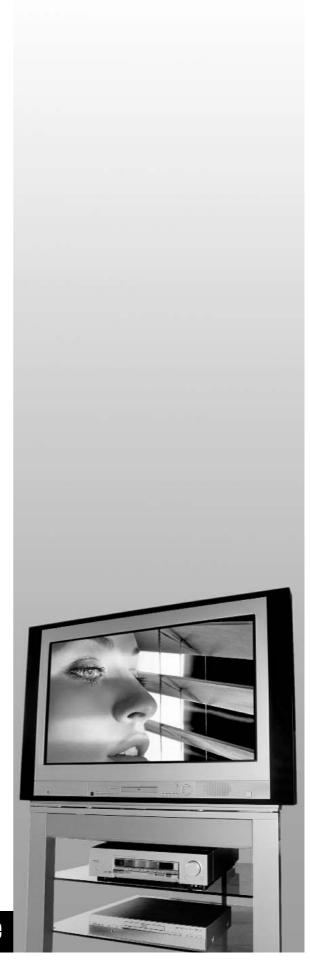
# THOMSON SCENIUM



DPL4000 Audio Video Receiver USEr'S Guide

# Safety Information

Rating Information: At bottom of the unit this unit comply with the existing requirements



In accordance with the rating plate of the unit, this unit complies with current standards concerning electrical safety and electromagnetic compatibility.



Please respect the environment Before throwing any batteries away, consult your distributor who may be able to take them back for specific recycling.



Have a Blast- Just Not in Your Eardrums Make sure you turn down the volume on the unit before you put on headphones. Increase the volume to the desired level only after headphone are in place.



THE LIGHTNING FLASH AND ARROW-HEAD WITHIN THE TRIANGLE IS A WARNING SIGN WARNING SIGN ALERTING YOU OF "DANGEROUS VOLTAGE" INSIDE THE PRODUCT.

#### **CAUTION** RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE THE EXCLAMATION RISK OF ELECTRIC SHOCK, POINT WITHIN THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS IN-SIDE. REFER SERVICING TO QUALIFIED SERVICE DEPENMENT PERSONNEL.



TRIANGLE IS A WARNING SIGN ALERTING YOU OF I M P O R TA N T INSTRUCTIONS ACCOMPANYING THE PRODUCT.

SEE MARKING ON BOTTOM / BACK OF PRODUCT

**WARNING:** TO PREVENT FIRE OR ELECTRICAL SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

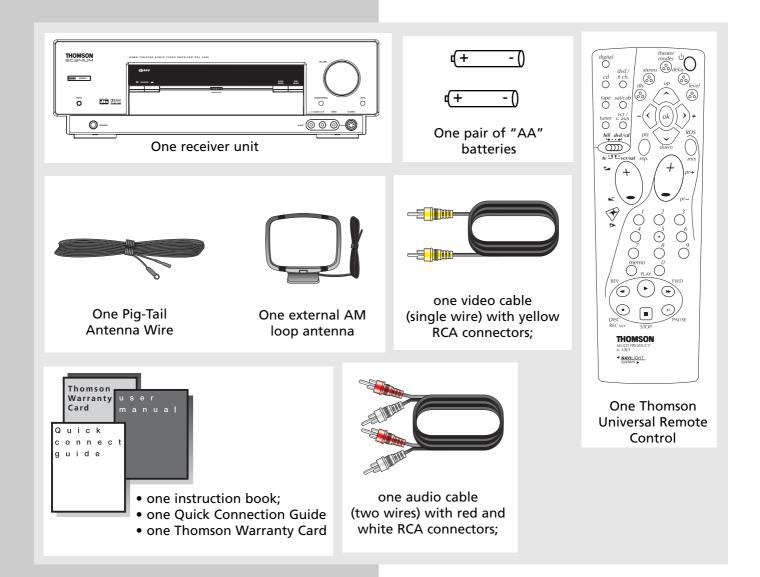
# EN

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# **Unpacking the Receiver**

You should receive the following items:

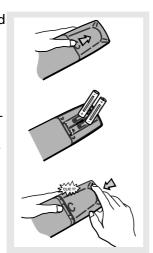


# **Inserting Batteries into Remote Control**

- 1. Press the part indicated and push in the direction of the arrow to open the battery compartment door.
- 2. Insert two AA(LR06) batteries according to the + and signs on the battery compartment.



To use the remote control, point it directly at your receiver.

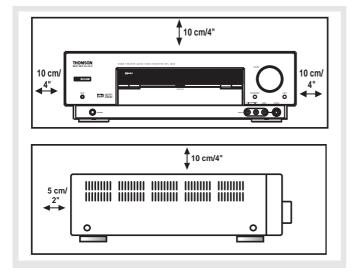


# Set up and Maintenance of the Receiver



# **IMPORTANT NOTE**

• Provide spaces for sufficient ventilation as indicated below. If the space is insufficient, the unit may overheat resulting in malfunction and shorter life time.



- Do not connect to the AC power cords until all connections are completed.
- Do not use your set immediately after transferring it from a cold place to a warm place: there is risk of condensation.
- Do not expose your set to water and excessively high temperatures.
- After having disconnected your set, clean the case with a soft cloth, or with a slightly damp leather chamois. Never use strong solvents.



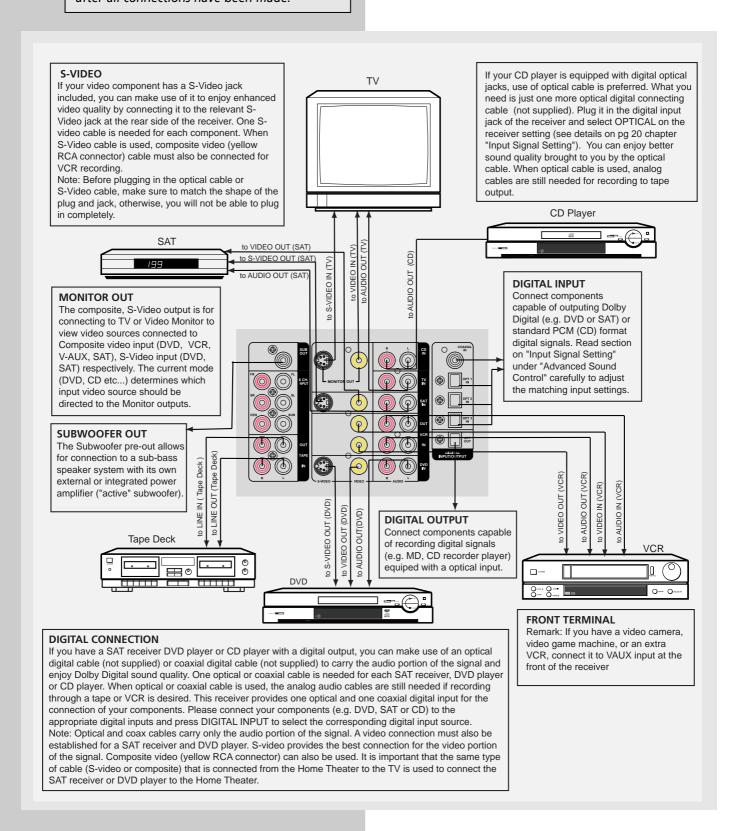
# Protect your Components from Overheating

- Do not block ventilation holes in any component. Arrange the components so that air can circulate freely.
- Do not stack components directly on top of each other.
- Allow adequate ventilation when placing your components in a stand.
- Place an amplifier near the top shelf of the stand so heated air rising from it will not affect other components. If you have a satellite receiver, you should place it on the top shelf.

# **Connecting to Audio-Visual Components**

# **NOTE**

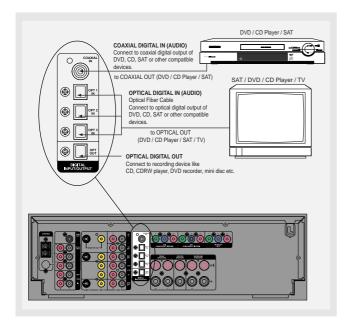
Before making any connections, check that the unit is switched off. With volume turned down to a low level, switch power on only after all connections have been made.



