

# TRX992

## DIGITAL WIRELESS TRANSCEIVER

The Zaxcom TRX992 transceiver is your all-in-one solution for wireless boom and parabolic microphone applications. Instead of having a belt full of components, the TRX992 performs the functions of wireless transmitter, an audio monitor channel receiver, a backup recorder and phantom power supply – all with ample battery power and robust connectors in a fully machined aluminum case. To keep things cost effective and eco-friendly it utilizes a rechargeable battery system.

## FEATURES

- 100% digital wireless transmission
- 106 dB transmitted audio dynamic range
- Built-in 2.4 GHz IFB receiver for monitor return
- Balanced XLR input with 48V phantom power
- Mic / line level input
- User selectable 10, 25, 50 or 100\* mW output power
- Rechargeable battery power system
- Built-in backup recording with timecode (Patent Pending)
- Internal timecode reader / generator
- RF remote controllable
- Internal headphone monitor mixer
- Microphone limiter
- 100% machined aluminum case



### ■ Zaxcom Digital Audio Quality

The audio transmission quality from the TRX992 sounds like it's coming from a hard wire, free from all compander artifacts and transmission distortions. Complex audio waveforms generated by large diaphragm microphones cannot be accurately recreated using an FM based system, giving digital wireless the clear advantage.

### ■ Digital IFB Audio Quality

The TRX992 boasts Zaxcom's new digital IFB receiver bringing the same compander-free audio quality to the return side of the TRX992. Critical audio judgments of return boom audio can now be made using a wireless return.

### ■ Internal Monitor Mixer and Headphone Output

The boom operator can mix between the IFB return and the transmitted boom audio via a control pot located on the top plate of the TRX992 providing maximum flexibility of audio monitoring.

### Private Line Talkback Mode

At the press of a button the **TRX992** transmission can be routed to a separate receiver output for private communication to the production sound mixer. The private communication is indicated by a tone introduced into the **TRX992's** headphone monitor. This eliminates the need for a walkie-talkie or separate wireless communication channel and keeps the back channel quiet during takes ensuring there is no confusion with the recorded audio from the boom microphone.

### Remote Control

In addition to carrying return audio, the **TRX992's** IFB diversity receiver can also receive timecode and remote control commands. Remote parameters include audio gain, RF frequency, timecode sync and recording functions. Gain can be remotely adjusted during a take.

### Internal Recording

Timecode referenced internal backup recording (Pat Pending) eliminates the possibility of an RF hit ruining a take. A high-resolution recording of your transmission will ensure you never again have to explain to the director that you didn't get the audio. With a 16 GB media card you can record up to 96 hours of 24-bit digital audio.

### Balanced Mic Level Input

The balanced mic-level input eliminates ground loop and level mismatch issues common to FM bodypack solutions in use today. Feeding the boom mic to a microphone preamp then feeding its line-level output to an unbalanced FM transmitter is likely to cause a mismatch of dynamic range and is susceptible to induced noise from cell phones and lighting on set. The balanced microphone input of the **TRX992** directly driving a balanced input A/D conversion is the cleanest solution available for boom pole audio capture and transmission. This solution is fully differential and offers high common mode rejection.

### Studio Quality Microphone Preamp

The **TRX992** incorporates a studio quality microphone preamp. The availability of a high power battery gives the **TRX992's** microphone preamp a dynamic range of 130 dB resulting in ultra low distortion and ultra low noise with excellent common mode rejection.

# SPECIFICATIONS

## Transmitter

<b>RF Power output</b>	10 / 25 / 50 / 100* mW - Software Selectable
<b>RF Modulation</b>	Digital - proprietary method
<b>RF Frequency Range</b>	518.0 to 872.0 MHz (separated into 30 MHz blocks)
<b>RF Frequency Step</b>	100 KHz
<b>RF Bandwidth</b>	<b>US setting:</b> 200 KHz <b>Euro setting:</b> 125 KHz
<b>Channel Separation</b>	500 KHz (700 KHz recommended)
<b>Antenna Connector</b>	50-ohm SMA female
<b>Emission Designator</b>	180 KV2E
<b>FCC Part</b>	74.861

## Transmitter Audio

<b>Dynamic Range</b>	106 dB
<b>Distortion</b>	.001%
<b>Frequency Response</b>	<b>Mode 0:</b> 20 Hz to 16 kHz <b>T&amp;M Model:</b> 0.2 Hz to 16 kHz
<b>Highpass Filter</b>	Off or 30 to 220 Hz, step: 10 (6 dB per octave)
<b>System Group Delay</b>	<b>US mode:</b> 3.6 ms <b>Euro mode:</b> 6 ms
<b>Mic Power</b>	48 VDC Phantom, balanced, 10 mA max
<b>Mic Connector</b>	XLR-3F
<b>Input Range</b>	<b>Line-level:</b> -10 to +4 dBu <b>Mic-level:</b> -60 to -30 dBu
<b>ADC Bit-depth</b>	24 bits

## Recording

<b>Media</b>	MiniSD card (Flash memory)
<b>File Format</b>	.ZAX
<b>Recording Time</b>	96 hours (with a 16 GB card)
<b>Timecode Frame-rates</b>	23.98, 24, 25, 29.97NDF, 29.97DF, 30NDF, 30DF
<b>Timecode Type</b>	SMTPE

## IFB Receiver

<b>RF Frequency Range</b>	2.403 to 2.475 GHz
<b>RF Frequency Step</b>	0.001 GHz (1MHz)
<b>RF Bandwidth</b>	1 MHz DSS
<b>Channel Separation</b>	2 MHz (8 MHz recommended)
<b>Sensitivity</b>	-96 dBm
<b>DAC Bit-depth</b>	24 bit
<b>DAC Rate</b>	48 kHz
<b>Frequency Response</b>	20 Hz to 12 kHz
<b>Output Impedance</b>	8-ohm minimum

## Physical

<b>Weight</b>	13.2 oz.
<b>Dimensions</b>	5.5" x 2.9" x 1.1"
<b>External Power</b>	N/A
<b>Internal Power</b>	<b>Life:</b> up to 4 hours @ 50 mW <b>Type:</b> one VPX battery
<b>Display</b>	Graphic LCD

\*100mW power output is available by request, standard output is 50 mW maximum

