

# LT-803-072 Stationary 3-Channel FM Transmitter (72 MHz)



## Configuration

LT-803-072-01\*  
LT-803-072-02\*  
LT-803-072-03\*

The LT-803-072 Stationary 3-Channel FM Transmitter is a solution for assistive listening where simplicity and cost are important. The transmitter offers universal inputs ensuring your ability to interface with any audio source i.e. mixer, microphone, iPod, or CD. The signature Look & Listen LCD shows channel, lock, and RF power. The LT-803-072 comes with a power supply (LA-207). The LT-803-072 is included in Listen's LP-3CV-072 Value Package for the lowest priced solution to meet your assistive listening needs.

## Highlights

- Economical price – backed by Listen's exceptional service and support.
- One step digital tuning – easy to get the install done quickly - no technical service calls are required as the transmission won't drift.
- Balanced/Unbalanced Inputs – you can interface with any audio source on the market.
- 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.
- Reliable clear sound quality - 62 dB Signal-to-noise ratio (SNR).
- Three (3) channels – makes it simple to install, manage and use.
- Limited Lifetime Warranty.
- Look & Listen™ LCD shows channel, channel lock, signal strength.
- Designed for installation – rack mountable with optional remote antennas and rack kit make installation easy and service reliable.
- Many accessory options make Listen products ideal for a wide range of applications.
- 30-day no obligation demonstrations available.

## Includes:

LT-803-072 Stationary 3-Channel FM Transmitter  
Power Supply  
Quick Reference Card  
Limited Lifetime Warranty Program Card

