



XLS-5800/HPR 8 CHANNELS 15 W MICROWAVE LINK MODEL FOR 5.8 GHz



15 W transmitter with 8 channels, 8 channel receiver, 2 directional antennas LOG1/GR), Capacity: 1 video/2 audio channels, receiver has built-in low noise amplifier for excellent sensitivity. Operating frequency: synthesized. This link is Professional and it is recommended for TV production and Film. It is made for very long distances - up to 35 km line-of-sight. Frequency setting is internal. Both receiver and transmitter are built in weatherproof NEMA enclosures.

Installation and Operating Instructions

1• Verify proper operation of camera and monitor/event recorder using coaxial cable prior to installing wireless link.

2• Install transmitter and receiver units in secure and dry place.

3• Install antennas

4. DO NOT EXTEND ANTENNA CABLES IN ANY CASE!

USE EXTREME CARE WHEN INSTALLING ANTENNAS NEAR POWER LINES.

4• Tighten antenna cable to receiver and transmitter. Apply a small amount of silicone to flange to make a leak proof connection.

5• Connect video, audio, power, cables to units through flanges. Tighten flanges to allow small air gap at bottom of enclosure.

IMPORTANT NOTE:

Power adapter must be kept dry.

6• Verify that LEDs are lit up and transmitter and receiver are on same channel.

**DO NOT APPLY POWER TO THE TRANSMITTER UNLESS THE ANTENNA IS CONNECTED.
PERMANENT DAMAGE MAY RESULT.**

To obtain the best picture quality and transmission distance, the following rules of thumb should be followed:

- 1) Mount the transmitter and receiver antennas above human and mechanical traffic, the higher the better. A 10 foot (or more) steel mast on top of a building is typical. Make sure that the mast is well grounded to earth ground with an 8 AWG or larger wire. For maximum range, the transmit and receive antennas must be 15 to 30 feet above all obstacles in the line of sight.

IF OMNI DIRECTIONAL ANTENNAS ARE USED, THE RANGE IS LIMITED, FOR THE BEST RESULTS USE ONLY DIRECTIONAL ANTENNAS WITH GAIN. DO NOT EXTEND ORIGINAL LENGTH OF ANTENNA CABLES.

- 2) Keep the transmission path as open as possible. Objects such as walls and metallic objects near the transmission path may reduce the transmission distance.

3) Do not add additional lengths of cable to connect the receiver to the antenna as significant losses in signal, and reduced transmission range will occur.

4) Keep the cable connecting the antenna to the receiver as short as possible.

5) If needed you may run over 100 ft coax audio/video cable feed to the A/V source

IMPORTANT NOTE:

The Transmitter and Receiver units may get warm to the touch. This is normal and does not affect operation in any way. Units are covered by one-year warranty.

WARRANTY VOID IF UNITS MODIFIED!

Figure 2 shows the front panel of the XL 1800/H transmitter and the functions of each control and input/output. Each control is described in greater detail below.

IMPORTANT NOTE:

The transmitter uses a non-standard (SMA) jack to connect to the transmitter to antenna. Any modification to this jack may void the user's authority to operate the equipment and will void the manufacturer's warranty.

AGAIN: DO NOT APPLY POWER TO THE TRANSMITTER WITHOUT THE ANTENNA SECURELY ATTACHED- DAMAGE TO THE UNIT MAY RESULT.

VIDEO INPUT

Designed to mate to a standard BNC male connector, this input accepts 1 Volt peak-to- peak video in both NTSC and PAL formats. This input is terminated with 75 Ω .

RCA to BNC adapters are available for use with some cameras and VCRs..

AUDIO INPUTS

There are two separate audio inputs/outputs for stereo audio broadcast.

Designed to mate to a standard RCA male connector, this input accepts 300 millivolt peak-to-peak audio input and is terminated with 600 Ω unbalanced configuration.

It is designed to be interfaced to "lineout" audio sources. A preamplifier must be used to connect a microphone to this input. RCA to BNC adapters are available for use with some cameras and VCRs.

IMPORTANT NOTE:

With no video signal input, the transmit power level will be reduced in compliance with FCC regulations, shortening the transmission range for audio significantly. A video signal must be present on the video input to allow transmission at full power.

POWER INPUT

Accepts a 12 Vdc power source such as the standard 12 Vdc adapters or an optional battery. The nominal current draw is 280 milliamperes for the receiver part and 1.5 A max. for the transmitter part. If using an adapter from a third party, use a well-regulated 12Vdc/500mA output supply for the receiver and 1.6 A/12 V well regulated for the transmitter unit.

Changing Channels:

To change channels, simply depress the Toggle/Standby switch momentarily until the LED for the desired channel pattern is lit up. Remember to change the receiver channel as well, since it is not automatically changed when the transmitter channel is changed. In order to change the channel please read the text below.

NOTE: MODEL XLS-5800HP HAS SWITCH FOR THE TRANSMITTER INSIDE THE BOX. CAREFULLY OPEN THE UNIT AND LOCATE SMALL PUSH-BUTTON SWITCH WITH LED DIODE. YOU CAN CHANGE THE CHANNEL FROM 1-8. THE RECEIVE PART HAS A SWITCH WITH 8 CHANNELS- PLACE DESIRED CHANNEL TO ON POSITION.

AUDIO OUTPUT

Designed to mate to a standard RCA male connector, this provides a 1 Volt peak-to peak audio output and should be terminated in a 600 Ω load, as is found in most "line in" audio inputs. RCA to BNC adapters are available for use with some monitors and VCR inputs.

INTERFERENCE

If interference such as lines in the pictures is observed, changing the transmission channel may cure the problem. In some cases strong signals from wireless network could cause the problem. Also, AC generators in close proximity to the transmitter or receiver may cause lines in the picture. Move the unit away from the source of the interference.

NO PICTURE

Check that transmit and receive channels are set the same.

Verify all connectors are tight.

POOR PICTURE QUALITY

Raise transmitter and receiver antennas above ground and away from obstacles and traffic, including foot traffic. Change the channel or check with a spectrum analyzer if any other source transmitting. Use only clear channel, not disturbed by other transmitting source.

Use an optional high-gain dish antenna on the receiver. Verify all connectors are tight. Shorten the receiver antenna feed cable.

Technical Specifications			
RF	Output power	15W (max)	
	Modulation type	FM	
	Channel frequency (8 CH)	CH1:	5733MHz
		CH2:	5752MHz
		CH3:	5771MHz
		CH4:	5890MHz
		CH5:	5809MHz
CH6:		5828MHz	
CH7:	5847MHz		
CH8:	5866MHz		
	Frequency stability	±200 KHz	
	Output flatness	1.5 dB	
Video	Input level	1V p-p (75 ohms Load)	
	Impedance	75 ohms	
	Pre-emphasis	NTSC and PAL	
Audio	Input level	30mV p-p (minimum)	
	Frequency response ²⁰¹	60Hz ~ 6KHz	
	Audio carrier frequency (L)	6.5MHz ± 25KHz	
	Audio distortion	2% max.	



Warning

Our microwave links are built in weatherproof boxes, but they are not waterproof. Please make sure to protect transmitter/receiver boxes from the rain and moisture.

FREQUENCY SETTING DETAIL

Please match the dip - switches in same position for Transmitter



Please match the dip - switches in same position for Receiver