# **Digital Connections**

Read instructions carefully when connecting components to the receiver.

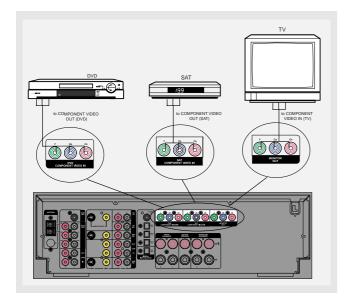
Digital In Jacks can accept Dolby Digital (AC-3), DTS or PCM signals when compatible components are connected.



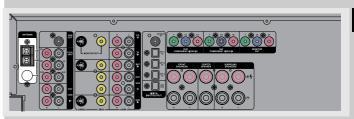
# **Component Connections**

## **Component Video In & Out**

The Component Video Input is linked to DVD and SAT modes. Selecting DVD or SAT mode will route a component video signal connected to the Component Video IN sockets to the Component Video Out sockets. Using dedicated high-quality video cable (not provided), connect the input from a device equipped with Component Video output such as a DVD player. Connect the Component Video output to a display device (TV, monitor) to the Monitor outputs.



# **Connecting the Antennas**

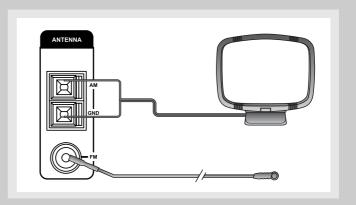


The AM and FM antennas connect to the AM and FM terminals on the system's back panel.

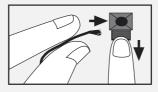
They must be hooked up in order to receive clear reception.

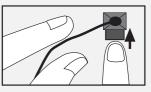
## **AM Loop Antenna and FM Indoor Antenna**

- 1. Uncoil the Antenna wire and locate the base end of the AM antenna and snap into place as shown below in AM Loop Antenna.
- 2. Press down on the Antenna tab to open the terminal









Push terminal tab down to insert wire.

Release tab to lock wire in the terminal.

NOTE: Make sure the insulation is completely removed from the ends of the Antenna wires at all connection points.

### AM Loop Antenna



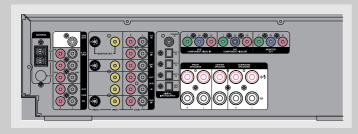
# HINT

- For FM reception, extend antenna to its full length and arrange the Antenna as a T Shape
- For AM reception, rotate the antenna horizontally to get better reception.

# **Connecting the Speakers**

## **Speakers**

There are 5 speakers jacks on the back of the unit (2 front, 1 center, 2 rear). In order to enjoy good surround effects, all five speakers need to be connected to the receiver.

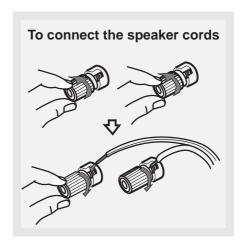


At least two front speakers (left and right) are required. For better sound quality, Center speaker, rear speakers and Subwoofer should also be connected. Adding center and rear speakers will enhance surround effects.

If you want to enjoy full range of sound effects, with small speakers, it is a must to use the subwoofer with the speakers to maintain adequate bass signal.

# **Connecting the Speakers**

To connect the speakers, rotate the speaker jack counter-clockwise. Insert the speaker wire into the terminal. Secure the wire in place by turning the speaker jack clockwise.



## **Speaker Polarity**

When connecting the speakers, make sure the polarities ("+" speaker wire to "+" on the receiver) of speaker wires and terminals are matched. If the wires are reversed, the sound will be distorted and will lack bass ("out of phase" effect).

# **Connecting the Subwoofer**

Adding a Subwoofer will increase bass response. Connect the subwoofer wire to the SUB OUT jack on the back of the unit.

This receiver offers a high flexibility for user to use a large variety of speakers and subwoofers. For more information please refer to section "Fine Setting of the Speakers" in "Advanced Sound Control" on page 24

# Positioning your speaker

# 1) Left, Right (Front Speakers)

They carry primarily music and sound effects

# (2) Center

In surround mode, the center speaker carries much of the dialogue as well as music and effects. It should be set between the left and right speakers.

# **3** Surround (Rear Speakers)

Their overall sound balance should be as close as possible to the front speakers. Proper placement is vital to establish an evenly distributed sound field.

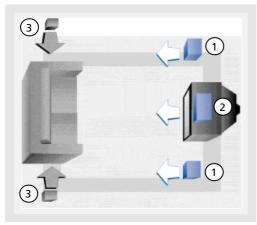
## Subwoofer

A subwoofer is designed to reproduce powerful low bass effects (explosions, the rumble of spaceships, etc.) which dramatically heightens involvement with the action on the screen. It is therefore recommended to connect subwoofers when small speakers are used.

# **Magnetic shielding**

Speakers placed less than two feet from the TV set must be magnetically shielded in order to prevent picture distortion.

It is not recommended to place the rear speakers near the TV set.



**Courtesy Dolby Laboratories** 

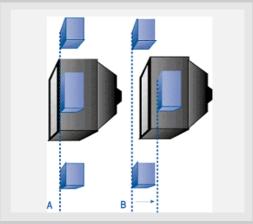
# **Front Speaker Placement**

Even if you can't duplicate this ideal home theater setup exactly, the suggestions for speaker placement that follow will help you get good results.

# Getting Started

**Alignment** 

Align the center speaker evenly with (A), or slightly behind (B), the left and right speakers, but not ahead of them.

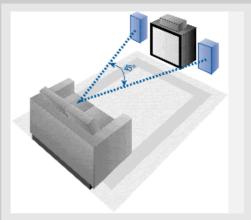


Courtesy Dolby Laboratories

# **Advanced Setting**

## **Angle**

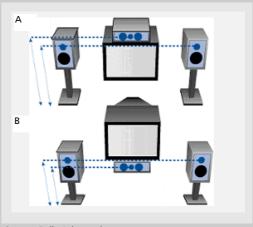
Placing the left and right speakers to form a 45degree angle with your favorite viewing position will duplicate the soundtrack mixer's perspective.



Courtesy Dolby Laboratories

# Height

The three speakers should be as close as possible to the same height. This often requires placing the center speaker directly atop (A) or beneath (B) the TV set.

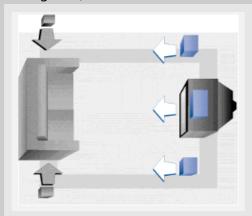


Courtesy Dolby Laboratories

# Preferred surround placement

### Location

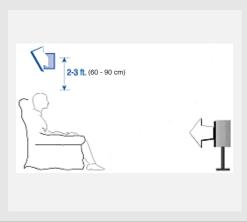
If possible, place surround speakers to either side of the listening area, not behind it.



Courtesy Dolby Laboratories

# Height

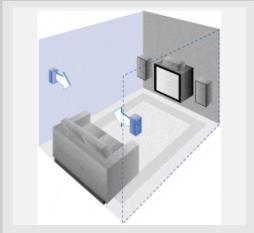
If space permits, install surrounds 2-3 feet (60 - 90 cm) above viewers. This helps to minimize localization effects.



**Courtesy Dolby Laboratories** 

# **Aiming**

Aiming surrounds straight across the room, not down at viewers, helps create a more open, spacious surround sound field.

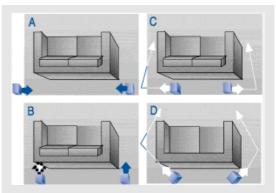


Courtesy Dolby Laboratories

# **Advanced Setting Alternative Surround Placement**

### **Rear wall**

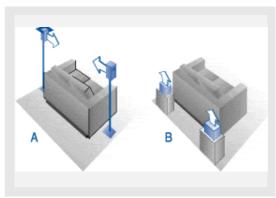
If rear wall mounting is the only choice, aim the speakers at each other (A), towards the front (B) or even towards the sidewalls (C, D). Experiment with placement until surround sounds seem to envelop you, rather than coming from behind you.



