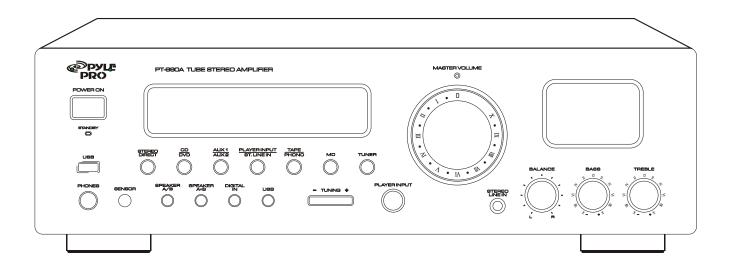


# PT-990A VACUUM TUBE STEREO AMPLIFIER



# **OPERATION MANUAL**

www.pyleaudio.com

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# **SAFETY INFORMATION**

CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	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.  Do not expose this appliance to rain or moisture	
	This lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninstalled "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.	
CLASS 1 LASER PRODUCT	The marking of products using lasers (except for some areas). The label is attached to the rear panel and says that the component uses beams that have been classified as Class 1,which means the unit is utilizing laser beams that are of weaker class. There is no danger of hazardous radiation outside the unit	

# **ACCESSORIES**

- 1. RCA cord (yellow color).
- 2. Remote control.
- 3. Battery AA x 2 for Remote control
- 4. Instruction Manual

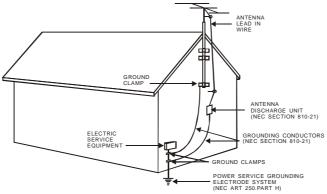
# IMPORTANT SAFETY INSTRUCTIONS

Caution: Read This Before Operating Your Unit.

- 1. **READ AND FOLLOW INSTRUCTIONS:** All the safety and operation instructions should be read before the product is operated. Follow all operation instructions within this manual.
- RETAIN INSTRUCTIONS: The safety and operation instructions should be retained for future reference.
- 3. **HEED WARNINGS:** Comply with all warnings on the product and in the operation instructions.
- 4. **CLEANING:** Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- 5. **GROUNDING or POLARIZATION:** This product may be equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician since it is likely you have an out of sate wall socket. Never force the plug into the socket.
- 6. OVERLOADING: Do not overload wall outlets or extension cords as this can result in the risk of fire or electric shock. Overloaded AC outlets, extension cords, frayed power cables, damaged or cracked wire insulation, and broken plugs are dangerous. They may result in electric shock or fire hazard. Periodically examine the power cable if its appearance indicates damage or deteriorated receptacles have it replaced by your service technician.



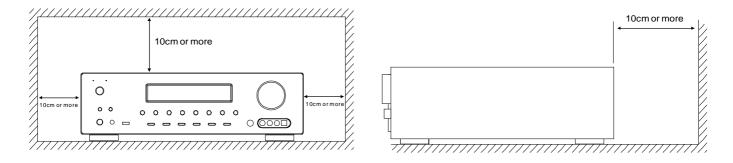
- 7. POWER SOURCES: This product should be operated only from the type of power source indicated on the rear panel label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intend to be operated from battery power, or other sources, refer to the operation instructions.
- 8. **ACCESSORIES:** Do not place this product on an unstable surface or support. The product may fall, causing serious injury to a child or adult as well as serious damage to the product. Any mounting of the product should follow the manufacture's instructions and use a mounting accessory recommended by the manufacturer. A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.
  - of ory re. to
- 9. OUTDOOR ANTENNA GROUNDING: If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. The example below is for reference only. Correct grounding should always be installed by an electrician.



- 10. POWER-CORD PROTECTION: The power supply cables 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 cables at plugs and the point where they exit from the product.
- 11. ATTACHMENTS: Do not use unauthorized attachments as they may cause faults with the unit.
- 12. **CONDITIONS REQUIREING SERVICE:** Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - a) If the unit exhibits sudden unusual operation or unusual display characteristics.
  - b) If the unit exhibits sudden unusual operation or unusual display characteristics.
  - c) b. If liquid has been spilled, or objects have fallen into the product.
  - d) If the product has been exposed to rain or water.
  - e) If the product does not operate normally by following the operation instructions, adjusting only those controls that are covered by the operation instructions. (**NOTE:** improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation).
  - f) If the product has been dropped or damaged in any way.
  - g) If the product exhibits a distinct change in performance.

