

**MODEL AFT-100  
INSTALLATION INSTRUCTIONS  
AM/FM TUNER**

**GENERAL:**

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Wheelock's AFT-100 is an AM and FM tuner designed to provide background music over a paging system, and music-on-hold to a telephone system. Separate telephone system and line level outputs, each with it's own volume control allow connection to a wide variety of paging, background music, and telephone systems. A built-in monitor speaker, tuning dial, LED signal strength indicator, and automatic frequency control provides ease of station tuning, while minimizing signal drift. In addition to a built-in telescoping and fully pivoting FM antenna, a separate FM dipole antenna is provided, as well as terminals to connect an external FM antenna. Selector switches allow selection of : AM-FM bands; internal-external antenna; speaker on-off; and power on-off. A tone control to adjust bass and treble response, is also provided. Barriered screw terminals are provided for ease and reliability of installation. The tuner can be powered by 12VDC or 24VDC, and is designed for surface wall mounting.

**TECHNICAL SPECIFICATIONS:**

POWER	
Voltage	12 OR 24VDC +/-5%
Current (Max)	250mA ± 5%
OUTPUTS	
1/2 Watt (Tel) Output	2Vrms
1/2 Watt (Tel) Output Impedance	8 Ohms
Line Output (@100mW)	2Vrms
Line Output Impedance	40 Ohms
Distortion	2%
Tone Control	-15dB
FM SECTION	
Tuning Range	88-108MHz
Sensitivity	12uVrms
Frequency Response	70-16000Hz
Signal to Noise Ratio	65dB
AM SECTION	
Tuning Range	540-1600KHz
Sensitivity	100uV/m
Frequency Response	70-5000Hz
Signal to Noise Ratio	50dB

**UNPACKING**

The unit was carefully checked before leaving the factory. Inspect the shipping container and unit carefully for indication of improper handling during shipping. If the unit has been damaged, save all packing materials and place a claim immediately with the distributor from whom the unit was purchased. If shipped directly to you, file an immediate claim to the carrier.

**WALL MOUNTING**

Mount the tuner using keyhole slots in left and right mounting flanges. Be sure to use mounting hardware suitable for the mounting surface.

**WARNING: 1.) THIS DEVICE IS DESIGNED FOR INDOOR USE ONLY. DO NOT EXPOSE TO RAIN OR MOISTURE. 2.) THIS DEVICE IS NOT INTENDED FOR USE IN HAZARDOUS LOCATIONS AS DEFINED BY THE NATIONAL ELECTRICAL CODE (NEC) AND BY THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). 3.) THERE ARE NO USER-REPLACEABLE PARTS WITHIN THE UNIT. HAVE ALL INTERNAL SERVICING DONE BY A QUALIFIED TECHNICIAN.**

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**POWER SUPPLY CONNECTIONS**

Using a 24VDC Power Supply

1. Connect (+) from 24VDC power supply to 24VDC (+) terminal on AFT-100.
2. Connect (-) from 24VDC power supply to 24VDC (-) terminal on AFT-100.

