

AMFM2 **INSTALLATION SHEET** AND OPERATORS MANUAL



General Description:

The AMFM2 is a rack-mountable digital AM/FM stereo tuner featuring a large illuminated digital display with 10 AM and 10 FM station presets, 14 day preset memory retention, and auto station search. The stereo/mono switch in "Stereo Mode" provides stereo Hi-Z unbalanced line level outputs, or in "Mono Mode" provides dual mono Hi-Z unbalanced line level outputs and an independent mono 8 ohm amplifier which will drive a monitor speaker or a telephone system's "Music-On-Hold". A 12 VDC power connection is available for emergency back-up power or for DC powered use in remote locations. An FM wire antenna is included and an "F" connector adapter is included for the connection of coaxial cable from a remote FM antenna (coaxial cable and remote FM antenna not included). A local AM loop antenna, a 2' RCA stereo to RCA stereo cable, and four (4) rubber stick-on feet are also provided.

Technical Specifications

AC Supply Voltage: 115VAC/230VAC (switchable) 50/60Hz, Power Consumption: 10W @ Rated Power

DC Supply Voltage: 12VDC, Power Consumption: 1.5A @ Rated Power

Tuning Range: FM: 87.5-108MHz, AM: 530-1710kHz,

Antenna Input: FM: 75Ω unbalanced coaxial, AM: 150Ω twin push terminals for AM loop antenna.

Stereo/Mono switch provides: Stereo Position: Stereo RCA jacks, unbalanced 0.775V @330ΩOutputs. (No MOH Out) Mono Position; 2 Mono RCA jacks, unbalanced 0.775V @330 Ω & Music-On-Hold Output: 8 Ω 1W @ screw terminals.

Frequency Response: 50Hz-15kHz ± 3dB

Total Harmonic Distortion: ≤ 1% at 1kHz at rated power

Signal to Noise Ratio: FM: 60dB, AM: 45dB

Dimensions: 19" wide x 1.75" high x 9.5"deep (482mm wide x 44mm high x 240mm deep)

Weight: 7.25LBS. (3.29KGS) Shipping Weight: 10LBS. (4.54KGS)

Color: Black

Optional Accessories (sold separately):

Lowell Manufacturing offers a full line of 19" equipment cabinets, wall mount shelves, rack mount AC power panels, AC power strips, and cooling fans that can be used to install the Lowell Amplifier products.

See www.lowellmfg.com for product details.



Lowell Manufacturing Company ● 100 Integram Drive ● Pacific, Missouri 63069 U.S.A.

Instruction Sheet IS-AMFM2 Issued: 2-18-15

Call: 800-325-9660

Fax: 636-257-6606

Click: www.lowellmfg.com

Getting Started:

Please study carefully the "IMPORTANT SAFETY INSTRUCTIONS" that are given on page 4 before applying power to your AMFM2 tuner.

INSPECTION

This unit was carefully checked and packed before leaving the factory. However, it is always a good idea to inspect the shipping container and unit for indications of improper handling. If the unit has been damaged, make an immediate claim to the dealer or distributor from whom it was purchased. If the unit was shipped to you, notify the transportation company without delay, saving all packing materials, in order to process the claim.

INITIAL PERFORMANCE CHECK

Before installing the AMFM2 tuner, continue the inspection by running a quick performance check. With the stereo/ mono switch in the "MONO OUT & MOH OUT" position, connect an 8 Ω test speaker to the 8 Ω music-on-hold "MOH OUT" terminals, attach the FM wire antenna, and set the controls for operation. MAKE SURE THE UNIT IS GROUNDED BEFORE TESTING. In this way you can check the basic operation of the AMFM2 before actually installing the unit and making all of the final terminations required for the permanent installation. If shipping damage has resulted in the tuner being inoperable out of the box, call Lowell Customer Service to arrange for a replacement.

MOUNTING THE TUNER

The AMFM2 may be placed on a wall-mount shelf. For shelf mounting, attach the provided stick-on rubber feet to the bottom of the AMFM2 chassis. Rack mount ears are built-into the front panel of the AMFM2, so the unit may be mounted in a Lowell equipment cabinet using standard 10-32 Phillips-head machine screws (like the Lowell model RS or RSP rack screws) with integral plastic washers to protect the finish of the front panel of the tuner.

