



### Configuration:

LT-800-216-01 Stationary RF Transmitter (216 MHz) (North America)

#### **Product Overview:**

Thanks to its outstanding audio quality, the Listen LT-800 Stationary Transmitter can be used in a variety of applications. The LT-800 connects to your main audio system, to broadcast a high quality audio signal to belt pack receivers or stationary receivers. The end result – your audience can hear and understand the presentation better because of improved speaker placement or because they have their own belt pack and headset. The signature Look & Listen<sup>TM</sup> LCD shows channel, lock, programming and RF power.

### Highlights:

- Superior audio quality 80 dB signal-to-noise ratio (SNR), setting the industry's sound quality standard
- 57 channels
- 100% Digital Listen transmitters are digitally-tuned so the transmission won't drift
- Use up to three (3) simultaneously on 216 MHz
- · Limited Lifetime Warranty
- Look & Listen™ LCD shows channel, channel lock, and programming information
- Balanced/Unbalanced Inputs you can interface with any audio source on the market
- Designed for installation rack mountable with optional remote antennas make installation easy and service reliable
- Auto Processor to condition the audio for voice/music prior to transmission
- VU level meter and test tone simply makes the installation easier to set-up
- 30-day no obligation demonstrations available
- Many accessory options make Listen products ideal for a wide range of applications

### Includes:

One (1) LT-800-216-01 Stationary Transmitter (216 MHz)

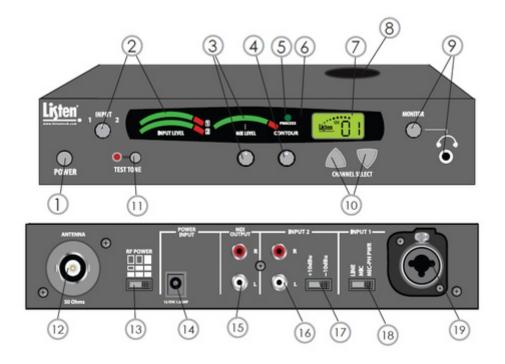
One (1) LA-207 12 VDC Replacement Power Supply for LT-800

One (1) Quick reference card

### **Architectural Specification:**

The stationary RF transmitter shall be capable of broadcasting on 57 channels. The transmitter shall have an SNR of 80 dB or greater. The output power shall be adjustable to quarter, half or full. Channel tuning shall be capable of being locked. The device shall have an audio frequency response of 50 Hz to 10k Hz, ± 3 dB at 216 MHz. It shall have two (2) mixing audio inputs and a mixed signal output. The device shall have the following audio controls: input level, mix level and an adjustable low pass filter (contour). The device shall have an audio processor that is capable of automatic gain control and limiting. The Listen LT-800-216 is specified.





## Stationary RF Transmitter (216 MHz) Product Features:

- 1. POWER: Easy access from the front to turn unit On/Off.
- 2. INPUT 1 & 2 AND INPUT LEVEL INDICATORS: Adjust audio levels of Input 1 and 2. Dual VU meters shows audio Input 1 and 2 levels.
- 3. MIX LEVEL & MIX TRANSMIT LEVELS: Mix Level control sets level of mixed audio. VU meter shows the output level of your mixed audio.
- 4. CONTOUR: Contour equalization Cuts/Boosts frequencies above 5 kHz.
- 5. PROCESS LED: Processing (automatic gain control and compression) can be turned on and off from the front panel.
- 6. SQ™ LED: (Super Quiet Companding Technology) can be turned on and off from the front panel.
- 7. LCD DISPLAY: Shows channel selected, channel lockout, programming, and RF power.
- 8. RF ANTENNA OUTPUT: Top mount antenna jack for top mounted telescoping antennas.
- 9. MONITOR LEVEL: Earphone jack and volume control to check audio integrity of transmission source.
- 10. CHANNEL SELECT: UP/DOWN channel selection of 57 channels. User can easily change between Basic and Expanded modes.
- 11. TEST TONE: The test tone level is adjustable, which adds flexibility when setting up and testing system.
- 12. RF ANTENNA OUTPUT: Top mount, rear mount, and remote antenna options.
- 13. RF POWER LEVEL: Multiple transmitter power settings (full, ½ and ¼) with indication on LCD display.
- 14. POWER INPUT: In-line power supply (included) attaches.
- 15. AUDIO OUTPUTS: Two (2) phono connectors for a mixed output of Inputs 1 and 2.
- 16. AUDIO INPUT 2: Two (2) unbalanced phono audio inputs. Select either +10 dBu or -10 dBu.
- 17. INPUT 2 LEVEL SWITCH: Set switch to match the level of Input 2 source.
- 18. INPUT 1 LEVEL SWITCH: Set switch for line or mic level. Phantom power available in Mic-PH power position.
- 19. AUDIO INPUT 1: Balanced XLR / ¼ inch audio input. Select either mic, line, or mic phantom power level for input. Electret (Condenser) microphones can be used with Input 1, mic, and phantom power.

