## INTRODUCTION

# A3 Tuner

## FM TUNER with Remote Control and RDS

### INSTRUCTIONS FOR USE

Thank you for purchasing the Musical Fidelity A3 Tuner FM tuner with remote control and RDS. Used properly and carefully, it should give you many years of outstanding musical reproduction.

The A3 Tuner is fitted with the latest Radio Data System (RDS) circuitry allowing station names to be displayed. This function only works if the tuned station supports RDS. Special noise reduction techniques are used to achieve both an excellent technical specification and unparalleled sound quality.

Aesthetically, the A3 Tuner is a perfect match for the A3 CD player and A3 or A300 integrated amplifiers. Together these components form one of the finest hi-fi systems available.

Dust regularly with a soft duster or soft brush but be careful when using cleaning or polishing agents - they may harm the surface finish.

If you have any questions about anything in your audio system, please consult your dealer who is there to help and advise you.

## SAFETY INFORMATION

## **IMPORTANT!**

This unit is supplied in the U.K. with a mains lead fitted with a moulded 13 amp plug. If, for any reason, you need to cut off this plug, please observe the following safety precautions. Please dispose of the cut-off plug safely. *It must* not be plugged into a mains power supply.

The wires in the mains lead supplied with this appliance are coloured in accordance with the following code:

Green and yellow	Earth
Blue	Neutral
Brown	Live

#### **WARNING** - This appliance must be earthed

As the colours of the wires of the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked with the letter E or coloured green or green-and-yellow, or by the earth symbol.



The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

If connecting to a BS1363 plug, a 13 amp fuse must be used.

#### WARNING - Radio Frequency Interference (RFI)

This hi-fi product has been tested to ensure that its operation will not be adversely affected by normal background levels of RFI. It is possible that if this product is subjected to abnormally high levels of RFI the unit may be susceptible and not perform as expected. In the unlikely event of this happening on a regular basis, please contact Musical Fidelity's service department.

The unit has also been tested to ensure that it does not radiate excessive levels of RFI that could affect other pieces of electronic or electrical equipment.

The electronics in modern hi-fi equipment is complex and hence may be damaged by lightning. It is possible that during electrical storms the operation of some equipment may be adversely affected. For complete protection of your hi-fi system during such storms, mains plugs and aerial leads should be disconnected.

Always ensure that when disconnecting and re-connecting your hi-fi equipment the mains supply is switched off.

## SAFETY INFORMATION

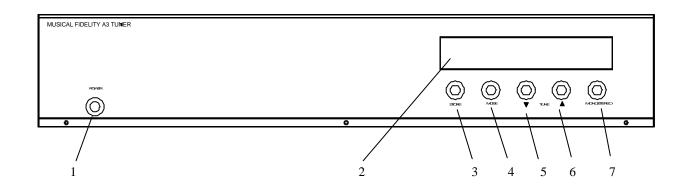
To comply with North American regulations this equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

## WARNING - ANY MODIFICATIONS OR CHANGES TO THIS UNIT NOT EXPRESSLY APPROVED BY MUSICAL FIDELITY WHO ARE THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THIS EQUIPMENT

This equipment generates, 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. As it cannot be guaranteed that interference will not occur in a particular installation the user is encouraged to try to correct any interference experienced, to radio or TV broadcasts, by one or more of the following measures:-

- Identify the source of interference, turn off each unit in turn, check whether the interference disappears.
- Re-orientate or relocate the receiving aerial.
- Increase the separation between the affected units.
- Connect the units into mains outlets on different circuits.
- Consult a dealer or experienced TV/radio technician for help.

## **FACILITIES and CONNECTIONS**



### FRONT PANEL RI

#### POWER mains on/off switch Tuner display

- 3 STORE button 4 MODE button
- 5 TUNE DOWN button6 TUNE UP button
- TUNE UP buttonSTEREO/MONO button