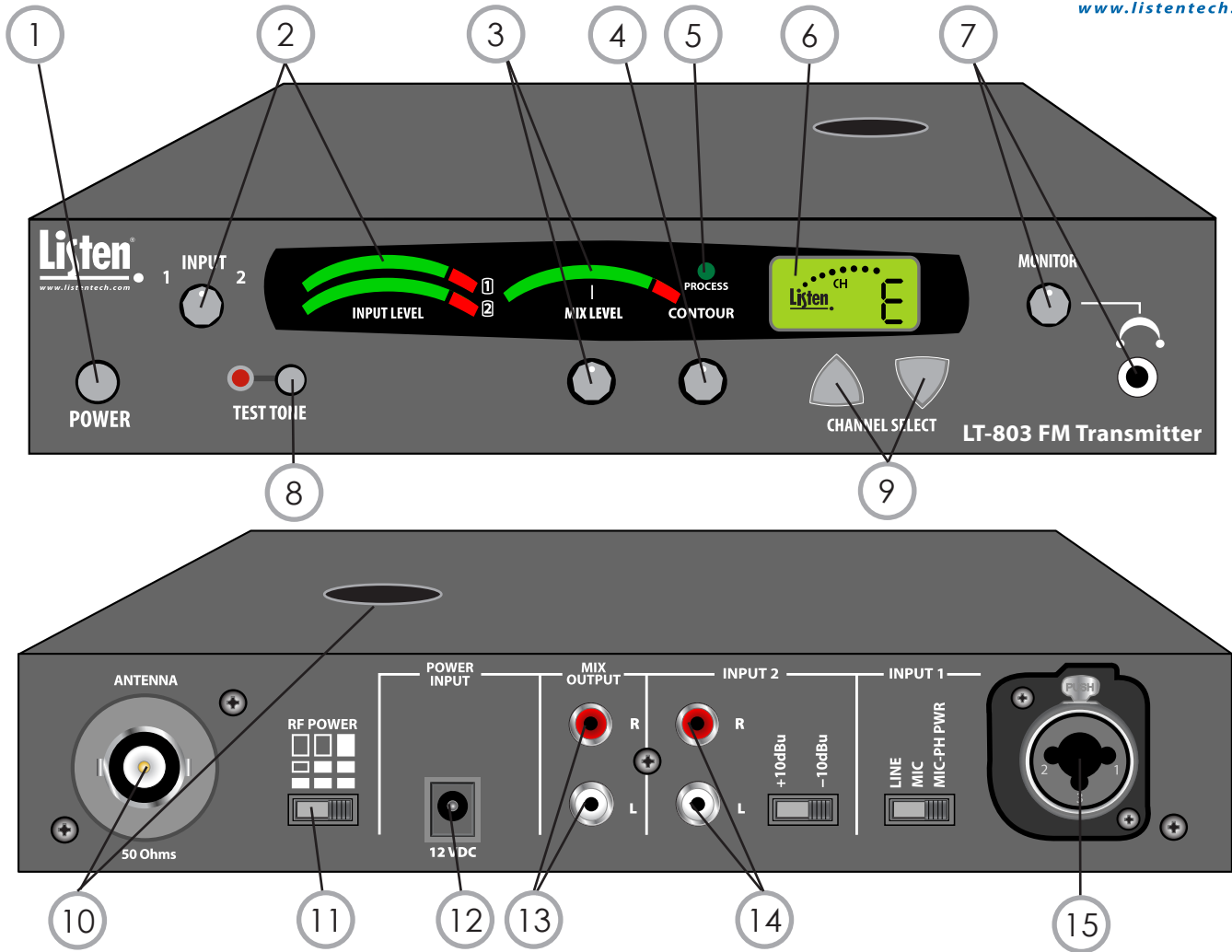
## Architectural Specification

### LT-803-072

The stationary FM transmitter shall be capable of broadcasting on one of any three channels – A (72.100 MHz), E (72.900 MHz) or H (75.900 MHz). The transmitter shall have a SNR of 62 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 15k Hz,  $\pm 3$  dB at 72 MHz. It shall have two (2) mixing audio inputs. 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-803-072 is specified.

## Requires:

LA-101 Helical Top Mounted Antenna (72MHz)  
LA-106 Telescoping Top Mounted Antenna (72 MHz)  
LA-116 Coaxial Dipole Remote Antenna (72MHz)  
LA-122 Universal Antenna Kit (72 and 216 MHz)  
LA-123 90° Helical Antenna (72 MHz)



## LT-803-072 Product Features

1. POWER on/off on front of unit for easy access.
2. Multiple audio inputs, with input level control and dual VU meters.
3. Mix Level control sets level of mixed audio. VU meter shows the output level of your mixed audio.
4. Contour equalization cuts/boosts frequencies above 5 kHz.
5. Processing (automatic gain control and compression) can be turned on and off from the front panel.
6. LCD display shows channel selected, channel lockout, and RF power.
7. Earphone jack and volume control to check audio integrity of transmission source.
8. The test tone level adds flexibility when setting up and testing your system.
9. UP/DOWN channel selection of 3 channels (A, E, H).
10. Top mount, rear mount, and remote antenna options.
11. Multiple transmitter power settings (full, ½ and ¼) with indication on LCD display.
12. In-line power supply (included) attaches here.
13. Two (2) phono connectors for a mixed output of Inputs 1 and 2.
14. Two (2) unbalanced phono audio inputs. Select either +10 dBu or -10 dBu.
15. 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.

## Accessories



LA-123

### Antennas

- LA-101 Helical Top Mounted Antenna (72MHz)
- LA-106 Telescoping Top Mounted Antenna (72 MHz)
- LA-116 Coaxial Dipole Remote Antenna (72MHz)
- LA-122 Universal Antenna Kit (72 and 216 MHz)
- LA-123 90° Helical Antenna (72 MHz)
- LA-125 Antenna Kit for Rack Mount (72 MHz)
- LA-80 2-Way RF Antenna Combiner
- LA-81 4-Way RF Antenna Combiner
- LA-82 6-Way RF Antenna Combiner



LA-207

### Power Supply (included)

- LA-207-01 12 VDC Replacement Power Supply for LT-803-072 (North America)
- LA-207-02 12 VDC Replacement Power Supply for LT-803-072 (Asia, UK)
- LA-207-03 12 VDC Replacement Power Supply for LT-803-072 (Euro)



LA-127

### Cables/ Connectors

- LA-112 RG-58 50 Ohm Coaxial Cable (Per ft.)
- LA-113 RG-8 50 Ohm Low-Loss Coaxial Cable (Per ft.)
- LA-115 RG-58 BNC Coupler
- LA-127 RG-58 BNC Connector
- LA-128 RG-8 BNC Connector
- LA-390 RG-8/50 Ohm Preassembled Coaxial Cable (Per ft.)
- LA-391 RG-58/50 Ohm Preassembled Coaxial Cable (Per ft.)



