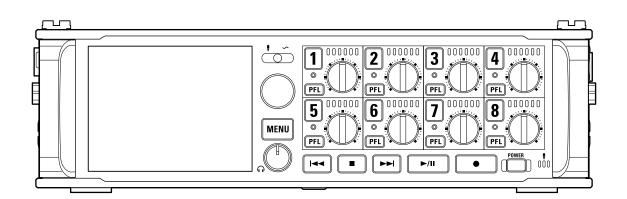
# 

# **F8n** Pro MultiTrack Field Recorder



# **Operation Manual**

You must read the Usage and Safety Precautions before use.

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## F8n Pro overview

# Achieving high audio quality throughout recording and editing

With dual AD converter circuits and support for 32-bit float WAV files, the F8n Pro can maintain the highest audio quality from recording to post-production.

#### Recording

Dual AD converter circuits enable recording the loudest to the quietest sounds without adjusting gain.



#### **Post-production**

Recording with 32-bit float WAV file formats allows the same audio quality to be retained when editing.

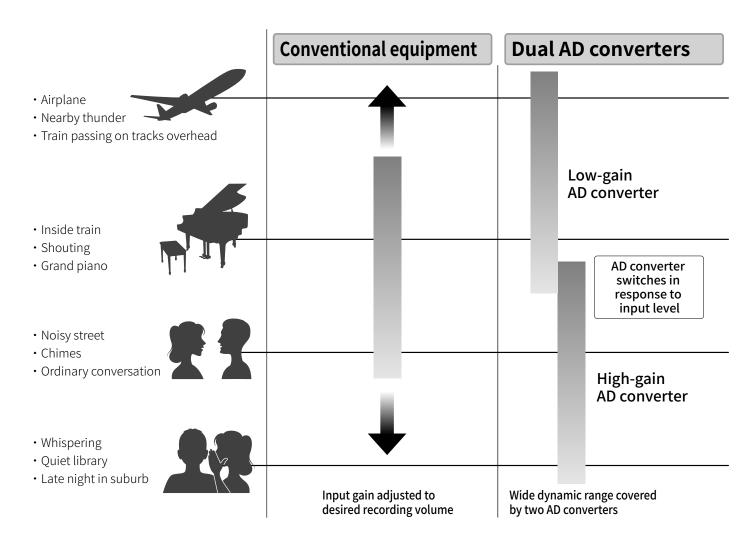


## Dual AD converter circuit overview

For each input circuit, the F8n Pro has two AD converters with different input gains. This design enables high-quality audio recording without the need to adjust gain settings, a step that is normally indispensable.

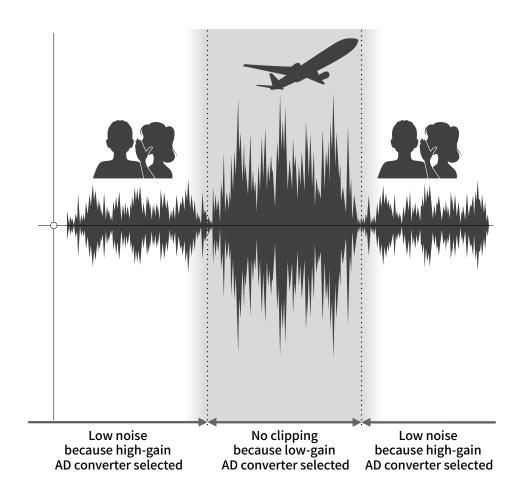
#### Providing amazing dynamic range

By combining two AD converters, a wide dynamic range not possible with a single AD converter has been realized.



#### Switching between two AD converters

The F8n Pro constantly monitors data from the two AD converters, and automatically selects the one that provides the best recording results.



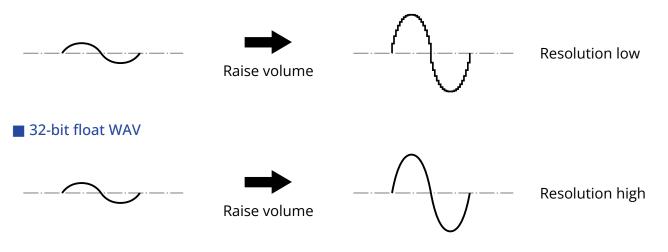
## 32-bit float WAV file overview

32-bit float WAV files have the following advantages over conventional 16/24-bit linear WAV files. These features enable the quality of the sound during recording to be maintained even during postproduction.

#### Resolution advantage

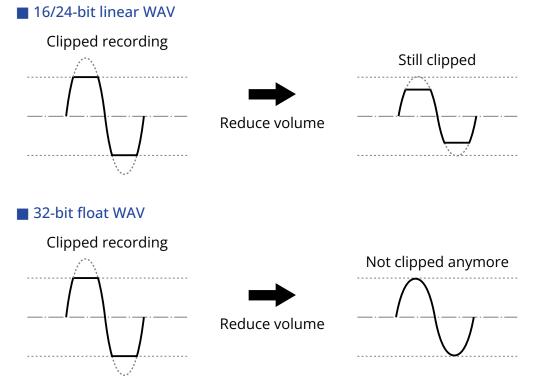
32-bit float WAV files have the advantage of being able to maintain high resolution even at low volumes. As a result, quiet sounds can be made louder when editing after recording without degrading their quality.

#### 16/24-bit linear WAV



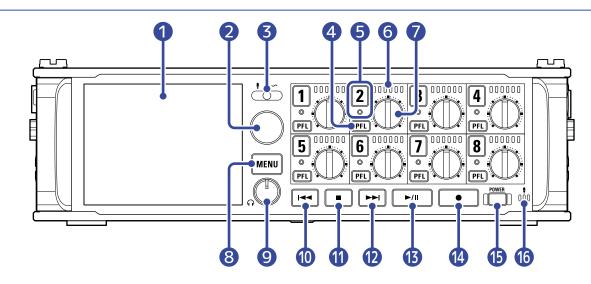
#### Clipping advantage

If a waveform sounds clipped when output from the F8n Pro or in a DAW, it can be edited after recording to lower its volume and restore an unclipped waveform because the data in the 32-bit float WAV file itself is not clipped.



## **Functions of parts**

## Front



#### 1 Display (LCD)

This shows the recorder status and Menu Screen. (→ Overview of screens shown)

#### 2 Selection encoder

Use this to select and to confirm in various menus.

#### **3** Slate switch

Use this to record slate tones and with the slate mic.

#### 4 PFL button

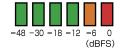
Press this to open the PFL Screen. The status indicator of the selected track will light orange. ( $\rightarrow$  <u>PFL</u> Screen)

#### **5** Track button/status indicator

Press the track button, lighting the status indicator red, to enable that track for recording.

#### 6 LED level meter

This lights according to the track input level.



#### 7 Track knob

This controls the track fader. Depending on the setting, this can also adjust trim or pan.

#### 8 MENU button

Press this to open the Menu Screen or return to the previous screen.

#### 9 Headphone volume knob

This adjusts the headphone volume.

#### 10 REW button

Use this to search backward and to skip to the previous track.

#### **1** STOP button

This stops recording and playback.

#### 12 FF button

Use this to search forward and to skip to the next track.

#### 13 PLAY/PAUSE button

This starts and pauses track playback.

#### 14 REC button

This starts recording.

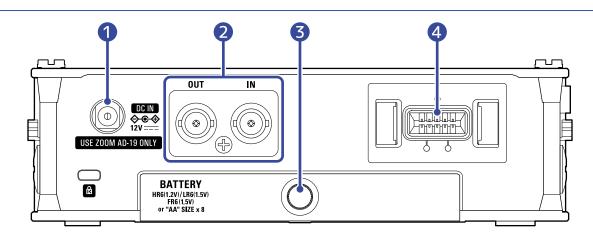
#### **15** Power button

This turns the power on/off.

#### **16** Slate mic

Use this for slate mic recording.

## Back



#### 1 12 V DC IN connector

Connect the dedicated AC adapter (ZOOM AD-19) here.

#### 2 TIMECODE IN/OUT connectors

Use cables with BNC connectors to input and output timecode.

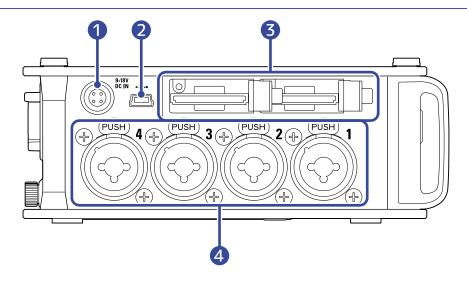
#### **3** Battery cover

Open this when installing or removing AA batteries.

#### 4 MIC IN connector

Mic capsules (sold separately) can be attached. (→ Connecting mic capsules)

## Left side



#### 1 EXT DC IN connector

External DC power supplies that support Hirose 4-pin connectors can be connected here.



#### 2 USB (Mini-B) port

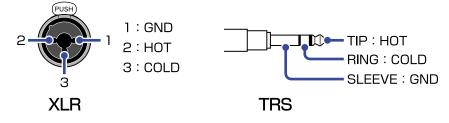
Connect this to a computer, smartphone or tablet to use the F8n Pro as an SD card reader or audio interface.

#### **3** SD card slots

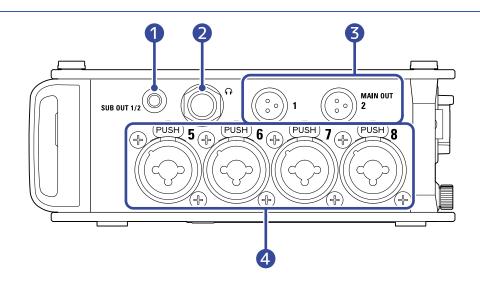
Up to 2 SD cards can be loaded.

#### 4 Inputs 1–4

Connect mics and instruments to these. These can be used with XLR and TRS connectors. When disconnecting the XLR plug, pull it while pressing Lock release button ("PUSH" area).



## **Right side**



#### 1 SUB OUT jack

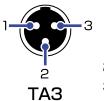
This stereo mini jack (unbalanced) can be used to output sound.

#### 2 Headphone jack

This can output sound to headphones.

#### **3** MAIN OUT jacks

Use cables with TA3 connectors to output sound to speakers.

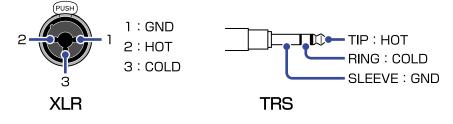




3 : COLD

#### 4 Inputs 5–8

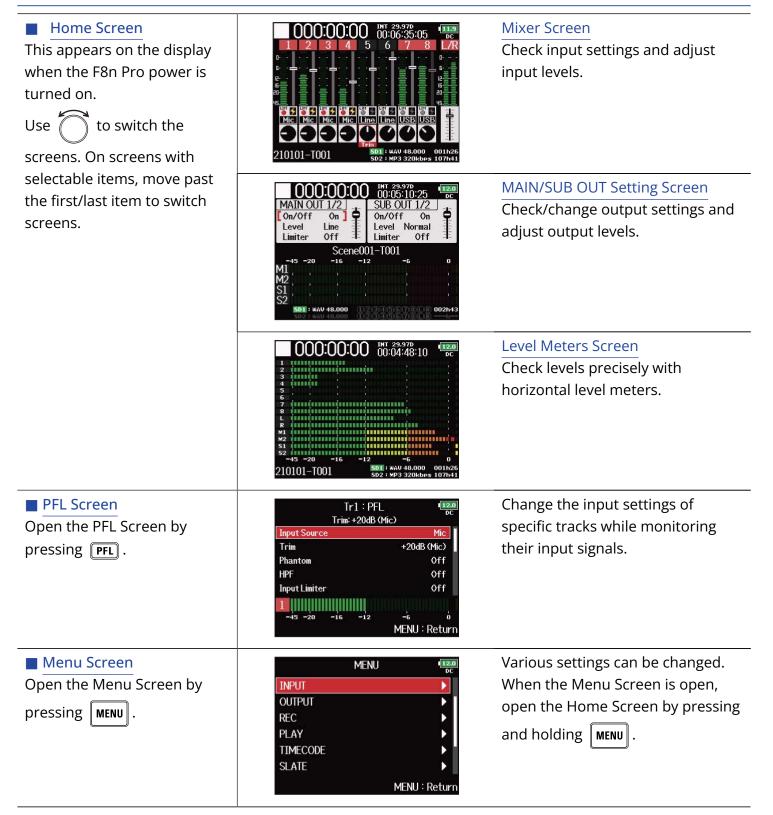
Connect mics and instruments to these. These can be used with XLR and TRS connectors. When disconnecting the XLR plug, pull it while pressing Lock release button ("PUSH" area).



## Overview of screens shown

This section explains the screens shown on the F8n Pro display.

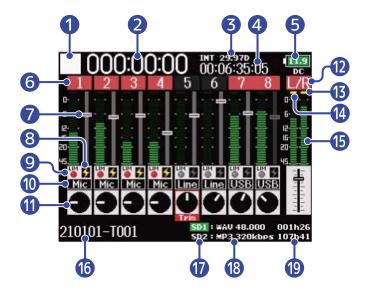
## Screen list



## Home Screen

#### Mixer Screen

You can easily check the elapsed playing/recording time, input/output levels, trim settings, input sources and other settings.



#### 1 Status icon

This icon shows the recording status.

- 🗌 : Stopped
- 🧧 : Recording
- 📕 : Paused (when recording)
- 🔁 : Playing
- 🔢 : Paused (when playing)

#### 2 Counter

This shows the elapsed recording time (when recording) or playback time (when playing).

#### **3** Frame rate

- · INT: internal timecode enabled
- EXT: external input timecode enabled

#### 4 Timecode

This shows the recording/playback timecode.

#### 5 Power type and remaining power

When the remaining battery charge becomes low, change the batteries ( $\rightarrow$  Installing batteries), connect an AC adapter ( $\rightarrow$  Connecting an AC adapter) or connect an external DC power supply ( $\rightarrow$  Using an external DC power supply).

12.0	9.0	8.5	8.2	8.0
Full <			<b>→</b> E	mpty

#### Power type

- DC: AC adapter
- EXT: external DC power supply
- AA: batteries

#### 6 Track number

This shows the track number and status.

- Red: input enabled
- Green: playback track enabled
- Grey: input disabled

Stereo-linked inputs are displayed as **778**.

#### 7 Fader

This shows the fader position.

#### 8 Phantom power status

- Lit: enabled
- Unlit: disabled

#### 9 Limiter status

- Grey: disabled
- Red: enabled
- Yellow: functioning

#### 10 Input source

This shows the selected input source. (→ Setting the input source (Input Source))

#### 🚺 Trim

Use shows the trim adjustment for each track.

Press ( ) to adjust the trim of the selected track.

#### 12 L/R tracks

#### 13 Limiter indicators

These light yellow when the limiter functions.

#### 14 Clipping indicators

These retain the peak levels of input/playback signals for a set amount of time after fader adjustment.

#### 15 Level meters

These show the track and L/R levels.

#### **16** Recording/playback take name

Press and hold show the name of the next track to be recorded.

#### 17 Playback card

- Green: used for playback
- Grey: no card

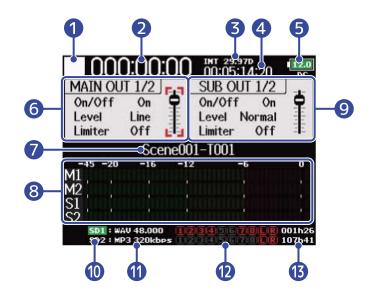
#### 18 Recording/playback file format and sampling rate This is shown by card.

#### 19 Remaining time

The remaining recordable time (when recording) or remaining playback time (when playing) is shown by card.

#### MAIN/SUB OUT Setting Screen

This shows the MAIN OUT and SUB OUT settings. They can be turned on/off, and their standard levels, limiters, and fader levels can be set.



#### 1 Status icon

This icon shows the recording status.

- 🗌 : Stopped
- 🧧 : Recording
- **I** : Paused (when recording)
- 🔁 : Playing
- 👖 : Paused (when playing)

#### 2 Counter

This shows the elapsed recording time (when recording) or playback time (when playing).

#### 3 Frame rate

- INT: internal timecode enabled
- EXT: external input timecode enabled

#### 4 Timecode

This shows the recording/playback timecode.

#### **5** Power type and remaining power

When the remaining battery charge becomes low, change the batteries ( $\rightarrow$  Installing batteries), connect an AC adapter ( $\rightarrow$  Connecting an AC adapter) or connect an external DC power supply. ( $\rightarrow$  Using an external DC power supply)

Power type

• DC: AC adapter

- EXT: external DC power supply
- AA: batteries

#### 6 MAIN OUT 1/2 setting area

The following items can be set.

- On/Off: Enables/disables the output. (→ Disabling outputs (Output On/Off))
- Level: Adjusts the standard output level. (→ Setting the standard output level (Output Level))
- Limiter: Enables/disables the output limiter. (→ Using the output limiter (Output Limiter))
- Fader: Adjusts the output level.

#### 7 Recording/playback take name

Press and hold show the name of the next track to be recorded.

#### 8 Level meters

These show the output levels of the MAIN OUT and SUB OUT.

#### 9 SUB OUT 1/2 setting area

The following items can be set.

- On/Off: Enables/disables the output. (→ Disabling outputs (Output On/Off))
- Level: Adjusts the standard output level. (→ Setting the standard output level (Output Level))
- Limiter: Enables/disables the output limiter. (→ Using the output limiter (Output Limiter))
- Fader: Adjusts the output level.

#### 10 Playback card

- Green: used for playback
- Grey: no card

#### Recording/playback file format and sampling rate This is shown by card.

#### 12 Recording/playback tracks

Red: Recording tracks Green: Playback tracks Gray: Tracks that are not recorded/played

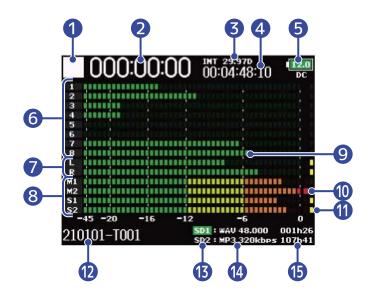
#### 13 Remaining time

The remaining recordable time (when recording) or remaining playback time (when playing) is shown by card.

#### Level Meters Screen

This shows large level meters for each track, allowing levels to be checked more precisely.

The level meters shown can be switched by using  $\bigcirc$  to change to the sources set for View 1–4. ( $\rightarrow$  Setting level meter appearance (Level Meter))



#### 1 Status icon

This icon shows the recording status.

- 🗌 : Stopped
- 🧧 : Recording
- **I** : Paused (when recording)
- 🚬 : Playing
- 🚺 : Paused (when playing)

#### 2 Counter

This shows the elapsed recording time (when recording) or playback time (when playing).

#### 3 Frame rate

- INT: internal timecode enabled
- EXT: external input timecode enabled

#### 4 Timecode

This shows the recording/playback timecode.

#### **5** Power type and remaining power

When the remaining battery charge becomes low, change the batteries ( $\rightarrow$  Installing batteries), connect an AC adapter ( $\rightarrow$  Connecting an AC adapter) or connect an external DC power supply. ( $\rightarrow$  Using an external DC power supply)

12.0	9.0	8.5	8.2	8.0
Full <			<b></b> ► E	mpty

#### Power type

- DC: AC adapter
- EXT: external DC power supply
- AA: batteries

#### 6 Levels for tracks 1–8

These show the input/playback levels for tracks 1-8.

#### 1 Levels for L/R tracks

These show the input/playback levels for the L/R tracks.

#### 8 Levels for MAIN OUT 1/2 and SUB OUT 1/2 tracks

These show the output levels for the MAIN OUT 1/2 and SUB OUT 1/2 tracks.

9 Level meters

These show the track and L/R levels.

#### 10 Clipping indicators

These retain the peak levels of input/playback signals for a set amount of time after fader adjustment.

#### Limiter indicators

These light yellow when the limiter is functioning.

#### 12 Recording/playback take name

Press and hold show the name of the next track to be recorded.

#### 13 Playback card

- Green: used for playback
- Grey: no card

#### Recording/playback file format and sampling rate

This is shown by card.

#### 15 Remaining time

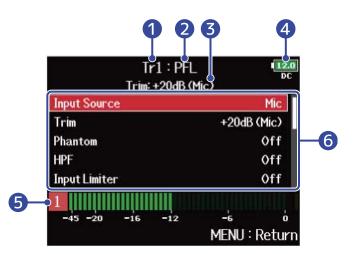
The remaining recordable time (when recording) or remaining playback time (when playing) is shown by card.

## **PFL Screen**

You can make the input settings of the selected track including input source and input level.

Press **PFL** of the track that you want to set or monitor to open its PFL Screen. Press **PFL** again to return to the previous screen.

You can monitor only the input signal of the selected track while the PFL Screen is open.



#### 1 Track name

This shows the selected track.

#### 2 PFL mode

This shows the monitor mode (prefader (PFL) or postfader (SOLO)). ( $\rightarrow$  Setting the monitoring sound on the PFL Screen (PFL Mode))

#### **3** Trim adjustment value/input source

#### 4 Power type and remaining power

When the remaining battery charge becomes low, change the batteries ( $\rightarrow$  Installing batteries), connect an AC adapter ( $\rightarrow$  Connecting an AC adapter) or connect an external DC power supply. ( $\rightarrow$  Using an external DC power supply)

12.0 9.0 8.5 8.2 8.0

Power type

- DC: AC adapter
- EXT: external DC power supply
- AA: batteries

#### 5 Level meter

This shows the prefader (PFL) or postfader (SOLO) input signal level.

#### 6 Input setting items

Use to select a setting item, and press . This opens a screen where that input setting can be changed. For details about each setting, see the links.

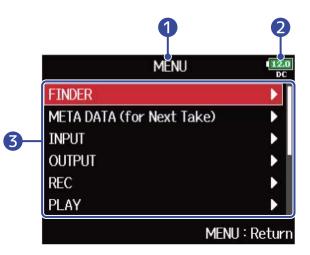
Setting items	Explanation
Input Source	Set the input source. ( $\rightarrow$ Setting the input source (Input Source))
Trim	Set the input level. ( $\rightarrow$ Adjusting input levels )
Phantom	Make phantom power settings. (→ Changing the phantom power settings (Phantom))
HPF	Set the high pass filter. ( $\rightarrow$ Cutting low-frequency noise (HPF))
Input Limiter	Set the limiter. ( $\rightarrow$ Using the input limiter (Input Limiter))
Fader	Set the fader.
Pan	Set the panning.
Phase Invert	Set the phase of the input signal. ( $\rightarrow$ Inverting the input phase (Phase Invert))
Side Mic Level	Set the side mic level of a mid-side mic capsule. (→ Adjusting the side level of a mid-side mic capsule (Side Mic Level))
Input Delay	Set the input delay. ( $\rightarrow$ Delaying input signals (Input Delay))
Plugin Power	Set the plugin power. ( $\rightarrow$ Changing the plugin power setting (Plugin Power))
Stereo Link	Set stereo linking. (→ Linking inputs as a stereo pair)
Stereo Link Mode	Set the stereo link mode. (→ Converting mid-side input to ordinary stereo (Stereo Link Mode))
PFL Mode	Set the monitoring sound when the PFL Screen is open. ( $\rightarrow$ Setting the monitoring sound on the PFL Screen (PFL Mode))

## Menu Screen

From this screen, various F8n Pro settings, including input/output, recording/playback, timecode, system and SD card settings can be made. Files can also be managed.

The Menu Screen is opened by pressing MENU.

You can open the Home Screen while the Menu Screen is open by pressing and holding MENU.



#### 1 Title

The title of the selected screen is shown.

#### 2 Power type and remaining power

When the remaining battery charge becomes low, change the batteries ( $\rightarrow$  Installing batteries), connect an AC adapter ( $\rightarrow$  Connecting an AC adapter) or connect an external DC power supply. ( $\rightarrow$  Using an external DC power supply)

12.0 9.0 8.3 8.2 (0.0

#### Power type

- DC: AC adapter
- EXT: external DC power supply
- AA: batteries

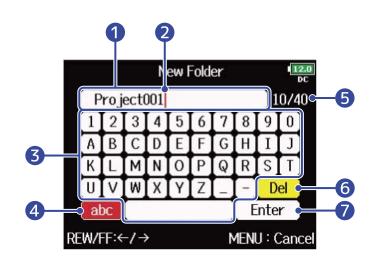
#### **3** Setting items

Use to select a setting item and press () to open a screen where the setting can be changed.

## Character input screen

A character input screen appears on the display when inputting characters, including file names. Use the select encoder to input characters.

**1.** Use to select the desired character or function and press to confirm. The selected character or function is highlighted in red.



#### Character input area

This shows the input characters.

**2** Character input position

The character will be input at this position.

#### **3** Character selection area

Select characters to input here.

#### 4 Change character type

This changes the characters that can be selected in the character selection area (capital letters/ numbers  $\rightarrow$  small letters/numbers  $\rightarrow$  symbols/automatic input).

The following characters can be input automatically by selecting automatic input keys.

- (Date): Automatically inputs the date. Example: 210210 (year, month, day)
- (Time): Automatically inputs the time. Example: 130950
- (Project): Automatically inputs "Project\*\*\*"
- (Scene): Automatically inputs the scene name
- 5 Number of characters input/Maximum number of characters
- 6 Delete character
- **7** Confirm character
- Other operations
- Press / >> : Moves cursor in box.

- Press + + : Deletes the previous character.
- Press + + : Moves the cursor to "Enter".
- Press **MENU** : Cancels editing and returns to the previous screen.

<b>2.</b> Repeat step 1 to input characters. When you have finished inputting characters, use	$\bigcirc$	to select
"Enter" and press 😱 .		

#### NOTE:

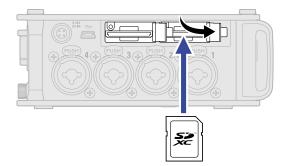
The characters and symbols that can be used are as follows. ! # \$ ' ( ) + , - ; = @ [ ] ^ \_ ` { } ~ (space) A-Z, a-z, 0-9 Recording with the F8n Pro follows the process shown below. The data created for each recording occurrence is called a "take".

Connect Turn power on	<ul> <li>Connect mics, instruments, audiovisual equipment and other devices to Inputs 1–8. (→ <u>Connecting mics/other devices to Inputs 1–8</u>)</li> <li>Connect a mic capsule to the MIC IN connector. (→ <u>Connecting mic capsules</u>)</li> <li>Turn the F8n Pro power on. (→ <u>Turning the power on</u>)</li> </ul>
Prepare before recording	<ol> <li>Set the SD card and file format for recording. (→ Enabling recording on SD cards and setting file formats)         Set the recording file format for each SD card separately.</li> <li>Select the recording tracks. (→ Selecting inputs)         Use track keys to select. The indicators for selected tracks light red and you will be able to monitor input sounds.         Press two track keys simultaneously to link them as a stereo track. (→         Linking inputs as a stereo pair)</li> </ol>
	<ul> <li>3. Make recording settings. Make other settings, including for the following functions: Pre recording (→ Capturing audio before recording starts (Pre Rec)), High pass filter (→ Cutting low-frequency noise (HPF)), limiter (→ Using the input limiter (Input Limiter))</li> <li>4. Adjust the input levels. (→ Adjusting input levels) The side mic level can also be adjusted when using a mid-side mic capsule.</li> </ul>
Record	<ul> <li>Press ● to start and ■ to stop recording. (→ Recording ) You can add marks during recording.</li> <li>Press ● to start recording a new track.</li> <li>Press ▶/II to pause.</li> </ul>
Play back and check	<ul> <li>Press ►/II to start playback and ■ or ● to stop it. (→ Playing recordings)</li> <li>You can add marks during playback.</li> </ul>
Check take information	<ul> <li>Check and edit metadata. (→ <u>Checking and editing take metadata</u>)</li> </ul>

# **Making preparations**

## Loading SD cards

**1.** When the power is off, open the SD card slot cover, and insert an SD card all the way into the slot.



To remove an SD card, push it further into the slot and then pull it out.

### **2.** Close the SD slot cover.

#### NOTE:

- Always make certain that the power is off when inserting or removing an SD card. Inserting or removing a card while the power is on could result in data loss.
- When inserting an SD card, be sure to insert the correct end with the top side up.
- Recording and playback are not possible when an SD card is not loaded in the F8n Pro.
- After purchasing a new SD card, always format it using the F8n Pro to maximize performance. (→ Formatting SD cards (Format))

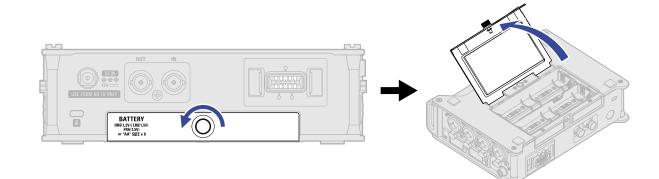
## Supplying power

The F8n Pro can operate using either an AC adapter, external DC power supply or batteries. The power supplies will be used in the following order of priority. AC adapter > external DC power supply > batteries.

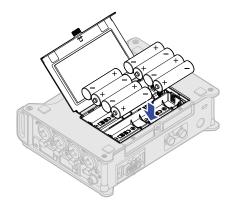
## Installing batteries

To run the F8n Pro using batteries, install 8 AA batteries in the battery compartment.

**1.** Turn the power off and then loosen the screw in the battery cover to open it.



**2.** Install the batteries.



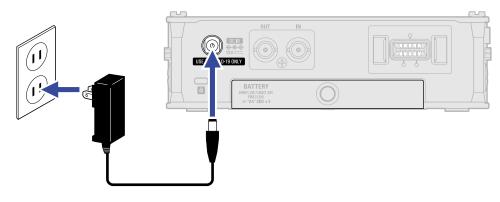
**3.** Close the battery cover and tighten the screw.

#### NOTE:

- Be careful because the battery case could become loose unexpectedly if the cover screw is not tightened firmly.
- Use only one type of battery (alkaline, NiMH or lithium) at a time.
- Set the type of battery used correctly so that the amount of remaining battery charge can be shown accurately. (→ Setting the power supply used (Power Source))
- If the battery charge becomes low, turn the power off immediately and install new batteries. You can check the remaining battery charge on the Home Screen. (→ Home Screen)

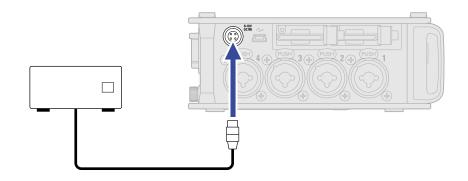
## Connecting an AC adapter

Connect the cable of the dedicated AC adapter (AD-19) to the 12 V DC IN connector, and connect the AC adapter to an outlet.



## Using an external DC power supply

**1.** Connect the external DC power supply equipment to the EXT DC IN connector. Connect a 9–18V direct-current power supply.



**2.** If there is an adapter, plug the adapter into an outlet.

#### NOTE:

When connecting an external DC power supply, be sure to make the power supply settings. ( $\rightarrow$  <u>Setting the</u> power supply used (Power Source))

## **Connecting input equipment**

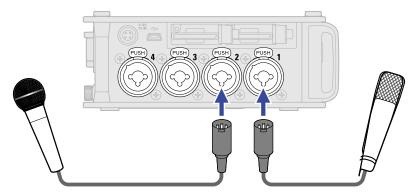
## Connecting mics/other devices to Inputs 1–8

The F8n Pro can record a total of 10 tracks simultaneously: 8 individual tracks with signals coming from Inputs 1–8 and a stereo mix of these inputs on left and right tracks.

You can connect mics and the outputs of line-level devices such as keyboards, mixers, or instruments with active electronics to Inputs 1–8 and record them to tracks 1–8. Alternatively, Inputs 1 and 2 can instead receive input from a ZOOM mic capsule connected to the F8n Pro MIC IN connector.

#### Connecting mics

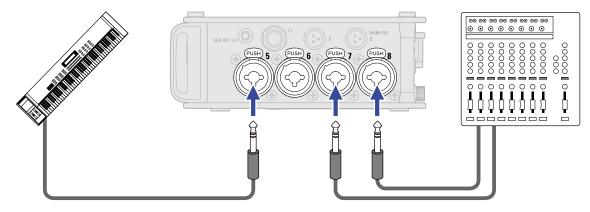
Connect dynamic and condenser mics with XLR plugs to Inputs 1–8.



- When connecting mics, set the input source to "Mic". (→ Setting the input source (Input Source))
- Phantom power (+24V/+48V) can be supplied to condenser mics. (→ Changing the phantom power settings (Phantom))
- When disconnecting a mic, gently pull on the XLR plug while simultaneously pushing the connector lock release button.

#### Connecting line level equipment

Connect TRS plugs from keyboards and mixers directly to Inputs 1–8.



- When connecting keyboards and mixers, set the input source to "Line". (→ <u>Setting the input source (Input Source</u>))
- Direct input of passive guitars and basses is not supported. Connect these instruments through a mixer or effects device.

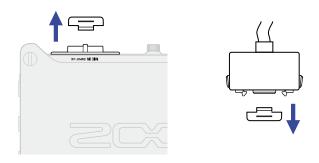
## Connecting mic capsules

A ZOOM mic capsule can be connected to the MIC IN connector on the back of the F8n Pro.

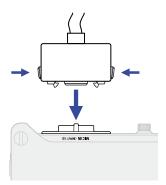
#### NOTE:

- The mic capsule input is assigned to tracks 1/2.
- When a mic capsule is connected, Inputs 1/2 cannot be used.

f 1 . Remove the protective caps from the F8n Pro and the mic capsule or extension cable.



**2.** While pressing the side buttons on the mic capsule or extension cable, connect it to the main unit, inserting it completely.



**3.** To disconnect the mic capsule or extension cable, pull it away from the main unit while simultaneously pressing the buttons on its sides.

#### NOTE:

- Do not use too much force when disconnecting. Doing so could damage the mic capsule, extension cable or main unit.
- Reattach the protective cap when a mic capsule is not connected.

#### Mic capsule compatibility

Mic capsule		Description	F8n Pro compatible
	XAH-8	XY-AB mic capsule	No
	VRH-8	Ambisonics VR mic capsule	No
	EXH-8	External XLR input capsule	No
	XYH-6	Adjustable X/Y stereo microphone capsule (→ Changing the plugin power setting (Plugin Power))	Yes
	XYH-5	Shock mounted X/Y stereo microphone capsule (→ Changing the plugin power setting (Plugin Power))	Yes
	MSH-6	Mid-Side stereo microphone capsule $(\rightarrow Adjusting the side level of a mid-side mic capsule$ <u>(Side Mic Level)</u> )	Yes
	SSH-6	Mid-Side stereo shotgun microphone capsule (→ Adjusting the side level of a mid-side mic capsule (Side Mic Level))	Yes
	SGH-6	Shotgun microphone capsule	Yes
	EXH-6	Dual XLR/TRS input capsule (→ Linking inputs as a stereo pair)	Yes

### Stereo input

By enabling the stereo link for tracks 1/2, 3/4, 5/6 or 7/8, the corresponding Inputs (1/2, 3/4, 5/6 or 7/8) can be handled as a stereo pair. ( $\rightarrow$  Linking inputs as a stereo pair)

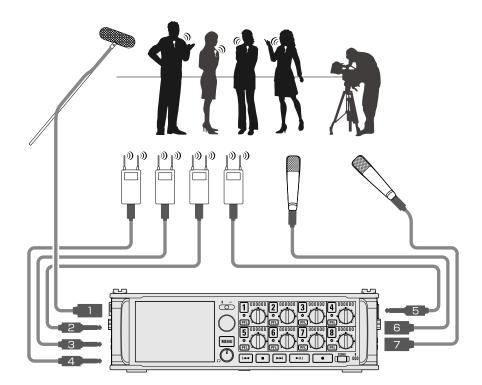
When linked, Input 1, 3, 5 or 7 becomes the left channel and Input 2, 4, 6 or 8 becomes the right channel.

### **Connection example**

Recording is possible in the following kinds of situations.