**Courtesy Dolby Laboratories** 

# No adjacent walls

Surrounds can go on stands facing each other to approximate the preferred sidewall mounting (A), or to the sides or rear of the viewing area aimed upwards. In the latter case, they can go right on the floor, or preferably, a few feet off the floor such as on end tables (B).

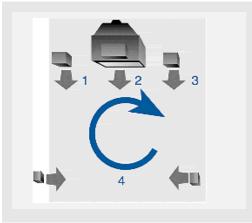


Courtesy Dolby Laboratories

## Test Tone / Channel balance

### **Channel balance**

Your receiver is equipped with a test signal generator for balancing the channels. As the signal "travels" from channel to channel, adjust the level controls until each channel plays at the same loudness level.



**Courtesy Dolby Laboratories** 

# Level adjustment & surround channel level expectation

Even though you adjust the surround channel to be as loud as the others on the test signal, you'll find that on actual program material the surround channel is usually much lower than the front. Don't be tempted to readjust the surround level; program producers use surround mostly for subtle atmospheric and ambience, and only rarely for special effects. A good surround mix doesn't call attention to itself; if it did, it would soon become distracting.

# NOTE

The system is equipped with Dolby Digital, and manufactured under License from Dolby Laboratories.

Dolby Digital Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic II" and the double-D symbol are trademarks of Dolby Laboratories. Copyright 1992-1997 Dolby Laboratories, Inc. All Rights Reserved.



Manufactured under License from Digital Theater Systems, Inc. US Pat. No. 5,451,942 and other world wide patents issued and pending. "DTS

Digital Surround", are trademarks of Digital Theater Systems, Inc. copyright 1996 Digital Theater Systems, Inc. All Rights Reserved.

# **Using Headphones**

To listen privately through your audio system, use the PHONES jack on the receiver. However, make sure you turn down the volume before you put on the headphones. Increase the volume to the desired level after headphones are in place.



Once headphones are connected, "HEADPHONE DOWN MIX 2 CHANNEL" will scroll on display. This feature automatically converts multi-channel speaker outputs to 2 channel stereo for your listening pleasure.

# **Hearing Comfort & Well-Being**

- Do not play your headset at a high volume. Hearing experts advise against continuous extended play.
- If you experience a ringing in your ears, reduce volume or discontinue use.

# **Factory Setting**

The unit is preset to the following settings when you first power the receiver up right out of the box:

Function = Tuner Volume setting = 45 Bass & treble = 0 dB

Speaker settings: Center, rear, front = small

Subwoofer = on

**EQ: FLAT** 

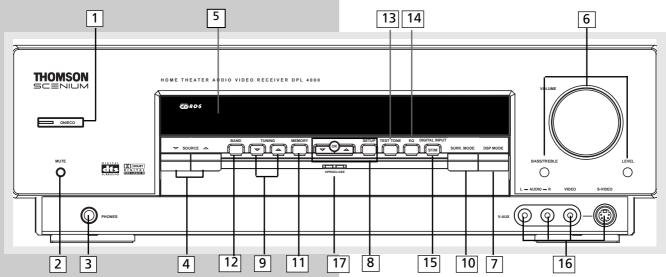
# NOTE

### Reset to Factory Settings:

All preset radio stations and surround sound setting will be lost after factory setting is restored. You may restore factory setting with the following procedures:

- 1. Enter Standby mode
- 2. While holding down the **SURR. MODE** key, press **SOURCE UP**.
- 3. All preset stations will reset to FM87.5MHz and all receiver settings restore to default settings as described above.

# **Operating Your Receiver**



# **Receiver Controls**

#### 1. ON/ECO

Press to enter Standby mode or to power off the unit.

#### 2 MIITE

To mute speakers and headphone out.

#### 3. PHONES

Plug your headphones (not supplied) into it for your private enjoyment. Speakers will be off when phones are inserted.

#### 4. Source Buttons

- Pressing SOURCE Up or Down in Standby mode exits the Standby mode and start up the unit for normal operations.
- These keys change to the previous/next source (DVD, SAT,6 CH, etc...) as indicated on the display.

#### 5. Display

To display current status of the receiver.

#### 6. Sound Control

Let you adjust the sound – volume, treble, bass & level.

- Rotate the VOLUME knob to control the master audio volume output of the unit. Volume is adjusted within the range of 0-80. This button can be used in junction with some setting modes to vary setting values.
- modes to vary setting values.

   To change the volume of individual speaker, press LEVEL button repeatedly to select the speaker, then turn the knob to adjust the level.
- To adjust TREBLE or BASS, press relevant button and turn the knob.
- Bass/Treble can only be activated under stereo mode.
   Bass/Treble effects are only active when there is no custom EQ effect. When pressing BASS/TREBLE, the unit will automatically go to EQ OFF mode.

#### 7. DSP MODE (Digital Sound Processor)

Press this button to select the DSP mode (STADIUM/THEATRE/CONCERT/CLUB/CHURCH/ARENA/DSP OFF) you want. DSP modes will not produce effects only with PCM/analog stereo audio source.

### 8. SETUP FUNCTION

- These buttons are used to adjust the speaker size, speaker distance, subwoofer phase, night mode, sleep, display dimmer and DPLII Music. Press SETUP to enter Setup menu.
- Pressing OK button in these modes confirms settings and exits the menu. Up and Down keys are used to change to the other available options within a menu.
- In order to enter the next level of the selected option, press OK. Settings are affirmed by OK and cancelled by pressing the SETUP button. Up and DOWN keys are used to change to another available option within a menu.
- After pressing OK to enter SLEEP setting in the setup menu, use the arrow keys to select the receiver to turn off from 5 to 120 minutes. Press OK to confirm setting.

• Press OK when DIMMER is displayed when scrolling the Setup menu to set display brightness. Use the arrow keys to select among 3 dimmer levels. Press ok to confirm your setting.

#### 9. TUNING

Press for about 2 seconds to search previous / next station in descending / ascending frequency direction.

In Preset mode, press to review all preset stations.

In Tuner mode, press to increase/decrease tuner frequencies.

#### 10. SURR. MODE

This button selects DOLBY SURROUND modes (i.e. PLII MOVIE, PLII MUSIC, Pro Logic) for Dolby Digital 2CH / PCM stereo / Analog inputs. With 5.1 Dolby Digital or DTS inputs, this button toggles output between 2 -channel down-mix mode and 5.1 mode respectively. This button does not response with other audio input configurations other than the ones mentioned above. Press repeatedly to select the surround mode you want. (refer to "Advanced Sound Control" on page 21)

#### 11. MEMORY

Press to toggle between manual tuning mode and preset station mode, Press and hold to manually store tuner station in preset mode. (Refer to pg 16 for details)

#### **12. BAND**

- Pressing the BAND button directly changes the active AVR mode to tuner mode.
- Press to choose between FM/MW/LW in TUNER mode.
- Holding this button continuously starts auto preset station programming that tunes from FM to the lowest frequency radio band and stores any tuned frequencies to the preset station location until either all radio bands are scanned or all preset station locations are stored.

### 13. TEST TONE

When pressing it briefly, a short noise (test tone) will be generated in the speakers one by one so that you can adjust the volume of individual speaker. (See page 9 for details)

#### 14. EQ

- With down-mixed 2 CH / PCM stereo / Analog inputs and 2 channels output only, this button allows the selection of different equalizer to be applied to the audio output.
- Press repeatedly to select the desirable EQ mode (music style)
   FLAT, ROCK, POP, JAZZ, CLASSIC, VOCAL. Your choice will be saved automatically.(Only available in Stereo mode)

#### 15. DIGITAL INPUT/ ST / M

Press repeatedly to select the input device (analog / optical / optical 2 / coaxial). In FM mode, press to toggle between stereo and mono.

