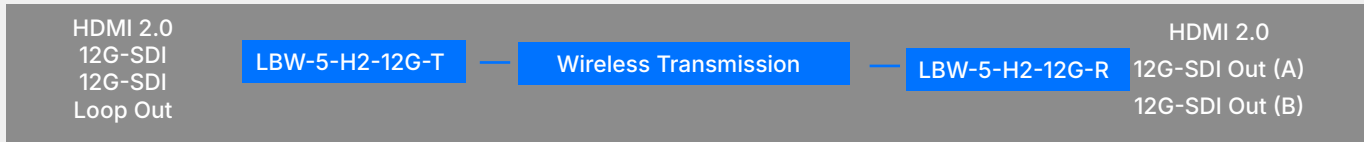
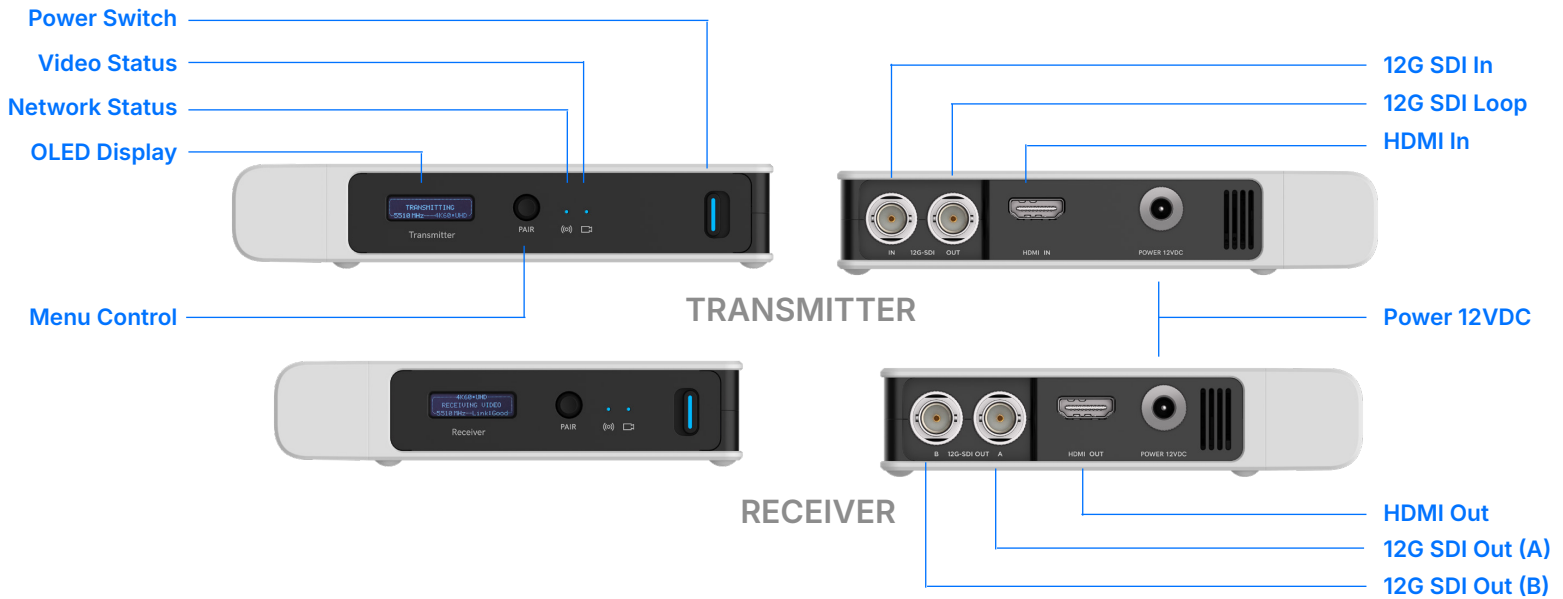


Wireless 4K Video Transmission System



Overview

The LBW-5-H2-12G-TR-A is a Transmitter & Receiver wireless device pair that delivers real-time, high fidelity, encrypted 4K60 video over a secure and reliable wireless link. Ideal in medical applications such as Endoscopy Systems, X-Ray/C-Arm, Digital Microscopes and other medical video applications.

