



Wireless Camera Control System

OEM Camera control over wireless, license free channels

Support for broad range of OEM cameras and control panels

Compact design for both camera and control panel interfaces





Overview

The Maxwell-Z24 is a camera control system designed for use with wireless cameras. Operating on the 2.4GHz worldwide license free band the system is ideal for use in studios, stadiums, arenas and other venues.

Unlike other camera control systems Maxwell supports fully featured control and feedback from the camera. So to the vision engineer there is no difference between the wireless and line cameras. And therefore no compromise in production quality.

Features

Transparent operation with the OEM control protocols

Worldwide license free operation and no need to set the operating frequency, even with multiple systems.

Frequency Hopping Spread Spectrum (FHSS) for robust operation

Remote transceiver that can be connected to the control panel interface with up to 1000m of CAT5 cable and positioned for optimal RF coverage

Tally support on the camera and panel with external tally out on camera interface

Compact camera interface, small enough to be mounted directly to the camera.

1U, half width rack control panel interface rack mountable

Intuitive control panels on camera and control panel interface displaying system status.

Benefits

Seamless integration with OEM control protocols so that there is support for all available camera features and full feedback from the camera to the vision engineer.

License free operation means that there is no need to liaise with frequency authorities or buy licenses. Even when working abroad.

FHSS wireless technology for robust operation and reliable coexistence with WIFI, Bluetooth and other ISM band devices. Multiple devices can operate in the same space without interference.

Remote transceiver that will operate on up to 1000m of cable and be deployed to provide the best coverage to the camera.

Intuitive user interface on both the control panel interface and the camera interface with making system configuration easy.

Applications

The Maxwell-Z24 is designed for use with wireless cameras including steadicam, handheld, remotely located hotheads, rail cams, etc.





Application Example

Typical applications for the Maxwell-z24 are on handheld or steadicam wireless cameras in studios or small venues. It is possible to mount the camera interface directly on the camera. The control panel interface can be located alongside the line camera CCUs which might be in a facilities room or outside in a broadcast truck. The remote transceiver can be located in the position that gives the best coverage to the camera. In the case of a studio this could be high up on a lighting gantry. As a rule of thumb, it can be placed in a similar location to the receive antennas for the cameras wireless video.



Camera Interface Specifications

General				
	Min	Тур	Max	
Power Supply	6.5V	12V	30V	
Power Consumption	4W nominal, 7.5W peak in high power mode (when used with auxilary power)			
Dimensions	112x70x25mm			
Mounting holes	3 x M3x4mm			
Input / Output				
RF Specifications	See Transceiver information			
Serial Camera Data	Hirose 8-P Female. RS232 / RS422, Power			
Aux Power (for high power operation)	Hirose 4-P Male.			
Tally output	Hirose 6-P Female. 2 x solid state contact closures to ground. Max current 150mA. +3V DC Output for LEDs.			

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Remote Transceiver Specifications

General					
	Min	Тур	Max		
Power Supply	6.5V	24V (PoE)	30V		
Power Consumption	4W nominal, 7.5W peak in high power mode				
Dimensions	112x70x25mm				
Mounting holes	3 x M3x4mm. Mounting bracket supplied with 1/4-20 UNC threaded hole for standard camera/lighting mounts.				
RF Specifications					
Modulation	Frequency Hop 2.483GHz.	ncy Hopping Spread Spectrum (FHSS) 2.4- Hz.			
RF Power	0.1-1W (20-30dBm)				
Receive Sensitivity	-107dBm				



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Control Panel Int. Specifications

General				
	Min	Тур	Max	
Power Supply	6.5V	12V	30V	
Power Consumption	3W			
Dimensions	185x200x44mm			
Mounting holes	4 x M3x4mm			
Input / Output				
Remote Transceiver	Neutrik etherCon RJ-45 RS-422			
Serial Camera Data	Hirose 8-P Female. RS232 / RS422, Power			
Tally	15Way D-Type Female			
Wayside Data	9Way D-Tpye Female. RS232 (RS422, RS485 available on request)			
Upgrades	USB			
Power	XLR4 Male			

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Supported OEM Cameras and Panels

Sony

Cameras – HDC-2500, HDC-1500, HDC-P1, PMW-F55, PDW-700, PDW-F800, HDW-709, DVW-700. All other cameras are untested. RCPs – RCP-1500. All other panels are untested.

Panasonic

Cameras – All untested. Control Panels – All untested.

Grass Valley

Cameras – All untested. Control Panels – All untested.

Ikegami

Cameras – All untested. Control Panels – All untested.

Hitachi

Cameras – All untested. Control Panels – All untested.

For other OEM support please contact Broadcast Electronics Ltd.

Note: This information is correct as of the 06/09/13. All OEM products are tested with known and recorded firmware version where possible. Broadcast Electronics Ltd. can not be held responsible for incompatibilities with other firmware (older or more recent). Please consult Broadcast Electronics Ltd. for details of specific firmware versions that are known to with individual OEM products. We advise all users test systems prior to use.

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