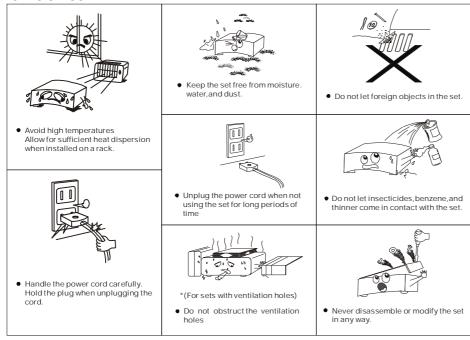
# IMPORTANT SAFETY INSTRUCTION

- 13. **SERVICING:** Do not attempt to service this product yourself as removing cover may expose you to dangerous voltages or other hazards. Refer all servicing to qualified service personnel.
- 14. **LIGHTNING:** For added protection for this product during a thunderstorm, or when it is left unattended and unused for long period 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.
- 15. **REPLACEMENT PARTS:** Should replacement parts be required, have the service technician verify that the replacement parts he uses have the same safety characteristics as the original parts. Use of unauthorized replacements parts can cause fire or electric shock.
- 16. **SAFETY CHECK:** Upon completion of any service or repairs to this product, ask the service technician to perform safety checks recommended by the manufacturer to determine that the product is in a safe operating condition.
- 17. **HEAT DISPERSION--**-Leave at least 10 cm of space between the top, back and sides of the unit and the wall or other components for proper ventilation.



18. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

## 19. NOTES ON USE



# REMOTE CONTROLLER

By using the provided remote control unit, the receiver can be controlled from your listening position. To use the remote control unit, point it at the REMOTE SENSOR window of the receiver.

#### Notes:

- Even if the remote control unit is operated within the effective range, remote control operation may be impossible if there are any obstacles between the unit and the remote control.
- If the remote control unit is operated near other appliance which generate infrared rays, or if other remote control devices using infrared rays are used near the unit, it may operate incorrectly.
- The power is turned on/off (standby) by pressing the POWER button on the remote control unit in standby mode.

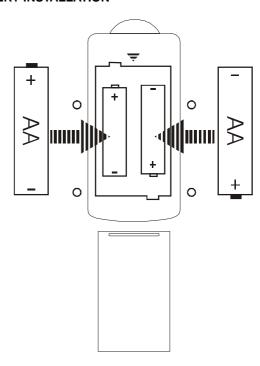
## **Precautions concerning batteries**

- -Be sure to insert the batteries with correct positive+ and negative polarities.
- Use batteries of the same type. Never use different types of batteries together.
- Rechargeable and non-rechargeable batteries can be used. Refer to the precautions on their labels.
- When the remote control unit is not to be used for a long time (more than a month), remove the batteries from the remote control unit to prevent them from leaking. If they leak, wipe away the liquid inside the battery compartment and replace the batteries with new ones.
- Do not heat or disassemble batteries and never dispose of old batteries by throwing them in a fire.

#### REMOTE CONTROL OPERATION RANGE

Use the remote control unit within a range of about 7 meters (23 feet) and the angles of up to 30 degrees aiming at the remote sensor.

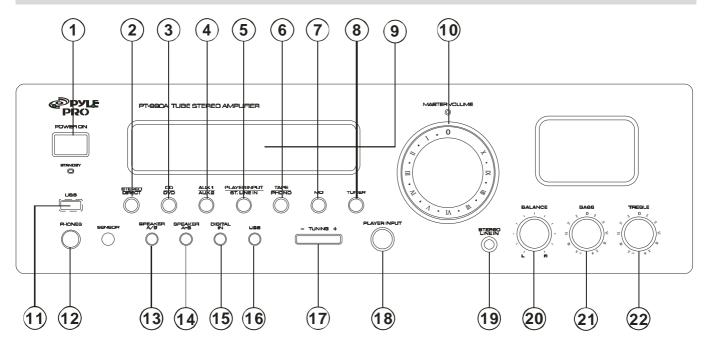
#### **BATTERY INSTALLATION**



- 1. Remove the battery compartment cover.
- Insert two "AA" dry batteries.
   Make sure that the batteries are inserted with their positive "+" and negative "-" poles positioned correctly.
- Close the cover until it clicks.