This technology enables wireless transmission of live video to display monitors, mobile display carts, recording equipment, etc., providing the necessary robustness and flexibility in operating rooms and clinical setups. This solution minimizes expensive and lengthy installations and OR shutdown times.

Features

- Video resolution: Up to 4K@60fps
- Simplified, nurse-friendly, button-push pairing scheme
- Latency: <2mS
- Supportedw RF bandwidth: 40MHz or 20MHz
- Antennas: Internal\
- MIMO configurations: 4×5
- AFS (Automatic Frequency Selection): Ensures best channel selection
- DFS (Dynamic Frequency Selection): Operates on the entire unlicensed 5GHz spectrum (5.1-5.9 GHz)
- Encryption: AES-256 (RSA-1024 key exchange)
- 1 transmitter can connect with up to 4 receivers simultaneously

Wireless 4K Video Transmission System

VIDEO/AUDIO

Video Input (T)	1× 12G-SDI SMPTE 2082-1 standard/75 Ω 1x HDMI 2.0 Type-A receptacle
Video Output (T)	1x Loopout 12G-SDI SMPTE 2082-1 standard/75 Ω
Video Output (R)	2× 12G-SDI SMPTE 2082-1 standard/75 Ω 1x HDMI 2.0 Type-A receptacle
2D Video Formats	1080p,4K (23.98 / 24 / 25 / 29.97 / 30 / 50 / 59.94 / 60) 1080i, 720p (50 / 59.94 / 60) [23.98/24/25/29.97/30/50/59.94/60] 1080i,720p [50/59.94/60]
3D Video Formats	Side by Side, Top bottom 1080p,4K (23.98 / 24 / 25 / 29.97 / 30 / 50 / 59.94 / 60) [23.98/24/25/29.97/30/50/59.94/60] [23.98/24/25/29.97/30/50/59.94/60]
Color Sampling	SDI: YCbCr 4:2:2 10-bit HDMI: RGB/YCbCr 4:4:4/4:2:2
Audio Compression	48KHz 24-bit PCM
Audio Input (T)	Embedded SDI/HDMI Audio Input (2 ch.)

WIRELESS

Bandwidth	20/40 MHz Bandwidth DFS Frequencies: 5.250-5.350 GHz & 5.470-5.725 GHz Non-DFS: 5.150-5.250 GHz & 5.725-5.850 GHz
Noise Rejection	Can coexist with Wi-Fi & other devices with 5GHz band
Transmission Range	Up to 100 ft (30m)
Antenna Scheme	4×5 MIMO Internal
Data Encryption	256-bit AES (RSA-1024 for key exchange) [23.98/24/25/29.97/30/50/59.94/60] [23.98/24/25/29.97/30/50/59.94/60]
Max Pairs Per Room	6

ELECTRICAL

Power Input	2.1 mm barrel connector 12VDC
Power Consumption	20W (T), 18W (R)
USB (Service Port)	Micro USB 2.0

CONTROL/STATUS INDICATORS

Link quality	On Screen Display
Network Status	Blue LED
Video Status	Blue LED
Power Indication	Blue LED
Switches	On/Off Switch
OLED and Joystick	Yes
OSD	Yes

PHYSICAL

Dimensions	Tx: 5.9"(L) x 3.6"(W) x 1.1"(H) (149 × 91.2 × 27.1 mm) Rx: 5.1"(L) x 5.5"(W) x 1.1"(H) (129 × 138.8 × 27.1 mm)
Weight	360 g/12.7 oz (T) 434 g/15.3 oz (R)
Temperature	Operating: 0-40°C
Device Composite	Milled aluminum (chassis) & regulation-compliant PCB

COMPLIANCE

EN-60601

CERTIFICATIONS

FCC, IC, CE, MIC, KC

ORDER INFORMATION

LBW-5-H2-12G-T	Wireless Transmitter Kit
LBW-5-H2-12G-R	Wireless Receiver Kit

PANEL DRAWING

TRANSMITTER (Dimensions are in mm) RECEIVER

