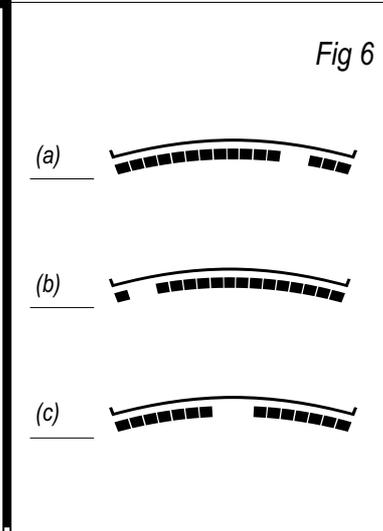
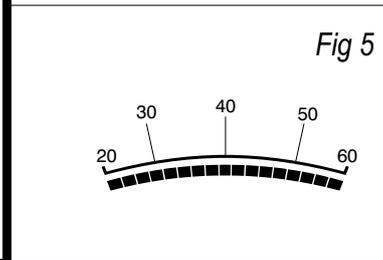
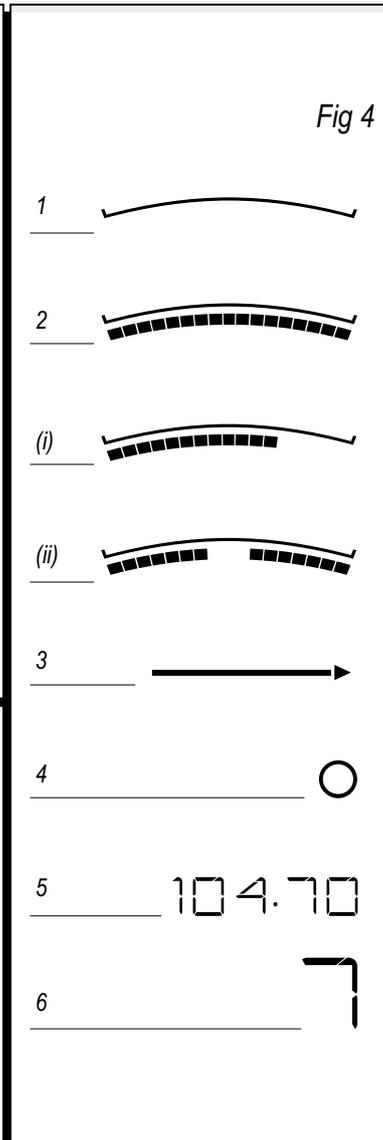