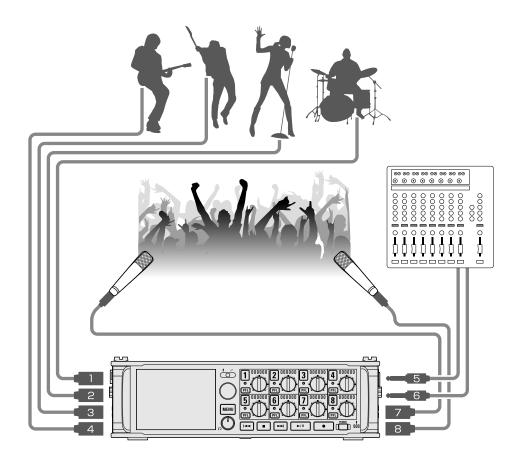
#### While filming

- Input 1: gun mic for main subject sound (XLR connection)
- Inputs 2–5: wireless lavalier mics for performers (TRS connections)
- Inputs 6-7: mics for ambient sound (XLR connections)



### Concert recording

- Inputs 1-4: mics for stage performance (XLR connections)
- Inputs 5-6: line-level PA mixer outputs (TRS connections)
- Inputs 7-8: mics for audience sound (XLR connections)



### Turning the power on/off

### Turning the power on

**1**. Press and hold **power** briefly.

This turns the F8n Pro power on and  $\lim_{n \to \infty}$  lights.

The first time the power is turned on after purchase, as well as after the F8n Pro has been restored to its factory default settings, screens to set the date and time will appear. Make these settings. ( $\rightarrow$  Setting the date and time (first time starting up) )

#### NOTE:

- The power will automatically turn off if it is unused for 10 hours. To keep the power on at all times, disable the automatic power saving function. (→ Disabling the Automatic Power Saving function (Auto Power Off))
- If "No Card!" appears on the display, confirm that an SD card is inserted properly.
- If "Card Protected!" appears on the display, the SD card write-protection is enabled. Slide the lock switch on the SD card to disable write-protection.
- If "Invalid Card!" appears on the display, the card is not formatted correctly. Format the card or use a different card. (→ Formatting SD cards (Format), Loading SD cards )

#### Turning the power off

**1**. Press and hold for briefly.

Keep pressing it until the ZOOM logo appears on the display.

#### NOTE:

When the power is turned off, the current mixer settings are saved on the F8n Pro.

## Setting the date and time (first time starting up)

The first time the power is turned on after purchase, set the date and time when the Set Date/Time Screen opens. The date and time are added to recording files.

<b>1.</b> Use $\bigcirc$ to select a setting item and press $\bigcirc$ .
Set Date/Time Year Month Day 2021 01 01 (FRD) 13 : 00 : 00 Enter
<b>2.</b> Use $\bigcirc$ to change the value and press $\bigcirc$ .
Set Date/Time Year Month Day 2022 ↓ 01 01 (SAT) 13 : 00 : 00 Enter
<b>3.</b> Repeat steps 1–2 to set the date and time.
<b>4.</b> When finished setting, use $\bigcirc$ to select "Enter" and press $\bigcirc$ .
Set Date/Time
Year Month Day 2022 01 01 (SAT) 13 : 00 : 00
Enter

#### NOTE:

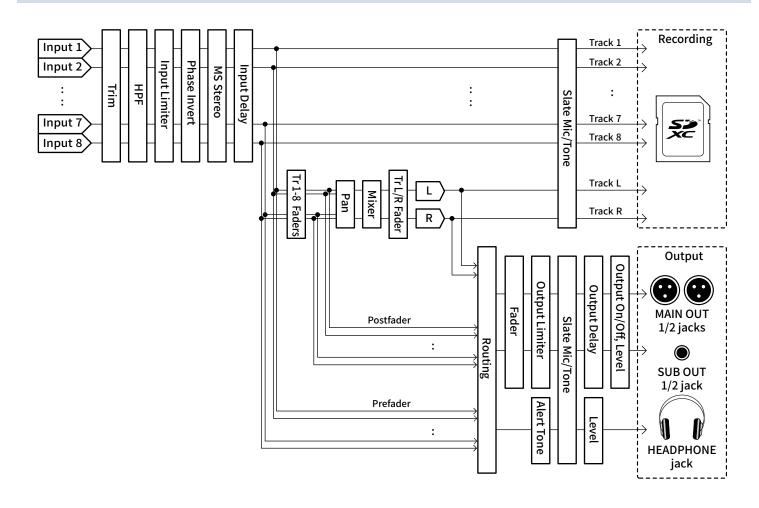
If power is not supplied by an AC adapter for a long time, date and time settings will be reset. If the date and time setting screen appears during startup, set them again.

#### HINT:

The date and time setting can also be changed later from the Menu Screen. ( $\rightarrow$  Setting the date and time (Date/Time (RTC)))

# Making input settings

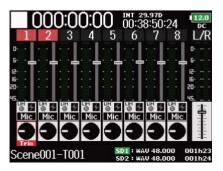
### Input and output signal flow



# Adjusting the input signal monitoring balance

You can adjust the volume of each input signal when monitoring.

**1.** Open the mixer on the Home Screen. ( $\rightarrow$  Mixer Screen)



# **2.** Use to adjust the faders.

#### NOTE:

- The MAIN OUT 1/2 and SUB OUT 1/2 faders do not affect the levels of the slate mic and slate tone. (→ Using the slate mic and slate tone)
- These volume settings only affect the monitoring signals. They have no effect on recorded data.
- Settings are saved separately for each take that is already recorded and can be changed during playback.
   (→ Mixing takes)
- Mix settings are not saved with the take when the recorded file format is MP3.

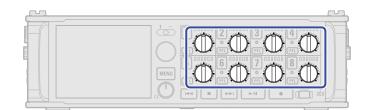
#### HINT:

- The fader setting range is muted, and -48.0 to +24.0 dB.
- You can turn to move the cursor, and also adjust the settings of the MAIN OUT 1/2 and SUB OUT 1/2 signals. (→ Setting output levels)

# Setting the track knob function (Track Knob Option)

The Home Screen layout and track knob functions can be changed.

You can adjust trim, fader and pan settings with the track knobs by changing the track knob function.



1. Press MENU.

This opens the Menu Screen.



**2.** Use to select "SYSTEM", and press .

١	MENU 🛄
PLAY	•
TIMECODE	•
SLATE	Þ
SYSTEM	Image: A start of the start
SD CARD	Þ
USB	•
	MENU : Retur

**3.** Use to select "Track Knob Option", and press .

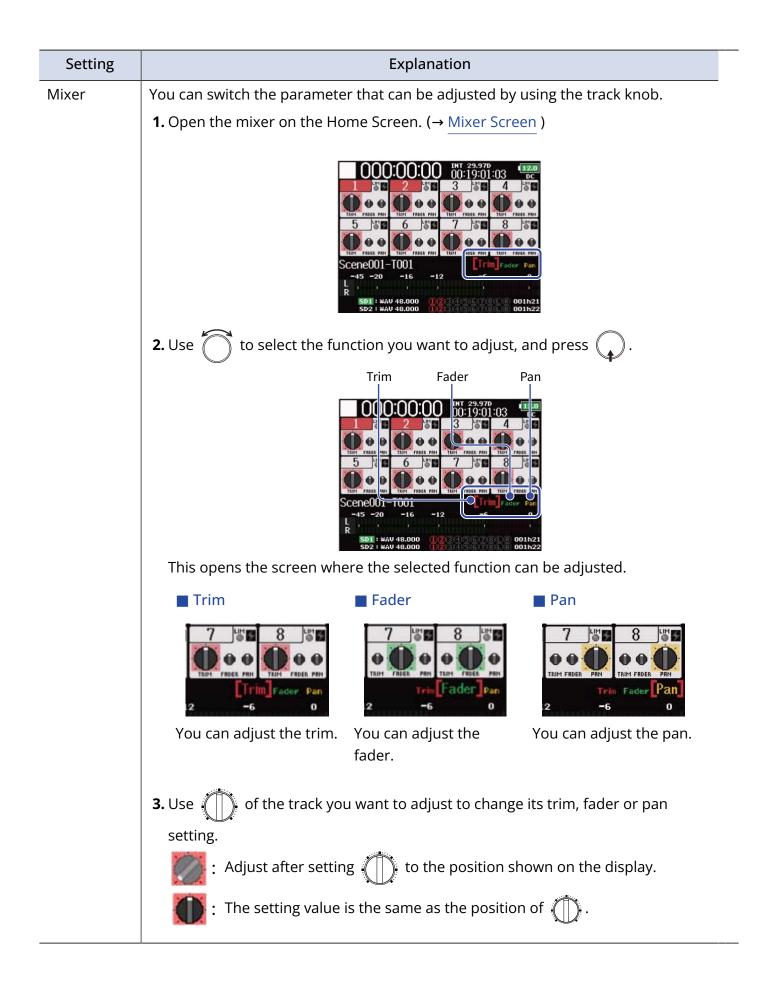
SYSTEM	12.0 DC
Track Knob Option	Fader
Key Hold Target	•
Shortcut List	•
Backup/Load Settings	•
Factory Reset	►
Firmware Version	•
	MENU : Retur

**4.** Use to select the track knob function, and press .



Explanation
This track knob function is restricted to changing input levels.
<b>1.</b> Open the mixer on the Home Screen. ( $\rightarrow$ Mixer Screen )
2. Use a track's in to adjust its trim.
HINT:
The panning and fader level can be changed as follows.
• Move cursor, change setting value: Turn 🔘.
• Select parameter to change: Press Q.

Explanation
The track knobs can be used to quickly adjust the fader.
<b>1.</b> Open the mixer on the Home Screen. ( $\rightarrow$ Mixer Screen )
2. Use a track's in to adjust its fader.
HINT:
The input level can be changed as follows.
• Move cursor, change setting value: Turn Ô.
• Select parameter to change: Press 😱.



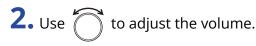
# Adjusting the L/R track volume

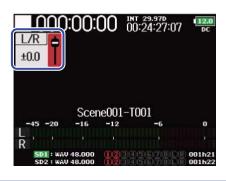
**1.** Press  $\blacksquare$  + **6** while the Home Screen is open. ( $\rightarrow$  Home Screen)

This opens the volume adjustment screen.

#### NOTE:

Shortcuts are disabled during playback.





#### NOTE:

- Volume settings affect the results of recording.
- If only the L/R track is recorded, the L/R track fader setting for the take will be saved as 0 dB.

<b>3.</b> When finished adjusting, press	MENU	or 🔳	+	6	•
--	------	------	---	---	---

#### NOTE:

This is only enabled when "Track Knob Option" is not set to "Fader". ( $\rightarrow$  Setting the track knob function (Track Knob Option))

When set to "Fader", you can adjust by using ሸ to sele	When s	et to "Fade	er", you car	n adjust by	using (	$\square$	to seled
--	--------	-------------	--------------	-------------	---------	-----------	----------

# Monitoring the input signals of specific tracks (PFL/ SOLO)

You can monitor the input signals of specified tracks.

Even tracks that have not been set to record can be input to the PFL Screen and their input sounds monitored.

This is convenient when using tracks as return inputs.

**1.** Press **PFL** on the tracks that you want to monitor.

The selected track keys will light orange, and the PFL Screen will open. (→ PFL Screen)

Tr1:PFL Trim:+20dB(		1 <u>12</u> D
Input Source		Mic
Trim	+20dB (	Mic)
Phantom		Off
HPF		Off
Input Limiter		Off
1		
-45 -20 -16 -12	-'6 MENU∶F	i Retur

#### NOTE:

This does not change the signals output from MAIN OUT and SUB OUT.

#### HINT:

- You can select either prefader listening (PFL) or postfader solo (SOLO) for monitoring. (→ <u>Setting the</u> monitoring sound on the PFL Screen (PFL Mode))
- You can also make input settings, including source and level, for the track that is monitored. (→ PFL Screen)

**2.** Press **PFL** or **MENU** for the monitored tracks.

Open the Home Screen.

# Setting the input source (Input Source)

Follow these procedures to set the input source of each track.

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use of to select "INPUT", and press .
MENU INPUT OUTPUT REC PLAY TIMECODE SLATE MENU : Return
<b>3.</b> Use of to select "Input Source", and press .
INPUT Input Source Ambisonic Mode HPF Input Limiter Phase Invert Phantom MENU : Return
<b>4.</b> Use of to select a track, and press .
Input Source Input 1 Mic Input 2 Mic Input 3 Mic Input 4 Mic Input 5 Mic Input 6 Mic MENU : Return

#### HINT:

Select "All" to set all the tracks at the same time.

**5.** Use to select the input source, and press .

	Input 1	12.0 DC
✓ Mic		
Line		10.
USB 1		
USB 2		
USB 3		
USB 4		
	м	ENU : Return

Setting	Explanation
Mic	Select this when connecting a mic or other equipment with a low input level.
Line	Select this when connecting line level equipment. The input level will be reduced 20 dB compared to when "Mic" is selected.
USB 1、USB 2、USB 3、USB 4	When "Audio Interface with Rec" is set to "On", computer output signals are treated as input signals. ( $\rightarrow$ Using SD card recording and audio interface functions at the same time (Audio Interface with Rec) )

#### NOTE:

When a mic capsule is connected, the Input Source cannot be changed for Inputs 1 and 2.

# Setting the monitoring sound on the PFL Screen (PFL Mode)

On the PFL Screen, you can set the monitored sound to be either prefader listening (PFL) or postfader solo (SOLO). ( $\rightarrow$  Monitoring the input signals of specific tracks (PFL/SOLO))

1. Press MENU.

This opens the Menu Screen.

MENU	12.8 DC
INPUT	Þ
OUTPUT	•
REC	▶
PLAY	▶
TIMECODE	▶
SLATE	•

**3.** Use to select "PFL Mode", and press .

INPUT	12.0 DC
Plugin Power	Off
Input Delay	•
Stereo Link Mode	
Trim Link	▶
PFL Mode	
Auto Mix	•
	MENU : Return

**4.** Use to select a track, and press .

	PFL Mode	12.0 DC
Input 1		PFL
Input 2		PFL
Input 3		PFL
Input 4		PFL
Input 5		PFL
Input 6		PFL
	ME	NU : Return

#### HINT:

Select "All" to set all the tracks at the same time.

**5.** Use to select the mode, and press



).

Setting	Explanation
PFL	Monitor the prefader sound.
SOLO	Monitor the postfader sound.

#### NOTE:

When the PFL Screen is open during playback, the monitoring sound will be post-fader (SOLO) regardless of the setting.

#### HINT:

The selected mode is shown at the top of the PFL Screen.

+20dB (Mic) Off
Off
Off
Off
-6 0

# Cutting low-frequency noise (HPF)

The high pass filter can cut low frequencies to reduce the sound of wind, vocal pops and other noise.

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use 觉 to select "INPUT", and pre	ess 😱.	
	MENU INPUT OUTPUT REC PLAY TIMECODE SLATE	MENU : Return
<b>3.</b> Use 觉 to select "HPF", and press	·	
	INPUT HPF Input Limiter Phase Invert Phantom Plugin Power Input Delay	MENU : Return
<b>4.</b> Use 觉 to select a track, and pres	s 😱.	
	HPF Input 1	UII.0 DC
	Input 2 Input 3	Off Off
	Input 4	Off
	Input 5 Input 6	Off Off
	Input o	MENU : Return

#### HINT:

Select "All" to set all the tracks at the same time.



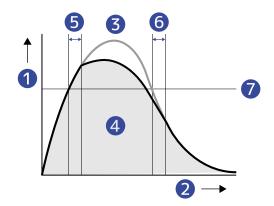


#### HINT:

This can be set to "Off" or between 10 and 240 Hz.

# Using the input limiter (Input Limiter)

The limiter can prevent distortion by controlling input signals that have excessively high levels. When the limiter is ON, if the input signal level exceeds the set threshold value, the signal level will be suppressed to prevent the sound from distorting. The attack time is how long after the signal exceeds the threshold before the limiter starts operating. The release time is how long after the signal goes below the threshold before the limiter stops operating. You can change these two parameters to adjust the sound quality.





- 2 Time
- Original signal
- 4 Output signal when Limiter used
- 5 Attack Time
- 6 Release Time
- 7 Threshold

### Turning the input limiter on/off

You can turn the input limiter on/off for each track.

You can select an ordinary limiter (Normal) or an optimized limiter that prevents distortion by detecting the maximum level in advance (Advanced).

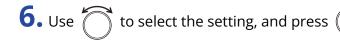
### 1. Press MENU. This opens the Menu Screen. **2.** Use to select "INPUT", and press . MENU INPUT OUTPUT REC PLAY TIMECODE SLATE MENU : Return **3.** Use of to select "Input Limiter", and press ( INPUT Input Limiter Phase Invert Phantom Input Delay Stereo Link Mode MENU : Return **4.** Use to select a track, and press . Input Limiter Input 1 Input 2 Input 3 Input 4 Input 5 Input 6 MENU : Return

#### HINT:

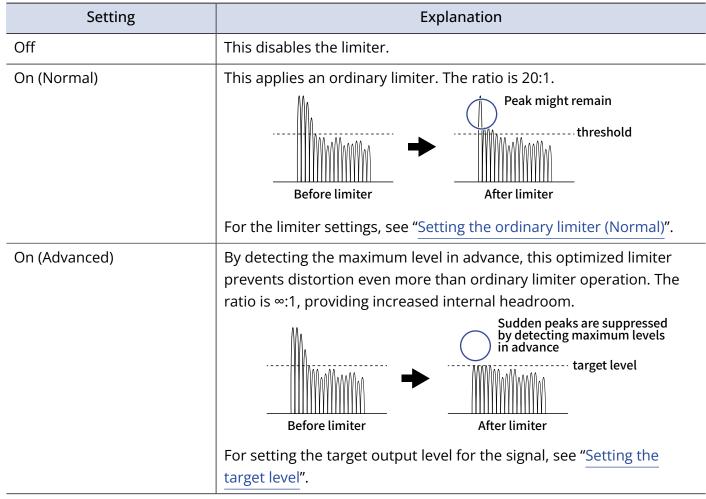
Select "All" to set all the tracks at the same time.

**5.** Use to select "On/Off", and press .

Input 1	
On/Off	Off
Туре	Hard Knee
Threshold	- 2dBFS
Attack Time	
Release Time	200ms
Target Level	± 0dBFS
	MENU : Return







#### NOTE:

- When set to "On (Advanced)", the input latency of the F8n Pro increases 1 ms. When monitoring sounds being recorded with a mic in real-time, increased latency can cause interference between sound transmitted through the air from the source and the delayed monitored sound, possibly making accurate monitoring of the sounds difficult.
- When set to any value other than "Off", the Sample Rate cannot be set to 192 kHz. Moreover, when the Sample Rate is set to 192 kHz, only "Off" can be selected. (→ Setting the sampling rate (Sample Rate))

#### HINT:

- Limiter operation is linked for tracks that have stereo link or MS stereo link enabled. If the signal for either linked channel reaches the threshold, the limiter will operate on both tracks.
- When the limiter is operating, the right-most segment of the level meter and the mixer limiter indicator on the display light yellow.

### Setting the ordinary limiter (Normal)

You can make settings for the ordinary limiter by selecting "On (Normal)" in "Turning the input limiter on/ off".

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use of to select "INPUT", and press .
MENU DC INPUT C OUTPUT C REC C PLAY C TIMECODE C SLATE C MENU : Return
<b>3.</b> Use of to select "Input Limiter", and press .
INPUT
<b>4.</b> Use of to select a track, and press .
Input Limiter

#### HINT:

Select "All" to set all the tracks at the same time.

**5.** Use to select a setting item, and press .

]	Input 1 12.0
On/Off	On (Normal)
Туре	Hard Knee
Threshold	- 2dBFS
Attack Time	1ms
Release Time	200ms
Target Level	± 0dBFS
	MENU : Return

Setting	Explanation
Туре	This sets the limiter type.
	<b>1.</b> Use to select the type, and press .
	Type Type Type Control of the second
	<ul> <li>Hard Knee: Only peaks that exceed the threshold are attenuated.</li> <li>There is no effect below the threshold.</li> </ul>
	<ul> <li>Soft Knee: The limiter gradually affects the signal about 6 dB below the threshold for a gentler effect.</li> </ul>
Threshold	This sets the level at which the limiter begins operating.
	<b>1.</b> Use to adjust the setting, and press <b>MENU</b> .
	Threshold - 2dBFS MENU : Return This can be set from -16 to -2 dBFS.

Setting	Explanation
Attack Time	This sets the amount of time until limiting starts after the input signal exceeds the threshold.
	<b>1.</b> Use to adjust the time, and press <b>MENU</b> .
	Attack Time
Release Time	This sets the amount of time until limiting stops after the input signal
	goes below the threshold.
	<b>1.</b> Use to adjust the time, and press <b>MENU</b> .
	Release Time
	This can be set from 1 to 500 ms.

### Setting the target level

When the setting of "Turning the input limiter on/off" is set to "On (Advanced)", use this to set the target output level for the signal.

1. Press MENU.

This opens the Menu Screen.

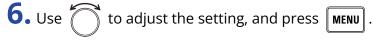
<b>2.</b> Use of to select "INPUT", and press .
MENU INPUT OUTPUT REC PLAY TIMECODE SLATE MENU : Return
<b>3.</b> Use of to select "Input Limiter", and press .
INPUT Delay INPUT INPUT INPUT DELAY INPUT
<b>4.</b> Use of to select a track, and press .
Input Limiter

#### HINT:

Select "All" to set all the tracks at the same time.

**5.** Use to select "Target Level", and press .

Ir	put 1 12.0
On/Off	On (Advanced)
Туре	Hard Knee
Threshold	– 2dBFS
Attack Time	
Release Time	200ms
Target Level	± 0dBFS
	MENU : Return





#### NOTE:

- This can be set from -16 to 0 dBFS.
- After a signal passes through the limiter, it will not exceed the set target level value.

# Inverting the input phase (Phase Invert)

The phase of the input signal can be inverted.

This is useful when sounds cancel each other out due to mic positioning.

1. Press MENU.

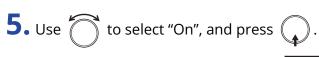
This opens the Menu Screen.

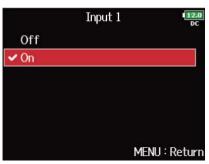
<b>2.</b> Use <b>to</b> select "INPUT", and p	press 😱.
	MENU DEC INPUT OUTPUT FREC PLAY TIMECODE SLATE MENU : Return
<b>3.</b> Use to select "Phase Invert"	and press 😱 .
	INPUT Phase Invert Phantom Plugin Power Off Input Delay Stereo Link Mode Trim Link MENU : Return
<b>4.</b> Use to select a track, and pr	ress 😱 .
	Phase Invert

#### HINT:

Select "All" to set all the tracks at the same time.

MENU : Return





## Changing the phantom power settings (Phantom)

The F8n Pro can provide phantom power.

The voltage can be set to +24 V or +48 V and it can be turned on/off for each input separately.

#### NOTE:

Do not use this function with a device that is not compatible with phantom power. Doing so could damage the device.

#### HINT:

Phantom power is a function that supplies power to devices that require an external power supply, including some condenser mics.

The standard power is +48 V, but some devices can operate with lower voltages.

### Using phantom power

1. Press MENU

This opens the Menu Screen.

**2.** Use to select "INPUT", and press .

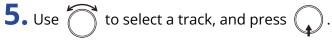
	MENU III.0
INPUT	
OUTPUT	•
REC	•
PLAY	•
TIMECODE	) i i
SLATE	
	MENU : Return

**3.** Use to select "Phantom", and press .

INPUT	12.0 DC
Phantom	
Plugin Power	Off
Input Delay	• • •
Stereo Link Mode	•
Trim Link	•
PFL Mode	•
	MENU : Return

<b>4.</b> Use	$\square$	to select "On/Off", and press	$\bigcirc$ .
		, ,	





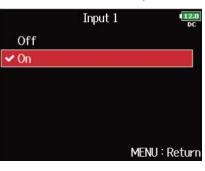
	On/Off 12.0
Input 1	Off
Input 2	Off
Input 3	Off
Input 4	Off
Input 5	Off
Input 6	Off
	MENU : Return

#### HINT:

Select "All" to set all the tracks at the same time.

# 6. Use to select "On", and press

This turns phantom power on for the track selected in step 5.



#### NOTE:

When a mic capsule is connected, phantom power is set to "Off" for inputs 1/2.

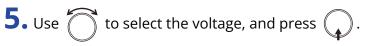
### Setting the voltage

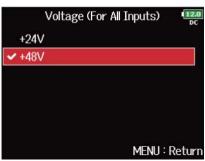
When using mics and other equipment that can operate with voltages less than +48 V, selecting +24 V can reduce power consumption by the F8n Pro.

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "INPUT", and press .
MENU DEC INPUT  OUTPUT  REC  PLAY  TIMECODE  SLATE  MENU : Return
<b>3.</b> Use to select "Phantom", and press .
INPUT Phantom Plugin Power Off Input Delay Stereo Link Mode Trim Link PFL Mode MENU : Return
<b>4.</b> Use of to select "Voltage (For All Inputs)", and press .
Phantom





#### NOTE:

This setting is applied for all inputs.

### Disabling phantom power during playback

If mics do not need phantom power during playback, disabling it can reduce F8n Pro power consumption.

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "INPUT", and press .
MENU DUTPUT CONTROL CONTROL CONTROL CONTROL CODE CODE CODE CODE CONTROL CODE CODE CONTROL CONT
<b>3.</b> Use of to select "Phantom", and press .
INPUT Phantom Plugin Power Off Input Delay Stereo Link Mode Trim Link PFL Mode MENU : Return
<b>4.</b> Use of to select "Power Saving (For All Inputs)", and press
Phantom Phantom On/Off Voltage (For All Inputs) +48V Power Saving (For All Inputs) Off MENU : Return

**5.** Use to select "On (Phantom off during play back)", and press .



Setting	Explanation
Off	Phantom power is supplied even during playback.
On (Phantom off during play back)	Phantom power is not supplied during playback. This can reduce the F8n Pro power consumption.

### NOTE:

This setting is applied for all tracks.

# Changing the plugin power setting (Plugin Power)

Make this setting when a mic that is compatible with plug-in power is connected to the mic capsule's MIC/LINE input jack.

## 1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "INPUT", and press .
MENU DEC INPUT DEC OUTPUT DE REC DE PLAY DE TIMECODE E SLATE DE MENU : Return
<b>3.</b> Use to select "Plugin Power", and press .
INPUT Plugin Power Off Input Delay  Stereo Link Mode  Trim Link  PFL Mode  Auto Mix  MENU : Return
<b>4.</b> Use of to select "On", and press .
Plugin Power

### NOTE:

This setting can be changed only when a mic capsule that supports plug-in power is connected.

# Delaying input signals (Input Delay)

If there are differences in the timing of input signals, use this function to correct them when recording.

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "INPUT", and press .
MENU INPUT CUTPUT CUTPUT CUTPUT CUTPUT CUTPUT CUTPUT CUTPUT CUTPUAY CUTPUT CUTPUT CUTPUAY CUTPUA CUTPUAY CUTPUAY CUTPUA CUTPUAY CUTPUA CU
<b>3.</b> Use of to select "Input Delay", and press .
INPUT Plugin Power Off Input Delay Stereo Link Mode Trim Link PFL Mode Auto Mix MENU : Return
<b>4.</b> Use to select a track, and press .
Input Delay Input 1 0.0ms Input 2 0.0ms Input 3 0.0ms Input 4 0.0ms Input 5 0.0ms Input 6 0.0ms MENU : Return

### HINT:

Select "All" to set all the tracks at the same time.

**5.** Use to adjust the delay time, and press **MENU**.



### NOTE:

When Sample Rate is set to 192 kHz, "Input Delay" is disabled. (→ Setting the sampling rate (Sample Rate))

### HINT:

This can be set from 0 to 30.0 ms.

# Converting mid-side input to ordinary stereo (Stereo Link Mode)

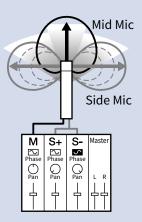
Signals from a mid-side stereo mic input connected to stereo-linked inputs can be converted to an ordinary stereo signal. See "Linking inputs as a stereo pair" for how to use stereo linking.

### Mid-side stereo format overview:

This technique creates a stereo recording from signals input by a directional mid mic that captures sound in the center and a bidirectional side mic that captures sounds from the left and right. Mid-side recording allows you to change the stereo width by the adjusting the level of the side mic.

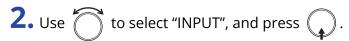
Since this technique can capture a wide stereo image, it is ideal for recording open spaces with numerous sound sources, such as orchestras, live concerts and soundscapes.

Mid-side recording is also extremely effective when you want to be able to control the amount of room ambience in a signal. For this reason, it is often used for live as well as studio recording. In addition, the stereo signal created by this technique is fully monocompatible, making it especially useful when recording sound for film, video, or broadcast.



### 1. Press MENU.

This opens the Menu Screen.



	MENU	12.0 DC
INPUT		
OUTPUT		•
REC		•
PLAY		•
TIMECODE		•
SLATE		•
	ME	NU : Return

**3.** Use to select "Stereo Link Mode", and press .

INPUT	12 D
Plugin Power	Off
Input Delay	•
Stereo Link Mode	Þ
Trim Link	•
PFL Mode	►
Auto Mix	•
	MENU : Retur

<b>4.</b> Use	to select a track, and press	
---------------	------------------------------	--

Stereo	Link Mode	12.0 DC
Input 1/2	Stereo Lini	k
Input 3/4	Stereo Lin	k
Input 5/6	Stereo Lin	k
Input 7/8	Stereo Lin	k
All		$\mathbf{>}$
	MENU:Ret	ur

### HINT:

Select "All" to set all the tracks at the same time.



Setting	Explanation
Stereo Link	When stereo-linked, inputs are handled normally.
MS Stereo Link	When stereo-linked, signals from a mid-side mic are converted to ordinary stereo.

### NOTE:

- When "MS Stereo Link" is selected, odd-numbered inputs are handled as mid signals and even-numbered inputs as side signals.
- The "MS Stereo Link" setting is disabled if a ZOOM mic capsule is connected that cannot have L/R signals routed individually to inputs 1/2.

### HINT:

- Use () for each input to adjust the mid/side balance.
- The PFL Screen allows you to adjust the side mic level for inputs 1/2 when a mid-side mic capsule is connected. (→ PFL Screen)

# Adjusting the input levels of multiple tracks simultaneously (Trim Link)

The input levels of multiple tracks can be linked and adjusted at the same time.

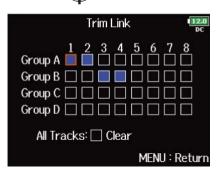
<b>1.</b> Press MENU.	
This opens the Menu Screen.	
<b>2.</b> Use to select "INPUT", and press	
O RE PL TJ	MENU
In Si Tr	INPUT lugin Power Off nput Delay tereo Link Mode rim Link
	FL Mode
HINT:	

### HINT:

You can also open the "Trim Link" screen from the Home Screen by pressing **3** while pressing and holding

. .

**4.** Use to select a track to link, and press



: Linked

: Not linked

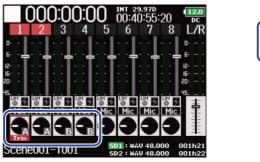
You can clear all settings by selecting "Clear".

### NOTE:

- A track cannot be in more than one group at a time.
- The input levels of tracks set to "MS Stereo Link" will also be linked if those tracks are put into groups. (→ Converting mid-side input to ordinary stereo (Stereo Link Mode))
- The input levels of tracks that have a mic capsule connected will not be linked even if those tracks are put into groups.

### HINT:

- When "Track Knob Option" is not set to "Fader", you can use for the first track in a link group to adjust all the input levels within that group at the same time. (→ Setting the track knob function (Track Knob Option))
- Icons for group names are shown next to linked tracks.

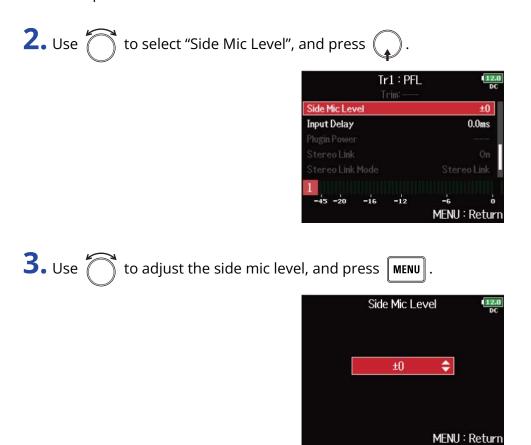




# Adjusting the side level of a mid-side mic capsule (Side Mic Level)

You can adjust the side mic level (stereo width) before recording when a mid-side mic capsule is connected.

**1.** Press **PFL** for track 1 or 2. This opens the PFL Screen.



### NOTE:

- The more the side mic level is increased, the greater the stereo width.
- When set to "RAW", recording will occur without stereo encoding. The stereo width of audio in RAW format can be adjusted after recording by using "ZOOM MS Decoder" or other plug-in software.
- This can be adjusted only when a mid-side type mic capsule is connected.

#### HINT:

This can be set to "Off", "RAW" or in a range from -24 to +6 dB.

# Changing the automatic mixing setting (Auto Mix)

When using multiple mics to capture audio during a meeting, for example, automatically attenuating the inputs of mics that are not in active use provides the following benefits.

- · The likelihood of feedback is reduced.
- Background noise, including fans and crowds is suppressed to a certain level regardless of the number of people using mics.
- Sound quality degradation due to phase differences caused by variations in the distances of multiple mics is reduced.
- 1. Press MENU.

This opens the Menu Screen.

	Menu 🖷	12.0 DC
INPUT		
OUTPUT	0	2
REC		
PLAY		
TIMECODE		3
SLATE	1	
	MENU : Ret	urr



**3.** Use to select "Auto Mix", and press .

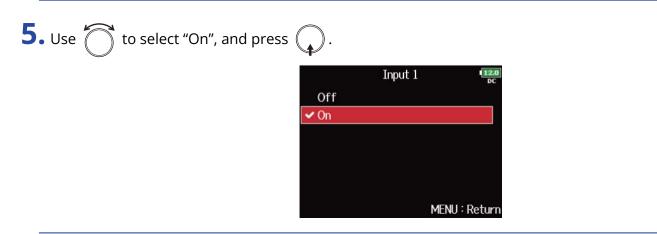
INPUT	12.0 DC
Plugin Power	Off
Input Delay	•
Stereo Link Mode	•
Trim Link	▶ [
PFL Mode	•
Auto Mix	►
	MENU : Return

```
4. Use to select a track, and press (
```

ļ	Auto Mix 💷
Input 1	Off
Input 2	Off
Input 3	Off
Input 4	Off
Input 5	Off
Input 6	Off
	MENU : Retur

### HINT:

Select "All" to set all the tracks at the same time.

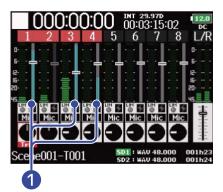


### NOTE:

- The following functions and settings cannot be used with this function.
  - The sampling rate cannot be set to 192 kHz. (→ Setting the sampling rate (Sample Rate))
  - The "Ambisonic Mode" format cannot be set to any value other than "Off". (→ Setting the format of Ambisonic Mode)
- When the sampling rate is set to 44.1–48.048 kHz and "Auto Mix" is set to "On", the latency will increase 2 ms. When monitoring sounds being recorded with a mic in real-time, increased latency can cause interference between sound transmitted through the air from the source and the delayed monitored sound, possibly making accurate monitoring of the sounds difficult. (→ Setting the sampling rate (Sample Rate))

### HINT:

When "Track Knob Option" is set to "Fader", the fader areas of the meters on the Home Screen show the amount of attenuation for tracks that have "Auto Mix" set to "On". ( $\rightarrow$  Setting the track knob function (Track Knob Option))



1 Meters that show the amount of attenuation due to "Auto Mix"

# Setting the format of Ambisonic Mode

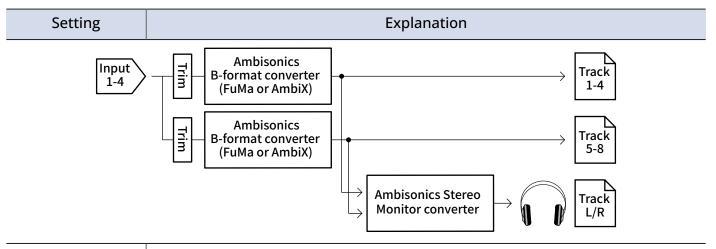
By connecting mics that can output ambisonics A-format signals to Inputs 1–4, audio can be converted to ambisonics B-format and recorded.