POWER WIRING

The AC power cord provided with this tuner is equipped with a North American style NEMA 5-15P plug and the AC VOLTAGE SELECT SWITCH (see item 16 on page 3) is set to operate on a 115 VAC 50/60 Hz. power source. The AMFM2 may also be powered with 12VDC (See the DC current requirements under "DC SUPPLY VOLTAGE" in the "TECHNICAL SPECIFICATIONS" section on page 1). If this unit is to be used in other geo-political areas of the world, it may be necessary to change the AC SUPPLY SWITCH to operate on 230 VAC. Remove the black screw below "VOLTAGE SELECT" on the rear panel and push the switch in using a small diameter insulated tool. Remove the plug from the end of the cord and replace it with one appropriate for the local power grid receptacle standards. The internal wire color code for the cord supplied with this unit is as follows:

Green/Yellow Earth "E" or Safety Ground

Blue Neutral "N" Line "L" or Hot Brown

WARNING: THIS AMFM TUNER MUST BE EARTH GROUNDED.

Note: If a British Standard BS1363 plug is installed, it must be provided with a 5 Amp fuse.

Since electrical color codes vary around the world, make sure that the correct connections are made to the cord even if the local color code is different. If in doubt, obtain the services of a locally qualified electrical professional.

MAIN OUTPUT CONNECTIONS

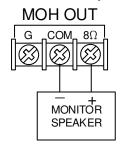
On the rear panel of the AMFM2 is a Stereo/Mono switch. When this switch is in the "MONO OUT & MOH OUT" position, RCA output jacks 1 and 2 provide the same mono output and the Music-Qn-Hold (MOH) output is "ON". When this switch is in the "STEREO OUT ONLY" position, those same two RCA jacks (also marked L and R) provide a stereo output and the Music-On-Hold (MOH) output is "OFF" (provides no output). The output cables connected to the RCA output jacks should be wired with the pin "hot" or "+" and with the sleeve "common" or "-".



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MUSIC-ON-HOLD (MOH) OUTPUT

The MOH 8Ω 1 watt output can drive a monitor speaker or the Music-On-Hold input of a telephone system.



Shielded wiring from the MOH output to the MOH OUT telephone system MOH input is typically not required, but if shielded wiring is used, drain the G shield at the MOH output and butt the shield (no connection) at the telephone system. DRAIN SHIELD Telephone 600Ω Twisted-Pair Wiring System MOH

BUTT SHIELD (No connection)

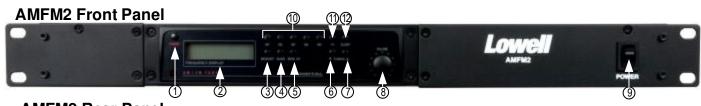
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- ① Tuner Power Switch
- ② Digital Display
- 3 Memory Button
- 4 Band Button
- ⑤ MEM. UP Button
- ⑦ Tuning ▲ (Up) Button
- ® Master Volume Control
- Master Power Switch
- 1 Preset Buttons M1 M5
- 11 +5 Button
- ⑥ Tuning ▼ (Down) Button ② Sleep Button
- ③ Power Cord Socket
- Main Power Fuse (0.5A 250VAC)
- Chassis Ground Screw
- **16** Voltage Select Switch
- 12VDC Input
- ® Stereo/Mono Switch
- 9 MOH Output (8 Ω ,1 W)
- MOH Volume Control
- ② FM Antenna Input
- 2 AM Antenna Input
- 3 Stereo/Mono Outputs