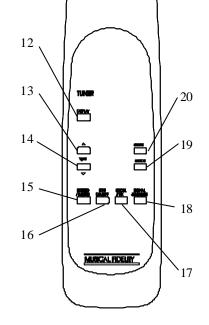
# <u>REAR PANEL</u>

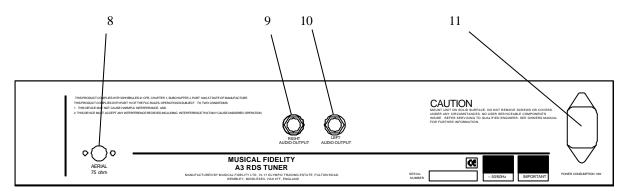
- 8 75 ohm AERIAL socket
- 9 Right AUDIO OUTPUT10 Left AUDIO OUTPUT
- 11 IEC type mains inlet

#### **REMOTE CONTROL**

12 DISPLAY button
13 TUNE UP button
14 TUNE DOWN button
15 STEREO/MONO button
16 RDS ON/OFF button
17 LOCAL/DX button
18 SIGNAL STRENGTH button

MODE buttonSTORE button





## GENERAL ADVICE

#### INSTALLATION PRECAUTIONS and USER INFORMATION

Your new A3 Tuner is designed and built to provide trouble-free performance, but as with all electronic devices it is necessary to observe a few precautions.

Heed all warnings on the back of the unit.

Only connect the A3 Tuner to a mains outlet of the voltage marked on the back of the unit.

Position the mains lead and signal interconnects where they are not likely to be walked on or trapped by items placed on them.

Do not use near water.

Do not place the unit near direct heat sources such as radiators or other equipment that producers heat.

Do not place the unit where it can be subjected to direct sun-light.

Do not remove any covers or try to gain access to the inside. The warranty is invalid if the unit has been tampered with. There are no user adjustments within. Refer all service work to an authorised Musical Fidelity agent.

Dust regularly with a soft duster or soft brush but be careful when using cleaning or polishing agents - they may harm the surface finish.

There are fuses in the A3 Tuner. In the unlikely event that one blows, take your unit to your audio dealer. Do NOT try to replace the fuse yourself or you will invalidate the warranty.

The remote control enables you to activate the main functions of the tuner from the comfort of your armchair. Several of the functions described in this manual are only available on the remote handset. Identical inscriptions on the remote control and tuner denote identical functions. The following should be noted when operating the tuner using the remote control.

- Point the remote control (transmitter) towards the display on the Tuner.
- Visual contact must exist between the transmitter and receiver.
- If the range of the remote control decreases dramatically, replace the batteries with new ones.

#### **Before Switching on the Stereo System**

Please read carefully the instructions on the following pages. The functional arrangement of the controls makes the stereo system fairly easy to operate. You should nevertheless study these instructions to get the best from your equipment.

# Important! Unauthorised opening of the equipment will invalidate any warranty claims.

Note: To help your dealer identify your Tuner if after-sales service is required, please quote the serial number located on the rear panel of the unit.

## INSTALLATION

#### **INTRODUCTION**

Congratulations on your purchase of an A3 FM tuner with RDS function and remote control.

The A3 tuner has been designed to deliver no compromise FM performance. To that end great attention has been paid to the internal layout to ensure that each significant discreet circuit section is in a different physical plane to any other which it might effect.

Additionally the A3 tuner has been designed to deliver excellent performance on a wide range of signals. At Musical Fidelity we understand that most audiophiles do not have perfect FM signals and have designed this tuner with this in mind.

The distortion is very low. This is achieved with minimal feedback.

The A3 tuner's output impedance is low, but more importantly its high frequency spuriae are extremely low, with the direct result that the tuner will not upset any amplifier to which its connected.

The resultant performance achieved by this tuner is one of the best in the world. It has fabulous noise ratios, low distortion, wide bandwidth, huge dynamic range and extraordinary resolution of fine detail.

#### **CLEANING**

Before cleaning the tuner always switch off the main switch and remove the mains plug from the wall outlet. Clean the housing and the remote control unit using a moist cloth. We do not advise that you use any solvents, white spirits, thinners, etc. as they could damage the surface finish of the unit.

#### **INSTALLATION**

Place your tuner on a stable, horizontal surface where there is no risk of it falling over. Avoid placing your tuner next to radiators or in direct sunlight.

Protect your tuner from humidity. Avoid placing it under a window. Do not place any containers filled with water on the tuner e.g. flower vases or potted plants. If water does enter the tuner, immediately pull out the mains plug from the wall socket and inform your dealer, who should then check the set before you use it again.

