

IFB T5

Technical Data

Synthesized UHF Transmitter



Feature Highlights

- PC programmable for up to 256 frequencies
- Microprocessor controlled operation
- 50 mW power output
- Pilot tone squelch control
- Compandor noise reduction
- Multi-use XLR input jack
- Built in microphone preamp
- DIP switch programmable intercom input
- Tx mute for frequency scrolling
- Adjustable brightness LED display
- Compact size for use anywhere
- Machined aluminum construction

The Lectrosonics IFB system was designed for use in broadcast, motion picture, theater, and stage applications where extended operating range and high quality audio are essential. The T5 transmitter can be used as a stand-alone device or patched directly into popular intercom systems.

Up to 256 frequencies can be stored with internal memory to provide exceptional flexibility in coordinating frequencies in multi-channel wireless systems and avoid interference from external sources.

Microprocessor control provides user friendly operation and eliminates transients at turn-on and turn-off. The transmitter output is muted in the TUNE mode to avoid generating interference in other wireless systems while scrolling up and down to change frequencies. In the XMIT mode, the output is turned on and the frequency cannot be changed.

The IFB T5 delivers 50 mW of output power which, when used with an efficient antenna, provides extended operating range outdoors with the R5 belt-pack receiver. Indoors, the signal will penetrate various surfaces and reflect from others efficiently to extend operating range and reduce the need for critical antenna positioning.

A supersonic pilot tone signal controls the audio squelch on the R5 receiver to eliminate noise when the transmitter is turned off and prevents the receiver from locking onto false signals. The pilot tone also eliminates noise in the receiver at turn-on and turn-off.

Compandor noise reduction provides an excellent signal to noise ratio that improves intelligibility in noisy environments. Audio signals from mic level to studio line levels are handled without distortion or noise.

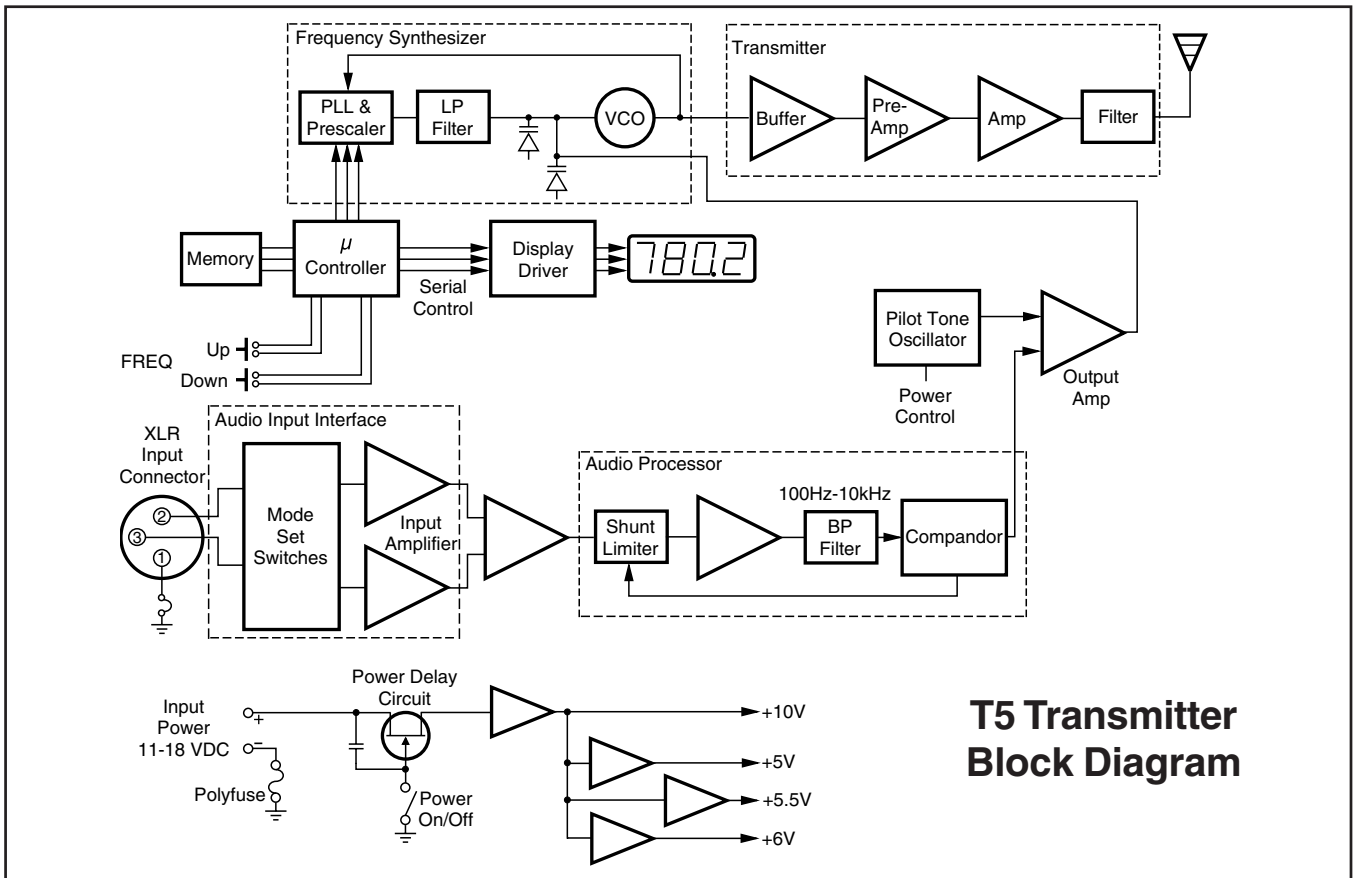
The brightness of the front panel LED display is adjustable for use in dimly lit conditions or outdoors in direct sunlight. The LEDs are easily seen from a distance.