1. Press MENU.
This opens the Menu Screen.
<b>2.</b> Use to select "INPUT", and press .
MENU IZE INPUT I OUTPUT I REC I PLAY I TIMECODE I SLATE I MENU : Return
<b>3.</b> Use of to select "Ambisonic Mode", and press .
INPUT Ambisonic Mode  Ambisonic Mode  HPF  Input Limiter  Phase Invert  Phase Invert  Phantom  Plugin Power  Off  MENU : Return
<b>4.</b> Use to select "Format", and press .
Ambisonic Mode Format Off Mic Position Upright MENU : Return

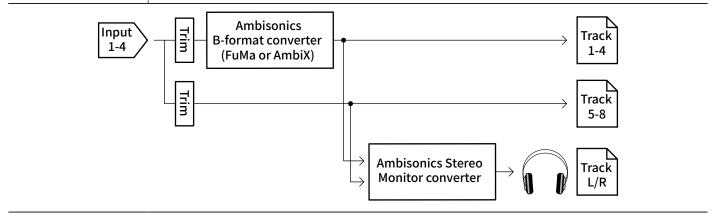
**5.** Use to select the format, and press .



Setting	Explanation	
FuMa	This converts the signals from Inputs 1-4 to the ambisonics FuMa B-format, and saves them as a 4-channel polyphonic file.	
AmbiX	This converts the signals from Inputs 1-4 to the ambisonics AmbiX B-format, and saves them as a 4-channel polyphonic file.	
Input 1-4	$\begin{array}{c} \hline H \\ H$	
Ambisonics A (Stereo Monitor)	This saves the signals from Inputs 1-4 as a 4-channel polyphonic file without converting them to an ambisonics B-format. The monitoring signal is converted to ambisonics B-format and then to an ordinary stereo signal.	
Input 1-4	$\begin{array}{c} \hline Tinck\\ 1-4 \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $	
FuMa(Dual)	This converts the signals from Inputs 1-4 to the ambisonics FuMa B-format, and saves them as a 4-channel polyphonic file.	
AmbiX(Dual)	This converts the signals from Inputs 1-4 to the ambisonics AmbiX B-format, and saves them as a 4-channel polyphonic file.	
FuMa + AmbiX	This converts the signals from Inputs 1-4 to the ambisonics FuMa B-format, and records them to tracks 1-4. It also converts the signals from Inputs 1-4 to the ambisonics AmbiX B-format, and records them to tracks 5-8. These can be recorded at different input levels.	



FuMa + Ambisonics A	This converts the signals from Inputs 1-4 to the ambisonics FuMa B-format, and records them to tracks 1-4. It also records the signals from Inputs 1-4 to tracks 5-8 without converting them to an ambisonics B-format. These can be recorded at different input levels.
AmbiX + Ambisonics A	This converts the signals from Inputs 1-4 to the ambisonics AmbiX B-format, and records them to tracks 1-4. It also records the signals from Inputs 1-4 to tracks 5-8 without converting them to an ambisonics B-format. These can be recorded at different input levels.



### NOTE:

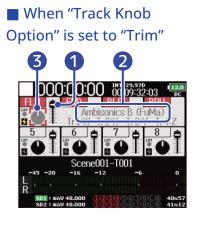
- The sampling rate can only be set to 192 kHz when the format of "Ambisonic Mode" is "Off". (→ <u>Setting</u> the sampling rate (Sample Rate))
- Ambisonic files are saved as 4-channel polyphonic files, not as mono or stereo files.
- A ZOOM mic capsule can only be used when the format of "Ambisonic Mode" is "Off".
- The following parameters cannot be set for tracks using "Ambisonic Mode" input. "Pan"/"Phase Invert"/"Side Mic Level"/"Input Delay"/"Stereo Link"/"Stereo Link Mode"/"Trim Link"
- Files recorded when the format of "Ambisonic Mode" is not "Off" will play back as ambisonic audio sources rather than ordinary 4-channel polyphonic files. For this reason, these tracks cannot the panned or muted during playback.
- When the sampling rate is set to 44.1–48.048 kHz and "Ambisonic Mode" is not set to "Off", the F8n Pro latency will increase 2 ms. When monitoring sounds being recorded with a mic in real-time, increased latency can cause interference between sound transmitted through the air from the source and the delayed monitored sound, possibly making accurate monitoring of the sounds difficult. (→ <u>Setting the</u> sampling rate (Sample Rate))
- This cannot be used with the "Auto Mix" function. (→ Changing the automatic mixing setting (Auto Mix) )

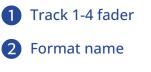
### HINT:

- "Ambisonic Mode" can be set during use as an audio interface (Multi Track). (→ Using as an audio interface (Audio Interface))
- Even when "Ambisonic Mode" is not set to "Off", you can press track **PFL** to monitor their input sounds. When "PFL mode" is set to "PFL", you can monitor sounds before they are converted to ambisonics B-format. When "PFL mode" is set to "SOLO", you can monitor sounds after they are converted to ambisonics B-format. (→ Setting the monitoring sound on the PFL Screen (PFL Mode), Monitoring the input signals of specific tracks (PFL/SOLO))
- The input enabled/disabled statuses of the "Ambisonic Mode" input tracks are linked, so the settings of all assigned tracks can be switched simultaneously by pressing any of their track keys.
- The following parameters that can be set on the PFL screen are linked for input tracks using "Ambisonic Mode". (→ PFL Screen)

"HPF"/"Input Limiter"/"Phantom"/"Fader"/"PFL Mode"/"Input Source"/"Input Level"

• When"Ambisonic Mode" is not set to "Off", the Home Screen is displayed as follows. (The display changes depending on the "Track Knob Option" setting. (→ Setting the track knob function (Track Knob Option))











# Setting the mic position used for ambisonic recording (Mic Position)

By setting the mic orientation used during ambisonic recording as an F8n Pro parameter, proper positioning can be maintained when converting to ambisonic B format if the mic orientation is changed from upright to upside down or horizontal.

- 1. Press MENU. This opens the Menu Screen. **2.** Use to select "INPUT", and press . MENU INPUT OUTPUT REC PLAY TIMECODE SLATE MENU : Return **3.** Use to select "Ambisonic Mode", and press INPUT Ambisonic Mode HPF Input Limiter Phase Invert Phantom
- **4.** Use to select "Mic Position", and press .

Ambisonic Mode	12.0 DC
Format	FuMa
Mic Position	Upright
ME	NU : Return

MENU : Return

**5.** Use to select the mic orientation, and press



Setting	Explanation
Upright	Use this setting to record with the mic upright.
Upside Down	Use this setting to record with the mic upside down.
	Upside Down
Endfire	Use this setting to record with the mic oriented horizontally.
	Endfire

### NOTE:

If this setting and the mic position do not match, sound positioning will not be properly re-created during conversion to ambisonic B format.

### HINT:

- Using the mic upright is recommended for ambisonic recording in order to minimize reflections from the floor and the mic itself.
- When it is difficult to use the mic in an upright orientation, you can place it upside down or pointing forward and change the Mic Position setting accordingly.

# Making output setting

# Setting signals sent to headphones (Headphone Routing)

You can set the type of signal sent to the headphone output to either prefader or postfader for each track. You can also save 10 setting combinations (Setting 1 – Setting 10).

1. Press MENU.

This opens the Menu Screen.



**2.** Use to select "OUTPUT", and press .

Ν	ienu 🖷	2.0
OUTPUT	Þ	1
REC	•	1
PLAY	•	I
TIMECODE	•	I
SLATE	•	
SYSTEM	Þ	ļ
	MENU : Retu	rı

**3.** Use to select "Headphone", and press .

OUTPL	
Headphone	Þ
Output On/Off	•
Output Level	•
Output Delay	•
Output Limiter	
MAIN OUT Routing	►
	MENU : Retur

**4.** Use to select "Headphone Routing", and press (

Headpho	ne <b>12.0</b>
Headphone Routing	
Alert Tone Level	-20dBFS
Volume Curve	Linear
Digital Boost	±0dB
	MENU : Return

**5.** Use  $\blacksquare$  and  $\blacksquare$  to select the setting you want to change.

The selected "Setting" is displayed at the bottom of the screen.



### NOTE:

- You can also press **•** + **7** to open the "Headphone Routing" screen.
- You can edit and save up to 10 signal settings.
- Settings are saved automatically.

**6.** Use **(**) to select the tracks/outputs for headphone routing and press **(**)



### 1 Tracks routed to the left or right headphone channel

Press ( to cycle through the options: "Prefader"  $\rightarrow$  "Postfader"  $\rightarrow$  "Off".

- 🖊 : Prefader selected
- 🔽 : Postfader selected
- 🖊 : Off

### 2 Monitoring mid-side stereo signals

Signals from a mid-side stereo mic can be converted to an ordinary stereo signal for monitoring.

- This is disabled for stereo-linked tracks that have "Stereo Link Mode" set to "MS Stereo Link". (→ Converting mid-side input to ordinary stereo (Stereo Link Mode))
- This is only enabled for tracks that have a mid-side microphone or mid-side mic capsule connected and the "Side Mic Level" set to RAW. (→ Adjusting the side level of a mid-side mic capsule (Side Mic Level))

• When mid-side stereo monitoring is enabled, the prefader tracks will be routed automatically to the headphone channels, with the odd-numbered to the left and the even-numbered to the right. In this case, the routing cannot be changed manually.

### 3 Prefader setting

This sets tracks 1–8 to prefader. This deactivates mid-side stereo monitoring.

### 4 Postfader setting

This cycles through the following options.

- Changes tracks 1–8 to postfader (cancels others)
- Changes L/R to postfader (cancels others)
- Changes M1/M2 to postfader (cancels others)
- Changes S1/S2 to postfader (cancels others)
- Changes U1–U4 to postfader (cancel others)

### 6 Mono mix

This makes the headphone output mono.

6 All Clear

This clears all settings.

#### NOTE:

- When "Audio Interface with Rec" is set to "On", USB tracks 1–4 can be assigned. (→ Using SD card recording and audio interface functions at the same time (Audio Interface with Rec) )
- Only postfader can be selected for L/R, MAIN OUT 1/2, SUB OUT 1/2 and USB 1–4 tracks.
- You cannot select the 1–8, L/R , MAIN OUT 1/2, SUB OUT 1/2 and USB 1–4 tracks at the same time. Selecting one will deselect any other.

7. Press MENU .

# Outputting alerts through headphones (Alert Tone Level)

The volume can be adjusted for alerts output to headphones when, for example, recording starts and stops.

### 1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use of to select "OU"	TPUT", and press 😱 .		
		MENU	12.0 DC
	OUTPUT		Þ
	REC		▶.
	PLAY		•
	TIMECODE		► ►
	SLATE		
	SYSTEM		•
		MEN	U : Return

**3.** Use to select "Headphone", and press .

OUTPL	JT 12.0
Headphone	Þ
Output On/Off	•
Output Level	•
Output Delay	•
Output Limiter	•
MAIN OUT Routing	•
	MENU : Return

**4.** Use to select "Alert Tone Level", and press .

Headphon	e 12.0 pc
Headphone Routing	•
Alert Tone Level	-20dBFS
Volume Curve	Linear
Digital Boost	±0dB
	MENU : Return

**5.** Use to adjust the volume, and press **MENU**.



### HINT:

- This can be set to "Off" or between -48 and -12 dBFS.
- When set to "Off", no alerts will be output.

### Alert sound conditions and types

Alert sound condition	Sound type
Remaining battery low	880 Hz tone 4 times every 30 seconds
Recording starting	1000 Hz tone 1 time
Recording stopping	880 Hz tone 2 times
Recording not possible	880 Hz tone 3 times

# Setting the headphone output Volume Curve

The volume curve used when adjusting the headphone volume knob can be set.

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use	to select "OUTPUT", and press	
---------------	-------------------------------	--

Ŧ		
	MENU	12.0 DC
OUTPUT		
REC		▶.
PLAY		•
TIMECODE		▶
SLATE		▶
SYSTEM		•
		MENU : Return

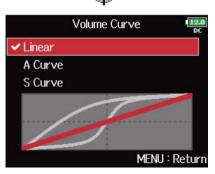
**3.** Use to select "Headphone", and press .

OUTPL	Л <b>12.0</b> РС
Headphone	
Output On/Off	▶
Output Level	•
Output Delay	۱.
Output Limiter	Þ
MAIN OUT Routing	•
	MENU : Return

**4.** Use to select "Volume Curve", and press .

Headphone	12.0 DC
Headphone Routing	•
Alert Tone Level	-20dBFS
Volume Curve	Linear
Digital Boost	±0dB
	MENU : Returi

**5.** Use to select the volume curve, and press .



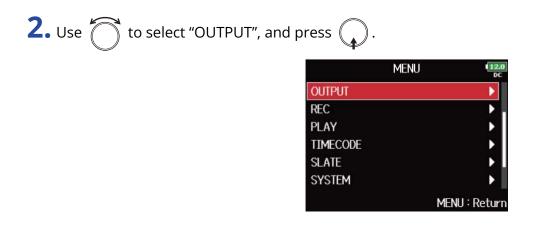
Setting Explanation	
Linear	The volume will change evenly from the minimum value to the maximum value.
A Curve The closer the volume is to its minimum position, the more rapid will change.	
S Curve The closer the volume is to its center position, the more rapidly change.	

# Boosting headphone output to alleviate interference from recorded sound (Digital Boost)

Boosting the headphone output alleviates the interference of sound waves traveling through the air with the headphone monitoring signal, enabling more accurate monitoring of the sound being recorded.

1. Press MENU.

This opens the Menu Screen.



**3.** Use to select "Headphone", and press .

OUTPL	JT 12.0
Headphone	Þ
Output On/Off	•
Output Level	•
Output Delay	•
Output Limiter	•
MAIN OUT Routing	•
	MENU : Return

**4.** Use to select "Digital Boost", and press .

Headphone	12.0 DC
Headphone Routing	•
Alert Tone Level	-20dBFS
Volume Curve	Linear
Digital Boost	±0dB
	MENU : Return

**5.** Use to adjust the amount of boost, and press



#### NOTE:

In situations where the sound being recorded can be heard at the headphone monitoring position, sound waves traveling through the air can interfere with the sound heard from the headphones, altering the monitored sound. The more the sound heard through the headphones is delayed and the lower its volume, the greater the impact of the sound waves.

"Digital Boost" adds a set boost volume to the adjusted headphone volume level, reducing the impact of the sound waves that travel through the air.

### HINT:

The amount of boost can be set from 0 to +24 dB.

# Disabling outputs (Output On/Off)

By disabling outputs that you are not using, you can reduce power consumption and increase the length of operation time when using batteries.

## 1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "OUTPUT", and press .
MENU OUTPUT REC PLAY TIMECODE SLATE SYSTEM MENU : Return
<b>3.</b> Use to select "Output On/Off", and press .
OUTPUT   Output On/Off   Output Level   Output Delay   Output Limiter   MAIN OUT Routing   SUB OUT Routing   MENU : Return
<b>4.</b> Use to select the output, and press .
Output On/Off MAIN OUT 1/2 On SUB OUT 1/2 On All ► MENU : Return

### HINT:

Select "All" to set all outputs at the same time.



	MAIN OUT 172	2 12.0 DC
✔ Off		
On		
		MENU : Return

# Setting the standard output level (Output Level)

The standard output level can be changed.

1. Press MENU.

This opens the Menu Screen.

to select "OUTPUT", and press	
-------------------------------	--

Ν	
OUTPUT	
REC	▶
PLAY	•
TIMECODE	▶
SLATE	•
SYSTEM	•
	MENU : Return

<b>)</b>		
J. Use	🗍 to select "Output Level", a	and press ( ).
		'

OUTPU	12.0 DC
Output On/Off	•
Output Level	Þ
Output Delay	
Output Limiter	•
MAIN OUT Routing	•
SUB OUT Routing	•
	MENU : Return

**4.** Use to select the output, and press .

Out	out Level	12.0 DC
MAIN OUT 1/2	Line (+4	dBu)
SUB out 1/2	Normal (-10	dBV)
	Menu :	Return

**5.** Use to set the standard output level, and press .

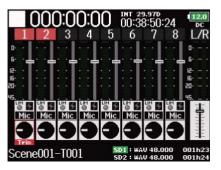


Setting	Explanation
Line (+4 dBu)	This sets the standard level to +4 dBu. Only MAIN OUT1/2 can be selected.
Normal (–10 dBV)	This sets the standard level to –10 dBV.
Mic (–40 dBV)	This sets the standard level to –40 dBV. Only SUB OUT1/2 can be selected.

## Setting output levels

The MAIN OUT 1/2 and SUB OUT 1/2 levels can be changed.

**1**. Open the mixer on the Home Screen. ( $\rightarrow$  Mixer Screen)





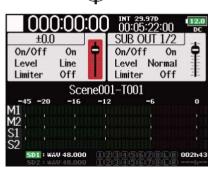
**2.** Use to open the MAIN OUT 1/2 and SUB OUT 1/2 settings screen.

000	):00:(	00 8	т 29.97 0:05:1		12.0 DC
MAIN OU On/Off Level Limiter	<u>1/2</u> On Line Off	O On Le	J <u>BOU</u> /Off vel N niter	T <u>1/2</u> On Iormal Off	
	Scer	ne001-T	001		
-45 -20	-16	-12	-	5	0
M1					
C1					
M2 S1 ¦ ' S2 '					
SD1 : WA	V 48.000	1234	1567	BER	002h43
		1234	1567	8(L)R	

**3.** Use to select a fader, and press .

UUU	):00:	00 🕷	1 29.97D 0:05:14:20	) 12.0 DC
MAIN OU	T 1/2	SU	B OUT 1/	2 .
On/Off	On	• On/	/Off 0	m O
Level	Line	E Lev	el Norm	al 🗄
Limiter	Off	Lim	iter Of	f I
	Sce	ne001-T	001	
-45 -20	-16	-12	-6	0
MI				
MZ				

**4.** Use to adjust the output level, and press



### HINT:

- This can be set to "Mute" or from -48.0 to +12.0 dB.
- You can also check and adjust various output settings on the MAIN OUT/SUB OUT setting screen. (→ MAIN/SUB OUT Setting Screen)

# Delaying output signals (Output Delay)

By delaying audio outputs, you can correct timing differences for signals input to other devices from the F8n Pro.

## 1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "OUTPUT", and press .	
MENU OUTPUT REC PLAY TIMECODE SLATE SYSTEM	MENU : Return
<b>3.</b> Use of to select "Output Delay", and press .	
OUTPUT Output On/Off Output Level Output Delay Output Limiter MAIN OUT Routing SUB OUT Routing	MENU : Return
<b>4.</b> Use to select the output, and press .	
Output Delay	y 112.0 DC
MAIN OUT 1	0.0Frames
MAIN OUT 2 SUB OUT 1	0.0Frames 0.0Frames
SUB OUT 2	0.0Frames
All	Þ
	MENU : Return

### HINT:

Select "All" to set all outputs at the same time.

**5.** Use to adjust the delay in frames, and press **MENU** 



#### NOTE:

- The delay in milliseconds depends on the frame rate of the selected timecode.
- When Sample Rate is set to 192 kHz, "Output Delay" is disabled. ( $\rightarrow$  Setting the sampling rate (Sample Rate))

#### HINT:

This can be set from 0.0 to 10.0 frames.

# Using the output limiter (Output Limiter)

Using a limiter on the output can protect devices connected to the output jacks.

#### HINT:

For details about the effect of the limiter, see "Using the input limiter (Input Limiter)".

## Turning the output limiter on/off

You can turn the output limiter on/off for each output.

1. Press MENU.

This opens the Menu Screen.



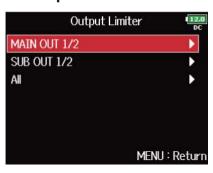
**2.** Use to select "OUTPUT", and press .

Ŧ		
	MENU	12.0 DC
OUTPUT		
REC		▶.
PLAY		•
TIMECODE		▶
SLATE		▶ .
SYSTEM		•
		MENU : Return

**3.** Use to select "Output Limiter", and press .

OUTPUT	12.0 DC
Output On/Off	•
Output Level	•
Output Delay	•
Output Limiter	Þ
MAIN OUT Routing	۱.
SUB OUT Routing	•
Ĩ	MENU : Returi

**4.** Use to select the output, and press .



HINT:

Select "All" to set all outputs at the same time.

<b>5.</b> Use of to select "On/Off", and	press 😱.	
	MAIN O	UT 1/2
	On/Off	Off
	Туре	Hard Knee
	Threshold	- 2dBFS
	Attack Time	1ms
	Release Time	200ms
	Link	On
		MENU : Return
<b>6.</b> Use of to select "On" or "Off", a	and press .	)ff [128
		DC
	Off On	
	<ul> <li>OII</li> </ul>	
		MENU : Return

For limiter settings, see "Setting the output limiter".

## Setting the output limiter

1. Press MENU .

This opens the Menu Screen.

**2.** Use to select "OUTPUT", and press .

	MENU	12.0 DC
OUTPUT		
REC		▶.
PLAY		•
TIMECODE		•
SLATE		• • I
SYSTEM		•
	MEI	NU : Return



**3.** Use to select "Output Limiter", and press .

OUTPU	T 12.0 DC
Output On/Off	•
Output Level	•
Output Delay	•
Output Limiter	•
MAIN OUT Routing	•
SUB OUT Routing	•
	MENU : Return

**4.** Use to select the output, and press . Output Limiter MAIN OUT 1/2 SUB OUT 1/2 All MENU : Return

#### HINT:

Select "All" to set all outputs at the same time.

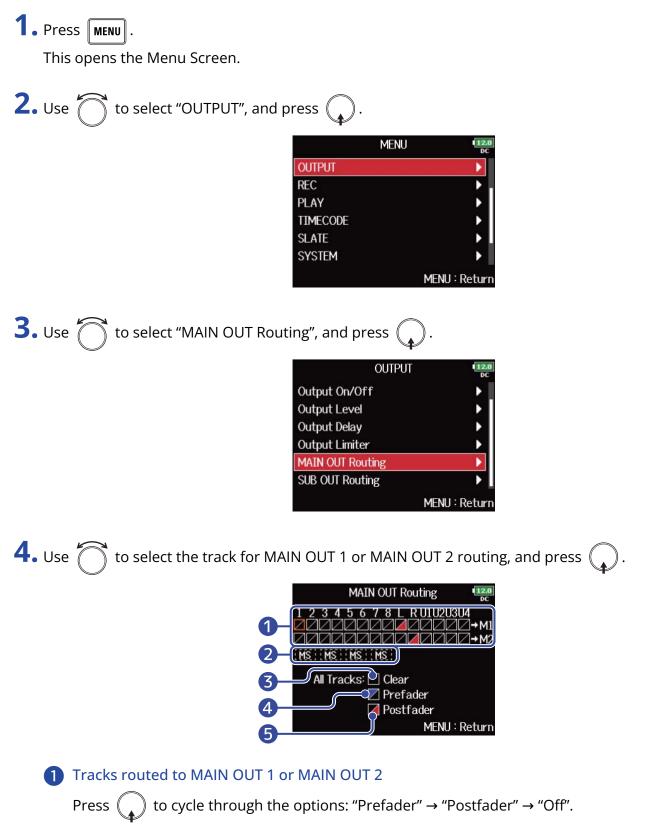
5.	Use 觉 to select a setting ite	em, and press 😱 .	
		MAIN C	UT 1/2
		On/Off	Off
		Туре	Hard Knee
		Threshold	- 2dBFS
		Attack Time	1ms
		Release Time	200ms
		Link	On
			MENU : Return
	Setting		Evolar

Setting	Explanation	
Туре	This sets the limiter type.	
	<b>1.</b> Use of to select the type, and press .	
	Type ♥ Hard Knee Soft Knee MENU : Return	
	<ul> <li>Hard Knee: Only peaks that exceed the threshold are attenuated.</li> <li>There is no effect below the threshold.</li> </ul>	
	• Soft Knee: The limiter gradually affects the signal about 6 dB below the threshold for a gentler effect.	
Threshold	This sets the level at which the limiter begins operating.	
	<b>1.</b> Use to adjust the setting, and press <b>MENU</b> .	
	Threshold - 2dBFS MENU : Return	
	This can be set from −16 to −2 dBFS.	

Setting	Explanation
Attack Time	This sets the amount of time until limiting starts after the input signal exceeds the threshold.
	<b>1.</b> Use to adjust the time, and press <b>MENU</b> .
	Attack Time
	This can be set from 1 to 4 ms.
Release Time	This sets the amount of time until limiting stops after the input signal goes below the threshold.
	<b>1.</b> Use to adjust the time, and press <b>MENU</b> .
	Release Time
	This can be set from 1 to 500 ms.
Link	The limiter can be linked or applied separately to MAIN OUT 1 and MAIN OUT 2, as well as to SUB OUT 1 and SUB OUT 2.
	<b>1.</b> Use to select "Off", and press .
	Link C C On MENU : Return
	Off: Separates limiter operation.
	• On: Links limiter operation. If the signal for either linked signal reaches the threshold, the limiter will operate on both channels.

# Selecting signals sent to the main outputs (MAIN OUT Routing)

You can send either prefader or postfader signals for each track to the main outputs.



• 🖌 : Prefader selected



• 🖊 : Off

#### 2 Mid-side stereo signal monitoring

This converts input track stereo signals to mid-side stereo signals for output. When mid-side stereo monitoring is enabled, the prefader tracks will be routed automatically to MAIN OUT 1/MAIN OUT 2, with the odd-numbered to the MAIN OUT 1 and the even-numbered to the MAIN OUT 2. In this case, the routing cannot be changed manually.

#### 3 All Clear

This clears all settings.

4 Prefader setting

This sets tracks 1–8 to prefader.

#### **5** Postfader setting

This cycles through the following options.

- Change tracks 1–8 to postfader (cancels others)
- Change L/R to postfader (cancels others)
- Change U1–U4 to postfader (cancel others)

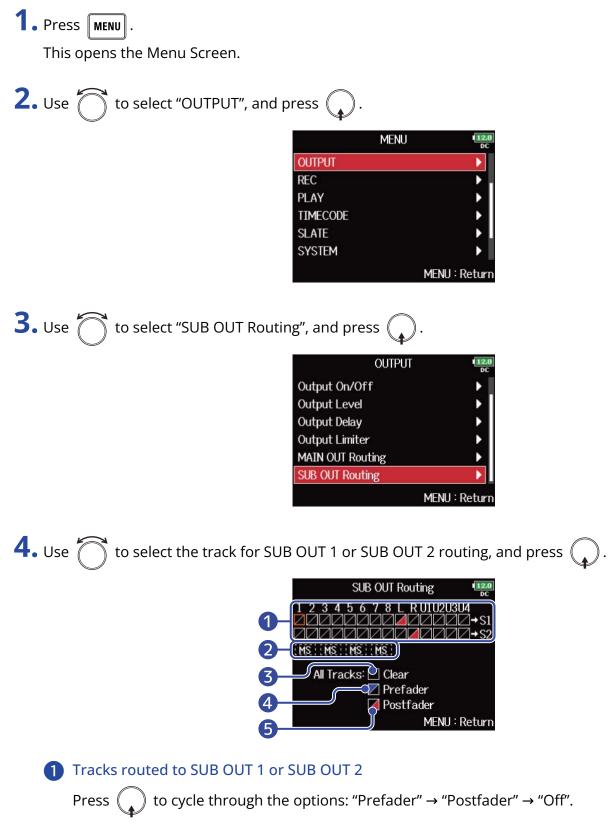
#### NOTE:

- When "Audio Interface with Rec" is set to "On", USB tracks 1–4 can be assigned. (→ Using SD card recording and audio interface functions at the same time (Audio Interface with Rec) )
- Only postfader can be selected for L/R and USB 1–4 tracks.
- You cannot select the 1–8, L/R and USB 1–4 tracks at the same time. Selecting one will deselect any other.

5. Press MENU.

# Selecting signals sent to the sub outputs (SUB OUT Routing)

You send either prefader or postfader signals for each track to the sub outputs.



• 🔀 : Prefader selected



• 🖊 : Off

#### 2 Mid-side stereo signal monitoring

This converts input track stereo signals to mid-side stereo signals for output. When mid-side stereo monitoring is enabled, the prefader tracks will be routed automatically to SUB OUT 1/SUB OUT 2, with the odd-numbered to the SUB OUT 1 and the even-numbered to the SUB OUT 2. In this case, the routing cannot be changed manually.

#### 3 All Clear

This clears all settings.

4 Prefader setting

This sets tracks 1–8 to prefader.

#### **5** Postfader setting

This cycles through the following options.

- Change tracks 1–8 to postfader (cancels others)
- Change L/R to postfader (cancels others)
- Change U1–U4 to postfader (cancel others)

#### NOTE:

- When "Audio Interface with Rec" is set to "On", USB tracks 1–4 can be assigned. (→ Using SD card recording and audio interface functions at the same time (Audio Interface with Rec) )
- Only postfader can be selected for L/R and USB 1–4 tracks.
- You cannot select the 1–8, L/R and USB 1–4 tracks at the same time. Selecting one will deselect any other.

5. Press MENU.

# Recording

# Enabling recording on SD cards and setting file formats

The recording file format can be set independently for SD CARD slots 1 and 2.

#### HINT:

- Recording the same content to two cards is possible by using the same settings for both card slots. This function can be used to create a backup in case the sound skips on one card, for example.
- You can also record tracks 1–8 unmixed on one SD card while recording all tracks mixed together as MP3 or WAV data with left and right tracks.

<b>1.</b> Press <b>MENU</b> . This opens the Menu Screen.		
<b>2.</b> Use of to select "REC", and pre	ess 😱.	
	MEI	NU 🗉
	REC	
	PLAY	,
	TIMECODE	
	SLATE	•
	SYSTEM	•
	SD CARD	•
		MENU : Retu
<b>3.</b> Use to select "Rec to SD1"/"		
	RE	and the second of the
	Rec to SD1	Tr1-8(Poly)
	Rec to SD2	Tr1-8(Poly)
	Sample Rate	48kHz
	WAV Bit Depth	32-bit Float
	MP3 Bit Rate	320kbps
	Pre Rec	Off
		MENU : Retu

**4.** Use to select the file type, and press



Setting value	Tracks recorded	Explanation
None	-	Nothing is recorded on the SD card.
Track1-8 (Poly WAV)	Selected tracks 1–8	A single (multitrack) file is created that contains audio for multiple tracks.
Track1-8 (Mono/Stereo WAV)		A single mono file is created for each mono track and a single stereo file is created for each stereo track.
Track1-8 + L/R (Poly WAV)	Selected tracks 1–8 + L/R track	A single (multitrack) file is created that contains audio for multiple tracks.
Track1-8 + L/R (Mono/ Stereo WAV)		A single mono file is created for each mono track and a single stereo file is created for each stereo track.
L/R (Stereo WAV)	L/R tracks	A stereo file is created based on the mix
L/R (Stereo MP3)	1	created by the internal mixer.

#### NOTE:

- When recording with the "Mono/Stereo WAV" setting, the audio files are saved in a take folder that is created. ( → Folder and file structure)
- When recording to 2 SD cards simultaneously, files will be saved in take folders with the same name on both cards. Folders will be created automatically if they do not already exist.
- If recording should stop on one SD card because, for example, it runs out of space, recording will continue on the other SD card. At such times, do not remove the card that has stopped recording from the slot. Doing so could damage the card or data.

## Selecting inputs and adjusting levels

You can select which of Inputs 1–8 to use.

Inputs will be recorded on tracks with the same numbers. For example, Input 1 will be recorded on track 1 and Input 2 will be recorded on track 2.

### Selecting inputs

**1.** Make the track indicator light by pressing the track key for the number of the input to record.



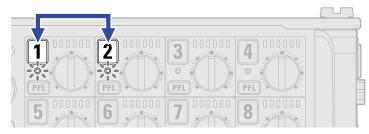
Track indicator	Track number background color	Explanation
Lit red	Red	The input is enabled.
Unlit	Gray	The input is disabled.

#### NOTE:

The signals from the inputs selected this way will also be sent to the L/R tracks.

## Linking inputs as a stereo pair

**1.** While pressing track key **1**, press track key **2**.

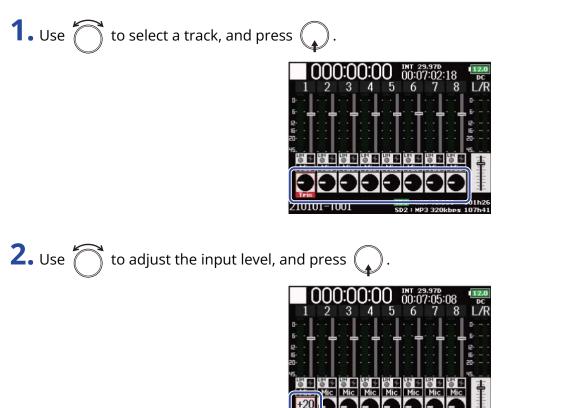


Tracks 1 and 2 will be linked as a stereo track (stereo link). Repeat the same procedure to disable the stereo link.

#### HINT:

- The 3/4, 5/6 and 7/8 track pairs can also be stereo-linked in the same way.
- When a mic capsule that allows independent L and R input selection is connected, stereo-linking can also be enabled and disabled for those tracks.

## Adjusting input levels



#### NOTE:

When a mic capsule is connected, the input levels of Input 1/2 cannot be adjusted with the F8n Pro. Use the level control on the mic capsule to adjust its input volume.

#### HINT:

- This can be set in a range from +10 to +75 dB when the input source is set to "Mic", from -10 to +55 dB when set to "Line", and from -35 to +30 dB when set to "USB". (→ Setting the input source (Input Source))
- If the sound distorts even when you lower the input level, try changing mic positions and adjusting the output levels of connected devices.
- Using the limiter (→ Using the input limiter (Input Limiter))
- Using the high pass filter (→ Cutting low-frequency noise (HPF))

## Setting the sampling rate (Sample Rate)

You can set the sampling rate used to record files.

1. Press MENU.

This opens the Menu Screen.

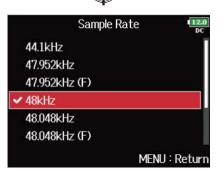
**2.** Use to select "REC", and press .

	Menu	12.0 DC
REC		
PLAY		•
TIMECODE		•
SLATE		•
SYSTEM		•
SD CARD		•
	MEN	U : Return

**3.** Use to select "Sample Rate", and press .

	REC	12.0 DC
Rec to SD2		Tr1-8(Poly)
Sample Rate		48kHz
WA∨ Bit Depth		32-bit Float
MP3 Bit Rate		320kbps
Pre Rec		Off
File Max Size		►.
		MENU : Return

**4.** Use to select the sampling rate, and press



Setting	Explanation
44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 192 kHz	These are standard sampling rates.
47.952 kHz	Select this when recording video at 23.976 frames per second if you want to edit at 24 frames per second later.
48.048 kHz	Select this when recording video at 24 frames per second if you want to edit at NTSC 29.97 or 23.98 HD later.
47.952 kHz(F), 48.048 kHz(F)	These function the same as the two above, but the <file_sample_rate> sampling rate metadata will be recorded as 48 kHz. This enables playback and editing with devices and software that do not support 47.952 kHz and 48.048 kHz WAV files. Playback, however, will occur at the ±0.1 % speed at which the file was recorded.</file_sample_rate>

#### NOTE:

• When the recording file format is MP3, only 44.1 kHz and 48 kHz can be selected.