- Liquid entering the tuner could cause dangerous short-circuits.

#### **AUDIO CONNECTION**

The tuner should be connected to an amplifier (tuner or Aux input) by an interconnect cable with RCA/phono type connectors. This is connected to the Left and Right AUDIO OUTPUT sockets on the rear panel of the tuner.

#### **AERIAL CONSIDERATIONS**

Before you will be able to extract the maximum performance from any tuner, it will be necessary to install a good aerial system. This does not inevitably mean an expensive aerial, as the type needed by most households in order to receive the stations within a given service area can be quite simple. However, do not expect to receive a good signal with minimum background noise if you are only using a T-shaped ribbon. We suggest that you contact a local approved contractor, who should be familiar with the reception conditions in your area.

## **OPERATION**

#### **OPERATION**

#### **POWER BUTTON**

Press this button to turn the power ON. Press again to turn the power OFF.

Note: Whenever the power is turned ON, the station you were listening to last will be received automatically, while the frequency of the station or the station name (if RDS selected) appears in the display.

All the previous settings, i.e.. stored stations, LOCAL/DX, STEREO/MONO will all be retained in memory while the unit is turned off.

#### **STORE BUTTON**

To enter a station in the preset memory please proceed as follows:-

- 1 Tune to the station required.
- 2 Press STORE button once. The memory indicator on the display will flash, and the next free memory location will be displayed. Press the STORE button again to accept this location. If a different location is required use the TUNE up and down keys to select the desired memory location and then press STORE button again.
- There are 20 available memory locations. If when you press the STORE button, the MEMORY legend (on the display) flashes and two parallel lines appear instead of a number, all 20 locations are full. You can still store your required frequency but only by overwriting an existing location.
- 4 To overwrite an existing location, press the STORE button, the MEMORY legend (on the display) flashes and two parallel lines appear instead of a number, use the TUNE up and down keys

to select the location you want to overwite with the new station and then press STORE button again.

#### **MODE BUTTON**

The MODE button is used to select one of the three methods, MANUAL, SEARCH, or PRESET, of selecting stations. Press the MODE button once and the display will indicate the current method selected. The display will show this method for approximately 3 seconds and then revert to normal.

To change the method, press the MODE button twice. Each time the MODE button is pressed twice the method will change to the next one of the three i.e. MANUAL, SEARCH or PRESET.

#### MANUAL MODE

In this mode the "TUNE UP" and "TUNE DOWN" buttons are used to increase or decrease the tuned frequency as required to manually tune the A3 Tuner.

#### **SEARCH MODE**

In this mode the press either the "TUNE UP" or "TUNE DOWN" button momentarily and the A3 Tuner will search, automatically, and stop at the next station it finds. To repeat this searching process simply by press the "TUNE UP" or "TUNE DOWN" button again and A3 Tuner will carry on searching to the next station.

<u>Please Note</u>: The stations the A3 Tuner stops at will be dependent on the setting of the LOCAL/DX facility. (Please refer to page 8)

## SPECIAL FEATURES

#### PRESET MODE

In this mode the "TUNE UP" and "TUNE DOWN" buttons are used to select one of twenty preset memory locations.

For details of how to preset these memory locations please see "STORE BUTTON" section.

#### MONO/STEREO BUTTON

When receiving a stereo station the STEREO indicator in the right side of the display will light, denoting stereo operation. If mono operation is required, then press this button once. The indicator will turn off, your X-PLORA is now in MONO mode. To return to STEREO mode, press the button once more. The indicator in the display will turn on, your X-PLORA is now in STEREO mode.

Note: Mono operation should be selected in areas of weak signal strength to reduce background noise.

#### **REMOTE CONTROL FUNCTIONS**

Any buttons on the remote control labelled the same as a button on the front panel operates in exactly the same way. See below for additional functions that are controlled just from the remote control.

#### **DISPLAY BUTTON**

Pushing the button once switches the display off. Pushing the button a second time brings the display back on, but dimmed. A third press returns the display to full brightness. When in display off mode, pressing any button will cause the display to return for 2-3 seconds to confirm the new settings, before again switching off.

#### RDS ON/OFF BUTTON

Radio Data System (RDS) is a system that allows the radio station name to be displayed on the display. The tuned radio station must support this system for the name to be displayed. RDS display is activated by the RDS ON/OFF button.