If the distance required between the remote control unit and main unit decreases, the batteries are exhausted. In this case, replace the batteries with new one

# FRONT PANEL INFORMATION



## 1. POWER ON/OFF

Push this button to turn the unit into standby mode, push it again to turn off the unit.

## 2. Stereo Direct

Press this button ,the unit will change to stereo direct output mode, all the signal through this unit will not be amplify.

#### 3. DVD/CD

Press to active the DVD inputs

#### 4. AUX1/AUX2

Press to active the AUX1/AUX2 input on the rear panel.

#### 5. PLAYER INPUT/ST.LINE IN

Press to select the iPod connected to iPod in on the front panel. Press it again the STEREO LINE IN jack will be actived.

# 6. TAPE/PHONO

Press to select the Cassette Deck source equipment for output through this unit.

#### 7. MD

Press to active the DAB inputs.

### 8. TUNER

Press to select the built in TUNER. Press it again to select FM or AM tuning

## 9. LED Indicator

Lights green when the amplifier is turned on. Lights red when the amplifier is in standby mode or in operation.

# 10. MASTER VOLUME

Rotate this knob clockwise or counterclockwise, the master volume will be increased or decreased.

## 11. USB PORT

1.1 format USB port,.

# 12. PHONES

Jack for the stereo headphones.

# 13. SPEAKER A/B

Press it once, the speaker that connect to Speaker A outputs will work, press it again Speaker B outputs's speaker will work.

# 14. SPEAKER A+B

Press this button, the speaker A&B outputs's speaker will work together.

# 15. DIGITAL IN

Press this button to active the PCM digital in input .

# 16 .USB

Press it to active the USB port.

# 17. TUNING +/-

Tuner frequency up & down

## 18. PLAYER INPUT

Jack for iPod

# 19. STEREO LINE IN jack

Connect to the stereo output terminal equipment.

### 20. Balance

Rotate this knob clockwise or counterclockwise for Balance adjustment.

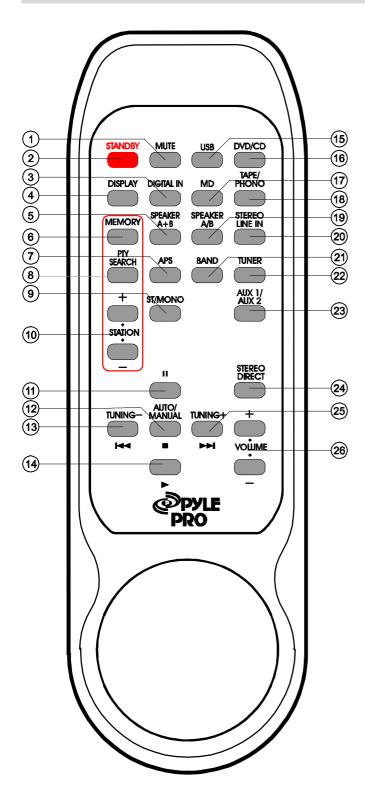
#### 21. Bass

Rotate this knob clockwise or counterclockwise for Bass adjustment.

# 22. Treble

Rotate this knob clockwise or counterclockwise for Treble adjustment.

# REMOTE CONTROL INFORMATION



#### 1 Mute

Press this button to mute the sound, push again to cancel the mute function.

#### 2. Standy

Push this button to turn the unit into standby mode, push it again to turn off the unit.

# 3. Digital in

Press this button to active the PCM digital in inpu

#### 4. Display

Press this button to display the state of input source.

## 5. Speaker A+B

Press this button, the speaker A&B outputs's speaker will work together...

#### 6. Memory

Press it to store the broadcast station as a preset

#### 7. APS

In tuner mode, press this button to allocate and memorize radio station automatically.

## 8. PTY Search

No PTY inforamtion would be displayed.

#### 9. ST/Mono

Press this button to alternate between Stereo and Mono mode when listen to FM broadcast.

#### 10. Station +/-

Press these buttons to select a preset channel during the tuner mode.

# 11.II

When insert a MP3 player in the USB port, press this button to pauses the playback.

#### 12.■ Auto/Manual

This button is used to select AUTO or MANUAL tuning for AM and FM stations. Press once to set to AUTO ,again for MANUAL

When insert a MP3 player in the USB port press this button to stop the playback.