### Product Specification: Stationary RF Transmitter (216 MHz)



Audio			
Frequency Response	50 Hz - 10 kHz (±3 dB)		
Signal-to-Noise Ratio	SQ enabled 80 dB, SQ disabled 50 dB		
Distortion	<2% total harmonic distortion (THD) at 80% deviation		
Audio Input 1	Rear panel, one (1) Female XLR or 1/4 in combo connector, balanced, 0 / -55 dBu (line/mic) nominal input level adjustable, -30 / +21 dBu (line/mic) maximum input level, impedance 20k / 1k ohm (line/mic), phantom power +12 VDC		
Audio Input 2	Rear panel, two (2) phono connectors, unbalanced, -10 / +10 dBu nominal input level adjustable, +30 dBu maximum, impedance 100k ohm		
Audio Processing	Compression can be turned on/off, slope internally adjustable from 1:1 to 4:1, default 2:1		
Contour	Cuts and boosts frequencies above 5 kHz		
Audio Output	Input 1 and input 2, mixed output (rear panel), two (2) phono connectors, unbalanced, -10 dBu nominal output level, +15 dBu maximum, impedance 10 ohm		
Headphone Output	Front panel, one (1) 3.5 mm (0.14 in.) stereo connector, unbalanced, adjustable output level, +3 dBu maximum, impedance 10 ohm		
	Controls		
User Controls	Front Panel: Power, test tone on/off, channel up/down, input levels, mix level, contour, monitor volume control Rear Panel: Input 1 Level, (Line, Mic, Mic-Phantom Power), Input 2 level (-10 / +10 dBu), RF power level (low, mid, high)		
Internal Adjustments	Compression ratio for audio processor		
Programming	SQ on/off, process on/off, channel lock		
Indicators			
Audio Input Status LEDs	Indicates Input 1, Input 2, and Mix audio levels; 10 segment LED's (8 green, 2 red)		
Processing	Indicated by a green LED when on (front panel)		
RF Power	Indicated on the LCD (low, mid, high)		
LCD	Channel designation, lock status, RF power level, programming (front panel)		
Test Tone	Red LED illuminates when test tone is enabled		
RF			
Frequency Range	216.0125 - 216.9875 MHz		
Number of Channels	19 wide band, 38 narrow band		



Number of Simultaneous Transmitters	3
Frequency Accuracy	± .005% stability +32° to +122 °F (0° to +50 °C)
Transmitter Stability	50 PPM
Transmission Range	Up to 3,000 ft. (914 m)
Output Power	100 mW (max allowed by FCC)
Antenna Type	Various antennas available
Antenna Connector	BNC
	Power
Compliance	UL, CE, GS, TÜV, RoHS
Power Supply	In line power supply, Listen part number LA-207 (Line cord is determined by the each Country's AC power standards)
Power Supply Input	100-240 VAC, 50-60 Hz, 0.4 A
Power Supply Output	12 VDC, 1.3 A, 15.6 W
Power Supply Connector	0.02 in (5.0 mm) OD, 0.01 in. (2.5 mm) ID, barrel type
Physical	
Height	1.75 in. (4.5 cm)
Width	8.50 in. (21.5 cm)
Depth	9.13 in. (23 cm)
Color	Dark Grey with white silk screening
Weight	2.6 lbs. (1.2 kg)
Unit Weight with Power Supply	3.5 lbs. (1.6 kg)
Rack Mounting	One (1) rack space height, 1/2 rack space wide. One (1) or two (2) transmitters can be mounted in one rack space, optional rack mount (LA-326)
Shipping Weight	6.0 lbs. (2.7 kg)
Environmental	
Temperature - Operation	-10 °C (14 °F) to +40 °C (104 °F)
Temperature - Storage	-20 °C (-4 °F) to +50 °C (122 °F)
Relative Humidity	0 to 95% relative humidity, non condensing
Compliance	
RF	FCC Part 15, Part 90, Industry Canada
Safety	RoHS