### 16. V-AUX Input and S-VIDEO

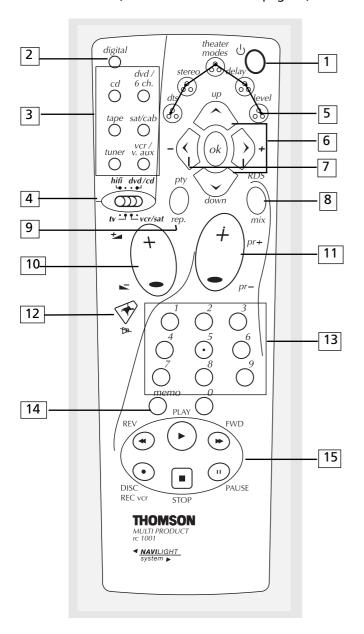
For convenient use of your digital camera, family game machines, second VCR, etc.

### 17. OPEN/CLOSE

Shows and hides the control panel when the unit is powered

# **Your Remote Control**

Please be sure you have inserted the batteries into the remote control (see relevant section on page 3.)





### 1. ON/OFF

To turn on or off the receiver and other auxiliary components

### 2. Digital

Select the way your external audio/video devices are connected to the receiver (Analog, Optical or Coaxial).

In Tuner mode, press to toggle between stereo and mono sound.

### 3. Source Buttons

To turn on and select various audio/ video sources and enable related functions.

Operating Your Receiver

### 4. Source Selector

To select which unit/mode you want to control with your remote.

### 5. Speaker Settings

dts - Selects dts decoding.

*Stereo* - Disables all surround mode and enable stereo mode.

theater mode - accesses all DSP modes.

delay - In HiFi mode, press to select speaker delay settings (between speakers and your favorite listening position.)

level - Adjusts volume of individual speakers.

#### 6. Up / Down

In Tuner mode, press to access programmed stations.

#### 7. - / +

Press to adjust parameters of different kinds of sound source.

#### 8. RDS/Mix

In Tuner mode, press to show Radio Data System information if available. (Frequency station, Station name, program type, clock and radio text)

#### 9. Pty

In Tuner mode, press to activate search by program type.

### 10. Volume - / +

Adjusts the volume.

### 11. pr+ / pr -

In Tuner mode, press to select programmed stations.

### 12. Mute

Mutes audio output

### 13. Number Buttons

In Tuner mode, press to select a preset station.

### 14. memo

In Tuner mode, press to enter program function to store desired frequency in memory.

MEMORY will flash in red on the display. Input your desired channel number while the work is still flashing and the frequency will be stored. (For details, refer to "Storing Radio Stations" under "Manual Preset" on pg 16)

### 15. Operations Buttons

In Tuner mode, press REV or FWD keys to tune down or up radio frequency.

The remote control currently operates most Thomson, RCA and GE products, but it can be programmed to operate devices from other manufacturers

# **Operating Your Receiver**

# **Display**



# DVD / VCR / SAT / TUNER / TAPE / V-AUX / C D / TV

• The arrow points to the respective icon to show the current source.

# DI Digital

• Audio output is in Dolby Digital mode.

### Pro Logic

• Audio output is in Dolby Pro Logic mode.

## Pro Logic I

• Audio output is in Dolby Pro Logic II mode.

## dts

• Audio output is in dts mode

## **MEMORY**

• Unit in Memory or Preset mode.

## FM / MW / LW

• The respective tuner icon will lite showing current radio frequency.

### **OPT 123**

• Optical 1, 2 or 3 digital Input selected

## COAX

Coaxial digital input selected.

### **STEREO**

• Tuner stereo signal detected.

## **TUNED**

• Tuner station detected.

### **SLEEP**

• Unit in Sleep mode.

### EQ

• EQ effect activated.

# **RDS**

• Radio data system is activated.

### KHz / MHz

• Tuner frequency unit.



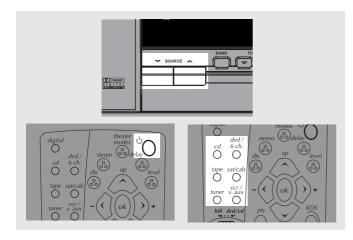
• Speaker Icons.

# Switching on/off

• To enter Standby Mode, press the **ON/ECO** button once.



• To power on the unit from Standby Mode, press **SOURCE** △ or ▽ button on the main unit or one of the source buttons on the remote control.



• To switch off the unit completely, press the **ON/ECO** button or unplug the power cord from the socket.

## **Show and Hide Control Panel**

When the unit is powered on, touch the **OPEN/CIOSE** button on the front panel of the unit to show the control panel. Press again to hide the control panel.



# NOTE

The unit must be powered on before you can open and close the control panel. Refer to "Switching onloff" above for instructions on powering on the unit.

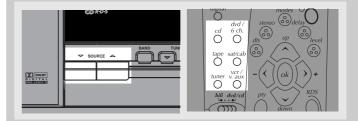
# Operating Your Receiver

# Selection of Audio/Video source

When one of the audio/video source is selected, the audio and video input corresponding to the name will be activated.

The receiver acts as a switching device between all the sources that are plugged into it.

Press **SOURCE** or on the main unit or one of the source buttons on the remote control to access the desired source.



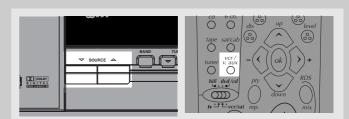
# **NOTE**

Remote control selector must be on hifi.



## **Example 1:**

If you connect a VCR player to the VCR input (audio + video) on the receiver and press the **SOURCE** △ or ✓ button on the main unit until VCR1/ANL shows on the display. You can also press **vcr/V.AUX** on the remote to select the source directly. You will be able to have the sound and image transmitted by the VCR.



# NOTE

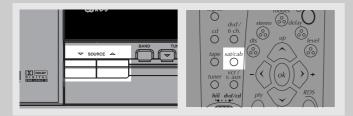
Remote control selector must be on vcr/sat to operate VCR player.



# **Operating your Receiver**

### **Example 2:**

Based on example 1, the VCR input is selected. If SAT is selected, image and sound from the SAT source will replace the VCR.



# NOTE

Remote control selector must be on vcr/sat to operate SAT features.



You can connect up to 8 audio/video sources to this amplifier:

Source	Corresponding connector (receiver back panel)
- DVD - SAT - VCR - V-AUX - CD - TV - TAPE - TUNER - 6 CH	DVD IN (audio / video) SAT IN (audio / video) VCR IN/OUT (audio / video) V-AUX IN (audio / video) CD IN (audio only) TV IN (audio only) TAPE IN/OUT (audio only) built-in 6 CH INPUT

When a source is selected, the arrow will point to the source name on the display.

Example: Press **DVD** to select DVD as the source to the amplifier.

# NOTE

- 1. Your receiver has a built in tuner. Just connect the appropriate antenna on the back of the receiver and you will be able to listen to radio stations. (See details in Tuner section)
- 2. Other sources can be connected to the above standard source. Example: you can connect a LD into the DVD inputs.
- 3. Refer to the "Connecting To Audio-Visual Components" section for details on connection.

# Using the receiver to play a source

After having properly connected a source (DVD, CD, VCR) to the receiver, you can partly control them through the receiver.

## Playing a DVD with the receiver

1. Connect a DVD player to the receiver (see connecting your receiver for details)

# NOTE

To play Dolby Digital or DTS sound, the source must be connected to the receiver via the optical or coaxial terminal.