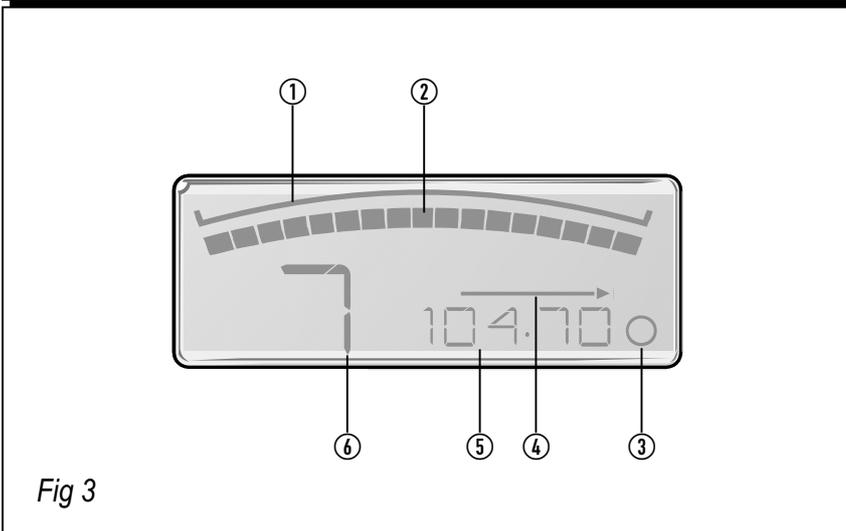
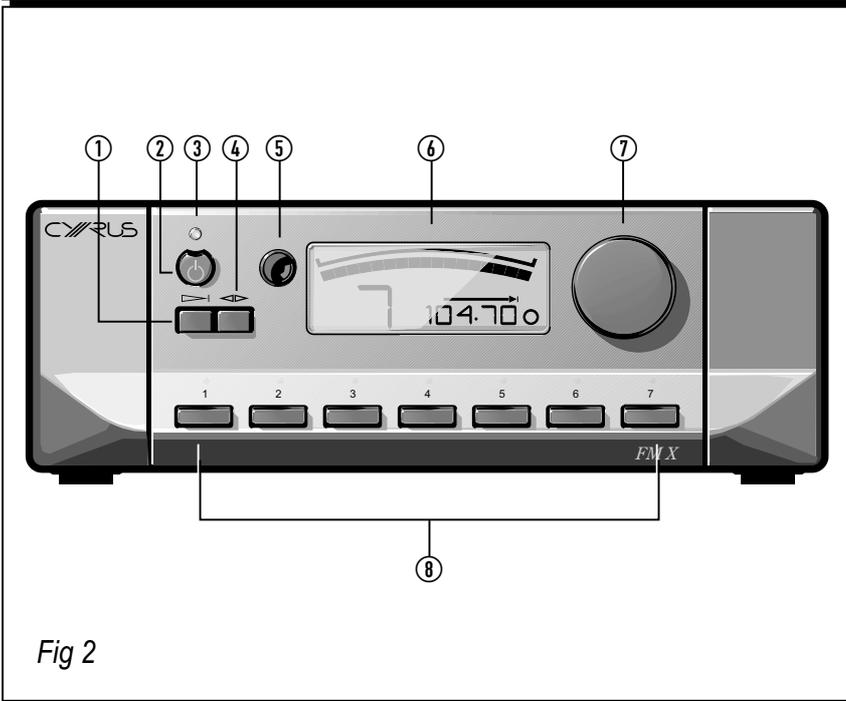
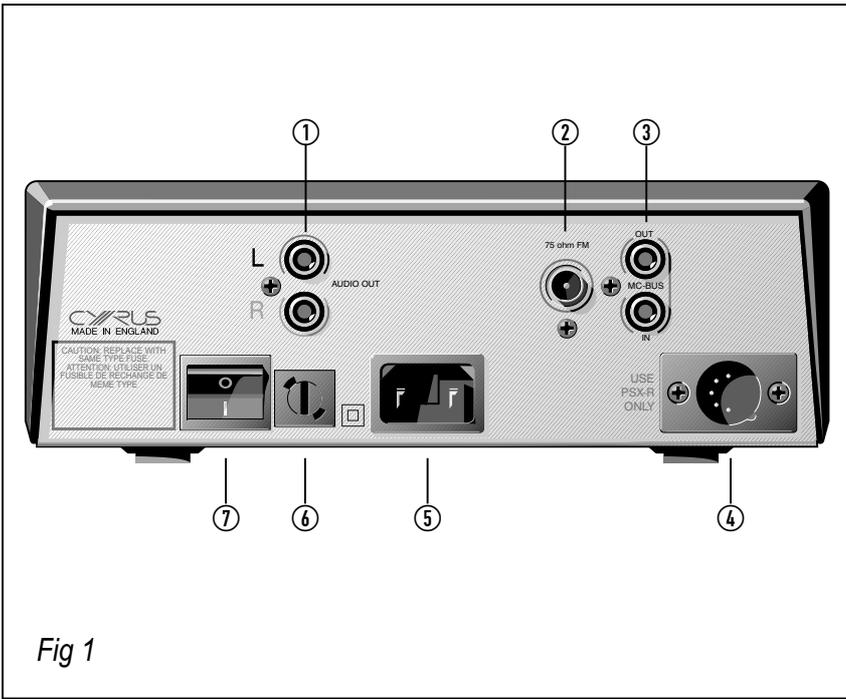