OPERATING INSTRUCTIONS

- A) Turn "ON" Master Power Switch. Turn on Tuner Power Switch. Both switches must be "ON" to operate tuner.
- B) Press the "Band" button 4 to select FM or AM frequencies.
- C) Press Tuning ▼ (DOWN) (a) or Tuning ▲ (UP) (7) to select a station. Press the tuning up or down buttons and hold for over 3 seconds, and the tuner will enter the automatic scan mode where it will search for an active station. When an active station is detected, the tuner will automatically stop scanning and the tuner will play the station.
- D) 10 AM station presets and 10 FM station presets are available. To select a preset, first select the band (AM or FM), second select the preset. Press buttons 1-5 ® to select presets 1-5 in the band chosen. To select preset 6, first press the "+5" button and then press the M1 button. To select preset 7, first press the "+5" button and then press the M2 button. To select preset 10, first press the "+5" button, and then press the M5 button.
- E) To save a station to a preset: First, select the band (AM or FM). Second, tune in the station desired. Third, press the "Memory Button" ③. Fourth, enter the preset number. Fifth, press the "MEMORY BUTTON" ③, and your preset is saved. For example, if you want to save AM station 1120 to AM preset 10, you would do the following: First, set the band button to AM. Second, tune the station to 1120 using the tuning ▼▲ buttons. Third, press the "MEMORY" button. Fourth, press the +5 button then the M5 button (which selects memory 10). Finally, press the "MEMORY" button, and your preset is saved. Note: When the tuner is powered down, the preset memory will remain for 14 days. If left unpowered for more than 14 days, the station presets would be lost and would need to be reset. It is a good idea to make a written record of your favorite presets so they can easily be re-entered.
- F) The "MEM UP" (memory up) button (5) has been provided as a convenient way to step through the presets in one band without having to press the +5 button. The "MEM UP" button will choose the next preset higher than the previous preset chosen. In this way you can step through presets 1-10 and then back to 1 again without ever having to press the +5 button.
- G) The "Sleep" function is used to set the time that the tuner will operated before shutting off. One press of the "SLEEP" button ⑫ will show "00" on the display which means that the sleep function is off. A second press of the "SLEEP" button will show 10 (for 10 minutes) and after a third press the display will show 20 (for 20 minutes). Additional presses will add 10 minutes up to a maximum of 90 minutes. As the sleep timer winds down, if the "SLEEP" button is pressed again, the remaining time before shutoff will briefly show on the display, and then the display will go back to normal. To turn the timer off once set, step the timer display back to 00 again. Once the sleep timer has shut off the power to the tuner, the "Tuner Power Switch" must be pressed to turn the tuner back on in normal mode.
- H) The Master Volume Control ® on the front panel adjusts the dual mono outputs and the MOH output. The MOH Volume Control @ on the rear panel only adjusts the MOH (music-on-hold) output.

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IMPORTANT SAFETY INSTRUCTIONS

Read these instructions.	$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	☐ Heed all warnings.
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Follow all instructions. Do not use this apparatus near water.

☐ Clean only with a dry cloth.

☐ Do not block any ventilation openings. Install in accordance with manufacturer's instructions.

 \lnot Do not install near any heat sources such as radiators, registers, stoves, or other apparatus (including amplifiers) that produce heat.

 \neg Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord and plug from being walked on or pinched particularly at plugs, convenience receptacles, and the point where it exits from the apparatus.

☐ Only use attachments and accessories specified by the manufacturer.

☐ Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

☐ Unplug this apparatus during lightning storms or when unused for long periods of time.

☐ Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

 \neg The plug on the power cord is the AC mains disconnect device and must remain readily operable. To completely disconnect this apparatus from the AC mains, disconnect the power supply cord plug from the AC receptacle.

This apparatus shall be connected to a mains socket outlet with a protective earthing connection.

☐ When permanently connected, an all-pole mains switch with a contact separation of at least 3 mm in each pole shall be incorporated in the electrical installation of the building.

☐ If rack mounting, provide adequate ventilation. Equipment may be located above or below this apparatus, but some equipment (like large power amplifiers) may cause an unacceptable amount of hum or may generate too much heat and degrade the performance of this apparatus.

This apparatus may be installed in an industry standard equipment rack. Use screws through all mounting holes to provide the best support.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus. This product may contain chemicals known to the State of California to cause cancer, or birth defects or other reproductive harm.

NOTE: This equipment may generate, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Changes or modifications not expressly approved by Lowell Manufacturing will void the manufacturers warranty.

WARNING



CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN



To reduce the risk of electrical shock, do not open the unit. No user serviceable parts inside. Refer servicing to qualified service personnel. The symbols shown below are internationally accepted symbols that warn of potential hazards with electrical products.



This symbol indicates that a dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

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4