- 2. Press **ON/ECO** to enter Standby mode then press **SOURCE** buttons on the front panel or **ON/OFF** button on the remote control to switch on the receiver
- 3. Select the DVD source.
- 4. Switch ON the DVD player and start playback
- 5. Switch ON your TV
- 6. Select the appropriate A/V channel on the TV (refer to your TV manual for details) until the image from the DVD player is displayed
- 7. Set the sound Mode if needed (see "Advanced sound control" for details)

### Example 1:

To play 5.1 Dolby Digital surround sound Press SURR. MODE button until "Dolby Digital" appears on the Display and all of the speaker" icons light up.

### **Example 2:**

*DVD:* You may also need to select the Dolby Digital 5.1 on the DVD disc menu to have the digital surround enabled providing that the disc is encoded with Dolby Digital 5.1 (please refer to the DVD player and DVD disc instruction)

### **Example 3:**

LD: You may need to select a different Audio Channel on your LD (refer to your LD player manual)

8. Adjust volume knob accordingly

# **Operating the Radio**

The receiver has a built-in tuner that allows for FM/MW/LW radio function.

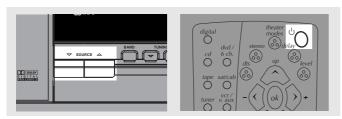
# **NOTE**

The remote control selector must be set

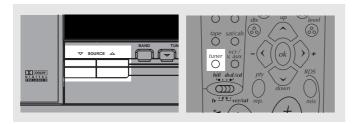


## **Manual tuning**

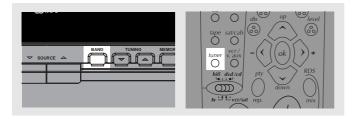
- 1. Connect the FM and AM antenna accordingly (see "Connecting the Antenna" on page 5 section for details)
- 2. Press **SOURCE** △ or ▽ keys on the main unit to switch on the receiver from Standby Mode.



3. Press **SOURCE** △ or ▼ keys on the main unit or **tuner** on the remote control to enter TUNER mode.



4- To select band, press the **BAND** button on the main unit or **tuner** on the remote control to toggle between FM/MW/LW mode.



# **Operating your Receiver**

5- Tune the stations by pressing **TUNING UP** or **DOWN** on the main unit or **REV** or **FWD** on the remote control repeatedly until the desired station is found.

Alternatively, you can press and hold the respective buttons for about one second to activate the automatic SEARCH function. In this mode the receiver will automatically tune frequencies until it finds a station



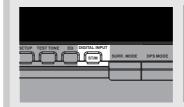
# **NOTE**

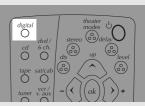
- 1. If there is interference, modify the location of the antenna until the optimal sound is heard. TV and other electronic devices could be the cause of interferences so try to position the antenna away from them.
- 2. Weak signal can affect the "auto Search function". Adjust the antenna for better reception for more efficient search.

Select sound effect if needed by pressing Preset EQ or DSP sound (see "Advance sound section" for details).

### **Selecting Mono or Stereo Sound**

Press **ST/M** on the main unit or the **DIGITAL** button on the remote control to toggle between mono and stereo sound in FM tuner mode (when available).





# Operating your Receiver

## **Storing radio stations:**

The receiver can store up to 40 radio stations in memory. You can enter every single radio station yourself or the receiver can store all available radio station automatically in an ascending order.

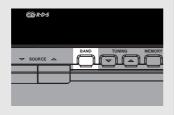
## Automatic preset storing

1. Select the band by pressing **BAND** on the main unit or **tuner** on the remote control.





2- Press and hold **BAND** on the main unit for 3 seconds. "MEMORY" will be displayed in red and will blink during the automatic storing process.



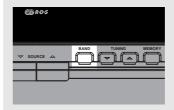
Radio frequencies will be scanned and radio station stored automatically. When all available radio stations are stored or if all 40 memory locations are full, the auto preset will stop.

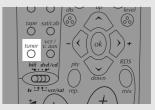
# **NOTE**

Weak signal can affect the "Automatic Preset Storing function" efficiency. Adjust the antenna for the best reception for more efficient search.

## Manual preset

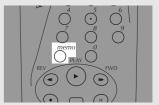
1. Select FM, MW or LW band by pressing **BAND** on the main unit or **tuner** on the remote control repeatedly.





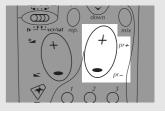
- 2. Tune to the radio station to be stored. (see "Manual tuning" on page 16 above for details)
- 3. Press and hold the **MEMORY** button on the front panel or **MEMO** on the remote control. "MEMORY" and a preset number will flash on the display.





4. Press **TUNING UP/DOWN** on the main unit or **pr+** / **pr** - on the remote control while MEMORY is still flashing to select the desired preset memory location.

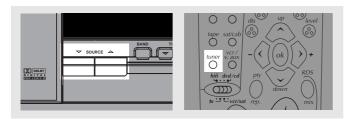




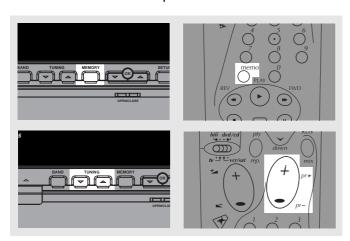
- 5. Press the **MEMORY** button on the front panel or the **MEMO** button on the remote control to store frequency in selected preset location.
- 6. Repeat steps 1-5 to store other frequencies.

# Retrieving preset stations

1. Press **SOURCE** △ or ▽ on the main unit or **tuner** on the remote control to select tuner mode.



2. Press **MEMORY** button on the main unit or **MEMO** on the remote control to enter preset setting mode (**MEMORY** icon shows on display), Press **TUN-ING UP/DOWN** on the unit or **pr+ / pr -** on the remote control to select preset station.



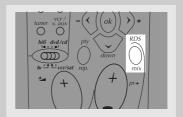
# RDS (Radio Data System) for FM Only

The RDS icon shows on display when RDS data are received. The following information may be available on certain stations:

Operating your Receiver

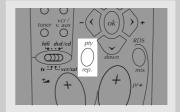
- Frequency station,
- Station name,
- Program type,
- Clock,
- Radio text

Press RDS on the remote control repeatedly to select the type of information you want to display.

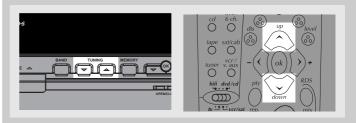


# **Search Station by Program Type**

1. Press PTY on the remote control repeatedly to display the desired program type.



2. Press TUNING UP/DOWN on the main unit or the UP or DOWN arrows on the remote control to begin search.



# NOTE

**NO PTY** will be displayed if selected kind of program is not broadcasted

3. The search will stop when a station broadcasting the program type you have selected is found.

# **Operating your Receiver**

You can search for stations using one of the following program types:

NEWS = news

AFFAIRS = current affairs

INFO = information

SPORT = Sport

EDUCAT = education

DRAMA = series and plays

CULTURE = religion or national culture

SCIENCE = science and technology

VARIED = miscellaneous

POP M = pop music

ROCK M = rock music

MOR M = middle-of-the-road music, easy listening music

LIGHT M = classical music

CLASSICS = serious classical

OTHER M = not classed

WEATHER = weather, medical

FINANCE = stock market reports

CHILDREN = children's programs

SOCIAL AFFAIR = sociology, history, geography, psychology, society

RELIGION = any aspect of beliefs, faith & God or Gods

PHONE IN = public forum by phone

TRAVEL = feature and programs concerning travelling

HOBBY = recreational activities & leisure

JAZZ = jazz music

COUNTRY = country music

NATIONAL = national music

OLDIES = oldies music

FOLK = folk music

**DOCUMENTARY** = documentaries

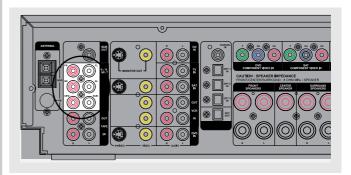
# NOTE

The remote control selector must be set on hifi.

