

BOGEN®

COMMUNICATIONS, INC.

FM/AM TUNER

TP-50A

The Bogen TP-50A is a solid-state monaural FM/AM tuner with visual indicators for precise tuning.

UNPACKING

The tuner was carefully checked before leaving the factory. Inspect the shipping carton and unit carefully for indication of improper handling. If the unit has been damaged, make an immediate claim to the distributor from whom it was purchased. If the tuner was shipped to you, notify the transportation company without delay and place your claim.

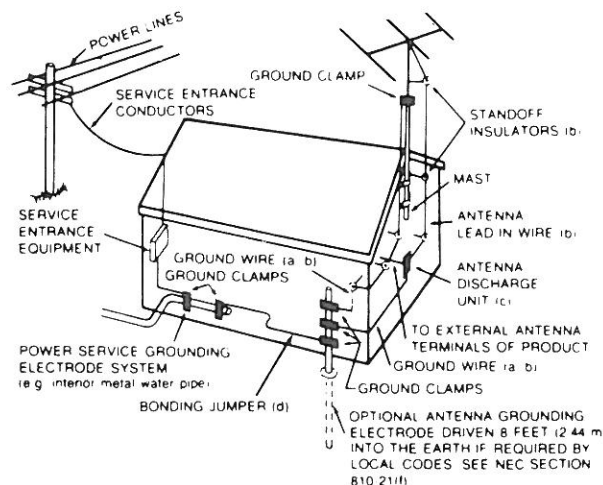
INSTALLATION

The TP-50A may be placed on a table or shelf that is located conveniently near a 120VAC, 60Hz outlet. The tuner may also be installed in a standard 19-inch sound equipment rack, using the Bogen Model RPK-46A Rack Mounting Kit. The mounting brackets are installed in the two holes on each side of the tuner, using the four screws provided. Each bracket has two elongated holes on 1-1/4" centers for fastening to the rack; the panel height is 1-3/4". All connections are made to the rear of the tuner.

ANTENNA CONNECTIONS

FM: The indoor dipole antenna provided should be adequate for normal FM reception. Connect the antenna to the two FM antenna terminals marked 300 ohms. Move the antenna around to determine the best possible reception; tack it to a wall or baseboard, if possible. For improved reception of weak signals, or for tuners mounted in consoles or racks, installation of an outdoor FM antenna is necessary. For a standard antenna system, connect the twin-lead line to the 300 ohms FM antenna terminals. For installations requiring the use of coaxial cable, attach the cable with the center conductor connected to the FM antenna terminal marked 75 ohms and the shield to the 75 ohms terminal with the ground symbol.

AM: The TP-50A is provided with a built-in Hi-Q ferrite loopstick antenna for AM reception. **Rotate the antenna in a horizontal plane only to avoid damage to the mechanical linkage.** If the tuner is mounted in a console or rack, an outside antenna may be required. Connect the external antenna lead to the terminal marked AM.



Power Lines—An outdoor antenna should be located away from all power lines to avoid any chance of possible contact.

Outdoor Antenna Grounding—If an outside antenna is connected to the tuner, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Articles 810 and 820 of the National Electrical Code, ANSI/NFPA No. 70-1984, provide information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

- Use No. 10 AWG (5.3mm²) copper, No. 8 AWG (8.4mm²) aluminum, No. 17 AWG (1.0mm²) copper-clad steel or bronze wire, or larger, as ground wires for both mast and lead-in.
- Secure lead-in wire from antenna to antenna discharge unit and mast ground wire to building structure with stand-off insulators spaced from 4 feet (1.22 meters) to 6 feet (1.83 meters) apart.
- Mount antenna discharge unit as close as possible to where lead-in enters building structure.
- Use jumper wire not smaller than No. 6 AWG (13.3mm²) copper, or equivalent, when a separate antenna-grounding electrode is used. See NEC Section 810-21(j).

AUDIO CONNECTIONS

Two audio patch cords are provided with a standard phono plug at each end. Connect one end of a patch cord to either of the two output jacks; connect the other end to the high-level input (AUX, HI-Z, TUNER) of the audio amplifier. The second output jack and patch cord may be used to connect the tuner to a tape recorder.

OPERATION

The front panel has a tuning knob and four push-in/push-out function switches. The panel display contains a calibrated FM/AM tuning dial with an illuminated pointer, and visual Signal Strength, Power ON, and FM Tuning indicators.

POWER: Press the Power push button to turn the tuner on; press again and release to turn the tuner off.

FM RECEPTION: Set the FM/AM Selector push button to the FM (Out) position. Set the AFC and Muting buttons to the On (Out) position. Rotate the Tuning knob to the approximate frequency in MHz of the station desired. Clockwise rotation will increase the frequency. As the station is approached, the Signal Strength indicator will display more illuminated bars and the Tuning indicator will operate. The Tuning indicator is comprised of red/green/red bars. The red bars will indicate when the station has not been properly tuned in. When the station is tuned in exactly, the green bar will be illuminated and the Signal Strength indicator will indicate a peak. The Muting function removes the annoying noise between stations. When tuning in a weak station adjacent to a strong station, the AFC function may tend to lock the tuning to the stronger signal. In such cases, the AFC and Muting switches should be in the Off (In) position while tuning. When the station is properly tuned, release the AFC switch to the On (Out) position in order to lock the tuner to the desired frequency. It may be

necessary to leave the Muting switch in the Off (In) position when listening to a weak station.

AM RECEPTION: Press the FM/AM switch to the AM (In) position. Rotate the Tuning knob to the approximate frequency in kHz of the station desired. Clockwise rotation will increase the frequency. As the station is approached, the Signal Strength indicator will display more illuminated bars; rotate the knob until the peak is reached.

SERVICE

CAUTION

There are no user-serviceable parts within the tuner. To avoid an electric shock hazard, have all internal servicing performed by qualified service personnel only.

The warranty will become void if repairs are made by other than the Bogen Service Department or an authorized service agency.

If the panel display does not light when the Power switch is depressed, check the fuse marked 120V, 100mA. One spare fuse of this value is packed with the tuner.

For assistance or advice, contact Bogen Communications, Inc., Service Department, P.O. Box 575, 50 Spring Street, Ramsey, NJ 07446.

EXPLANATION OF GRAPHIC SYMBOLS

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE



This symbol is used to warn the user that uninsulated "dangerous" voltage within the unit may have sufficient magnitude to cause electric shock.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is used to alert the user that important operating and maintenance instructions accompany this unit. Read them carefully.