- When 192 kHz is selected, L/R tracks will not be recorded. "Input Delay" (→ Delaying input signals (Input Delay)) and "Output Delay" (→ Delaying output signals (Output Delay)) are also disabled. Moreover, "Auto Mix" (→ Changing the automatic mixing setting (Auto Mix)), "Ambisonic Mode" (→ Setting the format of Ambisonic Mode), and "Input Limiter" (→ Using the input limiter (Input Limiter)) cannot be set.
- "Audio Interface with Rec" cannot be used when values other than 44.1 kHz or 48 kHz are selected. (→ Using SD card recording and audio interface functions at the same time (Audio Interface with Rec)

# Setting WAV file bit depth (WAV Bit Depth)

You can set the bit depth of WAV files.

1. Press MENU .

This opens the Menu Screen.

<b>2.</b> Use to select "REC", and pre	ess 😱.		
		MENU	12. D(
	REC		•
	PLAY		•
	TIMECODE		•
	SLATE		•
	SYSTEM		Þ
	SD CARD		•
		ME	NU : Retur

2		$\frown$
<b>D</b> . Use	$\bigcirc$ to select "WAV Bit Depth", and press (	))

	REC	12.0 DC
Rec to SD2		Tr1-8(Poly)
Sample Rate		48kHz
WAV Bit Depth		32-bit Float
MP3 Bit Rate		320kbps
Pre Rec		Off
File Max Size		•
		MENU : Return

4. Use to select the bit depth, and press . WAV Bit Depth 16-bit Linear 24-bit Linear \* 32-bit Float

#### NOTE:

When "32-bit Float" is selected, "Exceeding maximum input level." will appears on the display if the input signal exceeds the maximum input level (+4 dB when the input source is set to "Mic" or +24 dB when the input source is set to "Line"). In this case, adjust the output level of the device connected to the input jack of the F8n Pro.

MENU : Return

#### HINT:

This can be set to 16-bit Linear, 24-bit Linear or 32-bit Float.

## Setting MP3 file bit rate (MP3 Bit Rate)

You can set the bit rate of recorded MP3 files.

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "REC", and press	·		
		MENU	12.0 DC
	REC		
	PLAY		•
	TIMECODE		· · · • I
	SLATE		•
	SYSTEM		•
	SD CARD		•
		М	ENU : Return

2			$\bigcirc$
<b>D</b> . Use	🔰 to s	elect "MP3 Bit Rate", and press	( ).

	REC	12.0 DC
Rec to SD2		Tr1-8 (Poly)
Sample Rate		48kHz
WAV Bit Depth		32-bit Float
MP3 Bit Rate		320kbps
Pre Rec		Off
File Max Size		•
		MENU : Return

4. Use to select the bit rate, and press . MP3 Bit Rate 128kbps 192kbps 320kbps MENU : Return

#### HINT:

This can be set to 128 kbps, 192 kbps or 320 kbps.

## Capturing audio before recording starts (Pre Rec)

The input signal can be captured for up to 6 seconds before **•** is pressed (pre-recording). This is useful if, for example, • is pressed too late. 1. Press MENU. This opens the Menu Screen. **2.** Use to select "REC", and press . MENU REC PLAY TIMECODE D SLATE SYSTEM SD CARD MENU : Return **3.** Use to select "Pre Rec", and press . REC Rec to SD2 Tr1-8 (Poly) Sample Rate 48kHz WAV Bit Depth 32-bit Float 320kbps MP3 Bit Rate Pre Rec Off File Max Size MENU : Return

**4.** Use to select "On", and press .



	Sampling rate	Maximum pre-recording time
WAV	44.1 kHz	6 seconds
	47.952 kHz	6 seconds
	47.952 kHz(F)	6 seconds
	48 kHz	6 seconds
	48.048 kHz	6 seconds
	48.048 kHz(F)	6 seconds
	88.2 kHz	3 seconds
	96 kHz	3 seconds
	192 kHz	1 seconds
MP3	44.1 kHz	6 seconds
	48 kHz	6 seconds

#### NOTE:

Pre-recording will be disabled if "Mode" is set to "Int Record Run", "Ext" or "Ext Auto Rec". ( $\rightarrow$  Setting the mode)

# Maximum file size (File Max Size)

The maximum size of recording files can be set. If a recording file exceeds the maximum file size, recording will continue in a new take with a number that is one higher.

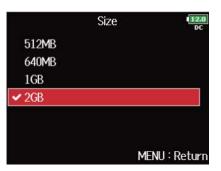
## 1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "REC", and pres	ss 😱 .	
	MEN REC PLAY TIMECODE SLATE SYSTEM SD CARD	U II2.0 DC ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) )
<b>3.</b> Use to select "File Max Size",	and press .	
	REC Rec to SD2 Sample Rate WAV Bit Depth MP3 Bit Rate Pre Rec File Max Size	Tr1-8 (Poly) 48kHz 32-bit Float 320kbps Off MENU : Return
<b>4.</b> Use to select "Size", and pres	ss 😱.	
	File Max Size Time Counter	(Size 12.0) DC 2GB Reset

MENU : Return

**5.** Use to select the maximum size of recording files, and press



#### NOTE:

If a recording file exceeds the maximum file size, recording will continue in a new take with a number that is one higher. No gap will occur in the sound between the two takes when this happens.

#### HINT:

Setting the maximum size to 640 MB or 512 MB is convenient for backing up to CDs.

# Showing total recording times for long recordings (Time Counter)

When recording for a long time, if the file size set with "<u>Maximum file size (File Max Size)</u>" is reached, recording will continue in a new take and the recording time will reset. You can change this, however, so that it is not reset and the total recording time is shown.

1. Press MENU.	
This opens the Menu Screen.	
<b>2.</b> Use to select "REC", and press .	
ME	NU 12.0
REC	
PLAY TIMECODE	
SLATE	
SYSTEM	•
SD CARD	► 1
	MENU : Return
<b>3.</b> Use to select "File Max Size", and press .	
	EC 112.0 DC
Rec to SD2	Tr1-8 (Poly)
Rec to SD2 Sample Rate	Tr1-8 (Poly) 48kHz
Rec to SD2	Tr1-8 (Poly)
Rec to SD2 Sample Rate WAV Bit Depth	Tr1-8 (Poly) 48kHz 32-bit Float
Rec to SD2 Sample Rate WAV Bit Depth MP3 Bit Rate	Tr1-8 (Poly) 48kHz 32-bit Float 320kbps
Rec to SD2 Sample Rate WAV Bit Depth MP3 Bit Rate Pre Rec	Tr1-8 (Poly) 48kHz 32-bit Float 320kbps
Rec to SD2 Sample Rate WAV Bit Depth MP3 Bit Rate Pre Rec	Tr1-8 (Poly) 48kHz 32-bit Float 320kbps Off
Rec to SD2 Sample Rate WAV Bit Depth MP3 Bit Rate Pre Rec File Max Size	Tr1-8 (Poly) 48kHz 32-bit Float 320kbps Off MENU : Return
Rec to SD2 Sample Rate WAV Bit Depth MP3 Bit Rate Pre Rec File Max Size File Max Size	Tr1-8 (Poly) 48kHz 32-bit Float 320kbps Off MENU : Return MENU : Return
Rec to SD2 Sample Rate WAV Bit Depth MP3 Bit Rate Pre Rec File Max Size	Tr1-8 (Poly) 48kHz 32-bit Float 320kbps Off MENU : Return MENU : Return
Rec to SD2 Sample Rate WAV Bit Depth MP3 Bit Rate Pre Rec File Max Size File Max Size	Tr1-8 (Poly) 48kHz 32-bit Float 320kbps Off MENU : Return MENU : Return

MENU : Return

**5.** Use to select "Continuous", and press .

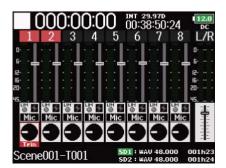


Setting	Explanation
Continuous	When recording, even if the file size set with "Maximum file size (File Max Size)" is reached, the counter shown on the Home Screen will not be reset.
Reset	When recording, if the file size set with "Maximum file size (File Max Size)Maximum file size (File Max Size)" is reached, the counter shown on the Home Screen will be reset to 000:00:00.

# Moving the previously recorded take to the FALSE TAKE folder

If the just recorded take was a failure, you can use a shortcut to move the recording to the FALSE TAKE folder.

**1.** Open the Home Screen. ( $\rightarrow$  Home Screen)



2. Press and hold

#### HINT:

- Moving the take recorded most recently to the FALSE TAKE folder will reduce the number of the take recorded next by 1.
- Even during recording, you can move the previously recorded take to the FALSE TAKE folder.



# Using timecode

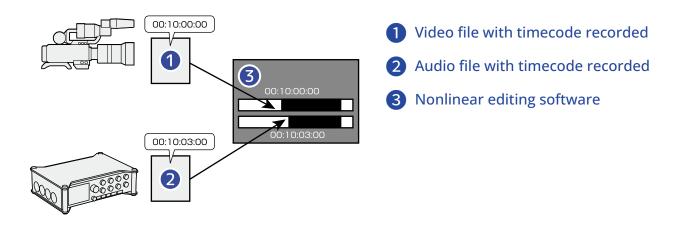
### Timecode overview

The F8n Pro can input and output SMPTE timecode.

Timecode is time information written to data when recording video and audio. It is used for video editing, control of other devices, and synchronization of audio and video.

#### Using timecode for editing

If video and audio data both have recorded timecode, aligning them to a timeline and synchronizing them together is easy when using nonlinear editing software for editing.



#### HINT:

The F8n Pro uses a precision oscillator that generates timecode with a high degree of accuracy (+/- 0.2 ppm, or approximately 0.5 frames per 24 hours).

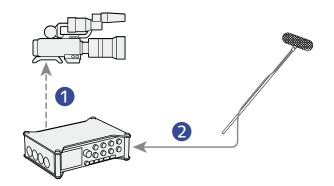
#### Connection examples

Connections like the following are possible, depending upon the specific equipment being used with the F8n Pro.

#### Synchronizing with a video camera

The F8n Pro records with mic input and transmits timecode.

The F8n Pro saves the timecode that it generates with the audio data. The timecode received by the video camera is recorded with the video data.

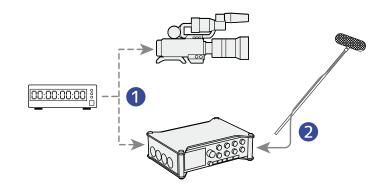




#### Inputting timecode

Timecode is transmitted from an external timecode generator.

Both the F8n Pro and the video camera receive timecode and record it with their audio and video data. The input timecode can also be used to synchronize the F8n Pro audio clock.





## Setting timecode functions

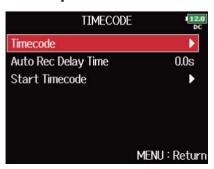
Use the timecode setting screen to set the timecode functions.

#### Opening the timecode setting screen

1. Press MENU.

This opens the Menu Screen.

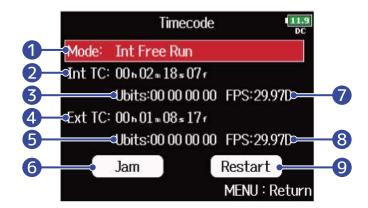
<b>2.</b> Use to select "TIMECODE",	and press 😱 .	
	PLAY	
	SLATE SYSTEM SD CARD	
	USB	Menu : Re
<b>3.</b> Use to select "Timecode", a	and press 😱 .	



~ ~

This opens the timecode setting screen.

For timecode setting details, see the links.



#### 1 Timecode mode

Timecode mode settings, including on/off and transmission/receiving settings, can be made. ( $\rightarrow$  Setting the mode)

2	Internal timecode This shows the internal timecode.
3	Internal user bits This shows the User bit data that can be set to be included in the timecode. ( $\rightarrow$ Setting the user bits for internal timecode)
4	External timecode This shows the external timecode.
5	External user bits This shows the external user bits.
6	Jam button This uses timecode input through the TIMECODE IN jack to set the internal timecode. (→ Jamming internal timecode)
7	Internal timecode frame rate This shows the Internal timecode frame rate. ( $\rightarrow$ Setting the frame rate for internal timecode)
8	External timecode frame rate This shows the external timecode frame rate.
9	Internal timecode restart button This restarts internal timecode with a specified value. ( $\rightarrow$ Restarting internal timecode with a specified value)

### Setting the mode

The timecode mode settings allow you to specify:

- Whether the F8n Pro generates timecode or receives external timecode
- Whether or not timecode continues running when not recording

**1.** Open the timecode setting screen. ( $\rightarrow$  <u>Opening the timecode setting screen</u>)

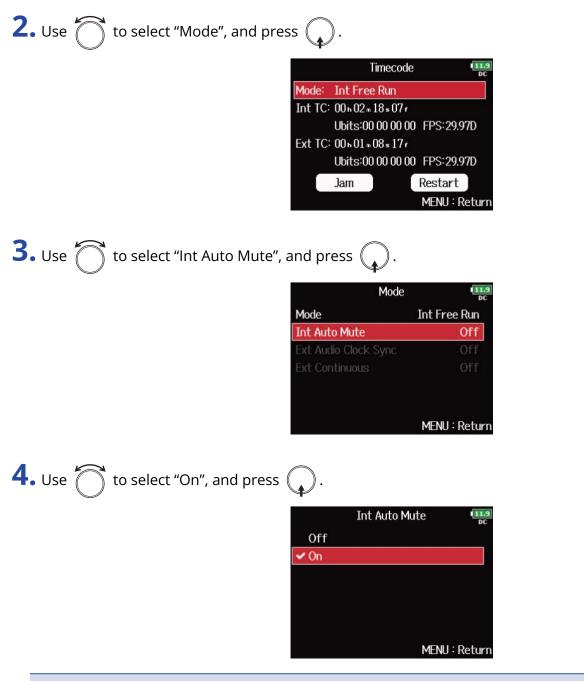
<b>2.</b> Use <b>to select "Mode"</b> , and press .	
	Timecode       Image: December 2014         Mode:       Int Free Run         Int TC: $00 h 02 m 18 * 07 r$ Ubits:00 00 00 00       FPS:29.97D         Ext TC: $00 h 01 m 08 * 17 r$ Ubits:00 00 00 00       FPS:29.97D         Jam       Restart         MENU : Return
<b>3.</b> Use 觉 to select "Mode", an	d press 😱 .
	Mode       Int Society         Mode       Int Free Run         Int Auto Mute       Off         Ext Audio Clock Sync       Off         Ext Continuous       Off         MENU : Return
<b>4.</b> Use <b>to</b> select the mode, a	and press 😱 .
	Mode       Immedia         Off       ✓         ✓       Int Free Run         Int Record Run       Int RTC Run         Int RTC Run       Ext         Ext       Ext Auto Rec         MENU : Return
Setting	Explanation
Off	No timecode will be written to the recording file. Timecode will not be output from the TIMECODE OUT jack.

Setting	Explanation
Int Free Run	Internal timecode will be generated regardless of the recording mode. The internal timecode can be set manually using the following operations:
	Jamming internal timecode
	Restarting internal timecode with a specified value
	Timecode will always be output from the TIMECODE OUT jack.
Int Record Run	Internal timecode will be generated only when recording. The internal timecode can be set manually using the following operations:
	Jamming internal timecode
	Restarting internal timecode with a specified value
	When switching from another mode, or when recording stops, the internal timecode will stop at the last value.
Int RTC Run	Internal timecode will be generated regardless of the recording mode. In the following situations, the internal timecode will be synchronized (jammed) with the RTC (internal clock):
	• At startup
	<ul> <li>When "Date/Time (RTC)" has changed (→ Setting the date and time (Date/Time (RTC)))</li> </ul>
	When switching to this timecode mode
	Timecode will always be output from the TIMECODE OUT jack.
Ext	The internal timecode will chase the external timecode. You can also enable the automatic generation of internal timecode when there is no external timecode. (→ Automatically enabling internal timecode when no external timecode is input)
Ext Auto Rec	The internal timecode will chase the external timecode. You can also enable the automatic generation of internal timecode when there is no external timecode. (→ Automatically enabling internal timecode when no external timecode is input) Recording starts automatically when external timecode input is detected. Recording stops automatically when external timecode stops.

#### Stopping timecode output when recording is stopped

You can set whether or not timecode is output from the TIMECODE OUT jack when recording is stopped.

**1.** Open the timecode setting screen. ( $\rightarrow$  Opening the timecode setting screen)



#### NOTE:

- Timecode will continue to be output when recording/playback is paused.
- This cannot be set when "Mode" is set to "Off", "Int Record Run", "Ext" or "Ext Auto Rec". (→ <u>Setting the</u> mode)

### Synchronizing audio clock with external timecode **1.** Open the timecode setting screen. ( $\rightarrow$ Opening the timecode setting screen) **2.** Use to select "Mode", and press . Timecode Mode: Ext Int TC: 00 h 06 m 34 s 15 r Ubits:00 00 00 00 FPS:29.97D Ext TC: 00 h 06 m 34 s 14 f Ubits:00 00 00 00 FPS:29.97D Restart Jam MENU : Return **3.** Use to select "Ext Audio Clock Sync", and press Mode 11.9 DC Mode Ext Ext Audio Clock Sync Off Ext Continuous Off MENU : Return **4.** Use to select "On", and press . Ext Audio Clock Sync 11.9 Off 🗸 On MENU : Return

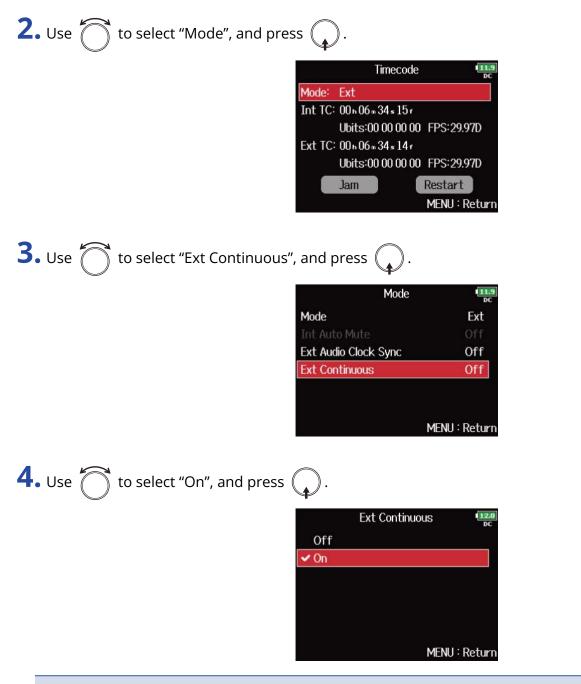
#### NOTE:

- When there is no external timecode, the internal audio clock is enabled to preserve continuity.
- This cannot be set when "Mode" is set to "Off", "Int Free Run", "Int Record Run" or "Int RTC Run". (→ <u>Setting</u> the mode)

#### Automatically enabling internal timecode when no external timecode is input

You can enable the automatic generation of internal timecode to preserve continuity when there is no external timecode.

**1**. Open the timecode setting screen. ( $\rightarrow$  Opening the timecode setting screen)



#### NOTE:

This cannot be set when "Mode" is set to "Off", "Int Free Run", "Int Record Run" or "Int RTC Run". (→ <u>Setting</u> the mode)

#### Setting the user bits for internal timecode

User bits are data that you can set to be included in the timecode. Up to 8 numbers (0–9) and letters (A–F) can be included. Recording date information, for example, can be useful when editing later.

#### Setting the user bits (Ubits) mode

**1.** Open the timecode setting screen. ( $\rightarrow$  Opening the timecode setting screen) **2.** Use to select "Ubits", and press . Timecode 12.0 DC Mode: Int Free Run Int TC: 00 59 41 × 08 r Ubits:00 00 00 00 FPS:29.97D Ext TC: 00 h 12 m 48 s 16 r Ubits:00 00 00 00 FPS:29.97D Restart Jam MENU : Return **3.** Use to select "Mode", and press . Ubits Mode uu uu uu uu Edit MENU : Return

**4.** Use to select the mode, and press .

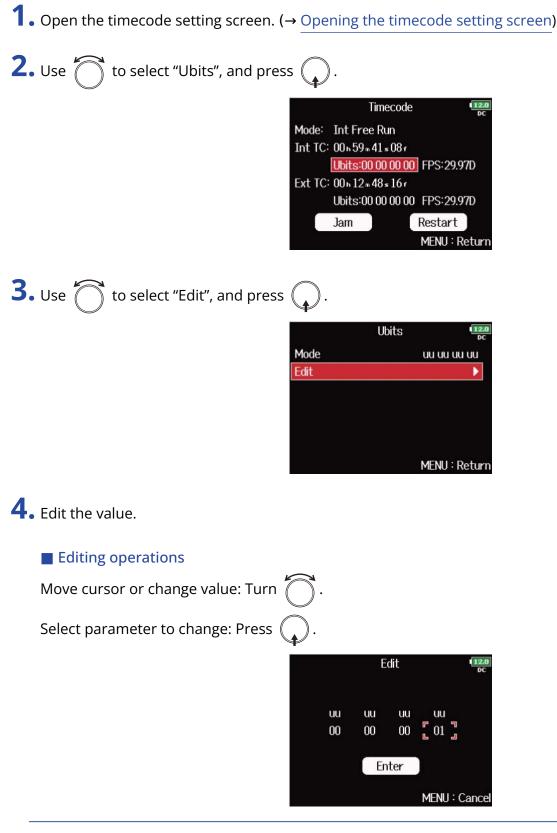


Setting	Explanation
นน นน นน นน	You can set these values as you like on the "Edit" screen.
mm dd yy uu	The month, day and year are entered automatically in that order using the RTC setting. You can set the "uu" value as you like on the "Edit" screen.
dd mm yy uu	The, day, month and year are entered automatically in that order using the RTC setting. You can set the "uu" value as you like on the "Edit" screen.
yy mm dd uu	The year, month and day are entered automatically in that order using the RTC setting. You can set the "uu" value as you like on the "Edit" screen.

#### HINT:

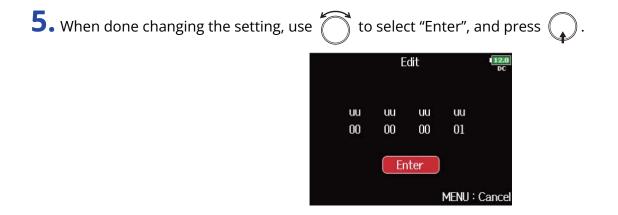
Only "uu" items can be changed.

### Setting user bits (Ubits)



#### HINT:

User bits can only consist of numbers from 0 to 9 and letters from A to F.



### Setting the frame rate for internal timecode

**1**. Open the timecode setting screen. ( $\rightarrow$  <u>Opening the timecode setting screen</u>)

**2.** Use to select "FPS", and press .



**3.** Use to select the frame rate, and press .

	FPS	12.0
24ND		DC
25ND		
29.97ND		
✔ 29.97D		
30ND		
30D		
		MENU : Return

Setting	Explanation
23.976ND	This is the most common frame rate used with HD cameras and other high- definition video recording. The count is 0.1% slower than the actual time.
24ND	This is the standard frame rate used for recording film. This is also used with HD cameras.
25ND	This is the frame rate for PAL video. This is used for PAL video, which is used in Europe and other regions.
29.97ND	This is a frame rate used for NTSC color video and HD cameras. The count is 0.1% slower than the actual time. This is used for NTSC video, which is used in Japan, the United States and other countries.
29.97D	This is an adjusted frame rate that uses drop frames to make NTSC match the actual time. This is used with video for broadcast that requires the actual time frame to be matched.
30ND	This is used to synchronize sound with film that is being transferred to NTSC video. This is the standard frame rate used for black-and-white television in Japan, the United States and other countries.

Setting	Explanation
30D	This rate is used for special applications. This synchronizes with film sound to be transferred to NTSC using 29.97fps drop frame. The count is 0.1% faster than the actual time.

### NOTE:

Matching frame rates must be set in advance on all connected video and audio devices.

### Jamming internal timecode

Timecode input through the TIMECODE IN jack is used to set internal timecode.

**1.** Open the timecode setting screen. ( $\rightarrow$  <u>Opening the timecode setting screen</u>)

**2.** Use to select "Jam", and press .

	Timecode	12.0 DC
Mode:	Int Free Run	
Int TC:	14n07m54s13r	
	Ubits:00 00 00 00	FPS:29.97D
Ext TC:	00 h 15 m 09 s 15 f	
	Ubits:00 00 00 00	FPS:29.97D
	Jam	Restart
		MENU : Return

### Restarting internal timecode with a specified value

**1**. Open the timecode setting screen. ( $\rightarrow$  <u>Opening the timecode setting screen</u>)

**2.** Use to select "Restart", and press .

	Timecode	12.0 DC
Mode:	Int Free Run	
Int TC:	14 h 08 m 09 s 09 f	
	Ubits:00 00 00 00	FPS:29.97D
Ext TC:	00 h 15 m 24 s 08 f	
	Ubits:00 00 00 00	FPS:29.97D
	Jam	Restart
		MENU : Return

**3.** Set the restart value.

#### Editing operations Move cursor or change value: Turn Select parameter to change: Press . Restart Int TC: 08 m 16= 001 14 м Restart Time: 00 m 00 f 00 h 00 s Restart MENU : Return **4.** Use to select "Restart", and press . Restart 12.0 DC Int TC: 14n 08 m 18s 291 Restart Time: 00 h 00 m 00 s 00 f

Restart

MENU : Return

# Setting automatic timecode recording delay (Auto Rec Delay Time)

If set to record automatically when external timecode is received, unnecessary recording could occur when timecode is received for a brief amount time. In order to prevent this, you can set the amount of time until recording starts after timecode is received.

### 1. Press MENU. This opens the Menu Screen. **2.** Use to select "TIMECODE", and press MENU PLAY TIMECODE D SLATE SYSTEM SD CARD USB MENU : Return **3.** Use $\int$ to select "Auto Rec Delay Time", and press ( TIMECODE 12.0 Timecode Auto Rec Delay Time 0.0s Start Timecode MENU : Return **4.** Use to adjust the time, and press **MENU**. Auto Rec Delay Time 12.0 0.0s ÷ MENU : Return

#### HINT:

This can be set from 0.0 to 8.0 s.

# Setting timecode initialization used at startup (Start Timecode)

Since internal timecode stops when the F8n Pro is turned off, the timecode is automatically initialized (jammed) during startup. You can set the value that is used for jamming at that time.

Setting how timecode is initialized at startup

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use of to select "TIMECODE", and press
MENU INCOME NU I
<b>3.</b> Use of to select "Start Timecode", and press .
TIMECODE Timecode Auto Rec Delay Time Start Timecode MENU : Return
<b>4.</b> Use of to select "Mode", and press .
Start Timecode Mode Restart Time RTC Timecode Calibration MENU : Return

**5.** Use to set how timecode is initialized, and press .



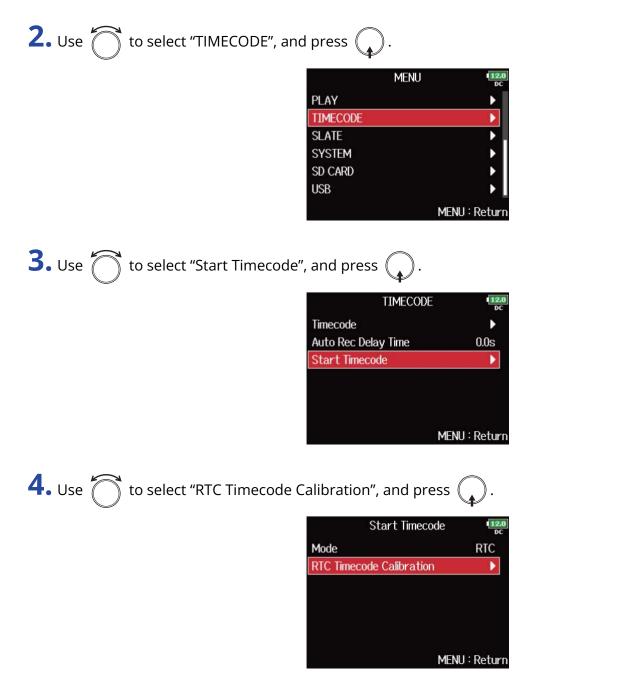
Setting	Explanation				
Restart Time	When the F8n Pro starts, the value set by "Restart" is used to jam the internal timecode. ( $\rightarrow$ Restarting internal timecode with a specified value)				
RTC	When the F8n Pro starts, its timecode is restored from the timecode when the power was turned off and advanced by the elapsed time using the "Date/Time (RTC)" setting (→ <u>Setting the date and time</u> ( <u>Date/Time (RTC)</u> )). Since RTC is less precise than internal timecode, discrepancies will occur.				

### Correcting timecode errors after the power has been turned off

When "Mode" of "Start Timecode" is set to "RTC", turning the power off lowers the timecode precision, but this function can improve the error to the value close to 0.2 ppm when the power has been turned off.

1. Press MENU.

This opens the Menu Screen.



<b>5.</b> Use to select "Recalibrate", and press .
RTC Timecode Calibration
<b>6.</b> Use of to select "Yes", and press .
RTC Timecode Calibration
<b>7.</b> Calibration completes.
RTC Timecode Calibration
8. To cancel calibration, press MENU, and use of to select "Yes", and press .
RTC Timecode Calibration

#### NOTE:

- The F8n Pro is calibrated before being shipped new from the factory.
- After calibrating once, the result will be retained.
- If the F8n Pro is moved to and used in an extremely hot or cold location, timecode precision could change slightly when the power is turned off. In such cases, we recommend calibrating it again.
- Calibration is not possible when "Audio Interface with Rec" is set to "On". (→ Using SD card recording and audio interface functions at the same time (Audio Interface with Rec))
- Calibration is only possible when "Mode" of "Start Timecode" is set to "RTC".
- Calibration is not possible when an FRC-8 is connected. ( $\rightarrow$  Using the FRC-8)

# Using with an UltraSync BLUE

The F8n Pro can receive timecode from a connected UltraSync BLUE and record it in audio recording files.

- This function cannot be used with an F8n Pro after it is first shipped from the factory. To use this function, a software extension file must be downloaded from the ZOOM website (<u>zoomcorp.com</u>) and installed in the unit.
- The F8n Pro has received radio law certification in Japan, the USA, Canada and Europe (EU). Use of this
  function is not allowed in other countries and regions. Using it in countries where certification has not
  been received could result in legal penalties. ZOOM CORPORATION will not assume any responsibility
  related to penalties due to the use of this function.
  - Connecting with an UltraSync BLUE

**1**. Press and hold **MENU** on the Home Screen.

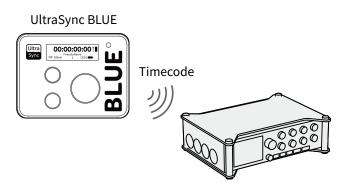
Connect the F8n Pro and an UltraSync BLUE.

Searching for the connected device will begin and "Searching..." will appear on the display.

### HINT:

- Searching can be canceled by pressing MENU.
- You can restart searching by selecting "Pair" on the "Timecode" screen even if searching has been canceled.

**4.** On the UltraSync BLUE, select the F8n Pro as the connected device.



When pairing completes, "Connected." will appear on the F8n Pro display.

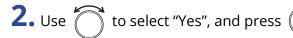
### HINT:

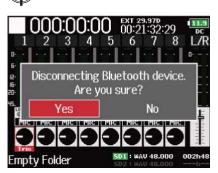
- See the UltraSync BLUE manual for the procedures to select connected devices.
- Use the F8n Pro and the UltraSync BLUE as close together as possible to make communication more reliable.
- If communication with the UltraSync BLUE is interrupted during recording, timecode data from the F8n Pro will be added to the recording file.

### Disconnecting from an UltraSync BLUE

A connected UltraSync BLUE can be disconnected from the F8n Pro, stopping timecode recording. Pairing information will be retained even when disconnected.

**1.** Press and hold **MENU** on the Home Screen.





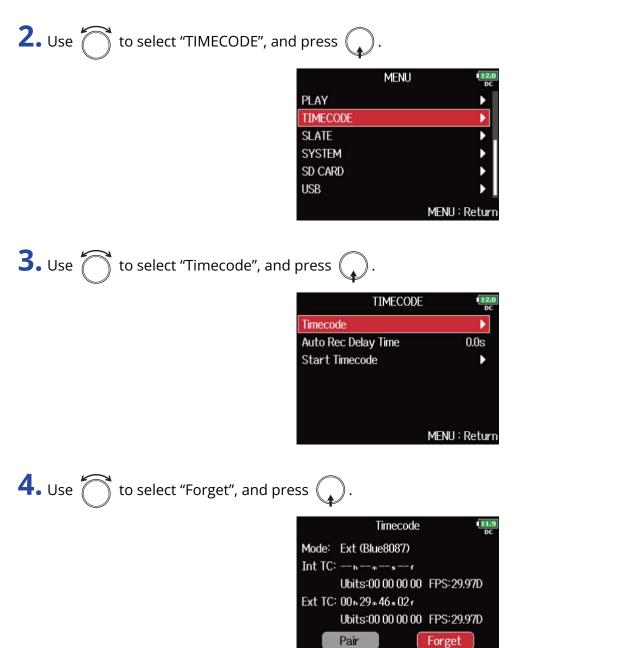
This disconnects the UltraSync BLUE. "Disconnected." will appear on the display.

### Connecting with a different UltraSync BLUE

To receive timecode from a different UltraSync BLUE, the pairing of the currently registered one must be first canceled and then the new one must be paired.

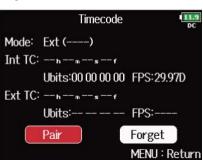
1. Press MENU.

This opens the Menu Screen.



MENU : Return

5. Use	to select "Pair", and press	•
--------	-----------------------------	---



Searching for the connected device will begin and "Searching..." will appear on the display.

#### HINT:

- Searching can be canceled by pressing MENU.
- You can restart searching by selecting "Pair" on the "Timecode" screen if searching has been canceled.

**6.** On the new UltraSync BLUE, select the F8n Pro as the device to connect. When pairing completes, "Connected." will appear on the F8n Pro display.

#### HINT:

- See the UltraSync BLUE manual for the procedures to select connected devices.
- Use the F8n Pro and the UltraSync BLUE as close together as possible to make communication more reliable.
- If communication with the UltraSync BLUE is interrupted during recording, timecode data from the F8n Pro will be added to the recording file.

# Setting the recording take

# Changing the note for the next take recorded (Note)

You can input characters for a note to use as metadata in the file.

<b>1.</b> Press <b>MENU</b> . This opens the Menu Screen.
<b>2.</b> Use 觉 to select "META DATA (for Next Take)", and press Q.
MENU (IZU) META DATA (for Next Take) INPUT OUTPUT REC PLAY TIMECODE MENU : Return
<b>3.</b> Use of to select "Note", and press .
META DATA (for Next Take)
<b>4.</b> Use of to select "Edit", and press
Note <b>Edit</b> No Slate History ►
MENU : Return

					Ec	it				112. DC
	No Slate									8/40
	1	2	3	4	5	6	7	8	9	0
	Α	В	С	D	Ε	F	G	Η	Ι	J
	Κ	L	Μ	N	0	Ρ	Q	R	S	Τ
	U	V	W	X	Y	Ζ	-	-	D	el
	abc							E	inte	r ]
۶E	W/I	FF:↔	-/-	÷			Ν	1EN	J:(	Cance

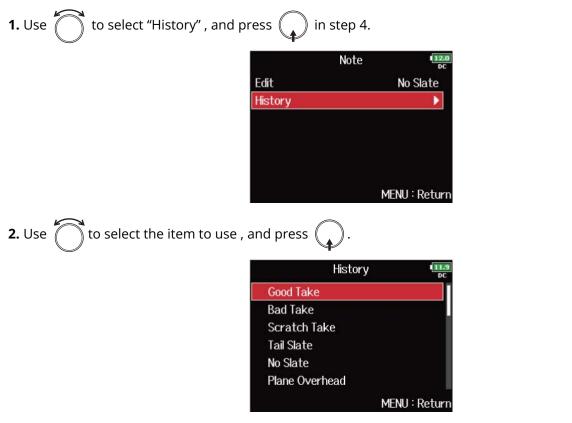
See "Character input screen" for how to input characters.

