

meduci, LLC
Safety and Operating
Use Instructions and
Owner's Manual / Users Guide

for models:

- **PRO1k**
- **PRO1k PLUS**
- **AMX-2000 /AMX2000**
- **AMX RACK MOUNTED TUNER**

(((Stereo))) AM
High Fidelity Audio
World Tuner
Precision Audio Component

Effective Date: October 10, 2005

<http://meduci.com>

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

AVIS RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIIR.

**WARNING - TO REDUCE RISK OF
FIRE OR ELECTRICAL SHOCK, DO
NOT EXPOSE THIS EQUIPMENT TO
RAIN OR MOISTURE.**

**NO USER-SERVICEABLE PARTS
INSIDE. REFER SERVICING TO
QUALIFIED PERSONNEL.**

To prevent the risk of electric shock, do not remove cover or back. No user-serviceable parts inside.

Thank you and congratulations for your purchase of this high quality meduci product. Your decision to own this meduci tuner ranks you at the very top among discriminating music listeners. Please take a short time to read the information in this manual. We want you to be as familiar as possible with all the features and functions of your new meduci.

IMPORTANT SAFETY INSTRUCTIONS! PLEASE READ THEM PRIOR TO OPERATING THIS EQUIPMENT APPARATUS.

SERIAL NUMBER: _____ PURCHASE DATE: _____

1. Read instructions – All of the safety and operating instructions provided herein should be read prior to operating the meduci tuner.
2. Retain instructions – These safety and operating instructions should be retained for future reference.
3. Head warnings – All warnings printed on the tuner and listed in these operating instructions should be adhered to by the user/ operator/owner of this meduci power unit and tuner.
4. Follow instructions – All operating, care/use, and other instructions need to be followed. Do not touch any sharp edges of tuner, power unit.
5. Water and moisture – Do not use this apparatus near water. This meduci tuner and power unit should not be close to any water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement or wet room, or near swimming pool, et cetera. To prevent fire or electrical shock, do not expose this tuner and power unit to rain, moisture, or water. Risk of electric shock – DRY LOCATION AND INDOOR USE ONLY. Power unit is to be correctly oriented into a wall-mounted household power outlet, operated in vertical-mount or floor-mount position. Do not use extension cords with power unit. Clean with a dry cloth.
6. Carts and stands – This tuner should not be used with cart or stand.
7. Wall or Ceiling Mounting – This tuner and power unit should not be mounted to any wall or ceiling. Power unit is for vertical or floor mount use only. Do not place your tuner near magnetic objects.
8. Ventilation – This tuner should be situated so that its location or position does not interfere with its proper ventilation. For example, the tuner and power unit should not be situated on a bed, sofa, rug, or similar surface, that may block the proper ventilation of the tuner and power unit. Tuner and power unit should not be placed in a built-in installation, such as bookcase or cabinet, which may cause elevated operating temperatures to occur, or impede the air flow to / from tuner and the power unit.
9. Heat – Do not install or operate tuner or power unit near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Do not leave your tuner in temperatures above 104 degrees F (40 deg C) such as in a sauna or parked vehicle. Install this tuner and power unit in a cool, dry, and clean place – away from windows, sources of excessive vibration, dust, moisture, and cold temperatures. Also avoid sources of humming (such as transformers and motors).
10. Power Sources – This tuner should be connected to the power unit only of the type described in these operating instructions, with voltage listed herein, and/or as marked on the rear of tuner. Power unit has to be listed by Underwriters Laboratories (UL) and designated as “plug-in class-two transformer.” Using this meduci tuner and power unit with higher input voltage than specified is dangerous, and may result in fire or other accidents. meduci will not be held responsible for any damage resulting from the use of this tuner and power unit with line frequency and input voltage other than that specified. For USA and territories and Canadian provinces, use power unit CUI DPD120050-PSP, or equivalent.
11. When tuned to C-QuAM stereo station, it is normal for AM stereo indicator to flutter on and off if tuner is moved. Tuner needs to rest on stable mounting surface.