## 13. ◀◀ Tuning-

When select the built in tuner, press it to tune frequency down.

When insert a MP3 player in the USB port press this button to select the previous track

#### 14.▶

When insert a MP3 player in the USB port press this button to starts the playback

# 15. USB

Active the USB port.

# 16. DVD/CD

Press to active the DVD inputs.

#### 17. MD

Press to active the DAB inputs.

# 18. TAPE/PHONO

Press to select the Cassette Deck source equipment for output through this unit.

## 19. SPEAKER A/B

Press it once, the speaker that connect to Speaker A outputs will work, press it again Speaker B outputs's speaker will work.

# 20. iPod/STEREO LINE IN

Press to select the iPod connected to iPod in on the front panel. Press it again the STEREO LINE IN jack will be actived.

#### **21. BAND**

Press the button to select FM or AM.

## **22. TUNER**

Press to select the built in TUNER. Press it again to select FM or AM tuning.

#### 23. AUX1/AUX2

Press to active the AUX1/AUX2 input on the rear panel,

## 24. Stereo Direct.

Press this button, the unit will change to stereo direct output mode, all the signal through this unit will not be amplify.

## 25.▶► Tuning+

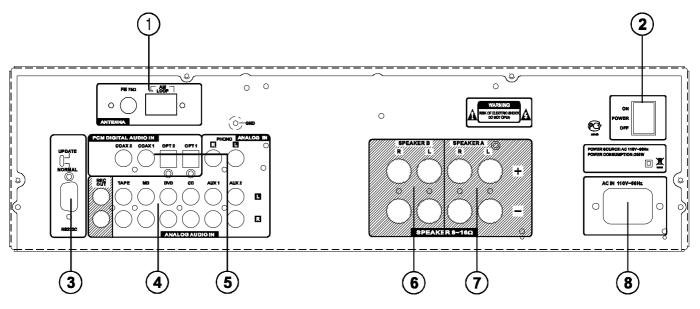
When insert a MP3 player in the USB port press this button to select the next track .

#### 26. Volume +/-

Press these buttons to decrease or increase the volume.

•

# **REAR PANEL INFORMATION**



- 1. Antenna: Connection terminal for AM& FM
- 2. Mains switch

Use to interrupt the mains voltage

- 3. RS232 port
- 4. Analog audio In/Out
- TAPE OUT: Connect to the line input terminals on the TAPE DECK
- AUX IN: Connect to the line output of an external player.
- -TAPE IN: Connect to the line output terminals on the TAPE DECK.
- DVD IN: Connect to the line output terminals on the DVD player
- MD IN: Connect to the line output terminals on the DAB player

## 5. PCM DIGITAL IN

## Optical in 1,2

PCM Digital audio input to the digital output of CD player.

# Coaxial In 1,2

PCM Digital audio input to the digital output of a CD player

## 6. Speaker B

For connection of loudspeaker

- Note: -The speaker impedance must be 4 and 16 Ohm
  - For optimal sound quality there must be a proper connection between the speaker terminal and the amplifier terminal .
  - -The cable ends must not be frayed to avoid that they come into contact with each other or the cabinet back panel

### 7. Speaker A

The other section for connection of loudspeaker.

## 8. AC CORD

Connect to the AC mains socket.

# CONNECTION

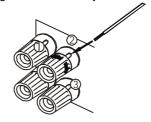
# LOUDSPEAKER CONNECTIONS

#### Caution:

To avoid damaging the speakers with a sudden high-level signal, be sure to switch the power off before connecting the speakers.

- I Check the impedance of your speakers.
  - Connect speaker with an impedance of 8 ohms or more. The amplifier's red speaker terminals are the + (positive) terminals and the black terminals are the (negative) terminals.
- I The + side of the speaker cable is marked to make it distinguishable from the side of the cable. Connect this marked side to the red + terminals and the unmarked side is the black terminal.
- I Prepare the speaker cords for connection by stripping off approximately 10 mm or less (no more as this could cause a short-circuit) of the outer insulation. Twist the wires tightly together so that they are not straggly.