DIP switch settings on the rear panel provide direct compatibility with RTS and Clear Com intercom systems. A preamp stage is also included in the input stage to allow direct connection to dynamic microphones in "stand-alone" applications. Direct output at studio line level can also be fed directly into the transmitter.

The transmitter housing is rugged, machined aluminum with electrostatic powder coating and anodized finishes. The unit is powered by 12 to 14 volts DC via a locking connector. The supplied antenna is a detachable, 1/4 wavelength whip that connects to a 50 Ohm BNC connector on the rear panel.



LECTRO™



**T5 Transmitter
Block Diagram**

Specifications

Operating Frequencies: 25.6 MHz blocks from 525.000 to 862.000 MHz

Frequencies (Channels per block): 256

Channel Spacing: 25kHz min. (programmable)

Spurious & Harmonic Suppression: 40 dB below carrier at freq. above 1GHz 70 dB below carrier at freq. below 1 GHz

Frequency Stability: ±.002% (10 ppm) @ 25° C

Temperature Stability: ±.005% (50 ppm) from -30° C to +50° C

Channel Selection: Momentary pushbutton switches; TUNE Up and Down

Pilot Tone: 29.997 kHz

Modulation: FM, ±20 kHz deviation

Audio Freq. Response: 100 Hz to 10 kHz, +1 dB, -3dB (system response)

Audio Compressor: 2 to 1

RF Power Output: 50 mW,

Output Impedance: 50 Ohms

Audio Input Levels:

- **MIC:** -50 dBv nominal
- **Clear Com:** -10 dBv nominal
- **RTS 1&2:** 0 dBv nominal
- **LINE:** 0 dBv to +12 dBv

Audio Input Config: Balanced and unbalanced, rear panel selectable for Line, Mic, RTS 1, RTS 2, and Clear Com

Input Impedance: Greater than 2K balanced, greater than 1K unbalanced at any gain setting

Gain Control Range: 43 dB, Semi-log Rotary control

Audio Input Jack: Standard XLR female connector

Input Power: 12 to 14 VDC typical, 250 mA. max.; Max. Input Range 11 to 18 VDC

Power Input Jack: Coax type, locking LZR RL26AE

Indicators:

- LED for -20 dB modulation
- LED for 0 dB modulation
- 4 Digit 7-segment LED for frequency/power (adjustable brightness)

Front panel controls:

- Audio Level rotary knob
- Power OFF-TUNE-XMIT, 3 position slide switch
- TUNE Up momentary pushbutton switch
- TUNE down momentary pushbutton switch

Rear panel controls:

- Mode Select
- 4 section DIP switch

Weight: 9 Oz.

Size: 5.25 x 3.25 x 1.25 inches

Emission designator: 100KF3E