#### NOTE:

This note is written to the <NOTE> metadata.

#### HINT:

You can select notes from the history list.



The history list will be erased if the "Factory Reset" function is used. (→ Restoring factory default settings)

# Setting how recorded scenes are named and numbered

You can set how scenes are named (name mode), the base scene name and how scene numbers advance.

Setting how scenes are named (mode)

### 1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "META DA	ATA (for Next Take)", and pres	ss 😱.
	MENU	12.0 DC
	META DATA (for Next Take)	Þ.
	INPUT	•
	OUTPUT	•
	REC	•
	PLAY	
	TIMECODE	
	M	ENU : Return
<b>3.</b> Use 觉 to select "Scene Na	ame Mode", and press 🕠.	

META DATA (for	Next Take) 💶
Scene Name Mode	Date
User Scene Name	•
Scene Increment Mode	e Numeric
Track Name	▶
Take Reset Mode	Folder Change
Take Name Format	"Scene"-T***
	MENU : Return

**4.** Use to select the mode, and press .



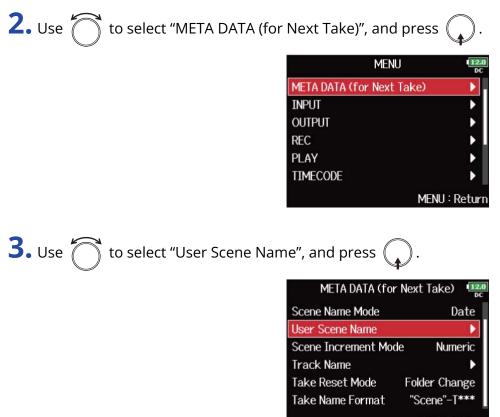
Setting	Explanation
None	The scene name and number are not used. When recording files are created, they are named only with the take number, such as "T001", "T002", "T003" and so on. + + cannot be used to advance the scene number by 1. Example: T001.wav
Current Folder	The name of the currently selected folder is used as the scene name. + + can be used to advance the scene number by 1. After advancing the scene number by 1, the corresponding folder will be used as the recording destination. If that folder does not already exist, it will be created. Example: FOLDER001-T001.wav
Date	The date is used as the scene name. The date is used as the scene name. The date is used as the scene number by 1. If recording occurs after the date changes, a scene folder with the date will be created. Example: 20210101-T001.wav
User Name	A scene name input by the user is used. <ul> <li>A scene name input by the user is used.</li> <li>+ + + can be used to advance the scene number by 1.</li> </ul> No folder is created in this case. Example: MYSCENE001-T001.wav

### Changing scene names

If "Scene Name Mode" is set to "User Name", set the scene name used like this.

1. Press MENU.

This opens the Menu Screen.



MENU : Return

**4.** Use to select "Edit", and press .



					Ec	it				12. D0	.0 C
	Scene001								8/40	)	
	1	2	3	4	5	6	7	8	9	0	
	Α	В	C	D	Ε	F	G	Н	Ι	J	
	К	L	Μ	N	0	Ρ	Q	R	S	Τ	
	U	V	W	X	Y	Ζ	-	-	D	el	
	a	abc Enter									
RE	W/I	FF:+	-/-	÷			١	1EN	U : (	Canc	e

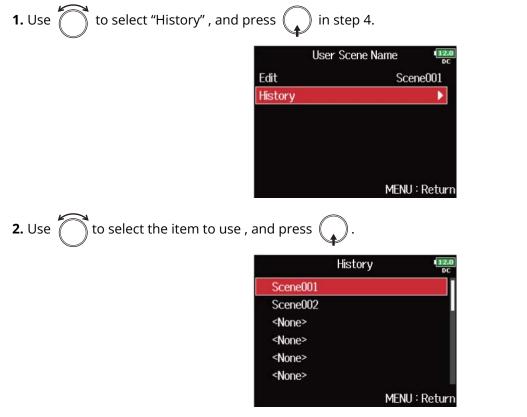
See "Character input screen" for how to input characters.

#### NOTE:

The scene name is written to the <SCENE> metadata. You cannot put a space or an @ mark at the beginning of the name.

#### HINT:

You can select a scene name from the history list.



The history list will be erased if the "Factory Reset" function is used. (→ Restoring factory default settings)

### Setting how scene numbers advance

1. Press MENU.

This opens the Menu Screen.

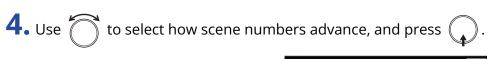


MENU	12.0 DC
META DATA (for Next Take)	•
INPUT	•
OUTPUT	•
REC	▶.
PLAY	► I
TIMECODE	•
MEN	NU : Return



**3.** Use to select "Scene Increment Mode", and press .

META DATA (for	r Next Take) 💷
Scene Name Mode	Date
User Scene Name	►
Scene Increment Mod	de Numeric
Track Name	•
Take Reset Mode	Folder Change
Take Name Format	"Scene"-T***
	MENU : Retur



Scene Incren	nent Mode	12.0 DC
✓ Numeric		
Character		
	MENU :	Return

Setting	Explanation
Numeric	Press $\blacksquare$ + $\blacktriangleright$ on the Home Screen to increase the scene number by one. Example: Scene $\rightarrow$ Scene1 $\rightarrow$ Scene2 $\rightarrow \rightarrow$ Scene9999
Character	Press $\blacksquare$ + $\blacktriangleright \bullet$ on the Home Screen to advance the capital letter at the end of the scene name by one. If the scene name does not have a capital letter at its end, one will be added. Example: Scene1 $\rightarrow$ Scene1A $\rightarrow$ Scene1B $\rightarrow \rightarrow$ Scene1Z $\rightarrow$ Scene1AA $\rightarrow$ Scene1AB $\rightarrow$

# Setting the take name reset condition and format

You can set the take name reset condition and format used when recording.

### Setting the take name reset condition

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use 觉 to select "META DATA (for	or Next Take)", and pre	ss 😱.
	MENU	12.0 DC
	META DATA (for Next Take)	D.
	INPUT	•
	OUTPUT	•
	REC	▶ .
	PLAY	
	TIMECODE	
	м	ENU : Return
<b>3.</b> Use 觉 to select "Take Reset Mo	ode", and press 😱 .	
	META DATA (for Next	Take) 12.0 DC
	Scene Name Mode	Date
	Liser Scene Name	

META DATA (for	Next Take) 💶
Scene Name Mode	Date
User Scene Name	•
Scene Increment Mode	e Numeric
Track Name	•
Take Reset Mode	Folder Change
Take Name Format	"Scene"-T***
	MENU : Return

**4.** Use to select the reset mode, and press .



Setting	Explanation
Off	The take number will not be reset. However, if the folder is changed and that folder contains a number higher than the current take number, the take number will be set to one higher than the highest existing take number.
Folder Change	If the destination folder is changed, the take number will be set to one higher than the highest take number in that folder.

### Setting the take name format

**1.** Press MENU.

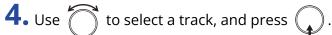
This opens the Menu Screen.

<b>2.</b> U	Use 💮 to select "META	A DATA (for Next Take)", an M META DATA (for Ne INPUT OUTPUT REC PLAY TIMECODE					
	3. Use of to select "Take Name Format", and press of . META DATA (for Next Take) META DATA (for Next Take) Scene Name Mode Date User Scene Name Scene Increment Mode Numeric Track Name Take Reset Mode Folder Change Take Name Format MENU : Return						
4. Use to select the format, and press . Take Name Format "Scene"-T**** "Scene"-T**** MENU : Return							
	Setting		Explanation				
	"Scene"-T***	"Scene"-T*** 1 2	<ol> <li>Scene name</li> <li>Track name</li> <li>Example: Scene001-T001</li> </ol>				
	"Scene"_***	"Scene"_*** 1 2	<ol> <li>Scene name</li> <li>Track name</li> <li>Example: Scene001_001</li> </ol>				

# Changing the track name of the next take recorded (Track Name)

The track name set with the following procedure will be given to the next recorded track.

1. Press MENU This opens the Menu Screen. **2.** Use of to select "META DATA (for Next Take)", and press ( MENU META DATA (for Next Take) INPUT OUTPUT REC PLAY TIMECODE MENU : Return **3.** Use to select "Track Name", and press . META DATA (for Next Take) 12. Scene Name Mode Date User Scene Name Scene Increment Mode Numeric Track Name Take Reset Mode Folder Change Take Name Format "Scene"-T\*\*\* MENU : Return HINT: On the Home Screen, **I** + **2** can be used to open the "Track Name" screen.



Tra	ack Name
Track 1	Tr1
Track 2	Tr2
Track 3	Tr3
Track 4	Tr4
Track 5	Tr5
Track 6	Tr6
	MENU : Return

# **5.** Use to select "Edit", and press .



# **6.** Edit the track name.

				Ec	it				112 D
	r1								3/1
1	2	3	4	5	6	7	8	9	0
Α	В	C	D	Ε	F	G	Η	Ι	J
К	L	Μ	Ν	0	Ρ	Q	R	S	Τ
U	V	W	Х	Y	Ζ		-	D	el
a	bc						E	inte	r ]
EW/	FF∶∢	-/->	•			١	1EN	J:(	Cano

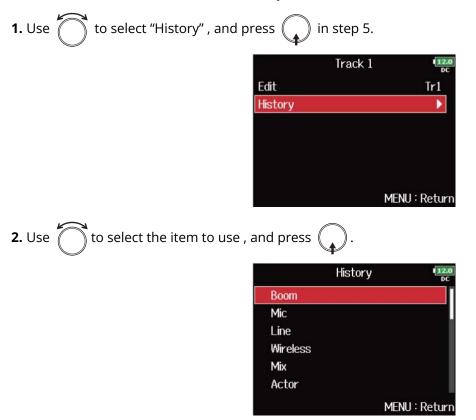
See "Character input screen" for how to input characters.

### NOTE:

The track name is written to the <TRACK> <NAME> metadata.

### HINT:

You can select a track name from the history list.

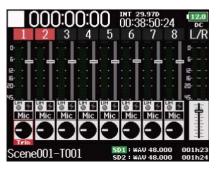


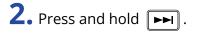
The history list will be erased if the "Factory Reset" function is used. (→ Restoring factory default settings)

### Changing the number of the next take recorded

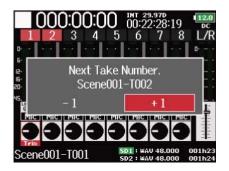
The number given to the next recorded take can be changed when the Home Screen is open.

**1.** Open the Home Screen. ( $\rightarrow$  Home Screen)





**3.** Use to increase or decrease the take number by one, and press .



#### NOTE:

This function cannot be used during recording and playback or when the "Scene Name Mode" (scene naming method) is set to "Date". You can change how scenes are named with "Setting how scenes are named (mode)".

# Using the slate mic and slate tone

### Slate mic and slate tone overview

When recording with the F8n Pro, you can add audio comments that describe, for example, the scene being filmed or the anticipated cuts. You can also record slate tone signals that can be used to synchronize with video.

The F8n Pro has a built-in slate mic for recording comments and the ability to output a variable frequency tone signal.

#### NOTE:

- The slate mic and slate tone cannot be used at the same time.
- The slate mic and slate tone cannot be used during audio file playback.

#### HINT:

A "slate" is a clapperboard used when recording video.

# Recording with the slate mic (Slate Mic)

You can use the built-in slate mic to record comments and to keep notes about recorded takes.

Setting the volume 1. Press MENU. This opens the Menu Screen. **2.** Use to select "SLATE", and press . MENU PLAY TIMECODE SLATE Þ SYSTEM SD CARD USB MENU : Return **3.** Use ) to select "Slate Mic", and press ( SLATE Slate Mic D Slate Tone MENU : Return **4.** Use to select "Level", and press . Slate Mic Level +20dB Routing On/Off On MENU : Return **5.** Use to adjust the level, and press **MENU**.



#### HINT:

This can be set from 0 to 24 dB.

### Setting the routing

Set the destination for the slate mic signal.

1. Press MENU.

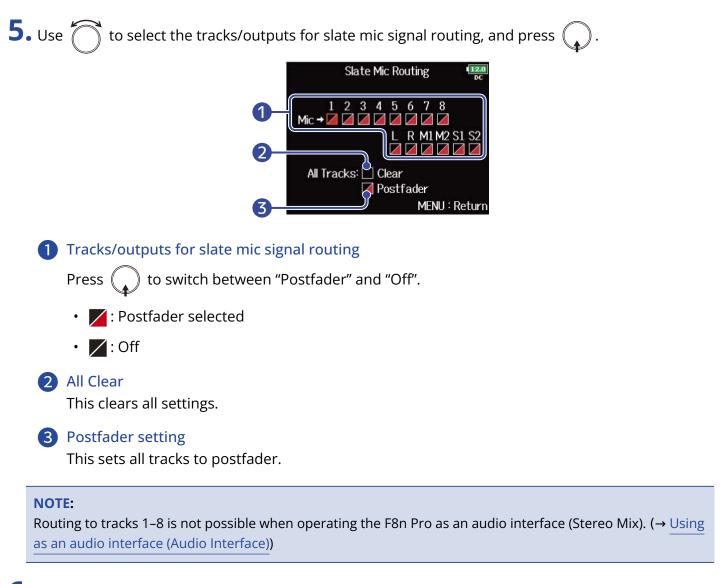
This opens the Menu Screen.

<b>2.</b> Use to select "SLATE", and p	press 😱.	
	MENU PLAY TIMECODE SLATE SYSTEM SD CARD USB	J (128) DC ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) )
<b>3.</b> Use $\bigcirc$ to select "Slate Mic", ar	nd press . SLAT	E (12.0) DC

	SLATE	12.0 DC
Slate Mic		
Slate Tone		•
		MENU : Return

**4.** Use to select "Routing", and press .

	Slate Mic	12.8 DC
Level		+20dB
Routing		•
On/Off		On
		MENU : Return





#### Recording

1. Press • to start recording.

**2.** Push i left toward the mic symbol and release.

**3.** To disable the slate mic, push is left toward the mic symbol again and release.

#### NOTE:

- When the slate mic is in use, other signals input to the tracks that it is routed to are muted.
- The slate mic signal is always routed to the headphone L/R channels regardless of other routing settings.
- The MAIN OUT 1/2 and SUB OUT 1/2 faders do not affect the levels of the slate mic and slate tone.

#### HINT:

If you push and hold  $\overbrace{\leftarrow}^{!}$  left toward the mic symbol for two or more seconds, the slate mic will be enabled until you release the switch.

#### Disabling the slate mic

You can set the slate mic so that it will not be enabled if  $\overset{\sim}{\smile}$  is accidentally pushed left toward the mic symbol.

1. Press MENU.

This opens the Menu Screen.

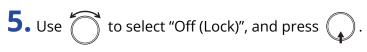
<b>2.</b> Use to select "SLATE", an	d press 😱 .	
	MENU	12.0 DC
	PLAY	•
	TIMECODE	
	SLATE	
	SYSTEM	•
	SD CARD	•
	USB	→ <u> </u>
		MENU : Return

**3.** Use to select "Slate Mic", and press .

S	LATE	12.0 DC
Slate Mic		
Slate Tone		•
	MEN	IU∶Return

**4.** Use to select "On/Off", and press .

	Slate Mic	12.0 DC
Level		+20dB
Routing		Þ
On/Off		On
		011
		MENU : Return





### Recording a slate tone (Slate Tone)

By adding a slate tone when the recording starts, aligning audio to video during editing will be easier. You can also use a slate tone to coordinate levels with connected equipment.

### Setting the volume

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "SLATE", and press .	
	MENU
	PLAY
	TIMECODE
	CLATE.

PLAY	•
TIMECODE	•
SLATE	▶.
SYSTEM	•
SD CARD	•
USB	• •
	MENU : Return

**3.** Use to select "Slate Tone", and press .

	SLATE	12.0 DC
Slate Mic		•
Slate Tone		Þ
		MENU : Return

**4.** Use to select "Level", and press .

S	late Tone
Level	-20dBFS
Frequency	1000Hz
Routing	•
On/Off	On
	MENU : Return

**5.** Use to adjust the level, and press **MENU**.



#### HINT:

This can be set from -20 to 0 dBFS.

### Setting the frequency

Set the frequency for the slate tone signal.

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "SLATE", and p	press 😱.	
		MENU II.0
	PLAY	•
	TIMECODE	▶
	SLATE	
	SYSTEM	•
	SD CARD	▶
	USB	•
		MENU : Return
<b>3.</b> Use 觉 to select "Slate Tone", a	and press 😱.	

SLATE Slate Mic Slate Tone MENU : Return

**4.** Use to select "Frequency", and press .

	Slate Tone	12.0 DC
Level		-20dBFS
Frequency		1000Hz
Routing		•
On/Off		On
		MENU : Return

**5.** Use to adjust the frequency, and press **MENU**.



#### HINT:

This can be set from 100 to 10,000 Hz.

### Setting the routing

Set the destination for the slate tone signal.

1. Press MENU.

**2.** Use

This opens the Menu Screen.

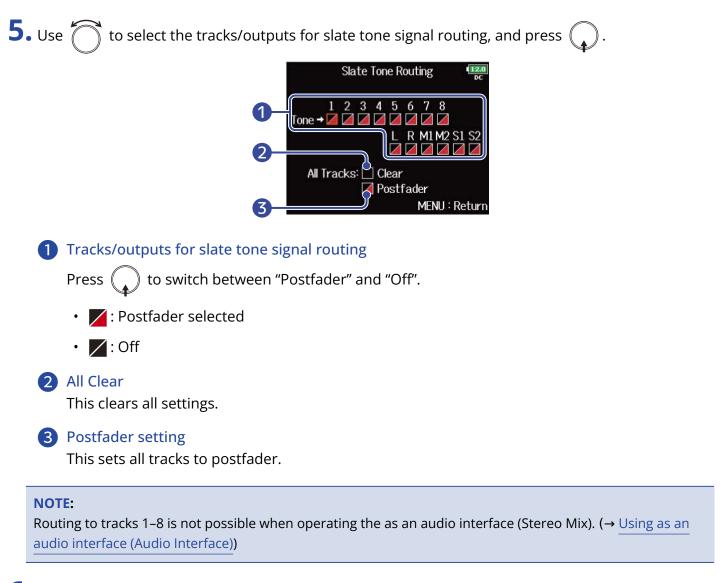
to select "SLATE", and pr	ress 😱 .		
		MENU	12.0 DC
	PLAY		•
	TIMECODE		•
	SLATE		
	SYSTEM		Þ
	SD CARD		Þ
	USB		•
			MENU : Return

**3.** Use to select "Slate Tone", and press .

	SLATE	112.0 DC
Slate Mic		•
Slate Tone		Þ
		MENU : Return

**4.** Use to select "Routing", and press .

	Slate Tone	12.0 DC
Level		-20dBFS
Frequency		1000Hz
Routing		Þ
On/Off		On
	м	ENU : Return





#### Recording

**1.** Press **•** to start recording.

**2.** Push  $\stackrel{!}{\longrightarrow}$  right toward the tone symbol and release.

#### NOTE:

- When the slate tone is in use, other signals input to the tracks that it is routed to are muted.
- The slate tone signal is always routed to the headphone L/R channels regardless of other routing settings.
- The MAIN OUT 1/2 and SUB OUT 1/2 faders do not affect the levels of the slate mic and slate tone.

#### HINT:

If you push and hold  $\stackrel{!}{\longrightarrow}$  right toward the tone symbol for one or more seconds, the slate tone will be enabled until you push the switch toward the tone symbol again.

#### Disabling the slate tone

You can set the slate tone so that it will not be enabled if  $\stackrel{\sim}{\longrightarrow}$  is accidentally pushed right toward the tone symbol.

### 1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use 🕷	🕤 to se	elect "SLATE",	, and press	·	
					ME

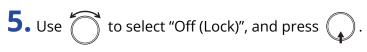
	MENU	12.0 DC
PLAY		•
TIMECODE		•
SLATE		•
SYSTEM		•
SD CARD		
USB		• • I
	ME	NU : Return

**3.** Use to select "Slate Tone", and press .

	SLATE	12.0 DC
Slate Mic		•
Slate Tone		Þ
		MENU : Return

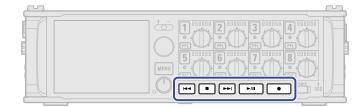
**4.** Use to select "On/Off", and press .

	Slate Tone	12.0 DC
Level		-20dBFS
Frequency		1000Hz
Routing		Þ
On/Off		On
		MENU : Return





# Recording



**1.** Press **•**. This starts recording.

2. Press • to start a new take when recording. This will end the current take and start a new take while continuing to record without interruption.

**3.** Press ►/II to pause.

### 4. Press **•** to stop.

#### NOTE:

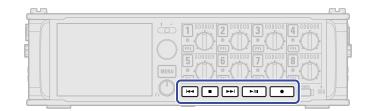
- Pressing old during recording is only possible after recording for at least a second.
- When pausing, pausing will occur at a whole second increment.
- When recording is paused, a mark is added at that point. Press **>**/**II** to resume recording.
- A maximum of 99 marks can be added to a take.
- If the maximum file size is exceeded during recording (→ Maximum file size (File Max Size)), recording will continue in a new take with a number that is one higher. No gap in sound will occur between the two takes when this happens.
- When recording on 2 SD cards simultaneously, if recording should stop on one because it runs out of space, recording will continue on the other SD card without interruption.

#### HINT:

- If the timecode function is enabled, recording will start from frame 00 (00 or 02 when using drop frame) and files will always end exactly on a second. This makes synchronization easy when editing later. (→ Using timecode)
- During playback, you can press and *market* and *market* to jump to points where marks have been added.
- You can also add marks without pausing. (→ Adding marks when recording/playing (PLAY Key Option))
- Press and hold 
  when the HOME screen is open to check the name that will be given to the next take recorded.
- Files are automatically saved at regular intervals during recording. Even if the power is interrupted or another unexpected problem occurs during recording, an affected file can be restored to normal by playing it with the F8n Pro.

# **Playing recordings**

# **Playing recordings**



### 1. Press ►/II

#### Playback operations

Select take or jump to mark: Press 🗔 or 🕞.	
Search backward/forward: Press and hold [4]/	-

Pause/resume playback: Press **>/II**.

#### NOTE:

Tracks that have no playback files appear gray.



#### HINT:

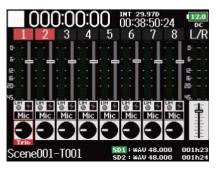
- The longer you press and hold [I], the faster the backward/forward search speed.
- During playback, press track keys to switch between playing back (lit green) and muted (unlit).
- An "Invalid Take!" message will appear if the selected take is not valid.
- A "No Take!" message will appear if no take exists.
- During playback, you can press ►/II to add a mark that can be used for skipping. (→ Adding marks when recording/playing (PLAY Key Option))

2. Press • or • to return to the Home Screen.

# Mixing takes

You can change the volume and panning of each track during playback.

**1**. Open the mixer on the Home Screen. ( $\rightarrow$  Mixer Screen)

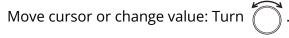




	000	):()(	0:0	4 5	INT 29 02:04 6	1:37: 7	12 8	<b>12.0</b> DC L/R
0								0
688889	) mjujuju							20 10 10 10 10 10 10 10 10 10 10 10 10 10
	Mic							
Scen	e001-	-T00	1	SI	1:WA	V 48.0	00	02n00

**3.** Adjust the parameter settings.

#### Editing operations



Select parameter to change: Press (...).

Parameter	Setting range	Explanation
Fader	Mute, -48.0 - +24.0 dB	Adjusts the level of the input signal.
Panning	L100 – Center – R100	Adjusts the left-right stereo position of the sound.

#### NOTE:

- The pan cannot be adjusted when "Track Knob Option" is set to "Fader". (→ Setting the track knob function (Track Knob Option))
- You can turn to move the cursor, and also adjust the settings of the MAIN OUT 1/2 and SUB OUT 1/2 tracks. (→ Setting output levels)
- When a fader or pan knob is selected, press and hold  $\bigcirc$  to reset it to its default value. If already set to its default value, selecting a fader mutes the track.

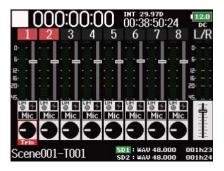
#### HINT:

- Settings are saved separately for each take and are used during playback.
- Mix settings are not saved with the take when the format is MP3.

# Monitoring the playback signals of specific tracks during playback

You can monitor the playback signals of specific tracks using SOLO mode.

**1.** Open the Home Screen. ( $\rightarrow$  Home Screen)





	00	)()	:0(	0:0	4	int 29 02:04	9.970 4:37:	12	12.0 DC
		2	3	-4	5	6	- 7	8	L/R
0 -									0
6 -									6
12									12
16									16
10									50
6.									45
LH		54		LIM N	Lint	19		5	
M	ic M	ic	Mic	Mic	Mic	Mic	Mic	Mic	中
Fac	ler							-	
Sce	eneO	11-	TOO	1	SD	1 : WA	V 48.0	00	02n00

**3.** Press **PFL** on the tracks that you want to monitor.

The background colors for the selected tracks will become green, and their track indicators will light orange.

> 00	0:0:	1:0	4 5	INT 29 02:04	<b>4:38</b> : 7	12 8	<b>12.0</b> DC L/R
0							0
6							5
e 🗧 🚪							15
20							50
45							45
OF OF			0		0	0	4
Mic Mic	MIC	MIC	MIC	MIC	MIC	MIC.	111
		0				9	111
Scene00	1-TOO	1	SI	1:WA	V 48.0	00	01n00

#### NOTE:

SOLO mode can only be used with tracks that can be played back (indicators lit green).

**4.** Press **PFL** of a track being monitored to stop monitoring it.

# Changing the playback mode (Play Mode)

You can change the playback mode.

1. Press MENU.

This opens the Menu Screen.

2.	Use	6
		//

to select "PLAY", and press	·

	MENU	12.0 DC
PLAY		
TIMECODE		•
SLATE		▶.
SYSTEM		•
SD CARD		•
USB		•
	ME	NU : Return

**3.** Use to select "Play Mode", and press .

	PLAY	12.0 DC
Play Mode		Play All
		MENU : Return

**4.** Use to select the play mode, and press .



Setting	Explanation
Play One (single playback)	Only the selected take will be played.
Play All (all playback)	Takes will be played back continuously from the selected one until the last take.
Repeat One (single repeat playback)	The selected take will be played repeatedly.
Repeat All (all repeat playback)	All takes in the selected folder will be played repeatedly.

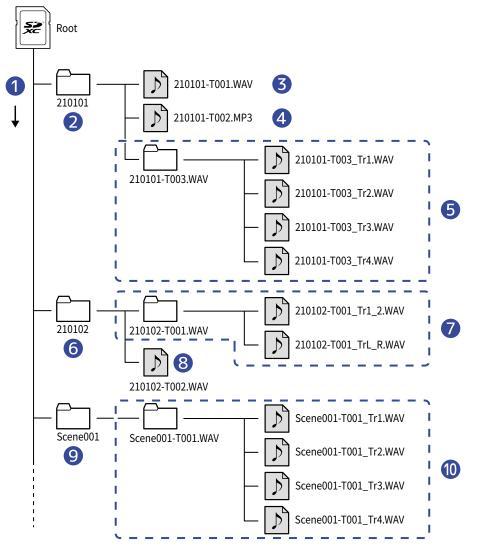
# **Managing files**

# Folder and file structure

When recording with the F8n Pro, folders and files are created on SD cards as shown below. Folders and files are used to manage scenes and takes.

### Folder and file structure

The folder and file structure differs according to the recording file format. In addition, the names of folders and files depend on how scenes are named.



#### 1 Order recorded



**3** Scene 210101 (1st take) WAV format, Poly file Scene 210101 (2nd take) MP3 format, Stereo file
Scene 210101 (3rd take) WAV format, Mono files (tracks 1-4)
Next scene
Scene 210102 (1st take) WAV format, Stereo file (track 1-2) Stereo file (L/R tracks)
Scene 210102 (2nd take) WAV format, Poly file
User created folder
Scene Scene001 (1st take) WAV format, Mono files (tracks 1-4)

#### NOTE:

- Enabling recording on SD cards and setting file formats (→ Enabling recording on SD cards and setting file formats)
- Setting how scenes are named (mode) (→ Setting how scenes are named (mode))

#### HINT:

- A "take" is a unit of data created for a single recording.
- A "Scene" is a unit containing multiple files and takes that comprise a single scene.

### Take names

Structure	Explanation
Scene001_T001 1 2 3	<ul> <li>Scene name: Select none, the folder name, the date or a name input by the user. (→ Setting how recorded scenes are named and numbered)</li> </ul>
①: Scene name ②: Scene number (1-9999) ③: Take number (001–999)	<ul> <li>Scene number: Press + to advance the number by one.</li> <li>Take number: This number increases by 1 for each recording made with the same scene name and number.</li> </ul>

### Audio file names

File names are given by the F8n Pro according to the file format—poly, mono or stereo. Track numbers and other data are added to file names.

File names are given according to the following formats.

Туре	Structure	Explanation
Poly file	Scene001_T001.wav	This is a file created by poly recording. Audio for multiple tracks is recorded to a single file.
	①: Take name	
Mono file	Scene001_T001_Tr1.wav 1 2 ①: Take name ②: Track number	This is a file created by mono recording.
Stereo file	Scene001_T001_Tr1_2.wav 1 (1) (2) (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2	This is a file created by stereo recording.

#### HINT:

When recording with the "Mono/Stereo WAV" setting, the audio files are saved in the take folder that is created. ( $\rightarrow$  Enabling recording on SD cards and setting file formats)

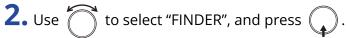
# Take and folder operations (FINDER)

The FINDER allows you to select and view the contents of SD cards, takes and folders, and to create project/ scene folders. It also allows you to, for example, set and delete recording/playback folders and view their information.

### Selecting SD cards, folders and takes

**1.** Press MENU.

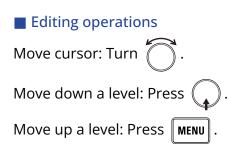
This opens the Menu Screen.



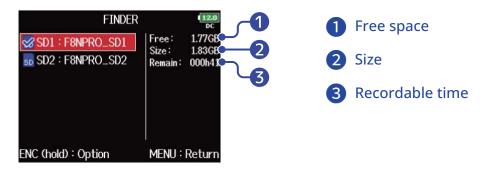
MENU	12.0 DC
FINDER	
META DATA (for Next Take)	•
INPUT	•
OUTPUT	•
REC	•
PLAY	
MENU	: Return

**3.** Turn to select the SD card, folder or take that you want to use.

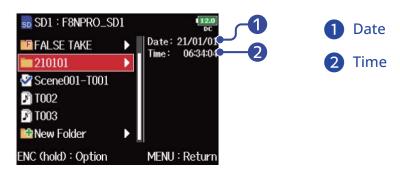
FINDER	12.0 DC
SD1 : F8NPRO_SD1 SD SD2 : F8NPRO_SD2	Free: 1.77GB Size: 1.83GB Remain: 000h41
ENC (hold) : Option	 MENU : Return



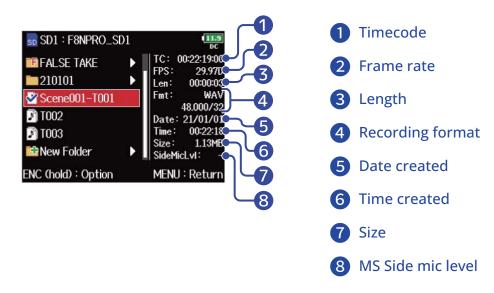
#### SD card selected



#### Folder selected



#### Take selected



#### NOTE:

- When the cursor is on a take, you can press 
   ▶/II to play the selected take. You can also use 
   ▶ and 
   .
- A check mark appears on the playback take and recording/playback folder.

### **Creating folders**

Folders can be created inside the currently selected SD card/folder.

**1.** Select the SD card or folder in which you want to make a folder (see "Selecting SD cards, folders and takes"), and press

This shows the files and folders in the selected SD card or folder.

<b>2.</b> Use 觉 to select "New Folder", and press	G
---	---



# **3.** Edit the folder name.

			Ν	ew l	Fold	er			12 D
F	olde	er00	1						9/4(
1	2	3	4	5	6	7	8	9	0
а	b	С	d	е	f	g	h	i	j
k	Τ	m	n	0	p	q	r	S	t
u	۷	w	x	У	z	_	-	D	el
#	+=						Enter		
W/I	-F:+	-/->	÷			N			Cano

See "Character input screen" for how to input characters.

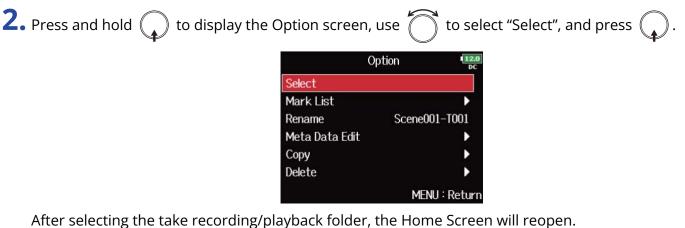
#### NOTE:

- The folder created will be set as the recording folder.
- The name of the folder created is written to the <PROJECT> or <SCENE> metadata.
- You cannot put a space or an @ mark at the beginning of the name.

### Selecting the take recording/playback folder

Use this procedure to select the folder that contains the take to be played or the folder to use for recording takes.

**1** Select the folder (see "Selecting SD cards, folders and takes").



After selecting the take recording/playback folder, the Home Screen will re A check mark appears on the selected folder.

NOTE:

The first take inside the selected SD card or folder will be set as the playback take.

### Checking take marks and using them for playback

You can view a list of the marks in a recorded take.

**1**. Select the take with the mark list that you want to view (see "Selecting SD cards, folders and takes").

<b>2.</b> Press and hold 😱 to display the Option screen, use ሸ to select "Mark List", and press 😱 .
Option DC Select
Mark List
Rename Scene001–T001
Meta Data Edit
Сору
Delete
MENU : Return
<b>3.</b> Use to select a mark, and press . $1 \qquad Mark List \qquad \qquad$
► 03 000:03:17 MENU : Return
1 Added Mark

2 Indicates that a mark was added during a recording error.

The Home Screen will reopen, and playback will start from the mark.

### Changing folder and take names

**1.** Select the folder or take with the name that you want to change (see "Selecting SD cards, folders and takes").

2. Press and hold to display the Option screen, use to select "Rename", and press .

	Option	12.0 DC
Select		
Mark List		•
Rename	Scene00	1-T001
Meta Data Edit		•
Сору		•
Delete		►
	MENI	J:Return

### **3.** Edit the folder/take name.

								D	С
ene	:00	1-T	001				]1	3/4	5
2 <b>1</b>	3	4	5	6	7	8	9	0	
3	С	D	Е	F	G	Η	Ι	J	
Ī	М	N	0	Ρ	Q	R	S	T	
7	W	Х	Y	Ζ		-	Del		
Ī						Enter			
		23 3C _ M / W	2 3 4 3 C D - M N / W X	3 C D E M N O / W X Y	2 3 4 5 6 3 C D E F M N O P 7 W X Y Z	2 3 4 5 6 7 3 C D E F G M N O P Q 7 W X Y Z _	2 3 4 5 6 7 8 3 C D E F G H M N O P Q R 7 W X Y Z	2 3 4 5 6 7 8 9 3 C D E F G H I M N O P Q R S 7 W X Y Z D	2 3 4 5 6 7 8 9 0 3 C D E F G H T J M N O P Q R S T 7 W X Y Z Del

See "Character input screen" for how to input characters.