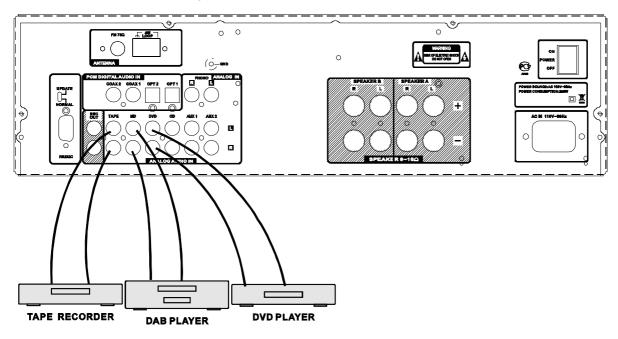
- 1. Unscrew the knob
- 2. Insert the speaker cable.
- 3. Tighten the knob and secure the cable.

# CONNECTION

# **AUDIO CONNECTIONS**

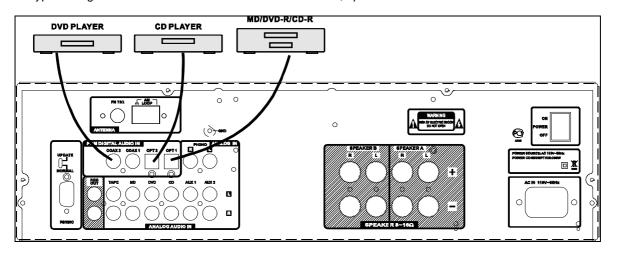
Note: Do not plug in the mains power lead or turn on the unit before all connections have been made.

Connect to source equipment using phono cables (stereo 2RCA-2RCA).



# **DIGITAL CONNECTIONS**

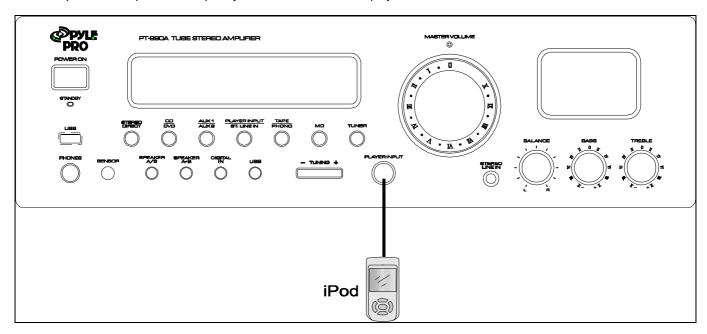
Two types of digital audio connections can be made to this unit, optical and coaxial.



# CONNECTION

# FRONT INPUT CONNECTIONS

The front panel iPod input is for temporary connections to the iPod player.



# **CONNECTIONS**

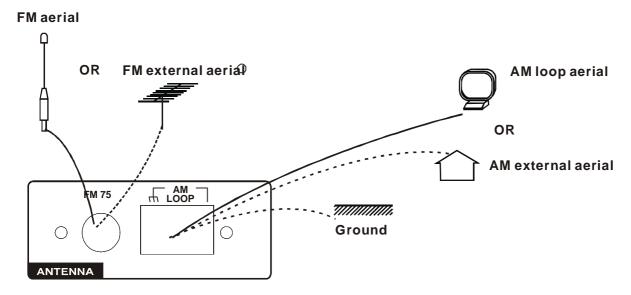
# **AERIAL CONNECTIONS**

## FM aerial

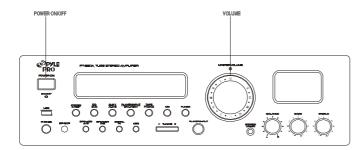
Connect an aerial to the FM 75 ohm socket (a simple wire aerial is supplied for temporary use). Extend the lead and move the aerial around until you get the best reception. For continued use, we strongly recommended using a 75 ohm outdoor FM aerial.

## AM loop aerial

Connect each end of the single length antenna to the antenna terminals. Place the antenna as far from the main system as possible to prevent unwanted noise and to obtain optimum reception. If the AM loop aerial provided does not receive sufficient reception, it may be necessary to use an outdoor AM aerial.

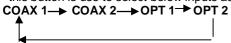


# **BASIC OPERATION**



- 1. Press the **Main Power ON/OFF Switch** on the rear panel to ON.
- 2. Press the **Power On** button on the front panel to switch on the unit.
- 3. Select the desired source by pushing the corresponding button
- DVD/CD
- AUX/STEREO LINE IN
- iPod
- MD
- TUNER
- TAPE
- USB(1.1 format only)
- Digital in

this button is use to select below inputs as follow



## **PHONES** jack

For private listening, insert optional (not included) headphones (1/4-inch plug) into the PHONES jack, and then the center and surround speaker will be cut automatically.