Using a 12VDC Power Supply

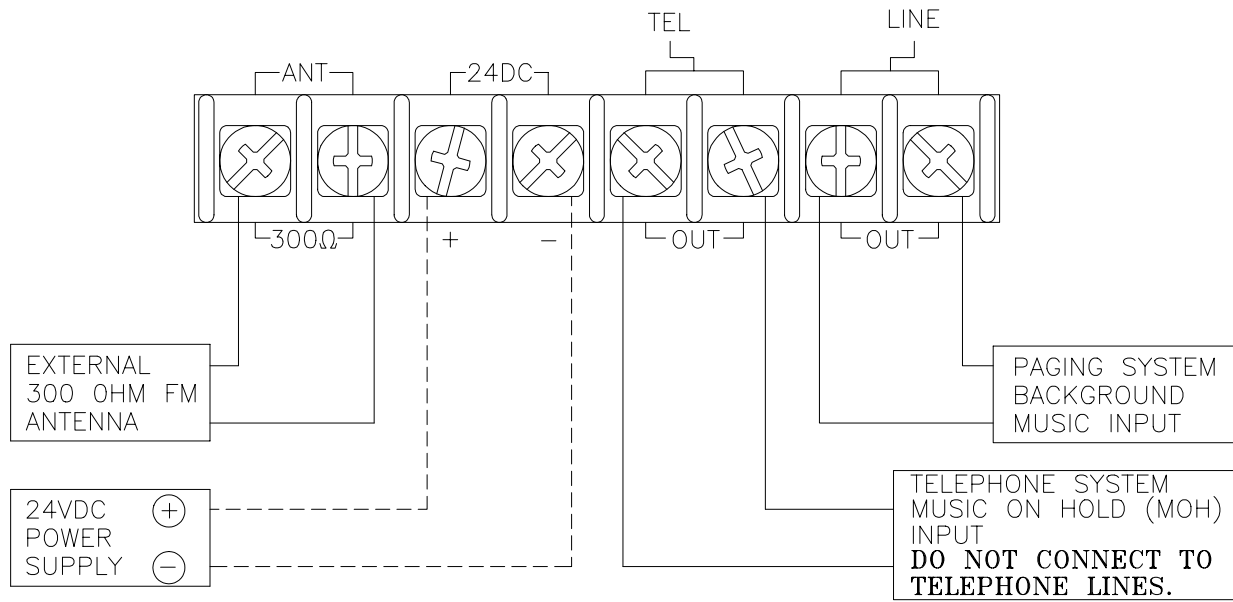
1. Plug power supply cord into 12VDC receptacle in bottom of AFT-100. Power supply plug polarity must match AFT-100 receptacle polarity (See Figure 1). Recommended 12VDC power supply is the Wheelock EPS 1205.

**CAUTION:** Exceeding specified maximum input voltage can lead to failure of the unit.

ANTENNA AND OUTPUT CONNECTIONS (See Figure 2):

1. For use as background music source, connect **LINE OUT** to music input of paging system.
2. For use as music-on-hold, connect **TEL OUT** to music-on-hold input of telephone system. Do **not** connect to telephone lines.  
**NOTE:** This output can develop .5 Watt into 8 Ohms and may be too strong for telephone systems that incorporate line-level amplification stages for music-on-hold. In these cases the **LINE OUT** send may also be used for the telephone system's music-on-hold input.
3. If using an external antenna for FM reception, connect to ANT 300 ohms terminals.  
**NOTE:** Antenna is not required for AM reception.

Figure 1: 12VDC Power Supply Connection



(SEE FIGURE 1 IF 12VDC POWER SUPPLY IS USED.)

Figure 2: AFT-100 Connections

OPERATION (See Figure 3):

1. Select AM or FM by sliding **BAND** switch to **AM** or **FM** position.
2. For **FM** program reception:
  - a. Slide **ANT** switch to **INT** position when using telescoping antenna, or...

- b. Slide **ANT** switch to **EXT** position when using an external antenna.
3. Slide **SPK** switch to **INT** position.
4. Rotate **TEL** and **LINE** volume controls to about 1/4 turn (clockwise).
5. With power supply connected, slide **POWER** switch to **ON** position.
6. Adjust tuning dial for desired station. Note: Red **TUNING** LED is brightest when the signal is strongest.
7. Slide **SPK** switch to **EXT** position. Adjust **TEL** and **LINE** volume controls to desired levels for music-on-hold and background music, as required.
8. Adjust **TONE** control as desired:
  - a. Clockwise rotation increases treble response.
  - b. Counterclockwise rotation increases bass response.

