T-500 FM Multi-Channel Transmitter

This 17-channel professional FM transmitter can be used for assistive listening and language interpretation. It wirelessly broadcasts a speaker’s voice, music or any audio signal up to 1000 ft. The audience can use the optional R-120 FM multichannel receiver or any other compatible FM receiver operating on the 72-76 MHz frequency to pick up the broadcast.

Overview:
The T500 transmitter features 3 main audio inputs that allow the direct connection of virtually any audio source, including a 3.5 mm jack for headset microphones, an XLR & ¼ inch combination jack with a selector for dynamic microphones, condenser microphones or line-level signals, and a RCA line auxiliary input. It also has a recording output and a 3.5 mm monitor headphone jack.

Special Features for Language Interpretation:
For language interpretation, it has a unique integrated interpreter console function. This feature allows interpreters to select an external incoming audio source and utilize a headset to listen to the source language without the need of an interpreter console or external headphone amplifier. Through the headphones’ volume control, interpreters can set the desired incoming audio level and the mute button allows them to momentarily silence their microphone for coughing or sneezing. For more advanced interpreting functions, it can also be utilized with the Enersound IC-12 multi-channel interpreter console or with any other interpretation platform with analog audio outputs.

Its LCD display allows to easily program the various useful functions, such as test tone, RF power level, display mode (frequencies or channel numbers corresponding to the Enersound R-120 receiver), channel lock.

In the US, the FCC limits the use of this device to assistive listening and simultaneous interpretation. This transmitter cannot be used in all countries. Check with your government's radio regulations for 72-76 MHz operation.
Features:
- Superb Audio Quality
- Long transmission range of up to 1000 ft
- Tabletop or rack-mountable
- Easy set-up and operation
- Multiple inputs and connector types for speech, music or any other audio signals
  - XLR, ¼”, 3.5mm, RCA inputs
- 17 selectable channels
- Ideal for assistive listening and language interpretation
- Compatible with most FM receivers in 72-76 MHz
- LCD display with backlight
- Adjustable power output
- Microprocessor controlled
- Universal Power Supply works worldwide (100-240V)

T-500 Transmitter Box Content:
- (1) T-500 transmitter
- (1) ANT-500 helical, flexible antenna
- (1) PS-500 power supply

Used with:
- R-120 FM Receiver
- Compatible with most FM receivers (72-76 MHz)
- MIC-200 Headband Microphone
- MIC-300 Professional Headband Microphone
- Interpreter Headset with 3.5 mm plugs
- IC-12 Interpreter Console/ CU-12 Control Unit

Accessories:
- ANT-500 Replacement Helical Antenna for T-500
- ANT-501 Remote Antenna for T-500
- PS-500 Replacement Power Supply for T-500
- RM-501 Single Rack Mount Kit for 1 T-500
- RM-502 Dual Rack Mount Kit for 2 T-500
- RAK-500 Rack Mount Antenna Kit
- AD-590 90° Antenna Adapter for T-500
- CON-558M Male Antenna Connector for RG58 Coax Cable
- CON-558S Female Antenna Connector for RG58 Coax Cable
- COV-500 Top/Bottom Metallic Cover without Antenna Hole for T-500
### SPECS

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Without top antenna connector</td>
<td>L 5” X W 5.5”x H 1.77” (127 mm x 140 mm x 45 mm)</td>
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<tr>
<td>With top antenna connector</td>
<td>L 5” X W 5.5”x H 2.36” (127 mm x 140 mm x 60 mm)</td>
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<tr>
<td>Weight:</td>
<td></td>
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<tr>
<td>Transmitter Only</td>
<td>18.7 oz. (531 g)</td>
</tr>
<tr>
<td>Boxed with Antenna and Power Supply</td>
<td>35 oz. (990 g)</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Power</td>
<td>100-240 VAC, 50-60 Hz, 3 W</td>
</tr>
<tr>
<td>Operating Frequencies</td>
<td>72-76 MHz</td>
</tr>
<tr>
<td>RF Field Strength</td>
<td>Does not exceed 80mV/m @ 3m</td>
</tr>
<tr>
<td>Nominal Range</td>
<td>Up to 1000 feet (305 m)</td>
</tr>
<tr>
<td>Modulation: FM, Selectable:</td>
<td></td>
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<tr>
<td></td>
<td>75 kHz deviation max. or</td>
</tr>
<tr>
<td></td>
<td>25 kHz deviation max.</td>
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<tr>
<td>Stability</td>
<td>±.005% over 0-50˚C</td>
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<tr>
<td>Pre-Emphasis</td>
<td>75 µS</td>
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<tr>
<td>Frequency Response</td>
<td>100Hz - 15kHz ±3dB</td>
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<tr>
<td>Distortion</td>
<td>1% Max. THD</td>
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<tr>
<td>Signal to Noise Ratio</td>
<td>69 dB</td>
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</table>

**Frequency chart:**

| CH 1: 72.1 MHz | CH 2: 72.5 MHz | CH 3: 72.9 MHz | CH 4: 75.7 MHz | CH 5: 74.7 MHz | CH 6: 75.3 MHz | CH 7: 72.3 MHz | CH 8: 72.7 MHz | CH 9: 75.5 MHz | CH 10: 75.9 MHz | CH 11: 72.2 MHz | CH 12: 72.6 MHz | CH 13: 75.4 MHz | CH 14: 75.8 MHz | CH 15: 72.8 MHz | CH 16: 72.4 MHz | CH 17: 75.6 MHz | CH 18: 72.4 MHz | CH 19: 75.6 MHz | CH 20: 72.4 MHz | CH 21: 75.6 MHz | CH 22: 72.4 MHz | CH 23: 75.6 MHz | CH 24: 72.4 MHz | CH 25: 75.6 MHz | CH 26: 72.4 MHz | CH 27: 75.6 MHz | CH 28: 72.4 MHz | CH 29: 75.6 MHz | CH 30: 72.4 MHz |
|----------------|---------------|-------------|--------------|--------------|--------------|---------------|---------------|--------------|--------------|--------------|---------------|--------------|---------------|--------------|--------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|-------------- |

Diagram of Language Interpretation with Multichannel Interpreter Consoles

- **Audience**
- **R-120 Receivers with Headphones**
- **Optional PA System**
- **T-500 Transmitter**
- **Interpreter**

Diagram showing the connection and flow of a language interpretation system with multiple transmitters (English, Spanish, French, German) connected to a control unit and an external PA system, providing multichannel interpretation to booths in German, French, and Spanish.