#### Pod in iack

The input ports are for iPod player. It can connect a iPod player directly or connect to a iPod docking.

## Balance/Bass/Treble control knob

BALANCE control is used to adjust the level of speaker . BASS control is used to adjust the level of the low frequency sound range.

TREBLE control is used to adjust the level of high frequency sound rang.

### **USB**

USB 1.1 format port, can connect a USB stick or connect a MP3 music player directly. When connect a MP3 player, you can use the remote to achieve the follow function: PLAY, PAUSE, STOP, SKIP, PREVIOUS

# Speaker channel selection

IF you want one section speaker work and another section stop, press SPEAKER A/B button on the front panel or on the remote control.

If you want two section speakers work together, press Speaker A+B button on the front panel or on the remote control

# **BASIC OPERATION**

# **Radio Operations**

# **Automatic Tuning**

- Press the Main Power On/Off switch on the rear panel first, then press the Power On/Off button on the front panel to turn this unit on.
- Press the **Tuner** button on the front panel or on the remote control, then press the **Band** button on the remote to select **FM** or **AM**.
- Press the "AUTO/MANUAL" button on remote control to activate automatic selection. (Default mode is Manual selection) (Note: Auto appears on the display.)
- Press TUNING + and TUNING to select the station you want to listen to. When a station is tuned in, the tuning process will stop automatically. (Automatic selection)
- Press TUNING + or TUNING again to select another channel.

# **Manual Tuning**

It is for selecting stations, which cannot be tuned automatically (manual selection)

To tune a channel manually:

Skip step 3 in the above procedures. Each time the **TUNING+** or **TUNING-** button is pressed momentarily (0.5 second or less), the frequency changes by a fixed step: FM: 50 kHz steps; MW: 10 kHz steps.

#### Two FM modes available:

Press **ST/MONO** button on remote control to select Stereo mode or Mono mode.

#### Stereo

FM stereo broadcasts are received in stereo and the "\omega" indicator lights on the display.

#### Mono

To compensate for weak FM stereo reception, select this mode. Reception will now be forced monaural, reducing unwanted noise.

If **DISPLAY** button is pressed, the details of incoming source will be displayed.

#### **Preset Tuning**

This facility is used to store FM, AM broadcasting from channel 1 to 15 respectively.

#### How to select preset stations

Press the "STATION buttons" (numbers)on remote control to select a preset channel during the tuner mode.

# **Manual Memory Presetting**

- 1. Press the **Tuner** button on the front panel or on the remote control, then press the **Band** button on the remote to select **FM** or **AM**.
- 2. Press the **TUNING** + or **TUNING** buttons to select a frequency channel you want to preset.
- 3. Press the **MEMORY** button briefly.
- 4. While the "**MEM**" indicator is lit, press **TUNING+** or **TUNING -** button to select a preset station. The station number will be displayed on the screen.
- 5. Press the **MEMORY** button to confirm.

To store more stations, repeat steps 3 to 6.

# **RADIO DATA SYSTEM (Optional)**

# **RADIO DATA SYSTEM (RDS)**

RDS is a method for the transmission of additional information from local Radio Stations. It can only operated in FM mode. For example, name of the station broadcasting, name of the program or the type of program will be shown on the multi-function display.

It functions only when the local broadcasting stations have the RDS transmission and the signal is strong enough.

Press "DISPLAY" on remote control, there are functions for PS, PTY, WAIT CT and RT.

After you have selected the radio program, press "DISPLAY" on the remote control, and then the information of the program will be shown on the screen.

# a) PS (Program Service Name)

Press "DISPLAY" on remote control until "PS" appears. The current station name will be shown.

**Note:** "NO PS" will be shown if the signal from local radio station is not strong enough or no such service.

## b) PTY (Program Type)

Press "DISPLAY" on remote control until "PTY" appears. The current name type of the program will be shown.

**Note:** "NO PTY" will be shown if the signal from local radio station is not strong enough or no such service.

#### c) CT (Clock - Time)

Press "DISPLAY" on remote control, then "WAITING CT" will appear.