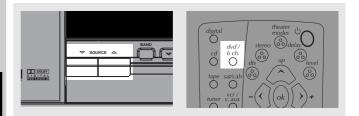


## 6 Channel external input

An external decoder (Dts, Dolby Digital, etc...) or a device with built-in multi-channel decoder and 6 channel output connector (DVD player, TV...) can be connected to the 6CH input. It is therefore possible to play any future 6 Channels coding (For example, SACD, DVD Audio) thanks to this connection. The external decoder device will send the separated audio information to the receiver that will then amplify the signal and send to appropriate speakers.



To activate 6 Channel external input, press the **SOURCE** △ or ✓ on the receiver until 6 CH is selected or press **dvd/6 ch.** twice on the remote control.



# **NOTE**

During 6-Channel direct input mode, TAPE OUT and REC OUT of VCR mode will not be available. Treble, bass, EQ, DSP, Dolby Digital and dts sound effects can not be selected.

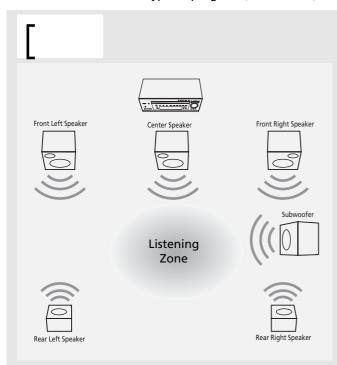
# **Sound Enhancement Systems**

This receiver is equipped with several built-in sound enhancement systems.

## **Dolby Pro Logic II**

The Pro Logic II mode uses the built-in circuit to steer the Left, Center, Right and Surround left and right channel audio signals and uses all five speakers to play both stereo and Dolby Pro Logic program source, such as TV and VCR. Dolby Pro Logic II includes Dolby Pro Logic II Movie, Dolby Pro Logic II Music and Dolby Pro Logic.

Use this mode to suit the type of program (such as VCR).



# Dolby Digital

The Dolby Digital mode lets you enjoy full digital surround from software processed in the Dolby Digital format. Dolby Digital provides better sound quality and more powerful presence than conventional Dolby Surround.

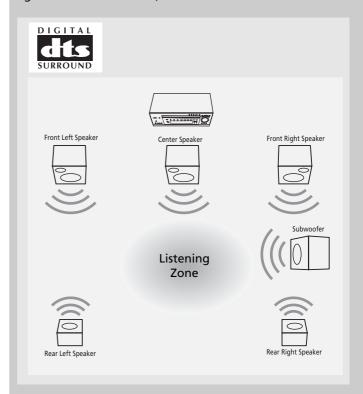
Advanced Sound Control

This unit is equipped with Dolby Digital 5.1-channel so that you can enjoy enhanced full digital surround sound. Being different from Dolby Pro Logic in which only four channels ( Front Left, Front Right, Centre and Rear ) are used, the new system provides stereo separation of the rear speakers (Rear-Right, Rear-Left ). These 5 channels, together with the subwoofer channel for bass sounds (counted as 0.1 channel ), constitute as 5.1-Channel ( or 6 Channels ) Input for Dolby Digital that brings you the most sophisticated sound enjoyment.

## **Digital Theater Systems (DTS)**

DTS is a digital surround system which delivers six channels of master-quality, 20-bit audio. It offers five full-range channels plus a special low frequency effect (LFE) channel for subwoofer, resulting commonly know 5.1 channels. It can be applied with existing 5.1 speaker configurations.

DTS is available in DVD, SAT/CAB, TV and CD mode. (When digital cable is connected)



# **Advanced Sound Control**

### **Stereo**

The Stereo mode uses the two main channel outputs from the front speakers. Use this mode if you have connected the front speakers only.

### **DSP (Digital Sound Processor)**

These digital sound effects resemble sounds in a real environment such as (DSP OFF / STADIUM / CONCERT / THEATRE / CHURCH / ARENA / CLUB). DSP automatically converts analog audio signals to digital ones which enables you to adjust the sound without degrading the sound quality. Different modes will give you different feel of size and type of listening environment. Press DSP MODE on the main unit to select among DSP options.(Not available in Dolby Digital/DTS).

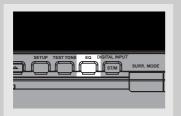
### **Night Mode**

By using Dynamic Range Compression technology (Night Mode), you can enjoy enhanced Dolby Digital sound quality at night without interrupting your roommates or neighbors. Night Mode will compress the difference in volume between normal voices and sound like explosions, while still enjoying a Dolby Digital enable component (DVD, SAT). You can access the setup menu by pressing **SETUP**. Then press the Up or Down setup arrows until NIGHT is displayed. Press **OK** to enter Night setup. Use the Up or Down setup arrows to select among compression options (NORMAL, SOFT and SOFTER). Press **OK** to save setting.



# **EQ Mode**

Sound can be adjusted to resemble various music types. Bass and treble levels vary between the different music styles. Press EQ on the main unit to select the desirable music style (FLAT, ROCK, POP, JAZZ, CLASSIC and VOCAL).



## **Dolby ProLogic II**

To provide a an exciting experience while listening to music, DPL II provides several advanced setting to adjust the DPLII Music mode. By modifying the settings, you will be able to adjust the music output effect according to different Home Theater set up, recordings and to suit better your personal tastes. The 3 options are Panorama, Dimension and Center Width.

## Dimension control:

Adjust the balance between the rear and front speakers. Depending on the recordings, the sound may be focused too much on the front or on the rear speakers. Adjusting this parameter will allow a more balance soundfield.

### Center width control:

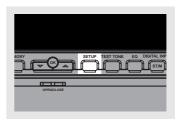
Control the "weight" or sense of image width of the sound coming from the center speaker. By adjusting the variable setting, the sound can only come from the center speaker or could be progressively blended into the 2 front speakers.

### Panorama mode:

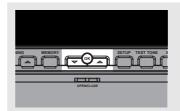
Increase the front stereo imaging by using the rear speakers to increase the surround and "wraparound" effect. Select "on" to enable Panorama mode.

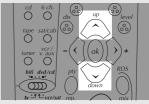
To access this setup, press the following sequence:

1. Press **SETUP** on the main unit to access the Setup menu.



- 2. Press arrow keys to scroll the Setup menu until DPLII MUSIC appears on the display. Press **OK** to enter DPLII setup.
- 3. Use the Up or Down arrow keys to select the desire option to set (panorama, dimension, center width). Then press **OK** to save your selection.





# **Fine Setting of the Components**

The receiver has pre-selected surround mode once you turn on the unit by pressing the Source Buttons (like DVD, SAT, CD) directly. The default surround modes for different components are listed in the table below.

If you decide to change the surround mode, you can press the **SURR MODE** button on the main unit or **theater modes** on the remote control repeatedly to toggle among the different surround mode choices and select the one you want.

PLII MOVIE ➤ PLII MUSIC ➤ PRO LOGIC ➤ Stereo

Source/ Input	If Digital Input (optical or coaxial) is selected	If Analog Input is selected
DVD SAT VCR V-AUX TV CD TAPE TUNER	Dolby Digital/DTS Dolby Digital/DTS N/A N/A Dolby Digital/DTS STEREO (PCM) N/A N/A	PRO LOGIC PRO LOGIC PRO LOGIC PRO LOGIC STEREO STEREO STEREO STEREO

The receiver will keep the last selection in memory.

# **NOTE**

If linear PCM source (CD), format will be Dolby Prologic even with Digital Input.

## **Input Signal Setting**

The receiver defaults to the most convenient settings for your easiest use (see table).

If your connection is different from the default setting,

- 1. Select the source
- 2. Press **DIGITAL INPUT** button on the main unit or **digital** button on the remote control to toggle among optical/ coaxial/ analog to match your connection. Your selection will be stored automatically.

The selected source and input source will be displayed on the display as long as they are active, except for some temporary change of display (e.g. adjusting volume).

# Digital Input

Select this setting to play digital signals from a DVD, CD, SAT or TV.