12. **Power-Cord Protection** – Power-supply cords leading from power unit and tuner should be routed so that they are not likely to be walked upon or pinched by items placed upon them or against them. Pay particular attention to cords at plugs, convenience power receptacles, and the point where cords exit from the tuner and power unit. Do not use force on switches, controls, or connection wires. When moving this tuner, first disconnect the power unit from the wall outlet, and then disconnect the plugs connected to the tuner (grasping at the plug and delicately pushing outward). Never pull the wires themselves. General appearance of the power unit and tuner shall be without deformation, cracks, or corrosion; otherwise do not use, and refer to service personnel for repair.
13. **Cleaning** – This tuner should be cleaned only as recommended by the manufacturer. Do not attempt to clean this tuner with chemical solvents; this will damage the finish. Use a clean, dry cloth.
14. **Non-use Periods** – The power unit of the tuner should be disconnected from the wall outlet household power supply when not being used.
15. **Object and Liquid Entry** – Care should be taken so that objects do not fall into, and liquids are not spilled onto, or inside the tuner. Do not expose this tuner to rain, moisture, dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on or near this tuner.
16. **Damage Requiring Service** – This tuner should be serviced by qualified service personnel when the A.)Power supply cord and/or the plug have been damaged; B.)Objects have fallen upon or into the tuner or power unit; C.)Liquid has been spilled on or into the tuner or power unit; D.)The tuner or power unit have been exposed to rain; or E.)Tuner or power unit does not appear to operate normally, or exhibits a marked change in performance; or F.)Tuner or power unit has been dropped; or G.)Cabinet housing has been damaged, cracked, deformed, or corroded.
17. **Servicing** – The user should not attempt to service the tuner or power unit. All servicing should be referred to qualified service personnel.
18. **Power Lines** – Tuner, power unit, and antenna need to be located away from all power lines.
19. **Grounding or Polarization** – Precautions should be taken so that the grounding, polarization, and other safety designs are not defeated on this tuner or power unit.
20. **Outdoor Antenna Grounding** – Do not use any outside antenna with this tuner, unless it is approved by meduci, LLC. Any antenna connected to this tuner should be grounded, so as to provide some protection against lightning bolts, electrical voltage surges, and built-up static charges. To prevent lightning damage to the tuner, always remove the power unit from household power outlet, and also disconnect the antenna cable to tuner when there is a thunderstorm, or any other severe, threatening, or inclement weather present.
21. **Digital signals generated by this tuner and power unit may interfere with other components, such as receivers, tuners, television sets, and computers. Move this tuner and power unit farther away from other such components, if interference is observed.**
22. **Be careful which antenna and RF pre-selector you connect to your tuner. This tuner is best suited for an external indoor tunable loop antenna (such as TERK Technologies Audiovox AM Advantage 1000).**
23. **Use only attachments/accessories specified by meduci for this tuner.**
24. **Completely disconnect this tuner from the AC mains power source when not in use. Disconnect the power supply cord plug from the AC household receptacle. The mains plug of the power unit shall remain readily operable.**

Connect the user-supplied AM external indoor tunable loop antenna to the tuner's rear panel RCA jack labeled "AERIAL IN." Depending on the AM antenna used, you may need to provide 1/8" monaural male-to-RCA shielded patch cable to properly facilitate this antenna connection from tuner to antenna. Remember that the radio's performance is only as good as the RF pre-selector and antenna system attached to it!

There are two audio line-level outputs on the rear panel of tuner. Connect user-supplied cable from tuner's "LEFT" rear-panel RCA jack to the "LEFT" input on user-supplied stereo amplifier, stereo receiver, self-powered amplified speakers, computer speakers, or other amplifier. This jack and cable connector may be colored black or white.

Connect user-supplied cable from tuner's "RIGHT" rear-panel RCA jack to the "RIGHT" input on stereo receiver or amplifier. This jack and cable may be colored **red**.

Consult the receiver or amplifier's owner / operation manual for further assistance with locating the correct "LEFT" and "RIGHT" input connections for your amplifier.

Connect the smaller round end power unit cord to the meduci tuner's rear panel power jack. Simply push plug into round black power jack located on rear of tuner, until it is seated in place. Insert the larger plastic box end of power unit prongs into normal AC household outlet. Ensure that the input voltage rating of the power unit matches the voltage from AC household outlet.