#### NOTE:

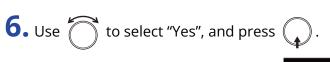
- The edited name of the folder/take is written to the <PROJECT> or <SCENE> metadata.
- You cannot put a space or an @ mark at the beginning of the name.

### Copying takes to other cards and folders

**1**. Select the take that you want to copy (see "Selecting SD cards, folders and takes").

2. Press and hold 😱 to display the Option screen, use ሸ to select "Copy", and press 😱 .	
Option Select Mark List ► Rename Scene001-T001 Meta Data Edit ► Copy ► Delete ► MENU : Return	
<b>3.</b> Use $\bigcirc$ to select the take to copy, and press $\bigcirc$ .	
Copy       Image: Copy         Image: Copy       Image: Copy </td <td></td>	
<b>4.</b> Press and hold .	
5. Use 觉 to select the copy destination, and press and hold 😱 .	
Copy to 210101 Date: 21/01/01 Time: 06:34:04 ENC (hold): Execute MENU: Return	
NOTE:	

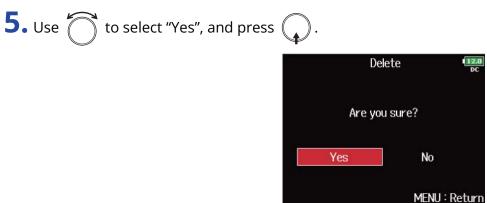
For how to select the folder, see "Selecting SD cards, folders and takes".





### Deleting folders and takes

**1**. Select the folder/take that you want to delete (see "Selecting SD cards, folders and takes"). **2.** Press and hold 🕠 to display the Option screen, use 🍎 to select "Delete", and press 🥠 . Option Select Mark List Rename Scene001-T001 Meta Data Edit Copy Delete MENU : Return **3.** Use to select the folder/take to delete, and press . Press MENU to cancel deletion. Delete Scene001–T001 🗹 🌛 Scene001–T002 🗆 🔊 T002 🗆 🕑 TOO3 ENC (hold) : Execute PLAY : All NOTE: You can press **>**/**I** to select/deselect all the folders and takes that are currently shown. **4.** Press and hold .

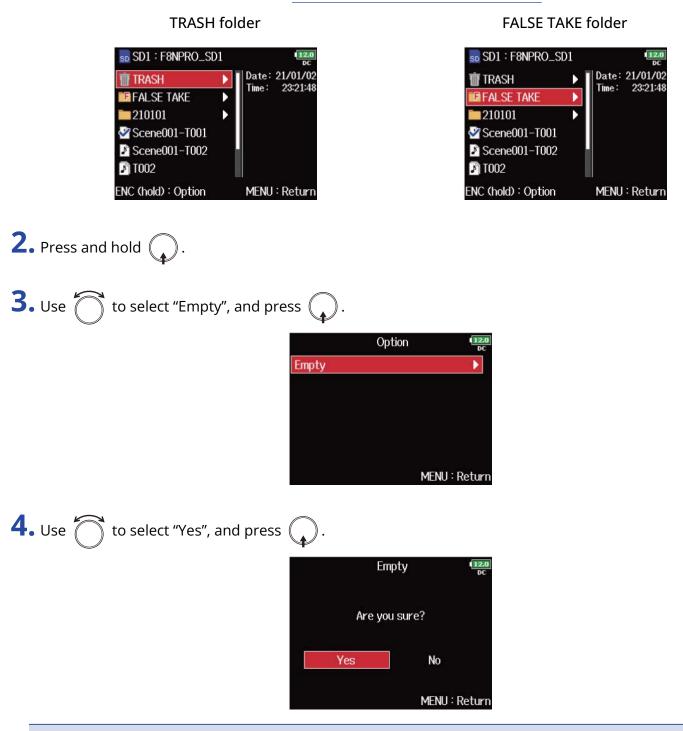


#### NOTE:

- Deleted folders and takes are not immediately erased from the SD card. They are moved to the TRASH folder.
- Deleting the folders and takes in the TRASH folder will completely erase their data.

### Emptying the TRASH/FALSE TAKE folder

**1.** Select "TRASH" or "FALSE TAKE" (see "Selecting SD cards, folders and takes").



#### NOTE:

- Emptying the TRASH folder will completely erase the data in it.
- Emptying the FALSE TAKE folder will not immediately erase the data in it from the SD card. Instead, this data will be moved to the TRASH folder.

# Overview of take information (metadata) stored in files

The F8n Pro writes a variety of information (metadata) to files during recording. When these files are read by an application that supports metadata, you will be able to check and use the saved information.

#### HINT:

- Metadata is data that contains information related to other data. The F8n Pro saves scene names and take numbers, for example, as metadata in audio files.
- A chunk is a unit that contains multiple data in a single block.
- To use BEXT and iXML chunk metadata, an application that supports both data formats is necessary.

#### WAV file metadata

The metadata saved in files recorded by the in WAV format is collected in BEXT (Broadcast Audio Extension) and iXML chunks.

For information about the metadata saved in these chunks, see "Metadata contained in BEXT chunks in WAV files, Metadata contained in iXML chunks in WAV files".

#### MP3 file metadata

The metadata saved in files recorded by the F8n Pro in MP3 format is written as ID3v1 tags. For information about the ID3 fields and formats for saving metadata, see the "<u>Metadata and ID3 fields</u> contained in MP3 files".

#### HINT:

- F8n Pro MP3 files conform to the MPEG-1 Layer III standard.
- MP3 metadata cannot be edited.

# Checking and editing take metadata

Use the metadata editing screen to check/edit take metadata.

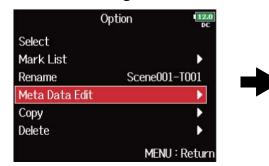
### Opening the metadata editing screen

1. Press MENU This opens the Menu Screen. **2.** Use of to select "FINDER", and press MENU FINDER META DATA (for Next Take) INPUT OUTPUT REC PLAY MENU : Return **3.** Use ሽ to select the take, and press and hold ( DIFERRIC SD1 : F8NPRO\_SD1 TC: FALSE TAKE FPS: 210101 Len 😪 Scene001-T001 **T1002** Date **T003** New Folder ENC (hold) : Option MENU : Return This opens the Option Screen.

#### HINT:

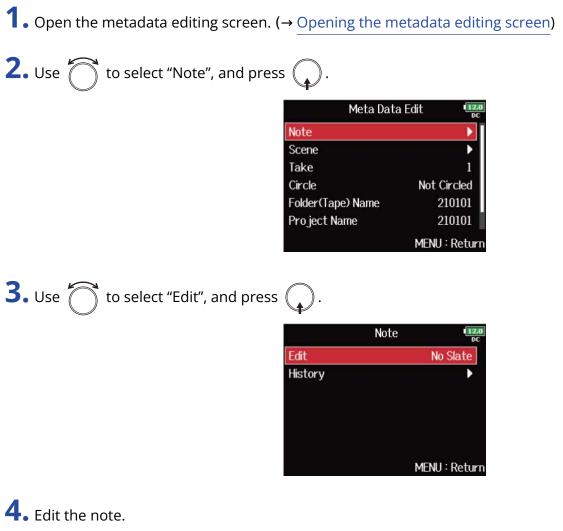
For how to select takes, see "Selecting SD cards, folders and takes".





Meta Data Edit 🛛 💷	
Note	Þ
Scene	Þ
Take	1
Circle	Not Circled
Folder(Tape) Name	210101
Project Name	210101
	MENU : Retur

## Checking and editing notes



					E	dit				1	2.0 DC
	N	lo Sl	late							8/4	0
	1	2	3	4	5	6	7	8	9	0	
	Α	В	C	D	Ε	F	G	Н	Ι	J	
	K	L	Μ	N	0	Ρ	Q	R	S	Τ	
	U	V	W	X	Y	Ζ	_	-	D	el	
	abc							E	inte	r	
RE	W/I	FF:+	-/->	÷			١	1EN	J:(	Can	cel

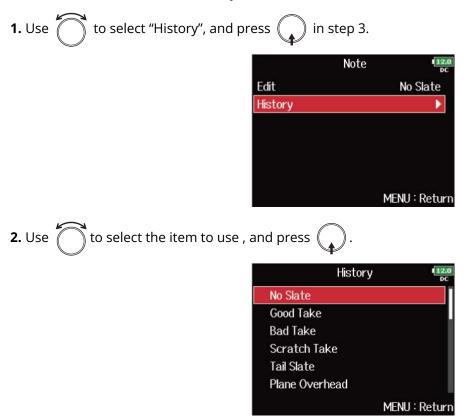
See "Character input screen" for how to input characters.

#### NOTE:

The content of this note is written to the <NOTE> metadata.

#### HINT:

You can select notes from the history list.



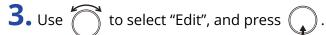
The history list will be erased if the "Factory Reset" function is used. (→ Restoring factory default settings)

## Checking and editing scene names

**1.** Open the metadata editing screen. ( $\rightarrow$  Opening the metadata editing screen)

**2.** Use to select "Scene", and press .

Meta Data	a Edit	12.0 DC
Note		•
Scene		•
Take		1
Circle	Not Ci	rcled
Folder(Tape) Name	21	0101
Project Name	21	0101
	MENU :	Return



Ŧ		
	Scene	12.0 DC
Edit		Scene001
History		•
	М	ENU : Return

## **4.** Edit the scene name.

					E	dit				12.0 DC
	Scene001									8/40
	1	2	3	4	5	6	7	8	9	0
	Α	В	C	D	Ε	F	G	Н	Ι	J
	K	L	Μ	N	0	Ρ	Q	R	S	Τ
	UVWXYZ_						_	-	D	el
	abc							E	inte	r ]
RE	W/I	FF∶∢	-/-	÷			١	1EN	U : (	Cancel

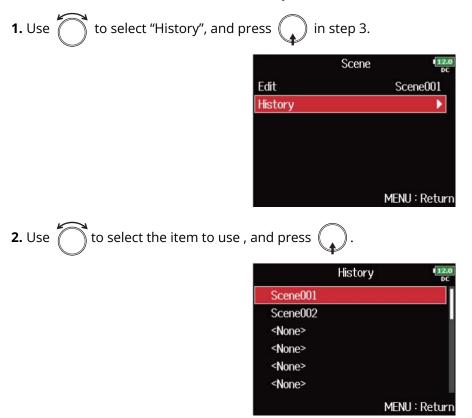
See "Character input screen" for how to input characters.

#### NOTE:

The scene name is written to the <SCENE> metadata.

#### HINT:

You can select a scene name from the history list.



The history list will be erased if the "Factory Reset" function is used. (→ Restoring factory default settings)

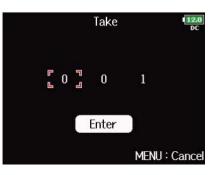
## Checking and editing take number

**1.** Open the metadata editing screen. ( $\rightarrow$  Opening the metadata editing screen)

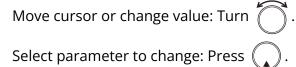
**2.** Use to select "Take", and press .

Meta Dat	a Edit 💶
Note	•
Scene	
Take	1
Circle	Not Circled
Folder(Tape) Name	210101
Project Name	210101
	MENU : Return

## **3.** Change the take number.



#### Editing operations

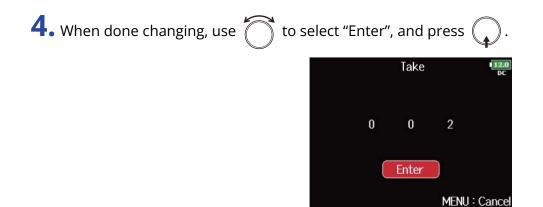


#### NOTE:

The take number is written to the <TAKE> metadata.

#### HINT:

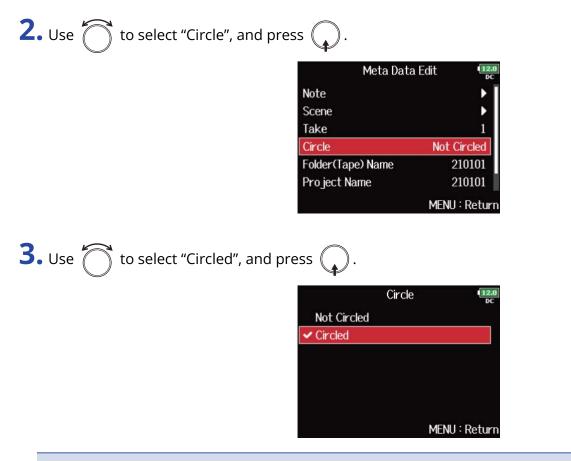
This can be set from 1 to 999.



## Setting the circling takes

Use this function to add an @ mark to the beginning of the name of the best take to make it stand out. This is called a "circled take".

**1.** Open the metadata editing screen. ( $\rightarrow$  <u>Opening the metadata editing screen</u>)



- To clear a circle, select "Not Circled" and press 🕠 .
- This circled status is written to the <CIRCLE> metadata.

## Editing folder (tape) names

**1.** Open the metadata editing screen. ( $\rightarrow$  Opening the metadata editing screen)

**2.** Use to select "Folder (Tape) Name", and press .

Meta Dat	a Edit 12.0
Note	▶ ]
Scene	•
Take	1
Circle	Not Circled
Folder(Tape) Name	210101
Project Name	210101
	MENU : Return

## **3.** Edit the folder (tape) name.

		FC	olde	rtia	ipe)	Nar	ne		
2	101	01							6/4
1	2	3	4	5	6	7	8	9	0
Α	В	С	D	Ε	F	G	Н	Ι	J
К	L	Μ	Ν	0	Ρ	Q	R	S	Τ
U	V	W	Х	Y	Ζ	_	-	D	el
abc							E	inte	r

See "Character input screen" for how to input characters.

- The folder (tape) name is written to the <TAPE> metadata.
- The folder (tape) name used immediately after recording is the name of the folder in which the take was recorded.

## Editing project names

**1.** Open the metadata editing screen. ( $\rightarrow$  Opening the metadata editing screen)

**2.** Use to select "Project Name", and press .

Meta Dat	a Edit 12.0
Note	▶
Scene	•
Take	1
Circle	Not Circled
Folder(Tape) Name	210101
Project Name	210101
	MENU : Return

## **3.** Edit the project name.

			Pro	o jec	t Na	ame			1	2.0 DC
2	101	01							6/4	0
1	2	3	4	5	6	7	8	9	0	
Α	В	С	D	Ε	F	G	Н	Ι	J	
K	L	Μ	Ν	0	Ρ	Q	R	S	T	
U	۷	W	Х	Y	Ζ		-	D	el	
ab	C						E	inte	r	

See "Character input screen" for how to input characters.

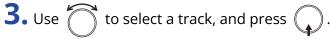
- The project name is written to the <PROJECT> metadata.
- The project name used immediately after recording includes the name of the highest level folder (inside the SD card root directory) that contains the folder in which the take was recorded.

## Checking and editing track names

**1.** Open the metadata editing screen. ( $\rightarrow$  <u>Opening the metadata editing screen</u>)

**2.** Use to select "Track Name", and press .

Meta Data	a Edit 12.0
Scene	•
Take	1
Circle	Not Circled
Folder(Tape) Name	210101
Project Name	210101
Track Name	Þ
	MENU : Return



Tr	ack Name 💷
Track 1	Tr1
Track 2	Tr2
Track 3	
Track 4	
Track 5	
Track 6	
	MENU : Retur

```
4. Use to select "Edit", and press .
```

	Track 1	12.0 DC
Edit		Tr1
History		•
	٨	1ENU : Return

					E	dit				1 <u>12.</u> DC
	T	r1								3/16
	1	2	3	4	5	6	7	8	9	0
	Α	В	С	D	Ε	F	G	Н	Ι	J
	К	L	Μ	N	0	Ρ	Q	R	S	Τ
	U	V	W	X	Y	Ζ	-	-	D	el
	al	С						E	inte	r
RE	W/I	FF:↔	-/-	÷			Ν	1EN	U:(	Cance

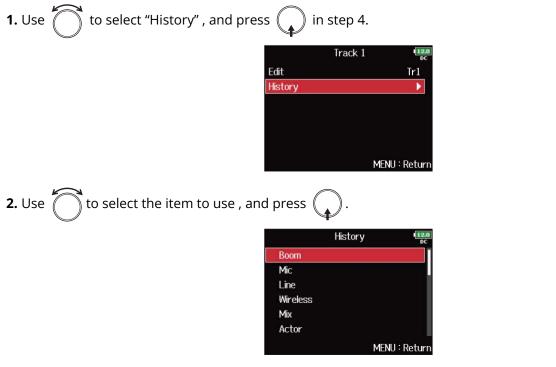
See "Character input screen" for how to input characters.

#### NOTE:

The track name is written to the <TRACK> <NAME> metadata.

#### HINT:

You can select a track name from the history list.



The history list will be erased if the "Factory Reset" function is used. (→ Restoring factory default settings)

## Writing sound reports (Create Sound Report)

A sound report includes information about recording times and takes. Reports can be written as CSV format files (F8n Pro\_"folder name".CSV). You can edit the comments written in sound reports.

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "FINDER", a	and press 😱 .
	MENU
	FINDER
	META DATA (for Next Take)
	INPUT
	OUTPUT
	REC
	PLAY
	MENU : F

**3.** Use to select the folder or SD card for which you want to create a sound report, and press and hold .

FINDER	12.0 DC
SD1 : F8NPRO_SD1 SD SD2 : F8NPRO_SD2	Free: 1.75GB Size: 1.83GB Remain: 000h40
ENC (hold) : Option	 MENU : Return

This opens the Option Screen.

#### HINT:

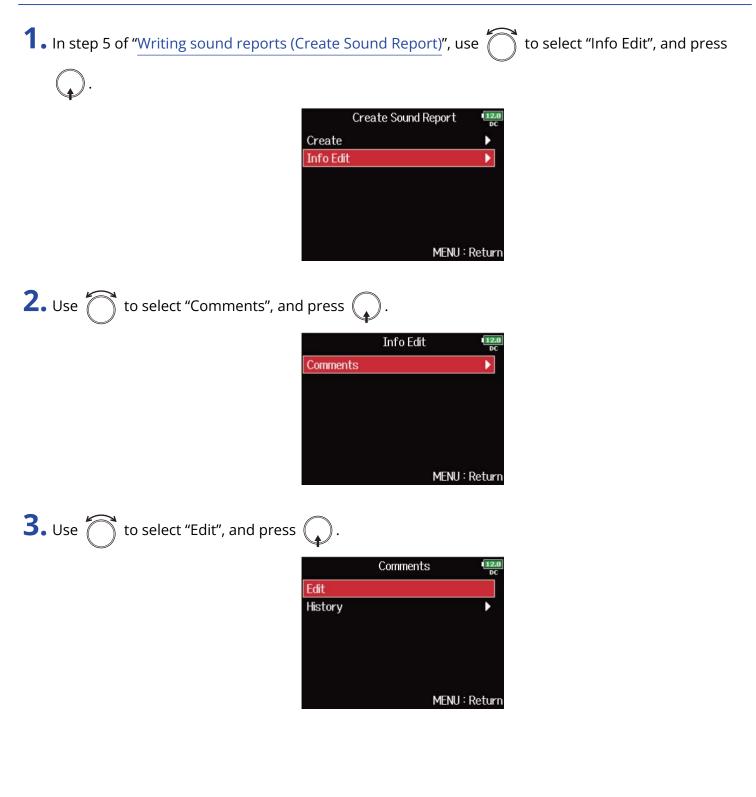
For how to select folders and SD cards, see "Selecting SD cards, folders and takes".

<b>4.</b> Use to select "Create Sound Report", and press .
Option Select Create Sound Report
MENU : Return
<b>5.</b> Use to select "Create", and press .
Create Sound Report
MENU : Return
<b>6.</b> Use to select "Yes", and press .
Create Create
Are you sure?
Yes No
MENU : Return

This writes the sound report inside the selected SD card or folder.

- Only information about takes in the folder or SD card is written in the sound report.
- If a sound report file with the same name already exists, it will be overwritten. Please use caution.

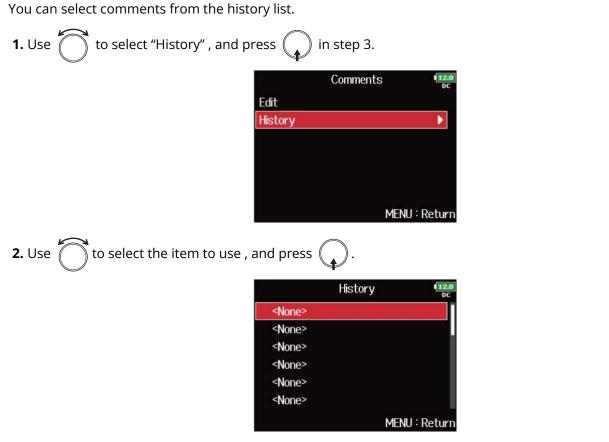
## Editing sound report comments



					E	dit				112. DC
	ĺ									0/40
	1	2	3	4	5	6	7	8	9	0
1	4]	В	С	D	Ε	F	G	Н	Ι	J
ŀ	<	L	М	N	0	Ρ	Q	R	S	Τ
ι	J	۷	W	Х	Y	Ζ		-	D	el
	at	)C						E	inte	r ]
EN	1/F	-F:←	-/-:	÷			١	1EN	U:(	Canc

See "Character input screen" for how to input characters.

#### HINT:



The history list will be erased if the "Factory Reset" function is used. (→ Restoring factory default settings)

## **Using USB functions**

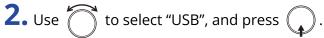
## Exchanging data with a computer (SD Card Reader)

By connecting the F8n Pro to a computer, you can check and copy data on SD cards.

## Connecting to a computer

1. Press MENU.

This opens the Menu Screen.

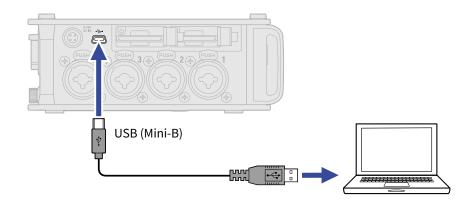


	MENU	12.0 DC
PLAY		•
TIMECODE		•
SLATE		•
SYSTEM		•
SD CARD		Þ
USB		►
	ME	NU : Return

**3.** Use to select "SD Card Reader", and press .

USB	12.0 DC
SD Card Reader	
Audio Interface	•
FRC-8	►
Audio Interface with Rec	Off
	MENU : Return

## **4.** Connect the F8n Pro and computer with a USB cable.



#### NOTE:

- Use a USB cable that supports data transfer.
- The F8n Pro cannot operate on USB bus power. Use the internal batteries, the dedicated AC adapter or an external DC power supply to power it.

#### HINT:

When the F8n Pro is connected to a computer, the SD cards loaded in slots 1 and 2 are recognized as separate SD cards.

## Disconnecting a computer

**1** Disconnect on the computer.

• Windows:

Select F8n Pro from the "Safely Remove Hardware and Eject Media" icon on the bottom of the computer screen.

• macOS:

Drag and drop the F8n Pro icon to the Trash.

**2.** Disconnect the cable from the computer and the F8n Pro, and press MENU.

#### NOTE:

Always conduct the removal procedure in step 1 before disconnecting the USB cable.

## Using as an audio interface

Signals input to the F8n Pro can be sent to a computer or iOS/iPadOS device, and playback signals from a computer or iOS/iPadOS device can be output from the F8n Pro.

Precautions when using 32-bit float format:

- Before using, confirm that the app used on your computer or iOS/iPadOS device supports 32-bit float format.
- Before connecting the F8n Pro to speakers or headphones, set the F8n Pro headphone volume and output level of the MAIN OUT 1/2 and SUB OUT 1/2 to a minimum. Using an app that does not support 32-bit float format could make an unexpected loud noise and damage your ears.

## Installing drivers

- Windows computers
- **1.** Download the F8n Pro Driver to the computer from <u>zoomcorp.com</u>.

**2.** Launch the installer and follow its instructions to install the F8n Pro Driver.

#### NOTE:

See the "Installation Guide" included in the driver package for detailed installation procedures.

## Mac computers and iOS/iPadOS devices

No drivers are necessary for use with Mac computers and iOS/iPadOS devices.

## Using as an audio interface (Audio Interface)

## Connecting to a computer or an iOS/iPadOS device

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "USB", and	press 😱.
	MENU
	PLAY
	TIMECODE
	SLATE
	SYSTEM
	SD CARD
	USB
	M

**3.** Use to select "Audio Interface", and press .

USB	12.0 DC
SD Card Reader	•
Audio Interface	•
FRC-8	•
Audio Interface with Rec	Off
	MENU : Return

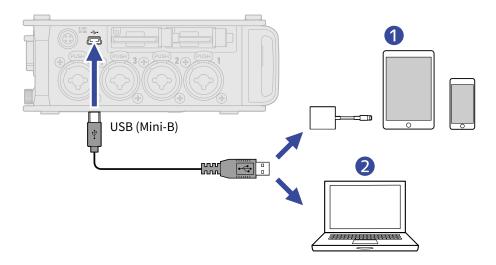
ENU : Return

**4.** Use to select the mode, and press .



Setting	Explanation
Stereo Mix (iPad)	This is a 2-in/2-out connection mode for iOS/iPadOS devices and sends tracks 1–8 as a stereo mix.
Multi Track (PC/Mac)	This is an 8-in/4-out connection mode for Mac/Windows and sends tracks 1–8 as separate signals (cannot be used with an iOS device). The screen for selecting the operation mode opens. Use to
	select the operation mode, and press . Multi Track (PC/Mac) Linear Float
	• Linear: This sets the bit depth during audio interface use to 24-bit
	<ul> <li>Float: This sets the bit depth during audio interface use to 32-bit Float.</li> </ul>

**5.** Use a USB cable to connect the F8n Pro and the computer or iOS/iPadOS device.



### 1 iOS/iPadOS device

2 Computer (Windows/Mac)

The audio interface screen opens.



### Operation mode

This shows the current operation mode.

- Use a Lightning to USB 3 Camera Adapter to connect to an iOS/iPadOS device.
- Use a USB cable that supports data transfer.
- The F8n Pro cannot operate on USB bus power. Use the internal batteries, the dedicated AC adapter or an external DC power supply to power it.
- When the F8n Pro is used as an audio interface and the sampling rate is set to 44.1/48 kHz, latency increases 2 ms. When latency increases while monitoring sounds being recorded with a mic in real-time, interference occurs between sound transmitted through the air from the source and the delayed monitored sound, possibly making accurate monitoring of the sounds difficult.

## Disconnecting

- 1. Press MENU . This opens the Menu Screen. **2.** Use to select "EXIT", and press . MENU INPUT OUTPUT LOOP BACK Off SLATE EXIT MENU : Return **3.** Use to select "Yes", and press . EXIT 12. Exit Audio Interface Mode. Are you sure? No Yes MENU : Return
- **4.** Disconnect the cable from the computer or iOS/iPadOS device and the F8n Pro.

#### NOTE:

Always conduct the removal procedure in steps 1 to 3 before disconnecting the USB cable.

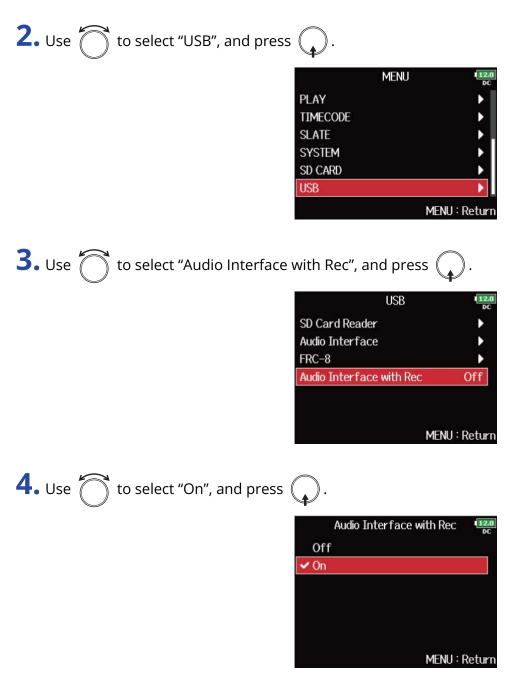
## Using SD card recording and audio interface functions at the same time (Audio Interface with Rec)

In addition to the two SD cards, a computer can also be used for recording backup.

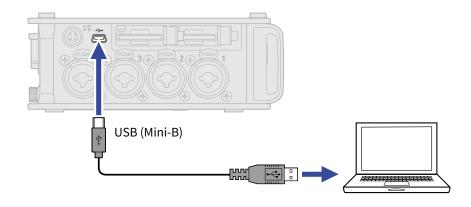
## Connecting to a computer

1. Press MENU.

This opens the Menu Screen.



**5.** Use a USB cable to connect the F8n Pro and the computer.

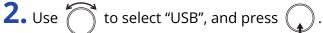


- Use a USB cable that supports data transfer.
- The F8n Pro cannot operate on USB bus power. Use the internal batteries, the dedicated AC adapter or an external DC power supply to power it.
- "Audio Interface with Rec" cannot be used with the following settings and functions.
  - Sampling rate settings other than 44.1/48 kHz (→ Setting the sampling rate (Sample Rate))
  - "SD Card Reader" ( $\rightarrow$  Exchanging data with a computer (SD Card Reader))
  - "Audio Interface" (→ Using as an audio interface (Audio Interface))
  - FRC-8 ( $\rightarrow$  Using the FRC-8)
- When "Audio Interface with Rec" is set to "On", the sampling rate cannot be changed. (→ <u>Setting the</u> sampling rate (Sample Rate))
- When "Audio Interface with Rec" is set to "On", files with sampling rates that differ from the F8n Pro setting cannot be played. (→ Setting the sampling rate (Sample Rate))
- When "Audio Interface with Rec" is set to "On", "WAV Bit Depth" cannot be changed. (→ <u>Setting WAV file</u> bit depth (WAV Bit Depth))
- Set the input source to USB 1-4 (→ Setting the input source (Input Source)) or set USB 1-4 to the output routing (→ Setting signals sent to headphones (Headphone Routing), Selecting signals sent to the main outputs (MAIN OUT Routing), Selecting signals sent to the sub outputs (SUB OUT Routing)) to monitor sound played back from the computer.
- When "Audio Interface with Rec" is set to "On", the F8n Pro latency will increase 2 ms. When monitoring sounds being recorded with a mic in real-time, increased latency can cause interference between sound transmitted through the air from the source and the delayed monitored sound, possibly making accurate monitoring of the sounds difficult.
- The audio interface operation mode changes depending on the "WAV Bit Depth" setting. (→ <u>Setting WAV</u> file bit depth (WAV Bit Depth) )
  - "16-bit Linear"/"24-bit-Linear": The bit depth during audio interface use is set to 24-bit Linear.
  - "32-bit Float": The bit depth during audio interface use is set to 32-bit Float.

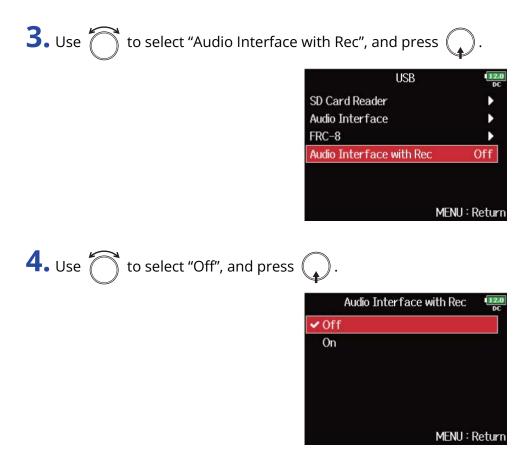
## Disconnecting

**1.** Press MENU.

This opens the Menu Screen.



	MENU	12.0 DC
PLAY		•
TIMECODE		•
SLATE		•
SYSTEM		•
SD CARD		Þ
USB		►
	ME	NU : Returr



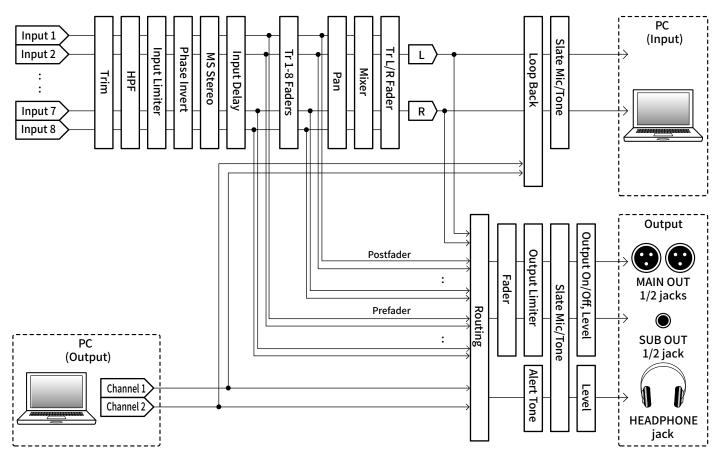
**5.** Disconnect the cable from the computer and the F8n Pro.

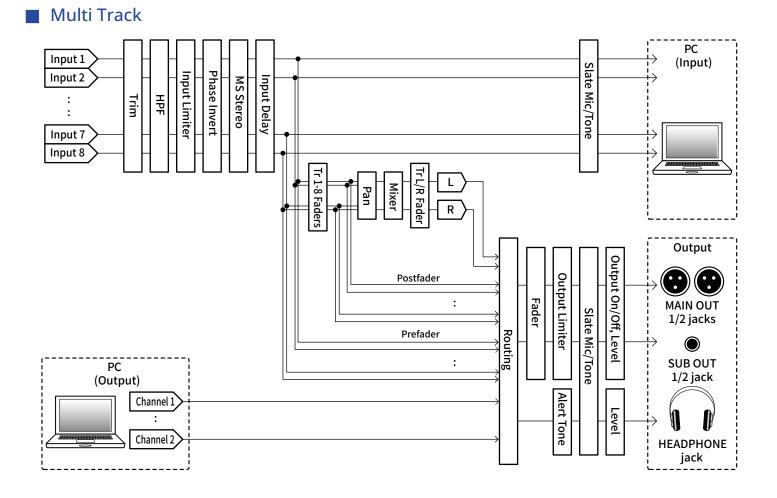
#### NOTE:

Always conduct the removal procedure in steps 1 to 4 before disconnecting the USB cable.

## Audio interface block diagrams

## Stereo Mix



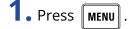


## Making audio interface settings

## Setting loop back (Stereo Mix only)

This function allows the playback sound from the computer or iOS/iPadOS device and the F8n Pro inputs to be mixed and sent back to the computer or iOS/iPadOS device (loop back).

You can use this function to add narration to music played back from the computer and record the mix or stream it from the computer, for example.



This opens the Menu Screen.

<b>2.</b> Use to select "LOOP BA	CK", and press 😱 .
	MENU
	INPUT
	OUTPUT
	LOOP BACK
	SLATE
	EXIT

## Mixing inputs

You can adjust the mix balance of input signals sent to the computer or iOS/iPadOS device. When "Audio Interface" is set to "Stereo Mix", the mixed stereo signal will be sent. ( $\rightarrow$  Using as an audio interface (Audio Interface))

MENU : Return

**1.** Open the mixer on the Home Screen. ( $\rightarrow$  Mixer Screen)



**2.** Adjust the parameter settings.

See "Adjusting the input signal monitoring balance" for how to change settings.

## **Using the FRC-8**

## Using the FRC-8 as a controller (Connect)

By connecting the FRC-8 to the F8n Pro, you can use it to adjust trim, fader and pan settings, for example.