**Advanced Sound Control** 

SOURCE	DEFAULT INPUT (as seen on display)
SAT	Analog (SAT/ ANL)
DVD	Analog (DVD/ ANL)
CD	Analog (CD/ ANL)
VCR	Analog (VCR/ ANL)
V-AUX	Analog (V AUX/ ANL)
FM/AM	Built-in Tuner
TAPE	Analog (TAPE/ ANL)
TV	Analog (TV / ANL)

# NOTE

Digital input is only available for DVD, SAT, CD, V Aux and TV

## **Analog Input**

Select this setting to play analog signals from a cassette deck or VCR.

SOURCE	AVAILABLE INPUT
SAT	Analog / Optical / Optical2 / Optical3 / Coaxial
DVD	Analog / Optical / Optical2 / Optical3 / Coaxial
CD	Analog / Optical / Optical2 / Optical3 / Coaxial
VCR	Analog / - / -
V-AUX	Analog / Optical / Optical2 / Optical3 / Coaxial
TAPE	Analog / - / -
lτv	Analog / Optical / Optical2 / Optical3 / Coaxial

# **Advanced Sound Control**

## **Speaker Configurations**

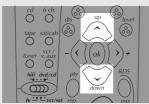
You can also change the setup of the speakers.

1. Access the Setup menu by pressing the **SETUP** button.



2. Use the UP or Down setup arrows to select the speaker setup. SPK SETUP shows on the display. Press **OK** to enter.





- 3. Use the Up or Down setup arrows to select the speaker you want to setup. Press **OK** when the desired speaker is displayed.
- 4. Press the Up or Down setup arrows to select among speaker options and OK to save your selection.
- 5. Repeat steps 3 and 4 to setup another speaker.

Available speaker setup options:

Front Speaker selection Large/ Small Center Speaker selection Large/ Small/ None Surround Speaker selection Large/ Small/ None Subwoofer selection Yes/ No Subwoofer Phase +/-Front Speaker distance 0.9-12.0m Centre Speaker distance 0-12.0m Rear Speaker distance 0-12.0m

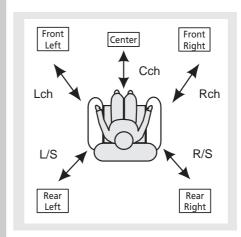
# **NOTE**

- The sub-woofer selection will always be YES when the main speakers are set to small (SML).
- For the subwoofer phase setting, it will be affected by how you locate the subwoofer. Try both + and settings and select the one that has better bass effect.
- When left and right front speakers are set to SMALL, center and surround speakers can not be set to LARGE.

Use a subwoofer to enjoy optimum sound.

- Subwoofer Phase (SUBW PHASE): Try both settings and select the sound preferred.
- Speaker distance (DELAY SETUP): For optimum surround experience measure the distance between the speaker and your favorite listening position.

The receiver has defaulted the following distances:



Front speakers (L/R) 4.5m

Center speaker (Cch) 4.5m

Rear speaker (SUR) 3m

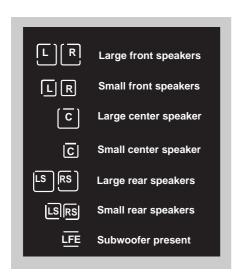
### **Available Setup Selections:**

Press **SETUP** button once to access setup menu. Use the Up or Down setup arrows to select among: SLEEP, DIMMER, NIGHT, SPK SETUP, SUBW PHASE, PLII MUSIC SETUP, DELAY SETUP and EXIT MENU. Press **OK** to enter selected category.



# Speaker Icons

The receiver shows you the speakers' types and settings on the display with the following icons:



## **Displaying Program Formats**

When a digital source is playing, the receiver will automatically switch to the proper surround mode and indicates on the speaker icons on the right-hand side of the display. (See diagram)



# Advanced Sound Control

It is important to note, however, that not all Dolby Digital sources are encoded with the full complement of five channels plus LFE\*. Speaker icons show how many and which speaker you have enabled (See "Fine Setting of the Speakers") and the letters inside the speaker icons show which channel is present in the source information. For example, the diagram shown means you have all the five speakers and subwoofer enabled and the digital sources you played have five channels plus LFE complemented.

\* LFE stands for Low Frequency Effect. The indication "LFE" appears if the digital source contains LFE information. In this case, the bass signal will be delivered to the subwoofer, offering more dynamic deep bass sound effects. If the letter is flashing, the signal is either too weak or just gone.

# **Advance Sound Control**

# Fine Setting of the Speakers

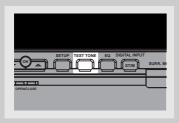
This receiver supports a wide range of speakers and subwoofers. For optimal surround sound enjoyment, you need to register the speaker selection settings of your audio system. If you buy this receiver with accompanied speaker package, then this step has been done for you.

Also, to make the surround sound more effective and suit the acoustic conditions in your listening room, you need to delay the signal from some of the speakers. Such channel delay compensates for center or surround speakers that are closer to listening position than the front speakers. You can make use of the **SETUP** button to adjust the speakers' relative loudness.

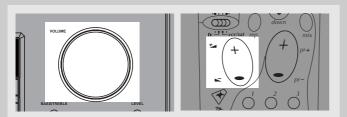
### The TEST TONE button

You can adjust the relative loudness of the individual speakers by the **TEST TONE** button.

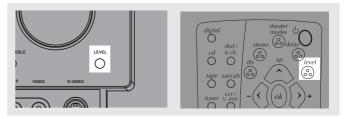
1. In Surround (Dolby Digital/Pro Logic/DTS) modes, press **TEST TONE** briefly. A short noise will be heard in the speakers one by one. The speaker having the noise at that moment will be shown in the display.



2. To adjust the volume level of the test tone, turn up/down the **VOLUME** knob or press **vol** + *I* - key on the remote control.



3. To adjust individual speaker volume level, press the **LEVEL** button when the short noise is played on the speaker you want to adjust then adjust the **VOLUME** to modify the output level.



- 4. Press **LEVEL** again to save your setting.
- 5. Repeat step 3 to adjust other speaker volume levels

# **NOTE**

To adjust the level of all speakers (center and surround speakers), you must select Pro Logic mode first by pressing the SURROUND key

# **Troubleshooting Tips**

## **Receiver/Tuner Operation**

## ST indicator is off.

- Adjust the antenna.
- Press **DIGITAL INPUT/ST/MONO** button to insure you are not outputting in mono.

# The signal is Mono. Severe hum or noise.

- The signal is too weak. Connect an external antenna.
- Adjust Antenna
- Reposition Antenna away from any electronics.

### **Remote Control Operation**

## The remote control does not operate the unit.

- Another source mode is selected on the remote. Press the correct Source Button.
- No batteries installed. (included with your system) Install the batteries before attempting to operate the remote. Be sure to match the + and ends of each battery to the symbols shown in the remote battery compartment.
- The batteries are weak. Replace all batteries.
- The remote is not pointed at the remote control sensor on the main unit or there is an obstacle between the remote and the main unit.
- The remote control is too far from the main unit, move closer.

## Remote loses Programmed codes.

• Weak batteries, replace batteries.

### Remote forgets what source was selected.

• Weak batteries, replace batteries.

# General

### No audio.

- Make sure the speakers are connected.
- Check the input connections.
- Check the power cord connections.
- Make sure the MUTE signal on the front panel is off.
- Make sure the digital setting (optical, coaxial or analog) is correct.
- Check that the headphone is not inserted.

### No audio from one channel.

- Check the speaker level setting.
- Check the speaker wire or external source cable connections.

### Noise occurs when the TV is turned on.

• The TV is too close to the audio system.

### Specific instruments sound displaced.

- Check the connections between the receiver and the speakers if the sound does not match the video.
- Check if the video and audio cable are correctly inserted.

## TAPE OUT and REC OUT do not operate in VCR mode.

• Check to make sure the unit is not in 6-channel direct input mode.