Move rear-mounted power switch (PRO1k only) to "UP" position to apply power to tuner. Rotate front-panel round tuning knob until desired AM station is tuned and heard. Do not rotate tuning knob clockwise or counter-clockwise past the natural stops, otherwise damage will occur to the tuning mechanism. Since the external indoor tunable loop antenna acts as RF pre-selector and the first tuned RF stage, also rotate the antenna's knob to the center frequency of the desired AM station.

When you are first fine tuning the AM stereo station, you may hear a faint "squeal" sound until the carrier is properly tuned to the center of the station's frequency. Then the front panel AM stereo indicator should be illuminated, if the station is broadcasting the Motorola © C-QuAM™ AM stereo format.

PRO1k tuner has the added feature of displaying the actual tuned frequency being directly received, thanks to very accurate internal frequency counter and other circuitry.

Since this a phase-detecting tuner, with a very low modulated 25Hz stereo pilot tone being received, the tuner needs to rest on a stable mounting surface. The air dielectric variable tuning capacitor, connection wires, and oscillator coil contribute to this requirement. Any AMX2000 tuner that was shipped after November 11, 2007 incorporates the WideBand audio circuitry, which is capable of up to 15 kHz audio frequency response. "High Fidelity Wide Band" is also legible on the front panel of AMX2000 and PRO1k tuners to designate this new special feature.

This tuner does NOT offer audio notch filters, NRSC-1 audio de-emphasis circuitry, wide / narrow audio bandwidth selection, auto stereo / forced mono switch, nor RF noise blanker. However, automatic stereo blend to monaural occurs under adverse input signal conditions, which eliminates the need for stereo / mono switch. Special AM adaptive bandwidth circuit eliminates the need for wide / narrow audio bandwidth switch.

AMX2000

AUDIO OUTPUT
RIGHT LEFT



+12VDC AERIAL
IN IN



Connect to
"RIGHT"
input of
stereo
Amplifier
or Receiver.

Connect to
"LEFT"
input of
stereo
Amplifier
or Receiver.

Connect to
AMX2000 wall-
mounted
Power Unit
Transformer.

Connect to
External AM
Tunable
Indoor Loop
Antenna.

PRO1k

TOGGLE
POWER
SWITCH



+12VDC
IN



AUDIO
RIGHT



AUDIO
LEFT



AERIAL
IN



Connect to
PRO1k wall-
mounted
Power Unit
Transformer.

Connect to
"RIGHT"
input of
stereo
Amplifier or
Receiver.

Connect to
"LEFT"
input of
Stereo
Amplifier or
Receiver.

Connect to
External AM
Tunable
Indoor Loop
Antenna.

Flip toggle power switch "UP" to apply power to tuner.

Design Specifications

For AMX2000 and PRO1k tuners manufactured after 11/11/2007:

- **Usable Sensitivity: 56 uV (mono)**
- **Tuning Frequency Range: 530 kHz to 1,710 kHz**
- **Center Intermediate Frequency: 450kHz**
- **Signal-to-Noise Ratio: 54dB (50 mV/m, 1050 kHz, mono)**
- **Total Harmonic Distortion (THD): 0.6% typical
(50 mV/m, 1050 kHz, stereo)**
- **Selectivity: 18dB**
- **Audio Bandwidth Frequency Response: 20 Hz to 15kHz, -6dB
(dependant on external indoor tunable loop antenna)**
- **Stereo Separation: >25dB (1kHz, 50% modulation)**
- **Line Level Audio Output: 900 milli-Volts, peak-to-peak**
- **Supply Voltage Power Requirement: +12 volts D.C input
(center tip positive), 5.5mm (O.D) x 2.1mm (I.D) plug.**
- **Current Consumption: Less than 500 milli-Amperes
continuous.**
- **Dimensions (inches): 5 (Width) x 4 (Depth) x 3 (Height)**

(Information listed herein is subject to change without notice. All rights and trademarks belong to their respective owners.)

Risk of electric shock – do not disassemble tuner or power unit. There are not any user-serviceable parts inside. Refer servicing to qualified service personnel. Do not expose tuner or power unit to rain or moisture.

The use of this product may cause exposure to lead and other chemicals known in the state of California to cause cancer, birth defects, or other reproductive harm.