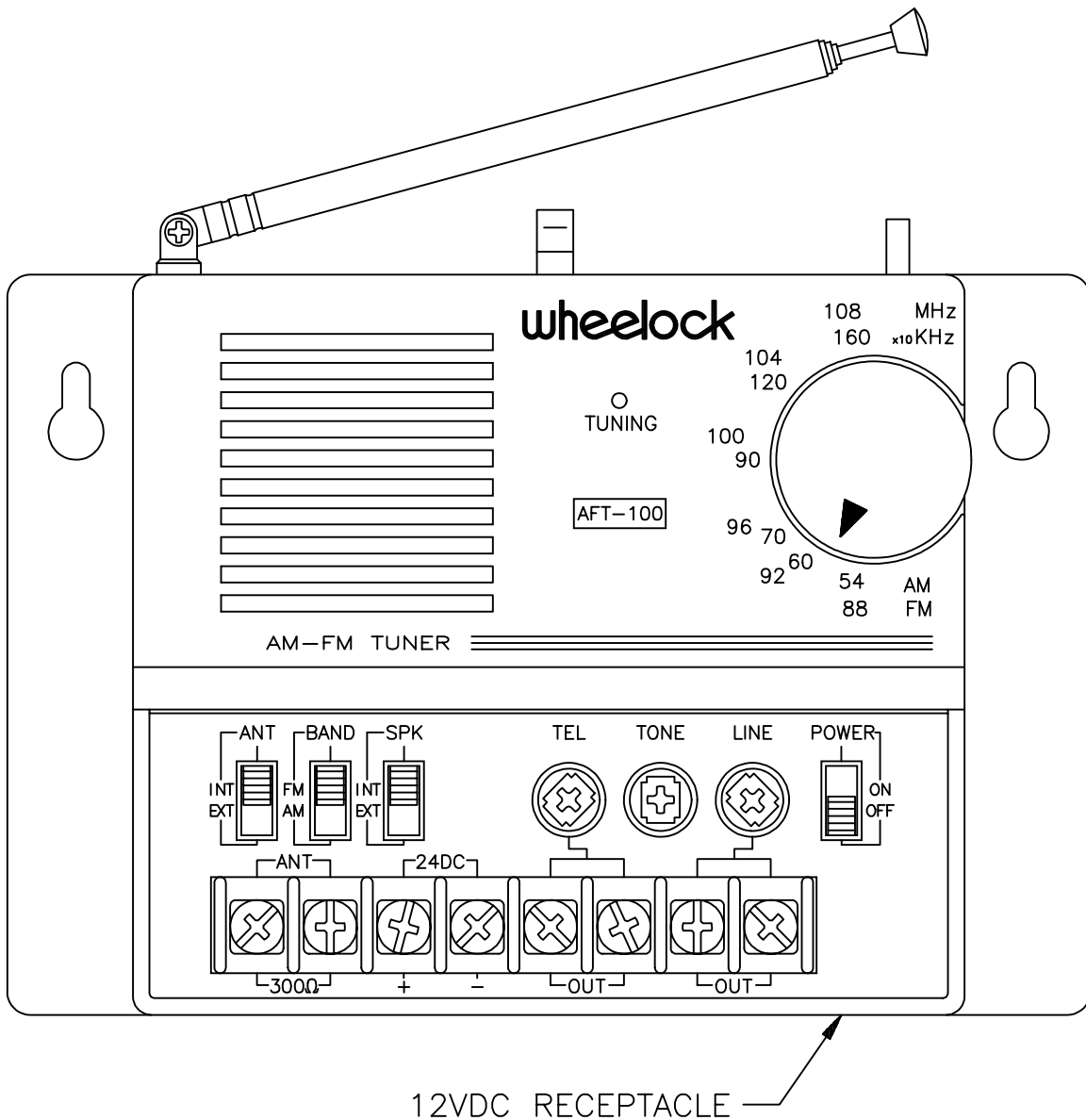


Figure 3: AFT-100 Control Panel Layout

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