The current time from Radio Station will be shown, e.g. 15:30

#### Note:

- 1. The **Clock Time** will be only transmitted from local radio station once a minute, so you need to wait for less than 1 minute to show the result.
- 2. "NO CT" will be shown if the signal from local radio station is not strong enough or no such service.

## d) RT (Radio text)

Press "DISPLAY" on remote control until "RT" appears. Some Text messages will be shown.

**Note:** "NO RT" will be shown if the signal from local radio station is not strong enough or no such service.

### PTY SEARCH (Program Type Search)

- Press the "PTY SEARCH" on remote control, "PTY SELECT" will flash on the display.
- Press TUNING + /- to choose the program type, for example, NEWS, SPORT, ...etc.
- Press "PTY SEARCH" again once you choose the program type.
- 4. When the type of program tuned in, it will stop searching, otherwise, "NO FOUND" will appear.

#### **APS (Auto Program Search)**

- Select your FM or AM band.
- Pressing the "APS" on remote control, it will search the available stations. The searched stations will be memorized in the respective band memory up to maximum 15 memories.

**Note**: Weak station may also be storied in memorizes, so manual memory presetting may be needed in order to have better receiving.

# **TROUBLESHOOTING**

To determine any problem with your receiver, always check the most obvious possible causes first. If any problem still remains after your having checked the items below, consult your nearest dealer.

Problem	Probable Cause	Suggestion		
Amplifier				
When listening to the music in stereo. Left/right speakers reversed.	Speakers are connected wrong.	After checking, if needed, reconnect.		
Low hum or buzz sound	Power cords or lighting placed near this product.	Place this product as far as possible from lighting or power leads		
Sound is only heard from one channel	One of the input cords is disconnected. The BALANCE control is set to one side.	Connect the input leads and adjust the BALANCE control.		
Sound cuts off when listening to the music or no sound even though power is ON.	Speaker impedance is less than prescribed for this unit.	After turning off the power and then turning it on again, reduce the volume or change to the correct 8 ohm speakers.		
Low bass response.	Speaker polarity (+/-) is reversed.	Check all speakers for correct polarity.		
Tuner				
An unusual hissing noise is heard when listening to the broadcast in stereo, but not heard when listening monaurally.	A slight noise may be heard because the method used for modulation of FM stereo broadcasts in different than that used for monaural broadcasts.	Try reducing the treble sound by turning the treble controls.		
Noise is excessive in both stereo and monaural broadcasts.	Poor location and/or direction of the antenna. Transmitted station is too far away.	Set the <b>FM</b> mode to monaural by pressing the STEREO/MONO button. (Note that the broadcast will then be heard as monaural sound)		
Sound is distorted and/or the volume level becomes low.	Broadcast signals are poor or poor antenna placement	If an indoor antenna is being used, change to an outdoor antenna		
Excessive distortion in speaker output	Poor reception area	Try using an antenna with more elements.		
Remote Control Unit				
Remote control not working	The batteries are exhausted.	Replace with new batteries.		
	The remote control unit is too far from the receiver or out of the effective range.	Operate the Remote Control unit within the effective range		

# **SPECIFICATIONS**

Max Power Output: 300Wx2CH (RMS,THD=0.25%,8 ohm)(20Hz-20kHz)

A Speaker :  $4\sim 8 \text{ ohm}$  B Speaker:  $4\sim 8 \text{ ohm}$  A+B Speaker 8 ohm

Total Harmonic Distortion: <0.005 (Vin=200mV, 1W Power output)

Inter-modulation distortion: <0.008

requency Response: +/- 0.5dB, 20Hz-22kHz
Signal/Noise ratio: 110 dB(Digital In)
Signal/Noise ratio: 110 dB(Analog In)

Channel Separation: >70dB

Audio Analogue input

Senstivity/Impedance: 200mV/47 Kohm

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

(FM preset 20 station, AM preset 10 station)

THD: FM-0.7%.AM-1%  $\sim$  1.3% Signal/Noise ratio FM: 68dB,AM: 45dB

Antenna inputs: FM75 ohms unbalance. AM: Loop Antenna

General:

Mains voltage: 110V-60Hz

Dimensions: 434(W)×317(D)×134(H)mm / 17.09" x 12.48" x 5.28" inches

Option

USB multimedia player for audio

<sup>\*</sup>Design and specifications are subject to change without notice.

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