*Cyrus FM X*  
*User Instructions*

# Cyrus FM X Tuner



*User instructions*

**FM X**

**IMPORTANT! Read before operating this equipment!**

**CAUTION:** The exclamation mark is to draw your attention to important instructions and safety procedures in this manual.



**ATTENTION:** The lightning flash warns you of the risk of electrical shock presented by components inside this product. Unauthorised personnel must not open this unit.



**WARNING:** To reduce the risk of electrical shock do not remove any unit covers or panels. There are no user serviceable parts in this product.

**WARNING:** To reduce the risk of electric shock, do not expose this equipment to rain or moisture.

**HEED WARNINGS:** All warnings on the product and in the operating instructions should be adhered to.

**READ ALL THE INSTRUCTIONS:** All the safety and operating instructions should be read before the product is operated.

**RETAIN INSTRUCTIONS:** The safety and operating instructions should be retained for future reference.

**FOLLOW INSTRUCTIONS:** All operating and user instructions should be followed.

**CLEANING:** Unplug this product from the mains before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.

**WATER AND MOISTURE:** Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement; or near a swimming pool and the like.

**HEAT:** The product should be situated away from heat sources such as radiators, stoves, or any other products (including amplifiers) that produce heat.

**VENTILATION:** Slots and openings in the cabinet are provided for ventilation, to ensure reliable operation of the product and to protect it from overheating and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

**OBJECT OR LIQUID ENTRY:** Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.

**ACCESSORIES:** Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

**MOVING THE PRODUCT:** A product and cart combination should be moved with care. Sudden stops, excessive force, and uneven surfaces may cause the product and cart to overturn.



**ATTACHMENTS:** Do not use attachments not recommended by the product manufacturer as they may cause hazards.

**POWER SOURCES:** This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

**OVERLOADING:** Never overload wall outlets, extension cords, or integral convenience receptacles. This can result in an increased risk of fire or electric shock.

**POWER CORD PROTECTION:** Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

**LIGHTNING:** For added protection for this product during a lightning storm, or when it is left unattended or unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

**CAUTION! POLARISED CONNECTOR (CANADA and USA):**

To prevent electrical shock, match wide blade of plug to wide slot, fully insert. Do not alter or remove this plug if it does not fit your mains power socket. Have a suitable socket installed by a competent electrician.

**POWER SUPPLY: (Refer to Fig.1)**

Connect the moulded IEC connector of the AC cord supplied into the power inlet Ⓢ on the rear of the unit. The mains fuse Ⓢ is on the rear panel next to the power switch. It must only be replaced as follows:

U.K. / Europe 230V	T100mA 20mm
N. America / Far East - 115V	T200mA 20mm

The mains supply requirement for your *Cyrus FM X* is marked on a label on the rear panel. Before connecting, check that this voltage is the same as your mains supply.

230V Products:	Voltage Range	220V-240V
115V Products:	Voltage Range	110V-120V

If you move to an area with a different mains voltage, contact your local *Cyrus* distributor to have your product converted.

**NOTE FOR UK CUSTOMERS:**

The *Cyrus FM X* is supplied with a power cable terminated by a fused 13A mains plug. This plug should not be removed but if it is removed, dispose of it safely and do not re-use it. To connect a new 13A plug, proceed as follows: Connect the brown wire to the terminal marked L or coloured red. Connect the blue wire to the terminal marked N or coloured black. The internal plug fuse should be 5A.

**SERVICING:**

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

**CONDITIONS REQUIRING SERVICE:** Unplug this product from the wall outlet and refer servicing to qualified service personnel when:

- When the power supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product has been dropped or damaged in any way.
- If the product does not operate normally by following the operating instructions. (Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage requiring extensive work by a qualified technician to restore the product to its normal operation).
- When the product exhibits a distinct change in performance.

**REPLACEMENT PARTS:** When replacement parts are required, be sure the service technician has used replacements specified by the manufacturer or have the same characteristics as the original part. Unauthorised substitutions may result in fire, electric shock, or other hazards.

**SAFETY CHECK:** Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

**PRODUCT SERVICE CENTRES**

For product service or technical advice, contact only authorised *Cyrus* service centres. The *Cyrus* distributors are listed at the end of this instruction manual.

## Welcome to the world of Cyrus!

Congratulations on your choice of *Cyrus* Hi-fi products. Our state-of-the-art design technology and outstanding quality of manufacture has won countless awards around the world. We are confident that you will derive great pleasure from owning a product from one of the most recognised and respected manufacturers of hi-fi equipment.

Please read these instructions carefully before commencing installation. They provide full guidance to help you install your *Cyrus FM X* safely and correctly.

## Preparation for Installation

Before installing the *Cyrus FM X* check that the following items are included in the accessory box.

- Warranty Card (with instruction manual)
- AC mains Cable
- 2 x Phono leads for MC-BUS connection

After removing these items, please retain the packaging.

Install the *Cyrus FM X* in a well ventilated location away from sources of high temperature, dust or humidity. Never stand the *Cyrus FM X* under another unit or on any surface likely to hamper its cooling or ventilation.

## INSTALLATION (Refer to Fig.1)

Key to the rear panel drawing:

1. Audio Output	5. Power Inlet
2. Antenna Input	6. Mains Fuse
3. MC-BUS System Connection	7. Power Switch
4. PSX-R socket	

## Connecting to the System Amplifier

Connect one end of a suitable phono interconnect to the Audio Output sockets of the *Cyrus FM X* ① and the other end to the corresponding Tuner input of the amplifier. Other amplifier inputs that are suitable for this purpose are CD or AUX inputs. DO NOT connect the *Cyrus FM X* to the PHONO input sockets of an amplifier.

## Connecting an External Aerial

This socket ② is for use with a 75Ω external FM aerial. The quality of the aerial you use will directly affect the performance of your *Cyrus FM X*. We would therefore advise that you contact an aerial installation expert in your local area or consult your dealer. In areas where FM cable transmission is available the signal strength should be adequate.

