

WLL-RX55

Wireless Camera Receiver for use
with the WLL-CA50 or WLL-CA55
Wireless camcorder adaptor



Overview

The WLL-RX55 is the receiver part of the Sony MPEG Wireless system, which also comprises the camcorder adaptor and camera adaptor.

Together, these models provide a stable, high quality wireless transmission system from a Sony camera or camcorder to a base such as an OB van. By eliminating the cable between camera and the van, the mobility of the camera is greatly increased. Based on 2.4 GHz wireless technology, MPEG encoding, and COFDM transmission, the Sony Wireless Camera System is ideal for delivering live news from the field, or for covering golf or similar sporting events

Cable-free operation

The new Sony MPEG Wireless Link system consists of a small adaptor, for virtually all Sony cameras and camcorders, together with a compact receiver. Video and audio can be transmitted up to 500 metres to from the camera, eliminating connecting cables. During live transmission, the cameraman is free to move around to catch important action and interviews, without the constraints imposed by a cable link.

Quick Set-up

Because the adaptor docks directly to the camera or camcorder, no connecting cables are required, and the cameraman is able to

convert to wireless mode quickly and easily. The receiver antenna is compact and has a wide acceptance angle, so does not need to be accurately steered when the cameraman changes location. Apart from frequency setting, all receiver settings are derived automatically, according to the transmitted signal.

Compact, lightweight construction

The WLL-RX55 is a compact 3U half rack width unit, which can be operated from either AC 220 volts, or 12 Volts DC for field applications.

The receiver antenna/downconverter is linked by up to 100 metres of cable to the receiver, and is also very compact, so can be located on a mast if required.

High quality transmission

Conventional wireless links use analogue techniques, with consequent loss of image quality. The WLL system, however, transmits MPEG-2 broadcast quality 4:2:0 video at data rates of up to 15 Mbps, to deliver much higher picture quality, comparable with that achieved using a triax transmission system.

Built-in Diversity Reception

The WLL-RX55 includes dual receivers and antennae to provide diversity reception. This helps to eliminate fading and other interference effects which could degrade the camera picture.

Easy to use

The Sony WLL system is extremely easy to use, requiring no skilled RF operators. The receiver includes an on-screen menu system with simple setup of all operating parameters.

AC or DC Operation

The WLL-RX55 can be operated either on 220 V AC, or 12 V DC supply, so can be easily used in all field applications

Full camera remote control

When used with the WLL-CA55 Wireless Camera adaptor, full remote camera control is available, including genlock, intercom and tally. Control is possible from any 700 series control panel, and the RM-B750 panel can be mounted directly on the front of the receiver if required.

Please note that genlock, control and intercom are not possible with the WLL-CA50 camcorder adaptor

Features

Compact Construction

The WLL-RX50 is very compact, 3U half-rack width. This package includes dual diversity receivers, MPEG decoder, and all camera video, control and intercom interfaces.

The antenna and down convertor are also very small, for convenient mounting on a mast, or in confined spaces.

Antenna

The WLL-RX55 includes two down converter units and reception antennae.

The down converter converts the received signal frequency from the 2.4GHz range to 326 MHz – 398MHz, in order to reduce the transmission loss through the IF cable between the reception antenna and the receiver WLL-RX55.

The antenna can directly be attached to the down converter, or separated by a few metres if more convenient. The down converter is very compact, and includes mounting holes and brackets for on the fixing to a mast or a tripod.

Exchangeable Reception Antenna

Since the down converter has standard N-type connector for reception antenna, an alternative antenna can easily be used to replace the supplied one.

Diversity reception

The WLL-RX50 includes two receivers to provide Diversity Reception. This helps to ensure a stable, interference-free output when operating near maximum separation distance, or in other conditions where reception is poor, or multiple signal reflections may occur. A built-in packet-switching Diversity Switcher in the WLL-RX55 monitors the error rate of the data streams from all receivers and dynamically selects a stream which does not contain errors.

Convenient power options

The WLL-RX55 can be powered either from AC mains, or from 12 volt DC, allowing easy field use.

Full camera remote control

Together with the WLL-CA55, the WLL-RX55 provides all the functionality of a triax camera, including genlock, camera control, tally, audio, and intercom facilities. The camera can be integrated within a multi-camera environment using standard Sony remote control panels.

Optional front control panel

If required, the RM-B750 remote control panel can be fitted directly to the front of the receiver to provide a convenient self contained control package. The camera output signal can also be viewed using the colour LCD screen on this panel.

EL display and Jog Dial

The EL display is used to provide status and menu information for the Wireless System. By using the Jog Dial and associated menu system, all system parameters can be setup quickly and easily.

Comprehensive range of video and audio interfaces

The WLL-RX55 provides SDI and DVB-ASI outputs, plus composite (VBS) picture and waveform monitoring outputs. For additional flexibility, the WLL-RX55 uses the same camera

control, intercom and tally interfaces as the CCU-550DP triax base station, allowing an OB van to be rapidly re-configured to suit programme requirements.

Specifications

Generic Specifications

Power requirements:	AC 100V to 240V, 50/60Hz, 800mA max. DC12V, 5.5A max.
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Operating temperature:	+5°C to +40°C
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Storage temperature:	-20°C to 60°C
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Dimensions (w/h/d):	φ200 x 127 x 365 mm
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Weight	5kg: Not including antennae or downconvertors
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Reception frequency range:	2406 to 2478 MHz
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Bit stream inputs/outputs:	DVB-ASI, EN50083-9 (DVB-PI-232 Revised TM Rev.2) Standards
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Supplied Accessories

Reception antenna	x 2
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Down converter	x 2
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Mounting bracket	x 2
Mounting screw	x 6 (M3 x 4, M4 x 8)
Coaxial cable with N-type connectors (10m)	x 2
Operation manual	x 1
Operation manual on CD-ROM	x 1
Camera number plate set	x1
4 pin connector	x1

Gallery

