



## TX-37A Transmitter Transmitters

The TX-37A Transmitter is the core of Gentner Assistive Listening Systems. The transmitter utilizes leveling multi-band compression, peak limiting, and the patented Aphex Aural Exciter® to process audio for maximum intelligibility and loudness. While other assistive listening transmitters simply increase volume, Gentner's TX-37A actually enhances the sound quality to increase audio clarity at louder levels. It also eliminates the potential for clipping and overmodulation.

The transmitter can be set to 37 different frequencies, allowing you to use multiple transmitters in one location while reducing the possibility for audio interference. This is especially useful for education and simultaneous translation applications. Its universal input stage accepts audio from mic, line, or speaker levels producing exceptional audio quality at all levels. Connection is made to the existing audio system via a tape or mixer auxiliary output.

The transmitter is designed with a compact, steel, 1/2 rack unit chassis. The shielded steel chassis protects the unit from damage and keeps out hum as well as other system noise. Gentner provides a rack mount kit\* (sold separately) to store the transmitter in a standard 1U rack space.

### Applications

- Theatrical productions, such as the opera, ballet, symphony, and plays
- Concerts in auditoriums or stadiums
- Lectures in convention centers
- Outdoor, sporting events
- Church services



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### Features and Benefits

- Only transmitter to combine multiband compression, automatic gain control, and peak limiting so there is no clipping or overmodulation
- Superior overall sound quality, and dynamics control
- Transmits to an area of more than 700,000 square feet, so the TX-37A is low cost for large venues
- Easily connects to any source—universal input stage provides input for mic, line, or speaker level, balanced or unbalanced
- Field selectable channels (37) with digital tuning for lower risk of interference
- Built-in test tone aid for quick and easy receiver tuning
- Supplied with flex antenna, remote mount, and 50' RG174 type cable
- Audio input level meter for visible indication of audio input and levels
- Adjustable RF level allows control of RF coverage
- Rugged steel chassis for enhanced RF quality
- Audio monitor jack with volume control
- Aphex® processing for increased intelligibility
- Wide area FM system works outdoors in bright light, no line of sight restrictions

\* single rack mount kit

## assistive listening systems



### Specifications

**Dimensions (LxDxH)**  
8.25" x 7.25" x 1.75"  
20.96 x 18.42 x 4.5 cm

**Weight**  
2.5 lb/1.13 kg (dry)  
5.4 lb/2.46 kg (shipping)

**Audio Inputs**  
Mic: 600 $\Omega$  balanced, 10mV  
Line: 600 $\Omega$  balanced, 1V  
Line: 10k $\Omega$  unbalanced, 1V  
Speaker: unbalanced

**Automatic Gain Control Range**  
40dB

**Manual Input Level Control**  
20dB

**Signal to Noise Ratio**  
60dB

**Transmission Type**  
FM modulation

**Maximum Deviation**  
 $\pm 25$ kHz, 50kHz total

**Maximum Radiated Power**  
8000uV/m at 30M  
 $\leq 100$ mW

**RF Level Adjust**  
1/4, 1/2 and full power

**Frequency Control**  
Digitally synthesized, crystal controlled

**Frequency Stability**  
0.005%

**Selectable Frequencies**  
37 channels between 72–76MHz

**Power Requirements**  
9–15VDC at 500mA

### A&E Specifications

The transmitter operates in the 72–76MHz Auditory Assistance Band as approved by the FCC. The transmitted field strength won't exceed 80mV per meter at three meters. The operating frequency is be digitally selectable by rear panel thumbwheel switches to any of 37 frequencies in the approved band. The transmitter is FCC and Industry Canada approved.

Maximum FM deviation does not exceed a total of 50kHz. Frequency stability is controlled by a phase-locked loop frequency synthesizer with crystal reference and is accurate within  $\pm 0.005\%$  from 0–50° C. The transmitter has a 50 $\Omega$  antenna

connector for a local or remote antenna. The RF output level is adjustable by a rear panel slide switch providing 1/4, 1/2, and full power.

The transmitter has XLR balanced and RCA unbalanced input jacks selectable as balanced mic, balanced and unbalanced line, and unbalanced speaker audio signals. There is a front panel control to adjust the audio input level with an LED audio level display. There is a switchable high-pass filter providing a 6dB/octave rolloff at 180Hz. There is an audio processing chain consisting of wide-band AGC, multi-band compression, Apex Aural Exciter®, and peak limiting. There is a

front panel control to regulate the overall amount of audio processing and a switchable 1kHz test tone to aid setup and receiver tuning.

The transmitter is powered by an external AC line to 12VDC power adapter. The front panel has a power switch with LED and an LED to indicate proper RF carrier operation. There is a 1/4" stereo monitor jack with volume control. The transmitter is rack mountable in a standard 1 RU rack steel package.

The TX37-A is specified.