## Connecting a Cyrus PSX-R

The *Cyrus PSX-R* is a high quality regulated power supply, the use of which will elevate your *FM X* into a true world-class state-of-the-art product.

The connector fitted to the umbilical cable from the *PSX-R* must be securely connected to the *PSX-R* socket ④ on the rear of the *FM X*. When correctly fitted, the connector will latch into the socket.

Note: The *PSX-R* power supply and the *FM X* will both require connection to the mains supply.

## MC-BUS System Connections

Through the MC-BUS and certain ancillary equipment a highly functional integrated system with full remote control may be set up. This feature is usable if you own a *Cyrus Amplifier* or *Pre-amplifier*. Refer to the amplifier handbook for MC-BUS wiring instructions.

## OPERATION (Refer to Fig.2)

Key to the front panel drawing:

1. Seek	5. Remote Eye
2. Standby	6. Display Window
3. Standby Light	7. Manual Tune
4. Fine Tune	8. Presets (1-7)

## Switching On (refer to Fig.1, rear panel drawing)

The mains power switch ① is located on the rear panel of the *Cyrus FM X*. This switch should be left on for normal operation, except when left unattended for a long period. In this case the mains power should be switched off or the product disconnected from the AC supply.

Refer now to Fig.2, front panel drawing.

When the *Cyrus FM X* is in regular use and power is permanently applied, the STANDBY key ② can be used to switch the unit on and off. The standby light will show red when the *Cyrus FM X* is in standby and green when operating. The *Cyrus FM X* will also switch on if a preset station is selected.

## Auto Tuning

Auto tuning will search automatically for stations with a usable signal strength. To begin searching, press the SEEK key ③ and the *Cyrus FM X* will scan up the frequency range, locking to the next available station. Another press will continue station scan. The station frequency and signal strength can be read from the display.

To stop scanning press the SEEK key again.

## Manual Tuning

Manual tuning can be used to set to a known station frequency or to lock to a weak transmitter, not detected in auto tuning. Rotate the MANUAL tuning control ④ until the required frequency is shown on the frequency display. The frequency will change in steps of 50 kHz.

When a station is correctly tuned, the lock indicator will be displayed. The signal strength can then be read from the bargraph display.

## Fine Tuning

Some radio stations and some cable transmissions may not be set exactly to their advertised frequency. For precise station alignment, fine station tuning is available.

Locate your station using either AUTO or MANUAL tuning. Ensure that the lock indicator on the display is showing. Press the FINE key ⑤. Using the manual tuning control you can now fine tune the station. When fine tuning, the bargraph display switches to show a "magic eye" centre tuning meter. For precise station tuning the black bars on each side of the display should be of equal length. Press the FINE key again to cancel fine tuning mode.

**Note:** Fine tuning will cancel automatically if no adjustment is made within a 5 second period.

## Storing a Preset Station

Seven preset memories are available on the front panel which may be programmed with your favourite stations.

Locate the station using either AUTO or MANUAL tuning and fine tune if necessary. Press and hold a PRESET key for about two seconds until the display blinks. The station is now stored in this preset location. The *Cyrus FM X* will retain preset stations indefinitely and requires no back up-batteries.

**Note:** When NEXT/PREVIOUS station preset commands are received from a *Cyrus* system remote control (for example, the *Cyrus Audio Commander* or *Cyrus MR3*) the *FM X* will automatically skip all unused presets stored with the frequency of 87.5MHz.

## Tuning to a Preset Station

To recall a station from the preset memory, press the desired PRESET key briefly.

**FRONT PANEL DISPLAY** (Refer to Fig.3)

Key to the display drawing:

1. Lock Indicator	4. Search Indicator
2. The Bargraph	5. Frequency Display
3. Stereo Indicator	6. Preset Number

Refer now to Fig.4.

- 1. Lock Indicator**  
This symbol indicates that the *Cyrus FM X* has locked to a station.
- 2. The Bargraph**
  - (i) Signal Meter Mode  
This symbol indicates the received signal strength of a tuned station.
  - (ii) Magic Eye Mode (Fine tuning only)  
The magic eye indicates the accuracy with which the unit is tuned to the transmitted frequency. The display illustrated shows optimised tuning.
- 3. Search Indicator**  
The arrow is displayed when the *Cyrus FM X* is searching up for the next station.
- 4. Stereo**  
This symbol indicates when a station is transmitting in stereo.
- 5. Frequency Display**  
This shows the frequency that the unit is currently tuned to. In fine mode, a further digit is displayed for 10kHz resolution.
- 6. Preset Number**  
This digit shows the current preset number.

