



**Broadcast
Electronics
Limited**

Maxwell– Z24 Camera Control System



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

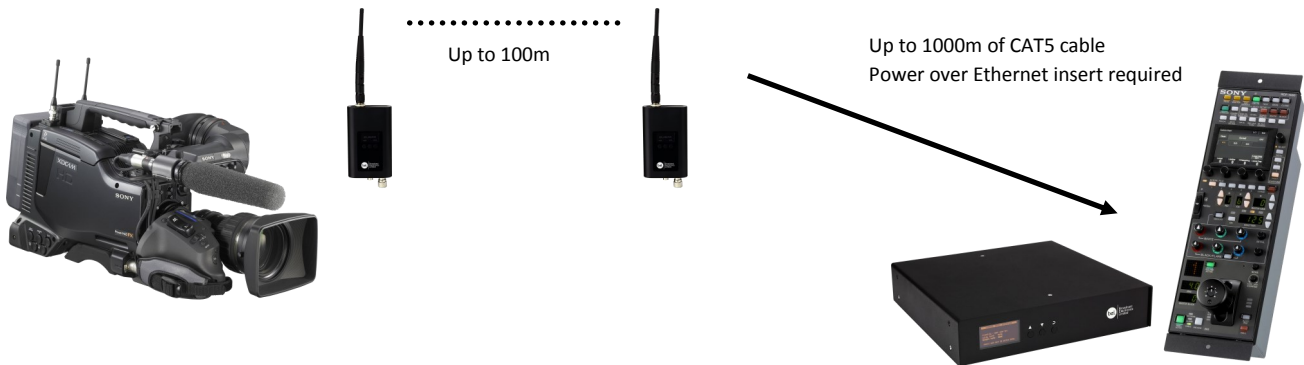
- Transparent operation with the OEM control protocols.
- Worldwide license free operation and no need to set the operating frequency, even with multiple systems.
- Frequency Hopping Spread Spectrum (FHSS) for robust operation.
- Remote transceiver that can be connected to the control panel interface 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 wireless camera systems, i.e. handheld, steadicam or remote POV. 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. 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

Power Supply: 6.5V Min—12V Typ—30V Max
Power Consumption: 4W nominal
Dimensions: 112x70x25mm
Mounting holes: 3 x M3x4mm

Input / Output

RF Specifications: See Transceiver information
Serial Camera Data: Hirose 8-P Female.
 RS232 / RS422, Power
Tally output: Hirose 6-P Female. 2 x solid state contact closures to ground. (Max current 150mA. +3V DC Output for LEDs.)

Remote Transceiver Specifications

Power Supply: 6.5V Min—24V (PoE).
 Typical— 30V Max
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 Hopping Spread Spectrum (FHSS) 2.4-2.483GHz.
RF Power: 0.1-1W (20-30dBm)
Receive Sensitivity: -107dBm

Control Panel Int. Specifications

Power Supply: 6.5V Min— 12V Typ—30V
Max 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-Type Female. RS232 (RS422, RS485 available on request)
Upgrades: USB
Power: XLR4 Male

Supported OEM Cameras and Panels

Sony

Cameras – HDC-2500, HDC-1500, HDC-P1, PMW-F55, PDW-700, PDW-F800, HDW-709, DVW-700, DVW-790, DVW-970, BVP-550.
 All other cameras are currently untested.

RCPs – RCP-1500, RM-B150, RM-B170.
 All other panels are untested.

For the latest information on all supported cameras and RCP's please contact your local representative.

For other OEM support and other manufacturers cameras please contact Acorn Technologies Ltd.

Note: All camera and control panels 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.