COFDM Transmitter



Designed for a new generation of HD SDI capable compact cameras, the AB-HDTX supports video and embedded audio transmission with selectable bandwidths of 6, 7 and 8 MHz within the 5.8 GHz range. The unit's size makes it ideal for point of view, ENG, sporting events, and reality-based productions as well as confidence monitoring.

The AB-HDTX features superb H.264 SD and HD encoding capabilities and operates in the standard 2k DVB-T COFDM mode.

The AB-HDTX has a friendly local control panel. The local controls include the selection of up to 12 presets, High/Low RF power and TX/Standby. The AB-HDTX is a perfect companion to the AB-HDRX stand alone receiver or Direct VU handheld monitor/receiver.

FEATURES:

- 5.8 GHz
- SD and HD encoding
- Up to 100mW RF output power
- Optimized for size
- Broadcast quality video
- Wide selection of video inputs
- H.264 Part 10
- Embedded audio
- Very low power consumption
- Video, audio, data and telemetry
- User-friendly controls

ACCESSORIES:

System Kit available

APPLICATIONS:

- ENG/EFP
- Live event coverage
- Confidence monitoring
- Camera mounted







RF Performance:

Base Model	Frequency	RF Power	DC Power
Number	(GHz)	(dBm)	(W)
AB-HDTX	5.725 to 5.850	20	10

Tuning Step Size: 250 KHz or 1 MHz step size

Frequency Stability: ± 10ppm

Standby Mode:

Standby: No RF output

Normal: Instant on-frequency transmis-

sion

Modulation:

Modulation Formats: COFDM (DVB-T)

Carriers: 2k

Constellation: QPSK, 16 QAM

Code Rate: 1/2, 2/3, 3/4, 5/6, 7/8
Guard Interval: 1/32, 1/16, 1/8, 1/4
Bandwidth: 6 MHz, 7 MHz and 8 MHz

MPEG Encoder:

Video:

Method: MPEG-4 Part 10/H.264

Video Coding: AVC

Video Input: Composite

NTSC: 720 x 480 (4:2:0) PAL: 720 x 576 (4:2:0)

SD-SDI Input: ANSI/SMPTE 259M HD-SDI Input: ANSI/SMPTE 292M

HD Formats (4:2:0): 720p 23.98/24/50/59.94

1080i 50/59.94

1080p 23.98/24/29.97/25 1080psf 29.97/25/24/23.98

SD Formats: NTSC: 720 x 480 (4:2:0)

PAL: 720 x 576 (4:2:0)

Audio:

Audio Coding: ISO/IEC 11172-3 (Layer II)

Audio Sample Rate: 48 kHz

Audio Channels: 1 Stereo, 2 Mono Standard Audio Input: Line, Gain selectable

(-12 dB to +50 dB) Mic, Gain selectable (-12 to +50dB); 10KΩ

Phantom power or Ext. Bias De-embedded from SDI Tone – Level Adjustable System:

Video Present: Remote Standby/Test

Generator selectable

Delay: < 4 frames in i and p formats

< 5 frames in psf formats

Test Generator (Dynamic): SMPTE CB (NTSC)/100% CB (PAL)

16 Character ID

(Match SDT Service name)

1kHz Tone/Pulse

User Data: RS232 side channel 300-115k Baud

Remote Control: Remote RS232
Local Control: Keyboard

Power Requirements:

Input Range: DC: +9 to +28 VDC

Power Consumption: See table above

Environmental:

Temperature Range:

Full Specification: -10° to +50°C ambient

Storage: -40° to +80°C

Humidity: 0 to 95% non-condensing

Altitude:

Operating: 20,000 ft (6,000 m) Storage: 50,000 ft (15,000 m)

Physical Characteristics:

Size: 5.41" (H) x 4.01" (W) x 2.63" (D)

Weight: 1.4 lbs (635 g)