**BARGRAPH** (Refer to Fig.5)

The signal strength bargraph and "magic eye" tuning indicator of the *Cyrus FM X* can be used for accurate assessment of signal quality at the antenna terminals. The bargraph may be helpful when adjusting the aerial position to give the strongest signal. The bargraph is calibrated from 20 dBµV to 60dBµV in 2dBµV steps.

When set for fine tuning the bargraph will indicate station tuning in steps of 10kHz.

**TUNING ALIGNMENT** (Refer to Fig.6)

These illustrations show different examples of tuning alignment.

- (a) De-tuned +30kHz.
- (b) De-tuned -40Khz.
- (c) Optimised Fine Tuning.

**OTHER FEATURES**

The *Cyrus FM X* is equipped with a high performance pilot tone suppression circuit. This ensures superb rejection of subcarrier related spurious, whilst providing a direct path for audio signals.

Four power regulators supply the RF, PLL, Audio and Control circuit modules of the *Cyrus FM X* independently.

**TROUBLESHOOTING GUIDE**

If you suspect that your *Cyrus FM X* is not operating to specification, please read through this section before returning the *Cyrus FM X* to your local dealer.

**If you are in any doubt, consult your dealer.**

<b>No sound from either speaker</b>	
Amplifier switched off or in Standby	Bring unit out of Standby (Standby light - GREEN)
Tuner input of your amplifier is not selected	Select Tuner input on amplifier
Interconnect cable is faulty or incorrectly connected	Check interconnect cable connections
<b>No lights or display</b>	
No power to unit	Check that the rear panel power switch is turned on
<b>Cyrus FM X will not tune to stations in 'SEEK' mode</b>	
Make sure that the antenna is connected to the 75Ohm socket on the rear panel and that stations can be tuned manually	
<b>All stations have high background noise</b>	
Check for the correct connection of your antenna cable and its connectors.	
<b>Some stations have high background noise</b>	
These may be weaker or more distant stations and therefore may require adjustment to the antenna direction for optimum reception	
There is a big difference in the sensitivity of FM antennae available on the market, and that your current antenna may need upgrading	
Proximity to appliances with potential for high frequency radiation may cause interference with high quality reception in certain frequency bands. If you own CD players, computers and similar devices experiment by removing them from the mains and re-checking the noisy station.	
<b>No stereo indication</b>	
Check other stations for stereo reception. The particular broadcast may be in mono, for example speech, commentary, etc	

**SPECIFICATIONS****Power Supply**

Voltage: .....As plate on rear of unit

**Power Consumption**

Standby ..... (4W)

ON (No Load) ..... (7.6W)

Safety Requirements ..... EN 60065

**Enclosure**

Dimensions (WxHxD) ..... 215 x 75 x 365mm

Weight ..... 2.7Kg

Material ..... Die cast chassis

**Audio Performance**

Audio Output (95% mod. mono 1kHz) ..... Line

Sensitivity (75 Ohm Input)

Mono, 50dB S/N ..... 12dB $\mu$ VStereo, 50dB S/N ..... 33dB $\mu$ V

Selectivity ..... 55dB

Capture Ratio ..... 1.5dB

IF Suppression ..... 90dB

Image Frequency Suppression ..... 80dB

Pilot Tone Suppression ..... 68dB

Stereo Separation ..... &gt;50dB

S/N Ratio, mono/stereo (CCIR-ARM) ..... 83/76dB

1kHz THD @ 50kHz DEV. (A-WTD)

mono/stereo ..... 0.05/0.08%

Aerial Input ..... 75 Ohm coaxial

**WARRANTY**

The warranty card enclosed should be completed by the Dealer and the purchaser and returned to CYRUS or its Distributor within 8 days of purchase. No Dealer or Distributor may vary the terms of this warranty which is personal to the original Purchaser and is not transferable.

Please retain the sales receipt as proof of purchase.

Warranty claims must wherever possible be made through the Dealer from whom the equipment was purchased.

This warranty excludes:

- Damage caused through neglect, accident, misuse, wear and tear, or through incorrect installation, adjustment or repair by unauthorised personnel. Any unauthorised servicing will result in loss of guarantee.
- Liability for damage or loss occurring in transit to or from the purchaser.
- Consequential damage, loss or injury, arising from or in conjunction with this equipment.

Equipment for attention under warranty should be consigned return carriage paid. If returned equipment is found to comply with the published specification, CYRUS reserves the right to raise a charge.

The above conditions do not affect your statutory rights as a consumer.