1. Press MENU.	
This opens the Menu Screen.	
<b>2.</b> Use <b>o</b> to select "USB", and press <b>(</b> .	
N PLAY TIMECODE SLATE SYSTEM SD CARD USB	1ENU
<b>3.</b> Use to select "FRC-8", and press .	
	USB
SD Card Reader	l l
Audio Interface	
Audio Interface w	ith Rec Off
	MENU : Return

**4.** Use a USB cable to connect the F8n Pro and the FRC-8.

## **5.** Turn the FRC-8 power ON.

## **6.** Use to select "Connect", and press .

FRC-	8 11.9 DC
Connect	
User Key	▶
Knob/Fader Mode	Absolute
Power Source	▶
Keyboard Type	US
USB Bus Power	Not Supply
	MENU : Return

#### NOTE:

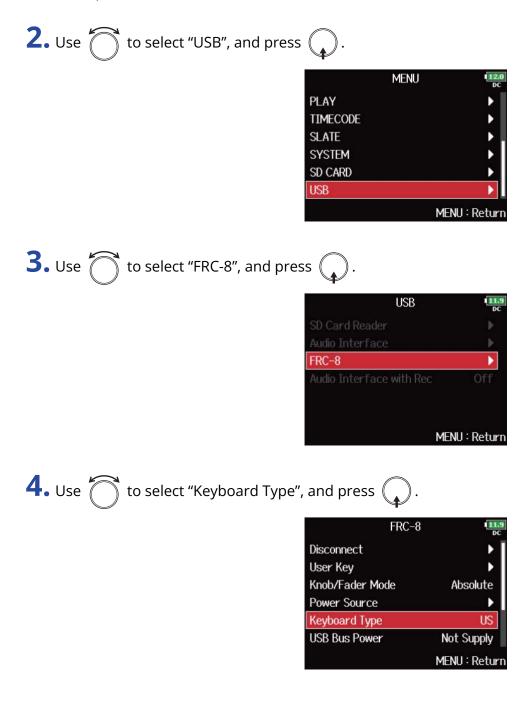
When disconnecting the FRC-8, select "Disconnect" before unplugging the USB cable.

# Setting the type of keyboard connected to the FRC-8 (Keyboard Type)

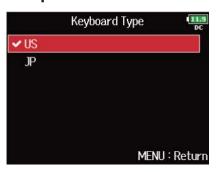
You can connect a PC keyboard to the FRC-8 and use it to input characters. Set the type of PC keyboard connected to the FRC-8.

1. Press MENU.

This opens the Menu Screen.



**5.** Use to select the type, and press .



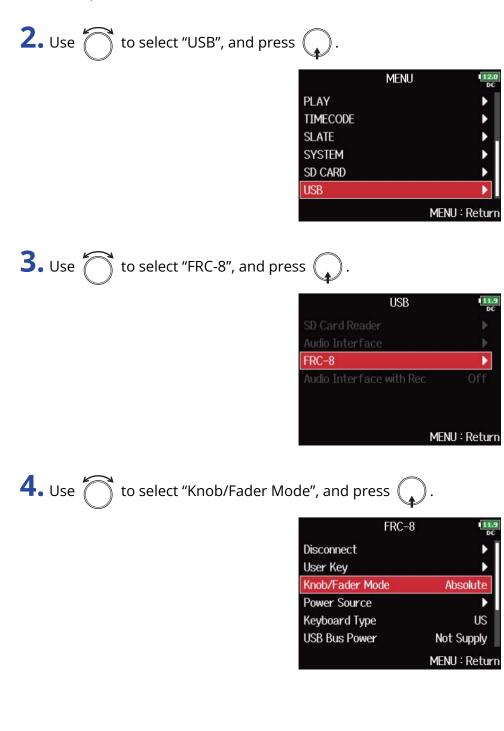
Setting	Explanation	
US	Use for English-language keyboards.	
JP	Use for Japanese keyboards.	

# Setting FRC-8 fader and knob operation (Knob/Fader Mode)

How the FRC-8 faders and TRIM/PAN knobs operate when their positions differ from actual parameter values can be set.

1. Press MENU.

This opens the Menu Screen.



**5.** Use to select the FRC-8 fader and knob operation, and press .



Setting	Explanation
Absolute	When a knob or fader is operated, the parameter value will change to the value shown by that knob or fader.
Safety	When a knob or fader is operated, the parameter value will not change until the knob or fader first matches that value.

#### NOTE:

The FRC-8 headphone volume operation cannot be changed.

## Setting user keys for the FRC-8 (User Key)

You can assign functions to the FRC-8 user keys.

1. Press MENU.

This opens the Menu Screen.

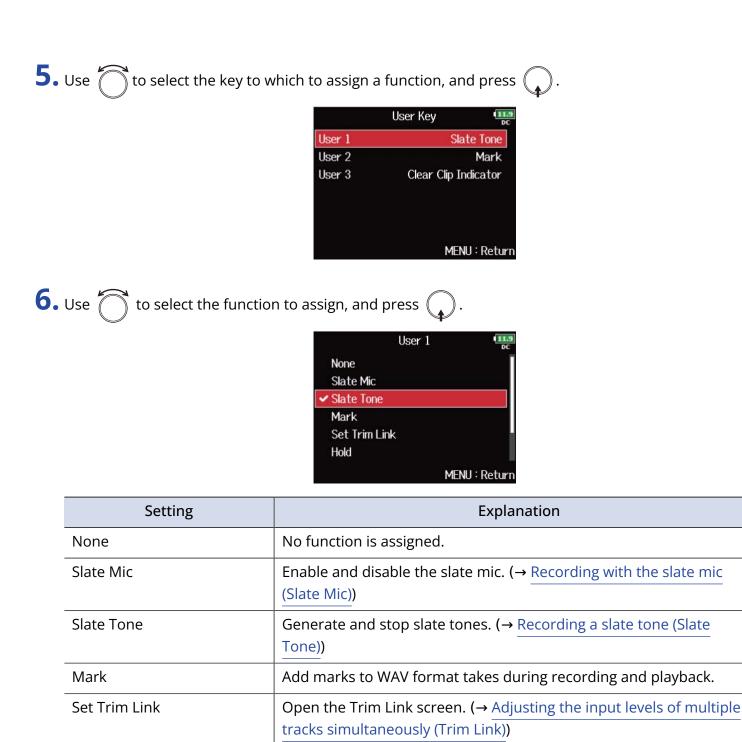
<b>2.</b> Use of to select "USB", and press .
MENU PLAY TIMECODE SLATE SYSTEM SD CARD USB MENU : Return
<b>3.</b> Use to select "FRC-8", and press .
USB USB SD Card Reader
MENU : Return
<b>4.</b> Use of to select "User Key", and press .
FRC-8 Disconnect User Key Knob/Fader Mode Absolute Power Source

110 0	oappij
MENU	: Poturi

US

Keyboard Type

USB Bus Power



held (Key Hold Target))

Clear the level meter clipping indicators.

Hold

Circled

**Clear Clip Indicator** 

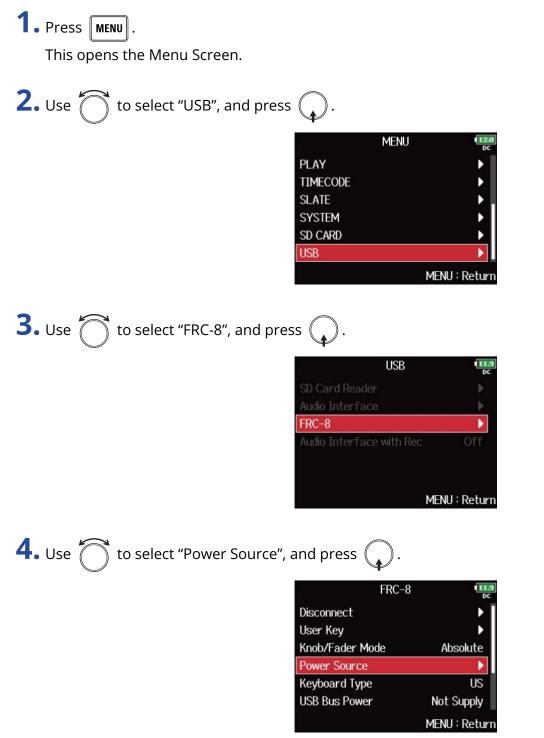
Use to disable the keys set with "Key Hold Target". ( $\rightarrow$  Setting the keys

Circle the currently selected take. ( $\rightarrow$  Setting the circling takes)

# Setting the power supply used by the FRC-8 (Power Source)

Set the DC power supply shutdown voltage, nominal voltage and type of batteries so that the remaining power supply charge can be shown accurately.

On this menu page, you can check the voltage of each power supply and the remaining battery capacity.



Power settings for the FRC-8 are the same as for the F8n Pro. See "Setting the power supply used (Power Source)".

#### NOTE:

- When multiple power supplies are connected, they will be used in the following order of priority. DC power supply (Ext DC) > USB bus power (supplied by F8n Pro) > AA batteries (Int AA)
- The voltages of each power supply are shown on the display.

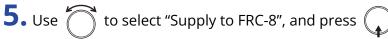
# Powering the FRC-8 with USB bus power (USB Bus Power)

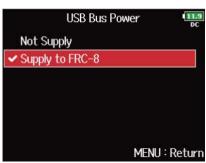
The F8n Pro can supply USB bus power to the FRC-8.

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "USB", and pre	ss 😱.	
	MENU PLAY TIMECODE SLATE SYSTEM SD CARD USB	MENU : Return
<b>3.</b> Use to select "FRC-8", and pr	ress 😱 .	
	USB SD Card Reader Audio Interface FRC-8 Audio Interface with Rec	(11.9) DC ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) )
<b>4.</b> Use to select "USB Bus Powe	er", and press 😱 .	
	FRC-8 Disconnect User Key Knob/Fader Mode Power Source Keyboard Type USB Bus Power	Absolute US Not Supply MENU : Return





#### NOTE:

When the F8n Pro is supplying bus power, do not connect any device other than an FRC-8 to the USB port. Doing so could damage the and the connected device.

### Setting the FRC-8 LED brightness (LED Brightness)

You can adjust the brightness of the LEDs on the FRC-8.

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "USB", and press .	
PLAY TIMECODE SLATE SYSTEM SD CARD USB	MENU
<b>3.</b> Use to select "FRC-8", and press .	
SD Card R Audio Inte FRC-8 Audio Inte	
<b>4.</b> Use of to select "LED Brightness", and pre	ess 😱 .
User Key Knob/Fade Power Sou Keyboard USB Bus P LED Bright	rrce ► Type US ower Not Supply

MENU : Return

**5.** Use to adjust the brightness, and press **MENU**.



#### NOTE:

This can be set from 5 to 100.

### Updating the FRC-8 firmware

You can check the FRC-8 firmware version and update it to the latest version. The latest update file can be downloaded from the ZOOM website (www.zoom.co.jp).

**1**. See "Using the FRC-8 as a controller (Connect)", and connect the F8n Pro and the FRC-8.

#### NOTE:

Updating is not possible if the remaining battery or DC power supply charge is low. In this case, replace the batteries with new ones or use a charged DC power supply.

- **2.** Copy the update file to the root directory on an SD card.
- **3.** Load the SD card into the SD CARD 1 slot. ( $\rightarrow$  Loading SD cards)

#### NOTE:

If an SD card is loaded in the SD CARD 2 slot, eject it.

4. Press MENU.

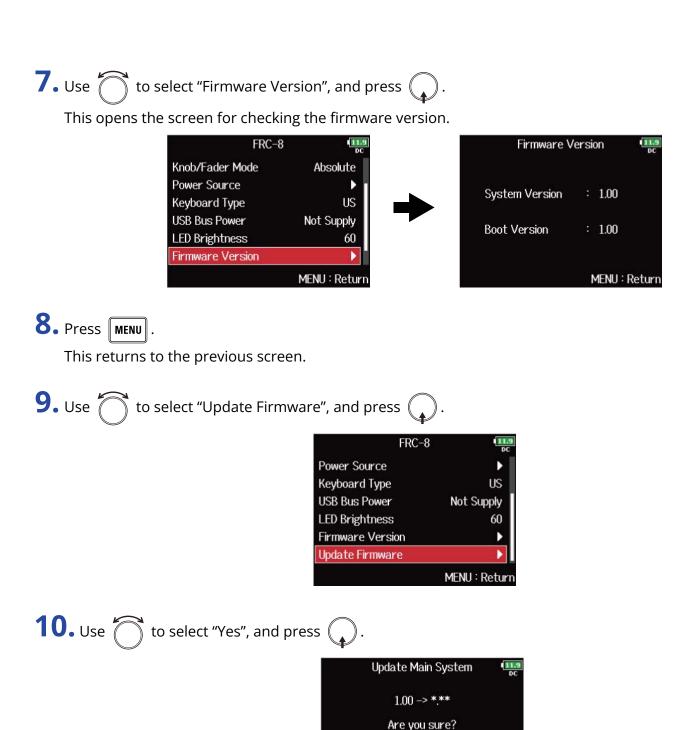
This opens the Menu Screen.

**5.** Use to select "USB", and press .

	MENU	12.0 DC
PLAY		
TIMECODE		•
SLATE		▶.
SYSTEM		•
SD CARD		۱.
USB		•
	ME	NU : Return

**6.** Use to select "FRC-8", and press .

USB	11.9 DC
SD Card Reader	
Audio Interface	
FRC-8	
Audio Interface with Rec	Off
	MENU : Return



#### NOTE:

Do not turn the power off, remove an SD card or disconnect the USB cable during an update. Doing so could cause the FRC-8 to become unstartable.

Yes

No

MENU : Return

**11.** When finished updating, turn the FRC-8 power off.



# Controlling the F8n Pro from a smartphone/ tablet

You can operate the F8n Pro wirelessly from a smartphone or tablet using the dedicated F8 Control app.

- This function cannot be used with an F8n Pro after it is first shipped from the factory. To use this function, a software extension file must be downloaded from the ZOOM website (<a href="mailto:zoomcorp.com">zoomcorp.com</a>) and installed in the unit.
- The F8n Pro has received radio law certification in Japan, the USA, Canada and Europe (EU). Use of this
  function is not allowed in other countries and regions. Using it in countries where certification has not
  been received could result in legal penalties. ZOOM CORPORATION will not assume any responsibility
  related to penalties due to the use of this function.

#### NOTE:

- The dedicated F8 Control app must be installed on the smartphone/tablet beforehand. The F8 Control app can be downloaded from the App Store and Google play. For app setting and operation procedures, see the F8 Control app operation manual.
- The F8n Pro cannot be simultaneously connected to the F8 Control app and an UltraSync BLUE.

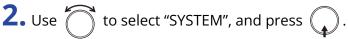
## Making various settings

# Setting how timecode is shown (Home Timecode Display Size)

You can change the size of the timecode display on the Home Screen.

1. Press MENU.

This opens the Menu Screen.



1	
PLAY	Þ
TIMECODE	۱.
SLATE	•
SYSTEM	Image: A start of the start
SD CARD	•
USB	•
	MENU : Return



SYSTEM	11.9 DC
Home Timecode Display Size	e Small
Level Meter	•
LED Brightness	60
LCD	•
PLAY Key Option	•
Track Knob Option	Fader
٨	1ENU : Returr

**4.** Use to select the size, and press .



Setting	Explanation
Small	The timecode is small and the time counter is large.
	<b>000:00:00 INT</b> 29.970 <b>111.9 00:</b> 42:13:21 <b>11.9 DC</b>
Big	The timecode is large and the time counter is small.
	00:42:19:28 000:00:00 INT 29.970

### Setting level meter appearance (Level Meter)

You can set how the level meters appear on the display.

1. Press MENU.

This opens the Menu Screen.

Use to select "SYSTEM", and press .

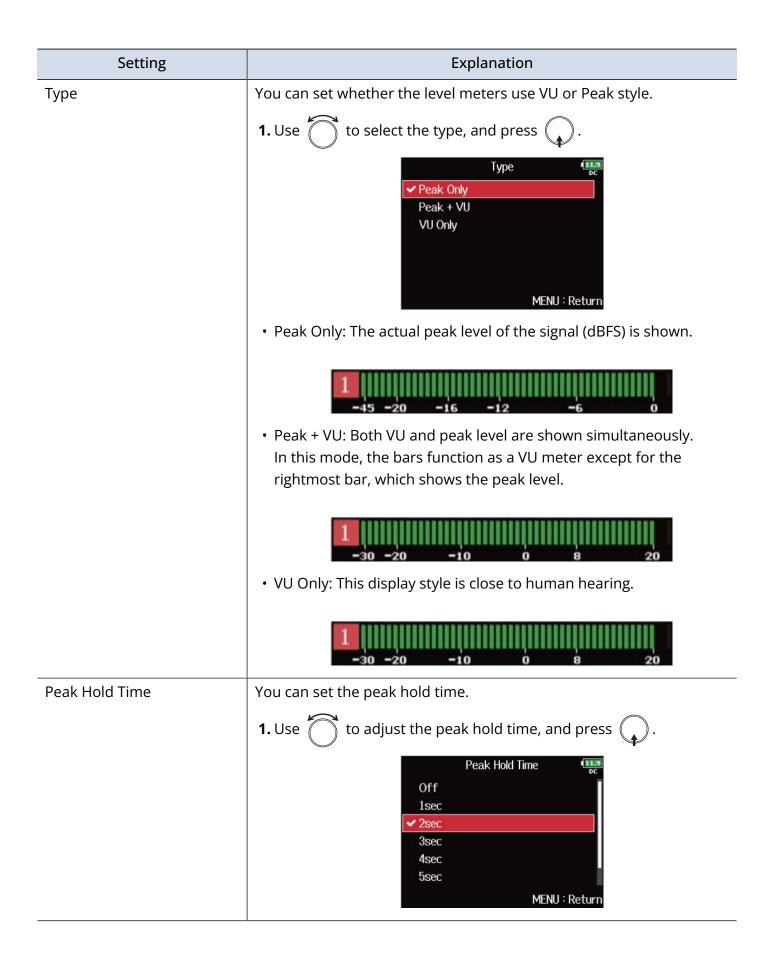
	MENU	11.9 DC
PLAY		•
TIMECODE		•
SLATE		▶.
SYSTEM		۱.
SD CARD		Þ
USB		•
		MENU : Return

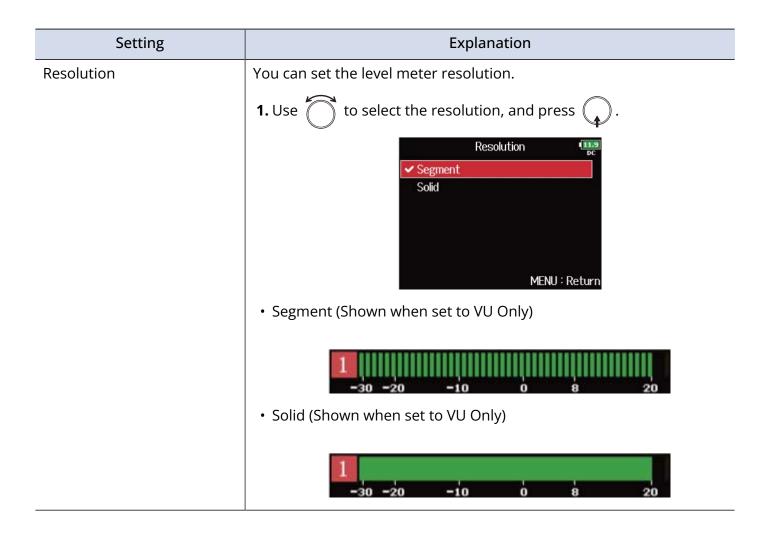
**3.** Use to select "Level Meter", and press .

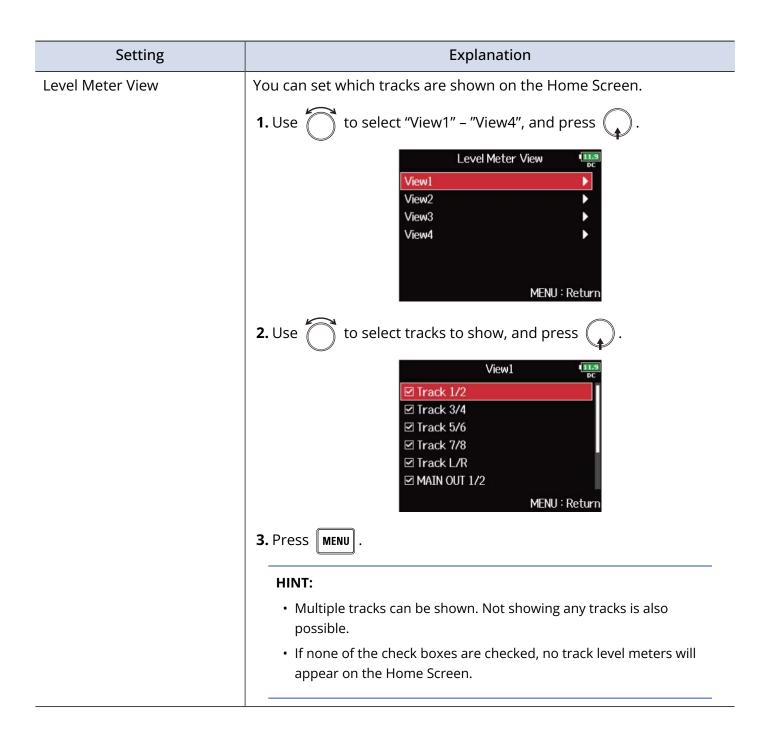
SYSTEM	۹ <b>۱۱.</b> ۹ DC
Level Meter	
LED Brightness	60
LCD	•
PLAY Key Option	•
Track Knob Option	Fader
Key Hold Target	•
	MENU : Return

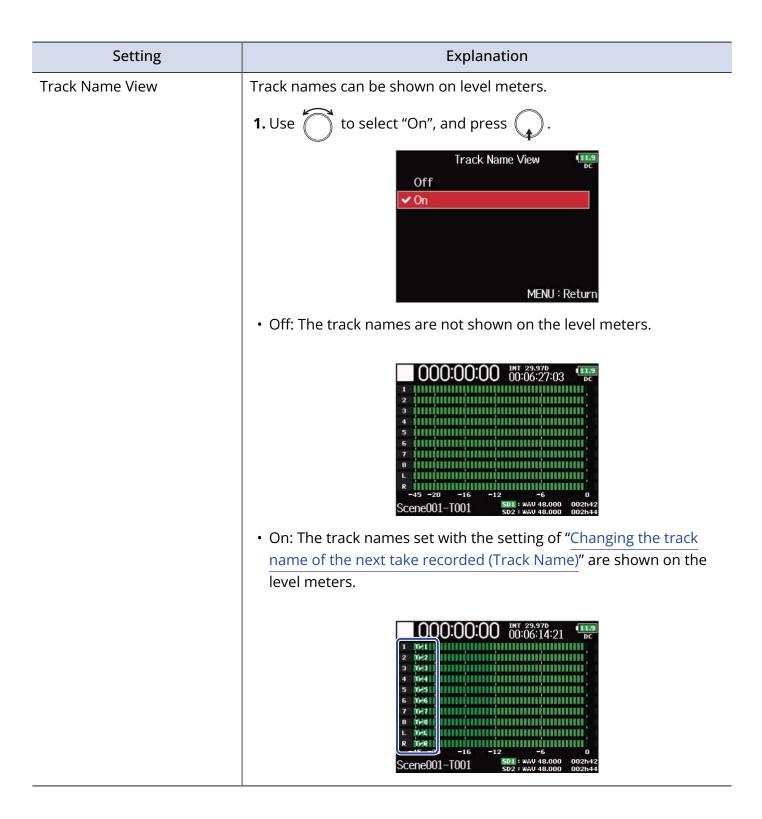
**4.** Use to select a setting item, and press .

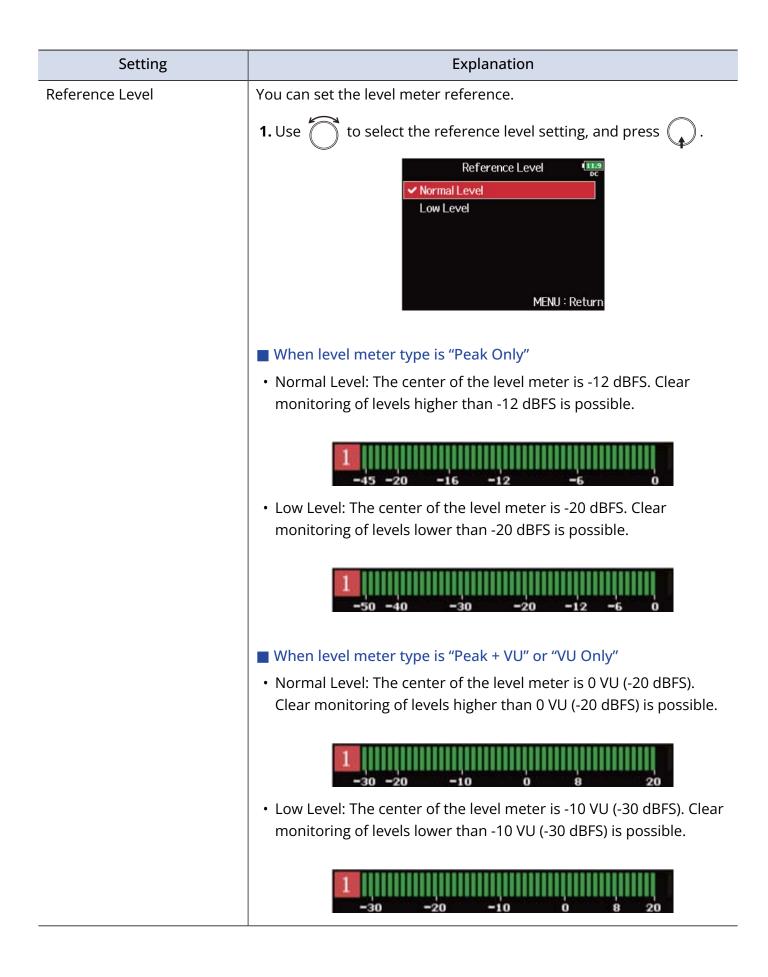
Level M	leter II.9
Туре	Peak Only
Peak Hold Time	2sec
Resolution	Segment
Level Meter View	Þ
Track Name View	Off
Reference Level	Normal Level
	MENU : Return











### Setting the LED brightness (LED Brightness)

You can adjust the brightness of the LED level meters on the front of the F8n Pro.

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use of to select "SYSTEM", and press .
MENU DC PLAY PLAY TIMECODE SLATE SYSTEM SD CARD USB MENU : Return
<b>3.</b> Use of to select "LED Brightness", and press .
SYSTEM LED Brightness 60 LCD • PLAY Key Option • Track Knob Option Fader Key Hold Target • Shortcut List • MENU : Return
<b>4.</b> Use to adjust the brightness, and press <b>MENU</b> .
LED Brightness

#### HINT:

This can be set from 5 to 100.

### Making display settings (LCD)

You can make settings related to the display.

1. Press MENU.

This opens the Menu Screen.

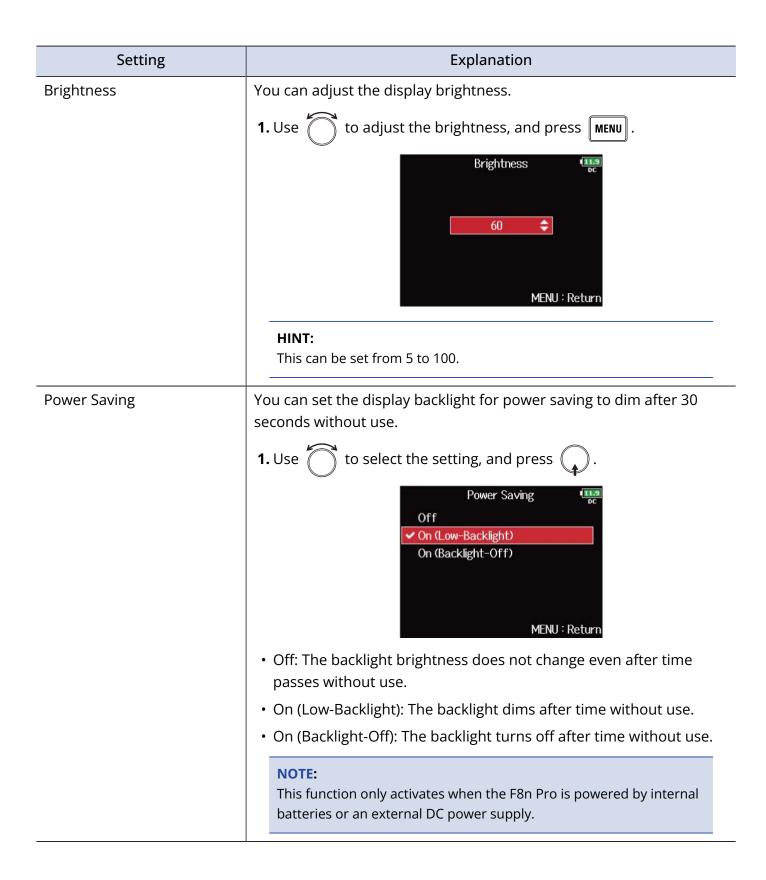
2.	Use	<b>K</b>

to select "SYSTEM", an	d press 😱.	
	Ν	1ENU III.9
	PLAY	▶
	TIMECODE	•
	SLATE	
	SYSTEM	Þ
	SD CARD	Þ
	USB	▶
		MENU : Return

SYSTEM	11.9 DC
LCD	Þ
PLAY Key Option	•
Track Knob Option	Fader
Key Hold Target	•
Shortcut List	•
Backup/Load Settings	
	MENU : Return

**4.** Use to select a setting item, and press .

	LCD	11.9 DC
Brightness		60
Power Saving	On (Low-Ba	cklight)
Outdoor Mode		Off
	MEN	J : Return



Setting	Explanation
Outdoor Mode	The display can be set to be easier to read in bright environments including in sunlight. <b>1.</b> Use $\bigcirc$ to select "On", and press $\bigcirc$ . Outdoor Mode $\bigcirc$ Off $\bigcirc$ On $\bigcirc$ On $\bigcirc$ Off $\bigcirc$ On $\bigcirc$ MENU : Return

### Adding marks when recording/playing (PLAY Key Option)

You can set how marks are added when **>**/II is pressed while recording or playing back a WAV format file.

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "SYSTE	M", and press 😱 .	
	MEN	U 11.9 DC
	PLAY	▶
	TIMECODE	•
	SLATE	· · · · ·
	SYSTEM	►
	SD CARD	•
	USB	▶
		MENU : Return

**3.** Use to select "PLAY Key Option", and press .

SYSTEM	11.5 DC
PLAY Key Option	
Track Knob Option	Fader
Key Hold Target	Þ
Shortcut List	•
Backup/Load Settings	•
Factory Reset	►
	MENU : Return

**4.** Use to select a setting item, and press .

PLAY	Key Option	11.9 DC
Recording	Pause & M	<b>/</b> lark
Playing	Pause	Only
	MENU :	Return

Setting	Explanation
Recording	You can set how marks are added when recording.
	<b>1.</b> Use of to select how marks are added, and press .
	Recording Pause Only ✓ Pause & Mark Mark Only MENU : Return
	<ul> <li>Pause Only: Pressing  /II will pause without adding a mark.</li> </ul>
	<ul> <li>Pause &amp; Mark: Pressing </li> <li>/II will pause and add a mark.</li> </ul>
	• Mark Only: Pressing <b>&gt;/II</b> will add a mark without pausing.
Playing	You can set how marks are added when playing.
	<b>1.</b> Use to select how marks are added, and press .
	✓ Pause Only Pause & Mark Mark Only MENU : Return
	<ul> <li>Pause Only: Pressing  /II will pause without adding a mark.</li> </ul>
	<ul> <li>Pause &amp; Mark: Pressing  will pause and add a mark.</li> </ul>
	• Mark Only: Pressing <b>&gt;</b> /II will add a mark without pausing.

### Setting the keys held (Key Hold Target)

Use the hold function to prevent misoperation during recording. Press **•** + **8** to turn it on/off. Follow these instructions to set which keys are disabled by the hold function.

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "SYSTEM", and pre	ess 😱.
	MENU
<b>3.</b> Use to select "Key Hold Target",	and press 😱 .
	SYSTEM Track Knob Option Fader Key Hold Target Shortcut List Backup/Load Settings Factory Reset Firmware Version MENU : Return
<b>4.</b> Use to select the keys held, and	l press 😱 .
	Key Hold Target

#### HINT:

You can select "Track 1-8", "PFL 1-8", "Trim Knob 1–8", "Slate Mic", "Slate Tone", "Encoder", "MENU", "HP Volume", "REW", "STOP", "FF", "PLAY" and "REC".



#### HINT:

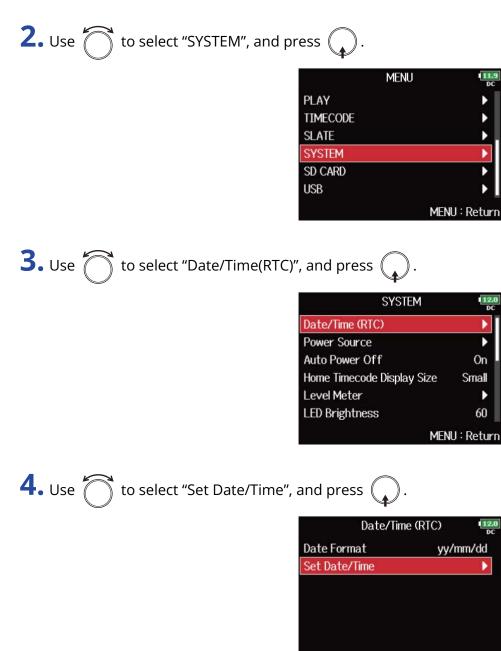
- Even when hold is on for "STOP" and "Track1-8", you can press **•** + **8** to turn the hold function off.
- Operation using the FRC-8 and F8 Control is possible even when the hold function is on.

### Setting the date and time (Date/Time (RTC))

The date and time set on the F8n Pro are used when recording files, for example. You can also set the date format (order of year, month and day).

1. Press MENU.

This opens the Menu Screen.



MENU : Return

<b>5.</b> Use to select a setting item and	d press 😱 .
	Set Date/Time 💷
	2021 01 01 (FRD) 13 : 00 : 00
	Enter MENU : Cancel
<b>6.</b> Use to change the value and provide the value of the	
	Set Date/Time Year Month Day 2022 01 01 (SAT)
	13 : 00 : 00 Enter
	MENU : Cancel

**7.** Repeat steps 5 and 6 to set the date and time.

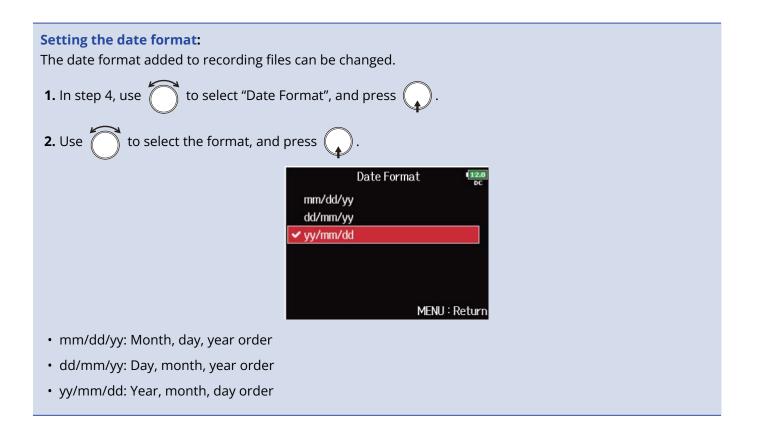
8. After finishing all settings, use	to select	t "Enter'	" and	l press 😱 .
		Set Dat	e/Time	111.8 DC
	Year	Month	Day	
	2022	01	01	(SAT)
	13	3 : 00		00
		Ente	er ()	
				MENU : Cancel

#### NOTE:

If power is not supplied by an AC adapter for a long time, date and time settings will be reset. If the date and time setting screen appears during startup, set them again.

#### HINT:

This screen opens automatically the first time the power is turned on after purchase.



### **Disabling the Automatic Power Saving function (Auto Power Off**)

The power will automatically turn off if the F8n Pro is unused for 10 hours.