Press this button once and the tuner display will show RDS status, either RDS ON or RDS OFF. After a few seconds the display will revert back to its previous state. If RDS was ON, it will display the tuned station's name. (As long as that station supports RDS) If RDS was OFF, the display will revert back to the tuned frequency. Press the button twice to change RDS status.

#### **LOCAL/DX BUTTON**

Set the tuner to LOCAL before tuning if you only want to search stations with strong signal strengths. When the tuner is set to LOCAL, the search facility will ignore stations with weaker signals. To search for stations with weaker signals ensure the tuner is set to DX.

Press the LOCAL/DX BUTTON once and the tuner display will indicate which mode is set, either LOCAL or DX. After a few seconds the display will revert back to its previous state. Pressing the button again while LOCAL or DX is displayed will toggle between the two modes of operation.

#### **SIGNAL STRENGTH BUTTON**

Press this button once and the tuner display will indicate the signal strength being received from the aerial. Please note, the indicated signal strength will depend on the setting of LOCAL/DX.

## **TROUBLESHOOTING**

Basic troubleshooting of a tuner is similar to troubleshooting of any other electrical or electronic equipment. Always check the most obvious possible causes first. To give you a few ideas of what to look for, check the following:

Problem	Probable Cause	Remedy
No power when POWER is pressed	Mains plug not inserted correctly.	Plug in securely.
Display does not light	Display switched off.	Switch display on using remote control.
No sound	Volume control on amplifier is set to minimum.	Turn up the volume.
	Mute is selected on amplifier.	Press mute button on remote control.
	Preamplifier not connected to power amplifier.	Check phono cable connection between units.
	Tape Monitor button is depressed.	Press Tape monitor button.
	Speakers are not connected or are connected incorrectly	Check speaker cables.
Sound is very noisy	Tuner is not tuned to local station.	Ensure that tuned frequency is correct for your area.
	Aerial is not good enough for your area.	Install better aerial or switch to mono reception.
Tuner will not stop on required stations	Tuner set to find local stations only.	Switch to DX using remote.
Tuner does not display station name	Tuned station does not support RDS.	None.
	Signal too weak.	Improve aerial.
	Tuner not switched to RDS function.	Switch to RDS using remote control.
Remote control unit operation is impossible	Tuners's POWER switch se to OFF	tSet switch to ON
	Batteries not inserted in remote control unit	Insert batteries
	Batteries Flat	Change Batteries
	Remote control not pointed at tuner	Ensure direct line of sight between remote control and tuner display
Range of remote control has dramatically reduced	Batteries running out	Change batteries

If none of these actions effect a cure, please contact your dealer, or an authorised Musical Fidelity service agent.

Remember, never open the case of the A3 tuner yourself, as this will invalidate the guarantee.

## **SPECIFICATIONS**

# A3 Tuner

## FM TUNER with Remote Control and RDS

Tuning range 87.50 MHz - 108.00 MHz

In 50 KHz steps

Antenna impedance 75 Ohm, coaxial

Usable sensitivity -mono -13.5 dBf 50dB quieting sensitivity -mono -19.9 dBf -stereo -42 dBf

Alternate channel selectivity 55dB ±400 KHz

Image rejection 98MHz>92dBIF frequency10.7 MHzIF rejection 98MHz>95dBAdjacent channel selectivity (IHF)52dBPilot suppression (IEC)30dBSubcarrier suppression (IEC)32dB

Audio Output (1KHz, 75KHz deviation) 500mV

Frequency response 30Hz - 15Hz + 1dB

THD 0.5% @ 75 KHz deviation

Stereo separation (1KHz) >38dB S/N ratio -mono >68dB -stereo >65dB

Power consumption 10 watts

Power requirements 100/115/230 Volts AC 50/60Hz

(Factory preset for country)

Dimensions (approx.) 440 x 95 x 400 mm (W x H x D)

Height includes feet Depth includes terminals

Weight 5kg (un-boxed)

Standard accessories Remote Control Handset

4 batteries (SUM-4, AAA, LR03) 75 Ohm coaxial aerial connector



Musical Fidelity reserves the right to make improvements which may result in specification or feature changes without notice.