LA-326

### Miscellaneous

- LA-304 Assistive Listening Notification Signage Kit
- LA-326 Universal Rack Mounting Kit

	Specifications	LT-803-072
RF	RF Frequency Range	(A) 72.100, (E) 72.900, (H) 75.900
	Number of Channels	3 wide band
	Frequency Accuracy	+/-0.005% stability 32° to 122°F (0° - 50°C)
	Transmitter Stability	50 PPM
	Transmission Range	Up to 1,500 ft. (457.20 m)
	Output Power	80,000uV at 3 m
	Antenna	Various antennas available
	Antenna Connector	BNC
Compliance		FCC Part 15, Part 90, Industry Canada

\*\* All system specifications are wireless end-to-end

Audio	System Frequency Response	50 Hz - 15 kHz (±3 dB)
	System Signal to Noise Ratio	62 dB (A-Weighted)
	System Distortion	<2% total harmonic distortion (THD) at 80% deviation
	Audio Input 1	Rear panel, one (1) Female-XLR and ¼ 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 Ohms.
	Audio Processing (Process)	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
	Combined Audio Output (Mix)	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 (monitor)	Front panel, one (1) 3.5 mm (0.14 in.) stereo connector, unbalanced, adjustable output level, +3 dBu maximum, impedance 10 Ohm.	

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	Process on/off. Channel lock

Indicators	Input 1, Input 2, Mix Level VU	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 Display	Channel designation, lock status, RF Power Level (front panel)
	Test Tone	Red LED illuminates when test tone is enabled

Power	Power Supply	In-line power supply. Listen part number LA-207 (line cord is determined by each country's AC power standards)
	Power Supply Input	Input: 100-240 VAC, 50-60 Hz, 0.4 A
	Power Supply Output	Output: 12 VDC, 1.3 A, 15.6 W
	Power Supply Connector	Output Connector: 0.02 in. (5.0 mm) OD, 0.01 in. (2.5 mm) ID, barrel type
	Power Supply Compliance	UL, CE GS, TUV, RoHS

Physical	Dimensions (H x W x D)	8.50 x 1.75 x 9.12 in. (21.6 x 4.45 x 21.16 cm)
	Color	Dark grey with white silk screening
	Unit Weight	2.6 lbs. (1.2 kg)
	Unit Weight with LA-207-03 Power Supply	3.5 lbs. (1.6 kg)
	Shipping Weight	6.0 lbs. (2.7 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)

Environmental	Temperature - Operation	-10°C (14°F) to +40°C (104°F)
	Temperature - Storage	-20°C (-4°F) to +50°C (122°F)
	Humidity	0 to 95% Relative Humidity, non condensing

## Frequently Asked Questions

**Q** What is the range of the LT-803-072 transmitter?

**A** Line of site up to 1,500 ft. (457.20 m) with remote antenna.

**Q** Does the LT-803-072 include the rack mount?

**A** No, but an LA-326 Universal Rack Mounting Kit is available for purchase. Antenna options for rack mounting are also available.

**Q** Do I need a transmitter for each audio source?

**A** Yes.

**Q** Is there a limit to the number of LT-803-072 transmitters I can use in one room?

**A** Yes. The maximum is one.

**Q** How many receivers can I have on a system?

**A** As many as you want. The transmitter simply transmits a signal and you can have as many receivers pick that signal up as necessary. See LR-200-072 Standard 3-Channel FM Receiver.

**Q** What is the warranty of Listen transmitters?

**A** Limited lifetime warranty. The following cases will void the warranty:

- Misuse, dropping, or any other noticeable cosmetic damage.

**Q** Is the LT-803-072 compatible with Listen's other receivers (LR-300-072, LR-400-072, LR-500-072, LR-100-072, and LR-600-072)?

**A** Yes. Remember, the LT-803-072 has only three (3) channels (A, E, H) therefore the receiver will need to be tuned to one of those channels. Also, the super quiet function must be turned off on the receiver.