If you want the power to stay on continuously until powered off, disable the Automatic Power Saving function.

1. Press MENU. This opens the Menu Screen. **2.** Use to select "SYSTEM", and press . MENU PLAY TIMECODE SLATE SYSTEM SD CARD USB MENU : Return **3.** Use ሸ to select "Auto Power Off", and press ( SYSTEM Auto Power Off Home Timecode Display Size Small Level Meter LED Brightness LCD **PLAY Key Option** MENU : Return **4.** Use to select "Off", and press Auto Power Off ✓ Off On

12. M

On

D

60

MENU : Return

#### NOTE:

The power will not turn off automatically regardless of the Automatic Power Saving setting in the following cases:

- When recording/playing
- When the F8n Pro is used as an audio interface
- When the F8n Pro is used as a card reader
- When an SD card is being tested
- When timecode is being calibrated
- When the firmware is being updated

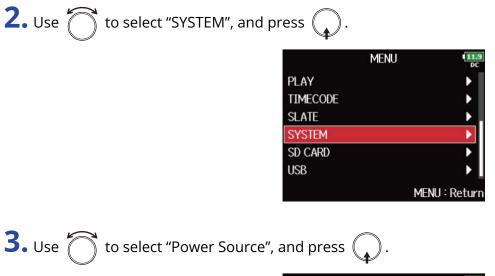
### Setting the power supply used (Power Source)

Set the external DC power supply shutdown voltage, nominal voltage and type of batteries so that the remaining power supply charge can be shown accurately.

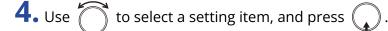
On this menu page, you can also check the voltage of each power supply and the remaining battery capacity.

#### 1. Press MENU.

This opens the Menu Screen.



SYSTEM	12.0 DC
Power Source	•
Auto Power Off	On
Home Timecode Display Size	Small
Level Meter	→ I
LED Brightness	60
LCD	•
ME	NU : Return



Power Sou	rce 12.0
DC IN 12.0V Ext DC	
Shutdown Voltage	9.0V
Nominal Voltage Int AA	14.8V
Battery Type	Alkaline
	MENU : Return

Setting	Explanation					
Shutdown Voltage	You can set the external DC power supply (EXT DC) shutdown voltage.         When an external DC power supply is being used, if the voltage drops below the value set here, the F8n Pro will automatically stop recording and turn off. If AA batteries (Int AA) are installed, however, the power supply will switch to Int AA and operation will continue.         1. Use of to select the voltage, and press will.         Shutdown Voltage         9.0V         WENU : Return         HINT:         • The shutdown voltage is the voltage when the external DC power supply runs out and can no longer supply power.					
	<ul> <li>See the manual for the external DC power supply for the shutdown voltage value.</li> </ul>					
Nominal Voltage	You can set DC power supply (Ext DC) nominal voltage.  1. Use  to select the voltage, and press MENU.  Nominal Voltage  14.8V  MENU : Return					
	<ul> <li>HINT:</li> <li>The nominal voltage is the voltage of the external DC power supply under normal conditions. This value should be indicated on the outside of the external DC power supply.</li> <li>This can be set from 12.0 to 15.0 V in 0.2 V intervals.</li> </ul>					

Setting	Explanation			
Battery Type	You can set the AA battery type (Int AA).			
	<b>1.</b> Use of to select the type, and press .			
	Battery Type			
	✓ Alkaline Ni-MH			
	Lithium			
	MENU : Return			
	Alkaline: Alkaline batteries			
	<ul> <li>Ni-MH: Nickel-metal hydride batteries</li> </ul>			
	• Lithium: Lithium batteries			

#### NOTE:

- When multiple power supplies are connected, they will be used in the following order of priority. AC adapter (DC IN) > DC power supply (Ext DC) > AA batteries (Int AA)
- The voltages of each power supply are shown on the display.

### Backing up and loading F8n Pro settings (Backup/Load Settings)

F8n Pro settings can be backed up to and loaded from SD cards.

### **Backing up**

This saves a backup file to the "F8n Pro\_SETTINGS" folder in the root directory of the SD card.

1. Press MENU.

This opens the Menu Screen.

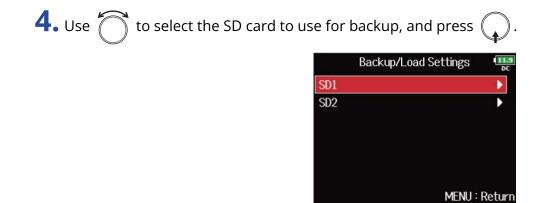


**2.** Use to select "SYSTEM", and press .

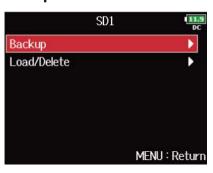
	MENU (	11.9 DC
PLAY		
TIMECODE		
SLATE		۲.
SYSTEM		
SD CARD		
USB		
	MENU:Ret	turn



SYSTEM	11.9 DC
Track Knob Option	Fader
Key Hold Target	•
Shortcut List	•
Backup/Load Settings	
Factory Reset	•
Firmware Version	▶
	MENU : Return



## **5.** Use to select "Backup", and press .



### **6.** Edit the name of the file saved.

				Ec	it				111. Di
F	8nP	_Se	ttin	gs_	210	101		2	0/20
1	2	3	4	5	6	7	8	9	0
Α	В	C	D	Ε	F	G	Η	Ι	J
K	L	Μ	Ν	0	Ρ	Q	R	S	Τ
U	V	W	Х	Y	Ζ		-	D	el
a	bC						E	inte	r ]
EW/	FF∶∢	-/->	÷			Ν	1EN	J:(	Canc

See "Character input screen" for how to input characters.

#### NOTE:

The extension of the saved backup file is ".ZSF".

### Loading

You can load a backup file that is saved in the "F8n Pro\_SETTINGS" folder in the root directory of the SD card.

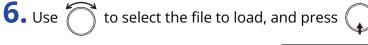
1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use of to select "SYSTEM", and press
MENU DEC PLAY FIMECODE SLATE SLATE SYSTEM SYSTEM SYSTEM STREE SYSTEM MENU : Return
3. Use to select "Backup/Load Settings", and press ). SYSTEM Track Knob Option Fader Key Hold Target Shortcut List Backup/Load Settings Factory Reset Firmware Version MENU : Return
4. Use to select the SD card to use for loading, and press ().









#### HINT:

You can press and hold  $\bigcirc$  to delete a file. Deleting a file will completely erase its data.

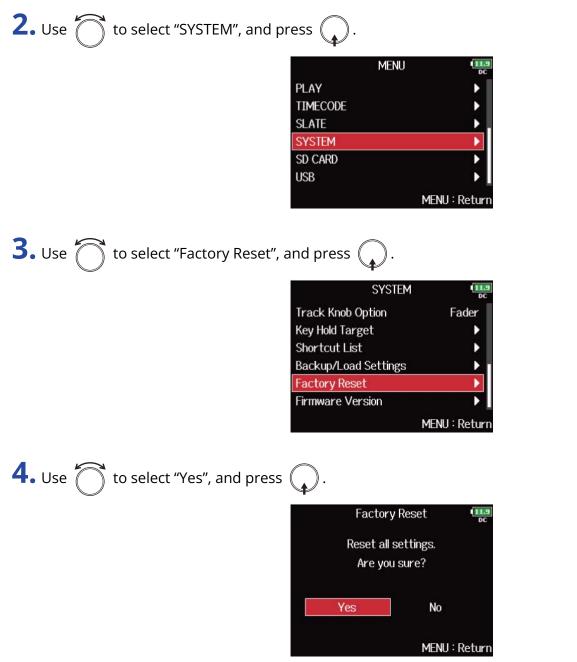


## Restoring factory default settings

The F8n Pro can be restored to factory default settings.

1. Press MENU .

This opens the Menu Screen.



After the F8n Pro is restored to its factory default settings, the power will turn off.

#### NOTE:

Conducting a factory reset will overwrite all settings to their factory defaults. Be certain before using this function.

# Managing SD cards

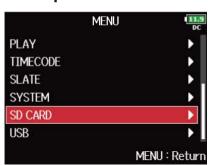
## Checking SD card information (Information)

You can check the size and free space of SD cards.

**1.** Press MENU.

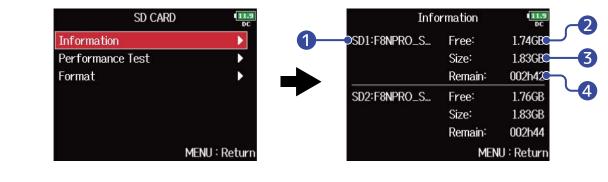
This opens the Menu Screen.





**3.** Use to select "Information", and press .

SD card information is displayed.

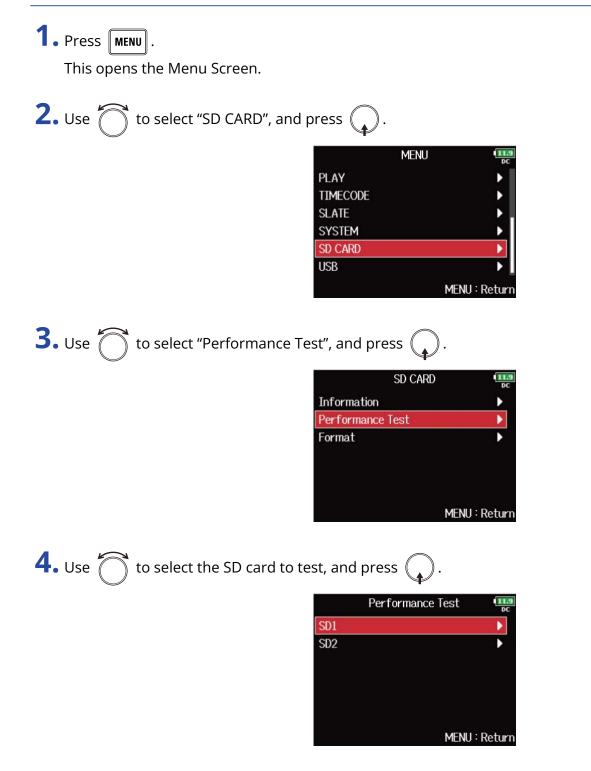


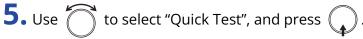
- 1 Volume label
- 2 Free space
- **3** Size
- 4 Remaining recordable time

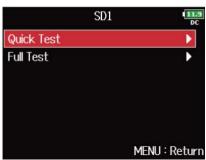
## Testing SD card performance (Performance Test)

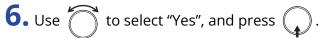
You can test whether an SD card can be used with the F8n Pro. A basic test can be done quickly, while a full test examines the entire SD card.

### Conducting a quick test





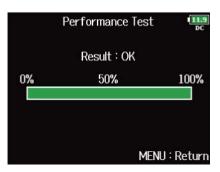




The card performance test will start. The test should take about 30 seconds.



The result of the test will be shown when it completes.



#### NOTE:

Even if a performance test result is "OK", there is no guarantee that writing errors will not occur. This information is just to provide guidance.

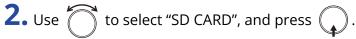
#### HINT:

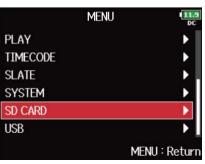
You can cancel a test in progress by pressing	MENU	
---	------	--

## Conducting a full test

1. Press MENU.

This opens the Menu Screen.

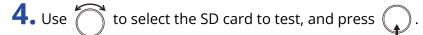


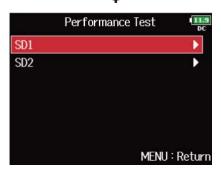




**3.** Use to select "Performance Test", and press .

SD CAR	D 11.9
Information	•
Performance Test	Þ
Format	•
	MENU : Return





<b>5.</b> Use to select "Full Test	", and press 😱 .	
	SD	1 <b>11.9</b> DC
	Quick Test	•
	Full Test	
		MENU : Return

**6.** Use to select "Yes", and press .

The amount of time required for the full test will be shown.

Full Test	11.9 DC
Execute Full Te	est.
Are you sure	e?
(Estimated Time :	0h 03m )
Yes	No
	MENU : Return

The result of the evaluation will be shown. If the access rate MAX reaches 100%, the card will fail (NG).

Pe	rforma	nce Tes	t	11.9 DC
	Result	: OK		
0%	50	%		100%
	Access	Rate		
Average:	21%	Max:	30%	
		М	ENU :	Return

#### NOTE:

Even if a performance test result is "OK", there is no guarantee that writing errors will not occur. This information is just to provide guidance.

#### HINT:

- You can cancel a test in progress by pressing MENU
- You can press **>**/**II** to pause and resume the test.

# Formatting SD cards (Format)

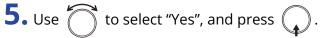
SD cards must be formatted for use with the F8n Pro.

1. Press MENU.

This opens the Menu Screen.

<b>2.</b> Use to select "SD CARD", and press .
MENU PLAY TIMECODE SLATE SYSTEM SD CARD USB MENU : Return
<b>3.</b> Use of to select "Format", and press .
SD CARD Information Performance Test Format MENU : Return
<b>4.</b> Use $\bigcirc$ to select the card to initialize, and press $\bigcirc$ .
Format SD1 SD2 ►

MENU : Return





This formats the SD card.

#### NOTE:

- Before using SD cards that have just been purchased or that have been formatted by a computer, they must be formatted by the F8n Pro.
- Be aware that all data previously saved on an SD card will be deleted when it is formatted.

# Managing the firmware

## Checking the firmware versions

You can check the firmware version.

1. Press MENU.

2.

This opens the Menu Screen.

Use of to select "SYSTEM", an	nd press 😱.		
		MENU	11.9 DC
	PLAY		•
	TIMECODE		•
	SLATE		▶.
	SYSTEM		•
	SD CARD		Þ
	USB		▶ _
		ME	NU : Return

<b>3.</b> Use	$\bigcirc$	to select "Firmware Version", and press	

SYSTEM	11.9 DC
Track Knob Option	Fader
Key Hold Target	•
Shortcut List	•
Backup/Load Settings	•
Factory Reset	•
Firmware Version	Þ
	MENU : Return

This shows the firmware versions.



## Updating the firmware

The F8n Pro firmware can be updated to the latest versions.

The latest update file can be downloaded from the ZOOM website (zoomcorp.com).

Follow the instructions in the "F8n Pro Firmware Update Guide" on the F8n Pro download page.

# **About the F8n Pro Shortcut function**

## Checking the F8n Pro Shortcut function (Shortcut List)

The F8n Pro has a shortcut feature that allows guick access to various functions. See the "List of shortcuts" for information about the shortcut functions.

1. Press MENU.

This opens the Menu Screen.



**2.** Use to select "SYSTEM", and press .

*		
	MENU	11.9 DC
PLAY		•
TIMECODE		•
SLATE		
SYSTEM		Þ
SD CARD		۲.
USB		• • I
	M	1ENU : Return

**3.** Use to select "Shortcut List", and press .

SYSTEM	11.9 DC
Track Knob Option	Fader
Key Hold Target	
Shortcut List	
Backup/Load Settings	•
Factory Reset	•
Firmware Version	•
	MENU : Return

This opens the F8n Pro Shortcut List.

Shortcut L	ist 🛄
Display Next Take	STOP (hold)
Scene Increment	STOP + FF
False Take	REW (hold)
Take Number -1 / +1	FF (hold)
User Scene Name Edit	STOP + Tr1
Track Name Edit	STOP + Tr2
	MENU : Return

# List of shortcuts

### Home Screen

Shortcut	Explanation
Press and hold	Show the name that will be given to the next take recorded. Example: Scene001-T002
	Advance the scene number by 1 (when the Home Screen is open).
Press and hold	Move the previously recorded take to the FALSE TAKE folder (when the Home Screen is open).
Press and hold	The number given to the next recorded take can be increased or decreased by one when the Home Screen is open.
■ + 1	Open the "User Scene Name" screen. (→ Changing scene names)
<b>•</b> + <b>2</b>	Open the "Track Name" screen. (→ Changing the track name of the next take recorded (Track Name)) During recording, the ■ key does not need to be used.
<b>•</b> + <b>3</b>	Open the "Trim Link" screen. ( $\rightarrow$ Adjusting the input levels of multiple tracks simultaneously (Trim Link)) During recording, the $\blacksquare$ key does not need to be used.
<b>•</b> + <b>4</b>	Open the "Note" screen. ( $\rightarrow$ Changing the note for the next take recorded (Note)) During recording, the $\square$ key does not need to be used.
<b>•</b> + <b>5</b>	Clear the level meter clipping indicators. During recording, the 🔳 key does not need to be used.
<b>•</b> + <b>6</b>	Open the L/R track fader settings screen. During recording, the 🔳 key does not need to be used.
<b>•</b> + <b>7</b>	Open the "Headphone Routing" screen. (→ Setting signals sent to headphones (Headphone Routing)) During recording, the  key does not need to be used.
<b>•</b> + <b>8</b>	Use to disable the keys set with "Key Hold Target". ( $\rightarrow$ Setting the keys held (Key Hold Target)) During recording, the $\blacksquare$ key does not need to be used.
■ + PFL (Track 1)	Circle the currently selected take. ( $\rightarrow$ <u>Setting the circling takes</u> )

Shortcut	Explanation
■ + PFL	Open the "Timecode" screen. ( $\rightarrow$ Setting timecode functions)
(Track 2)	

### Mixer Screen

Shortcut	Explanation
Press and hold	Reset the selected pan/fader to the default value (when the Home Screen mixer is
	open). If already set to its default value, selecting a fader mutes the track.

## Character input screen

Shortcut	Explanation			
Press and turn	Move the cursor vertically on a character input screen keyboard.			
	Delete a character on the character input screen.			
	Move the cursor to "Enter" on the character input screen keyboard.			

## Routing screen

Shortcut	Explanation
Press and turn	Move the cursor vertically.

# Appendix

# Troubleshooting

If you think that the F8n Pro is operating strangely, check the following items first.

## Recording/playback trouble

#### There is no sound or output is very quiet

- Check the connections to your monitoring system and its volume setting.
- Confirm that the volume of the F8n Pro is not too low. (→ Adjusting the input signal monitoring balance)

### Sound from connected equipment or inputs cannot be heard or is very quiet

- If you are using a mic capsule, confirm that it is oriented correctly.
- Check the input level settings. ( $\rightarrow$  Adjusting input levels)
- If a CD player or other device is connected to an input jack, raise the output level of that device.
- Check the input signal monitoring settings. (→ Adjusting the input signal monitoring balance, Monitoring the input signals of specific tracks (PFL/SOLO))
- Check the phantom power and plug-in power settings. (→ Changing the phantom power settings (Phantom), Changing the plugin power setting (Plugin Power))
- Check the headphone, MAIN OUT 1/2 and SUB OUT 1/2 routing. (→ Setting signals sent to headphones (Headphone Routing), Selecting signals sent to the main outputs (MAIN OUT Routing), Selecting signals sent to the sub outputs (SUB OUT Routing))

### Recording not possible

- Confirm that track keys are lit red.
- Confirm that the SD card has free space. ( $\rightarrow$  Checking SD card information (Information))
- Confirm that an SD card is loaded properly in a card slot. ( $\rightarrow$  Loading SD cards )
- If "Card Protected!" appears on the display, the SD card write-protection is enabled. Slide the lock switch on the SD card to disable write-protection.

### Recorded sound cannot be heard or is very quiet

- Confirm that the volume levels of the tracks are not too low. ( $\rightarrow$  Mixing takes)
- Confirm that track keys are lit green during playback.

## Other trouble

### Computer does not recognize it even though it is connected to a USB port

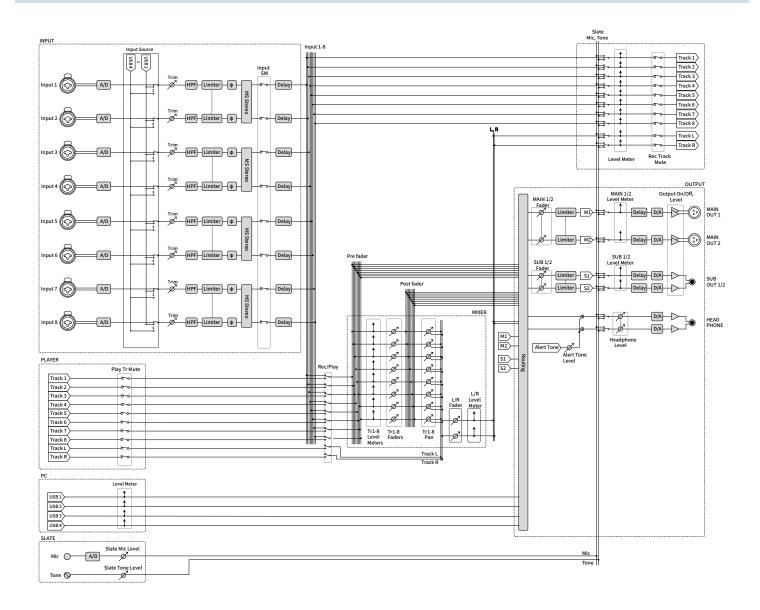
• The operation mode must be set on the F8n Pro to allow the computer to recognize the F8n Pro. (→ Using as an audio interface (Audio Interface))

#### Battery operation time is short

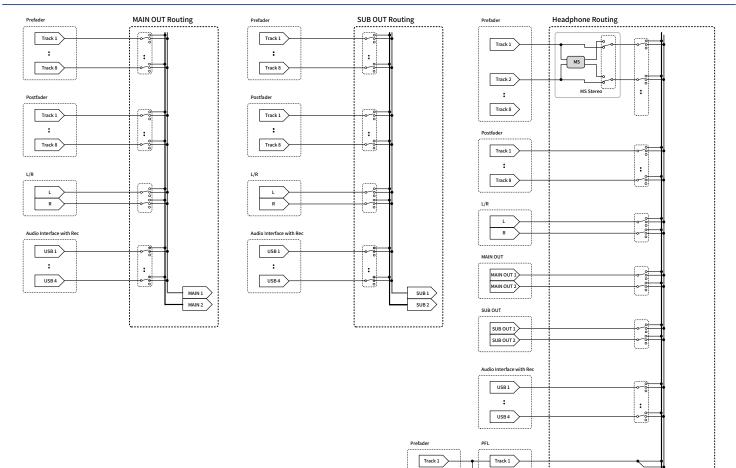
Making the following settings could increase the battery operation time.

- Set the power supply used correctly. ( $\rightarrow$  Setting the power supply used (Power Source))
- Turn unnecessary tracks off. (→ Selecting inputs)
- Turn unnecessary outputs off. (→ Disabling outputs (Output On/Off))
- Set the phantom power voltage to 24V. ( $\rightarrow$  Setting the voltage)
- Disable phantom power during playback. (→ Disabling phantom power during playback)
- Turn timecode off if not using it. ( $\rightarrow$  Setting the mode)
- Reduce the LED brightness. (→ Setting the LED brightness (LED Brightness))
- Reduce the display brightness. ( $\rightarrow$  Making display settings (LCD))
- Set the display to dim when not used for some time. (→ Making display settings (LCD))
- Reduce the sampling rate used to record files. (→ Setting the sampling rate (Sample Rate))
- Due to their characteristics, using nickel metal hydride batteries (especially high-capacity ones) or lithium batteries should enable longer use than alkaline batteries when power consumption is high.

## Detailed product diagrams



## Routing



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Track 8

Track 8

Track 1

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Tr1-8 Faders ø

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Tr1-8 Panning

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HP L HP R

SOLO

# Metadata list

## Metadata contained in BEXT chunks in WAV files

Tag	Explanation	Remarks
SPEED=	Frame rate	MENU > TIMECODE > Timecode > FPS
TAKE=	Take number	
UBITS=	User bits	MENU > TIMECODE > Timecode > Ubits
SCENE=	Scene name	MENU > META DATA (for Next Take) > Scene Name Mode MENU > META DATA (for Next Take) > User Scene Name MENU > FINDER > Option > Meta Data Edit > Scene MENU > FINDER > Option > Rename
TAPE=	Name of recording destination folder	MENU > FINDER (Recording destination folder name) MENU > FINDER > Option > Meta Data Edit > Folder(Tape) Name
CIRCLED=	Circled take	MENU > FINDER > Option > Meta Data Edit > Circle
TRL=	Left track name	Track names are written as follows.
TRR=	Right track name	TRL=TrL, TRR=TrR, TR1=Tr1, TR2=Tr2, TR8=Tr8
TR1=	Track 1 name	
TR2=	Track 2 name	
TR3=	Track 3 name	
TR4=	Track 4 name	
TR5=	Track 5 name	
TR6=	Track 6 name	
TR7=	Track 7 name	
TR8=	Track 8 name	
NOTE=	Take note	MENU > META DATA (for Next Take) > Note MENU > FINDER > Option > Meta Data Edit > Note

## Metadata contained in iXML chunks in WAV files

#### $\bigcirc$ = YES × = NO

iXML master tag	iXML sub tag	Written	Read	Remarks
<pre><project></project></pre>		0	0	MENU > FINDER (SD card root folder) MENU > FINDER > Option > Meta Data Edit > Project Name
<scene></scene>		0	0	MENU > META DATA (for Next Take) > Scene Name Mode MENU > META DATA (for Next Take) > User Scene Name MENU > FINDER > Option > Meta Data Edit > Scene MENU > FINDER > Option > Rename
<take></take>		0	0	MENU > FINDER > Option > Meta Data Edit > Take MENU > FINDER > Option > Rename
<table a="" and="" borders="" se<="" second="" td=""><td></td><td>0</td><td>0</td><td>MENU &gt; FINDER (recording destination folder name) MENU &gt; FINDER &gt; Option &gt; Meta Data Edit &gt; Folder(Tape) Name</td></table>		0	0	MENU > FINDER (recording destination folder name) MENU > FINDER > Option > Meta Data Edit > Folder(Tape) Name
<circled></circled>		0	0	MENU > FINDER > Option > Meta Data Edit > Circle
<wild track=""></wild>		×	×	
<false start=""></false>		×	×	
<no good=""></no>		×	×	
<file uid=""></file>		0	×	
<ubits></ubits>		0	×	MENU > TIMECODE > Timecode > Ubits
<note></note>		0	0	MENU > META DATA (for Next Take) > Note MENU > FINDER > Option > Meta Data Edit > Note
<bext></bext>		×	×	
<user></user>		×	×	

iXML master tag	iXML sub tag	Written	Read	Remarks
<speed></speed>				
<pre><speed></speed></pre>	<note></note>	0	×	
<speed></speed>	<master_speed></master_speed>	0	0	MENU > TIMECODE > Timecode > FPS
<speed></speed>	<current_speed></current_speed>	0	×	MENU > TIMECODE > Timecode > FPS
<speed></speed>	<timecode_rate></timecode_rate>	0	×	MENU > TIMECODE > Timecode > FPS
<speed></speed>	<timecode_flag></timecode_flag>	0	×	MENU > TIMECODE > Timecode > FPS
<speed></speed>	<file_sample_rate></file_sample_rate>	0	×	MENU > REC > Sample Rate
<speed></speed>	<audio_bit_depth></audio_bit_depth>	0	×	MENU > REC > WAV Bit Depth
<speed></speed>	<digitizer_sample_rate></digitizer_sample_rate>	0	×	MENU > REC > Sample Rate
<speed></speed>	<timestamp_samples_since_midnight_hi></timestamp_samples_since_midnight_hi>	0	×	
<speed></speed>	<timestamp_samples_since_midnight_lo></timestamp_samples_since_midnight_lo>	0	×	
<speed></speed>	<timestamp_sample_rate></timestamp_sample_rate>	0	×	MENU > REC > Sample Rate

iXML master tag	iXML sub tag	Written	Read	Remarks
<sync_point_list></sync_point_list>				
<sync_point></sync_point>	<sync_point_type></sync_point_type>	×	×	
<sync_point></sync_point>	<sync_point_function></sync_point_function>	×	×	
<sync_point></sync_point>	<sync_point_comment></sync_point_comment>	×	×	
<sync_point></sync_point>	<sync_point_low></sync_point_low>	×	×	
<sync_point></sync_point>	<sync_point_high></sync_point_high>	×	×	
<sync_point></sync_point>	<sync_point_event_duration></sync_point_event_duration>	×	×	

iXML master tag	iXML sub tag	Written	Read	Remarks
<history></history>				
<hi>HISTORY&gt;</hi>	<original_filename></original_filename>	0	×	
<hi>HISTORY&gt;</hi>	<pre><parent_filename></parent_filename></pre>	×	×	
<history></history>	<parent_uid></parent_uid>	×	×	

iXML master tag	iXML sub tag	Written	Read	Remarks
<file_set></file_set>				
<file_set></file_set>	<total_files></total_files>	0	×	
<file_set></file_set>	<family_uid></family_uid>	0	×	
<file_set></file_set>	<family_name></family_name>	×	×	
<file_set></file_set>	<file_set_start_time_hi></file_set_start_time_hi>	×	×	
<file_set></file_set>	<pre><file_set_start_time_lo></file_set_start_time_lo></pre>	×	×	
<file_set></file_set>	<file_set_index></file_set_index>	0	×	

iXML master tag	iXML sub tag	Written	Read	Remarks
<track_list></track_list>				
<track_list></track_list>	<track_count></track_count>	0	×	
<track/>	<channel_index></channel_index>	0	×	
<track/>	<interleave_index></interleave_index>	0	×	
<track/>	<name></name>	0	0	MENU > META DATA (for Next Take) > Track Name MENU > FINDER > Option > Meta Data Edit > Track Name
<track/>	<function></function>	×	×	

## Metadata and ID3 fields contained in MP3 files

Metadata	ID3 field	Format
Timecode	Artist Name	TC=[HH:MM:SS:FF]
Scene name, take number	Track Title	SC=[scene name] TK=[take number]
Frame rate, file length (time)	Album Title	FR=[frame rate] D=[file length (time)]

# Specifications

Inputs	INPUT 1–8	Connectors	XLR/TRS combo jacks (XLR: 2 hot, TRS: TIP hot)
	Input source set to "Mic" (→ Setting the input source (Input Source))	Input gain	+10 – +75 dB
		Input impedance	$3  k\Omega$ or more
		Maximum input level	+4 dBu (at 0 dBFS)
		Phantom power	+24/+48 V, 10 mA maximum per channel
	Input source set to "Line" (→ Setting the input source (Input Source))	Input gain	–10 – +55 dB
		Input impedance	5 kΩ or more
		Maximum input level	+24 dBu (at 0 dBFS)
	Equivalent input noise		–127 dBu or less (A-weighted, +75 dB input gain, 150 Ω input)
	Frequency response		20 Hz – 60 kHz, +0.5 dB/–1 dB (192 kHz sample rate)
	A/D dynamic range		113 dB typ. (–60 dBFS input, A- weighted)
	Crosstalk		–90 dB or less (between adjacent channels, 1 kHz)
	MIC IN		ZOOM mic capsule input (use disables Inputs 1/2)
	SLATE MIC		Built-in mic for voice memos can be assigned to tracks freely
Outputs MAIN O	MAIN OUT 1/2	Connectors	TA3 connectors (balanced output, 2: hot)
		Output impedance	150 Ω or less
		Reference output level	–10 dBV (normal output level) +4 dBu (line output level) 1 kHz, 600 Ω load
		Maximum output level	+10 dBV (normal output level) +24 dBu (line output level) 1 kHz, 600 Ω load
	SUB OUT 1/2	Connector	3.5 mm stereo mini (unbalanced output)
		Output impedance	100 Ω or less
		Reference output level	–10 dBV (normal output level) –40 dBu (mic output level) 1 kHz, 10 kΩ load

		Maximum output level	+10 dBV (normal output level) –20 dBu (mic output level) 1 kHz, 10 kΩ load
	HEADPHONE	Connector	1/4 inch stereo (unbalanced output)
		Output impedance	18 Ω or less
		Maximum output level	100 mW + 100 mW (32 Ω load)
	D/A dynamic range		105 dB typ. (–60 dBFS input, A- weighted)
Recording media		Dual SD card slots	SDHC cards: 4 GB – 32 GB SDXC cards: 64 GB – 1 TB
Recording formats	When WAV selected	Supported formats	44.1, 47.952, 48, 48.048, 88.2, 96 and 192 kHz 16-bit Linear, 24-bit Linear, 32-bit Float Mono/stereo/2-10ch poly BWF and iXML
		Maximum simultaneous recording tracks	10 (8 inputs + stereo mix) 8 (at 192 kHz sampling rate)
	When MP3 selected	Supported formats	128, 192 and 320 kbps 44.1 and 48 kHz ID3v1 tags
		Maximum simultaneous recording tracks	2
Recording time		Using a 32 GB card	23:08:00 (48 kHz/32-bit float stereo WAV) 5:47:00 (192 kHz/32-bit float stereo WAV)
Timecode		Connector	BNC
		Modes	Off, Int Free Run, Int Record Run, Int RTC Run, Ext and Ext Auto Rec (audio clock can be synchronized to timecode
		Frame rates	23.976ND, 24ND, 25ND, 29.97ND, 29.97D, 30ND and 30D
		Precision	±0.2 ppm
		Supported input levels	0.2 – 5.0 Vpp
		Input impedance	4.6 kΩ
		Output level	3.3 Vpp
		Output impedance	50 Ω or less
Power supplies		AA batteries	8 (alkaline, nickel-metal hydride or lithium)
		AC adapter	ZOOM AD-19, DC 12 V/2 A, center plus

		External DC power supply	HIROSE HR10A-7R-4S 4-pin connector (1 pin: -, 4 pin: +), 9–18 V
Estimated	2 channels to SD 1 48 kHz sampling frequency (32-bit float/16-bit linear/24- bit linear) MAIN/SUB OUT OFF, TIMECODE OFF, LED/LCD brightness		Alkaline batteries: about 6 hours
continuous recording times*			NiMH batteries (2500 mAh): about 8.5 hours
	5, 32 $\Omega$ headphones, PHANT	Lithium batteries: about 12 hours	
	8 channels to SD 1 48 kHz sampling frequency (32-bit float/16-bit linear/24- bit linear) MAIN/SUB OUT OFF, TIMECODE OFF, LED/LCD brightness		Alkaline batteries: about 5 hours
			NiMH batteries (2500 mAh): about 7 hours
	5, 32 $\Omega$ headphones, PHANT	Lithium batteries: about 10 hours	
	8 channels to SD 1/2		Alkaline batteries: about 0.5 hours
	192 kHz sampling frequency bit linear) MAIN/SUB OUT ON, TIMECO	NiMH batteries (2500 mAh): about 1.5 hours	
	brightness 60, 32 $\Omega$ headpho	Lithium batteries: about 2.5 hours	
	* These values are only estin greatly according to use con-	ouse testing methods. They will vary	
Display			2.4 inch full-color LCD (320 × 240)
USB	Connector		Mini-B • Use a USB cable that supports data transfer. USB bus power operation is not supported.
	Mass storage operation	Class	USB 2.0 High Speed
	Multi Track audio interface mode operation (driver required for Windows, not required for Mac)	Class	USB 2.0 High Speed
		Specifications	Sampling rate: 44.1/48/88.2/96 kHz Bit depth: 24-bit linear/32-bit float 8-in/4-out
	Stereo Mix audio interface mode operation (no driver required) • Supports audio interface operation with iOS/iPadOS devices	Class	USB 2.0 Full Speed
		Specifications	Sampling rate: 44.1/48 kHz Bit depth: 16-bit linear 2-in/2-out
	Audio interface operation with recording (driver required for Windows, not required for Mac)	Class	USB 2.0 High Speed
		Specifications	Sampling rate: 44.1/48 kHz Bit depth: 24-bit linear/32-bit float 10-in/4-out
Power consumption			15 W

External	7.0 in. (W) × 5.5 in. (D) × 2.1 in. (H)
dimensions	178.2 mm (W) × 140.3 mm (D) × 54.3 mm (H)
Weight (including batteries)	1200 g

Note: 0 dBu = 0.775 Vrms



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