# Cleaning the Exterior

• Disconnect the system from AC power before cleaning the exterior of the system with a soft dust cloth, or with a slightly damp leather chamois. Never use strong solvents.

# **Equipment Specifications:**

### AMPLIFIER SECTION:

110W at 8 ohm. <0.09% THD from 20 Hz to 20kHz

2 channel driven

Muting Attenuation: 65dB Frequency Response: +/-3dB

Signal to Noise Ratio: 65dB (Dolby digital mode mode)

### **VIDEO SECTION:**

Input (Sensitivity/Impedance):1Vp-p/75ohm Output (Level/Impedance): 1Vp-p/75 ohm Frequency Response: 10Hz to 6MHz at +/-3dB

Signal to noise ratio: 40dB Crosstalk @3.58MHz: 40dB

#### **AM TUNER SECTION:**

Frequency Response: 80Hz – 2kHz +/-6dB Usable Sensitivity: 800uV/m @ S/N 20dB

Signal to Noise: 38dB

Image Ratio: 27dB @ 1000kHz

IF Rejection: 35dB

### **FM TUNER SECTION:**

Frequency Response: 40Hz - 15kHz +/-3dB

Quieting: 24dBu

Signal to Noise: 60dB(stereo) / 65dB(mono)

Image Ratio: 40dB IF Rejection: 50dB

## Dimensions (H x W x D mm):

Unit - 130 x 430 x 400

# Care and Maintenance

Disconnect the audio system from the power source before performing any maintenance.

# Cleaning

Clean the exterior of the system using a soft dust cloth.

# Important battery information

- Remove the batteries to avoid leakage if you do not use your remote control for more than one month.
- Discard leaky batteries immediately as leaking batteries may cause skin burns or other personal injuries.
- Dispose of batteries in the proper manner, according to provincial and local regulations.
- Any battery may leak electrolyte if mixed with a different battery type, if inserted incorrectly, if all batteries are not replaced at the same time, if disposed of in fire, or if an attempt is made to charge a battery not intended to be recharged.

# **Safety precautions**

- Never open the cabinet under any circumstances. Any repairs or internal adjustments should be made only by a trained technician.
- Never operate this product with the cabinet removed.
- Do not touch the player with wet hands. If any liquid enters the player cabinet, take the player to a trained technician for inspection.
- The apparatus shall not be exposed to dripping and splashing.

# **Headset safety**

- Do not play your headset at a high volume. Hearing experts warn against extended high-volume play.
- If you experience a ringing in your ears, reduce volume or discontinue use.
- You should use extreme caution or temporarily discontinue use in potentially hazardous situations.
- Even if your headset is an open-air type designed to let you hear outside sounds, don't turn up the volume so high that you are unable to hear what is around you.

# Don't infringe

This product should only be used for the purposes for which it is sold, that is, entertainment, violating no copyright law. Any attempts to use this product for which it is not intended is unlawful and therefore not condoned by Thomson multimedia.

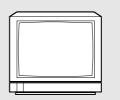
# **Universal Remote Control**

EN

## TV functions







According to the devices and when they were put on the market, all the functions represented on this page will not inevitably be available.



Standby/on

Switch the key to tv position to control the TV.



Access to the menu with the setting functions



To exit a menu



Up/Down selection in the menus



Confirm

Left/Right selection in the



Switch the key to vcr/sat position to control the THOMSON VCR or a SAT

menus



Call up the sound and picture settings (red button)



Call up a programme list (green button)



Display of channel name, time, sound, type (yellow button) and zoom for models with this function.



Call up NEXTVIEW Electronic Program Guide (for models with this function) or Teletext (Fasttext) headings (blue button)



Call up the Teletext/Toptext/Fastext function (purple key)

Volume level adjustment





To change channels



Sound mute

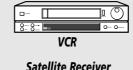


Direct access to the channels and input of the digital values

# **VCR/SAT functions**









According to the devices and when they were put on the market, all the functions represented on this page will not inevitably be available.



Standby/on



Access to the menu with the setting functions



To exit a menu



Up/Down selection in the menus



Confirm



Left/Right selection in the menus

## VCR only



Access to the Menu



Access to the tape functions



SHOW VIEW function



**VPS-PDC** function



Information displayed on the screen and setting of the menus



To change channels

AV input selection (VCR only)





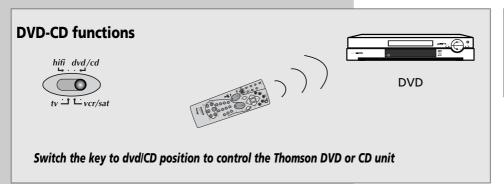


Direct access to the channels and input of the digital values



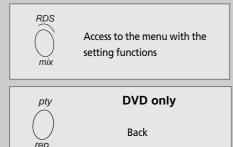
Playing of the tape (VCR only)

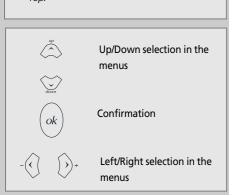
# **Universal Remote Control**

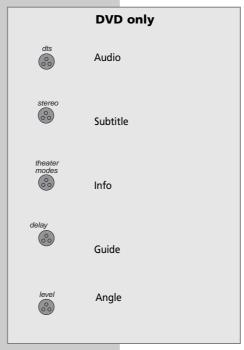


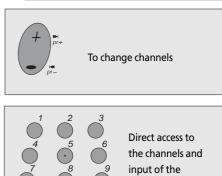
According to the devices and when they were put on the market, all the functions represented on this page will not inevitably be available.

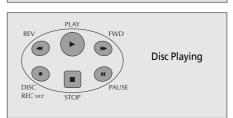












digital values

# Universal Remote Control

## **Universal remote control Programming**

You can program your remote control to control other devices.

Before making the following adjustments, see below for the 3 number code which corresponds to the brand of your device, and write it down in the chart below.

ΕN

## **TV Functions**

### VCR/SAT receiver

### **DVD** or **CD** unit







- 1. Position the key on the device that you want to control.
- 2. Keep the RDS menu key down and enter the 3 number code.
- 3. Release the **RDS menu** key.
- Try to control the device by turning it off and then on with
- If this code does not work, repeat the process from step 2 with another 3
- Some devices cannot be cotrolled by using this remote control.
- Test the functions that you can control by using this remote control.
- According to the device and when they were put on the market, all the functions will not inevitably be available.
- If you have programmed your remote control with other than Thomson devices, it may be necessary to reprogram it when you change the batteries.

### Remote codes

			Lie a.a.	GOLDSTAR	371		413 <b>-</b> 423	DIGITAL	
			hifi dvd/cd	GOODMANS	372		450		
0-4-1114	•			GRUNDIG	338/374/376	PROSAT	424	CANAL SATELLITE	442
Satellite re	eceivers		tv → L vcr/sat	HANSEATIC	377	RADIX	348/451	NOKIA	405
				HIRSCHMANN	378 <b>-</b> 382	REVOX	400	PACE	454
				HITACHI	383	SABA	446 -448	SAGEM	443
AKAI	301	CITYCOM	345	HUTH	384, 385	SALORA	425 <b>-</b> 426	SKY DIGITAL	452
ALBA	302 <b>-</b> 309	CIATRONIC	346	ITT	386, 387	SENTRA	444	VIA DIGITAL	453
ALDES	310	CONNEXION	349 <b>-</b> 350	KATHREIN	388 -391	STRONG	427	XSAT	449
AMSTRAD	315 <b>-</b> 321	DRAKE	351	LASAT	392 <b>-</b> 396	TATUNG	429		
ARCON	322 <b>-</b> 326	ECHOSTAR	353 <b>-</b> 354	LENCO	397	TECHNISAT	430 -433	=	
AST	327 <b>-</b> 330	EEC	355	MATSUI	398			-	
ASTRA	331 <b>-</b> 336	EUROPA	356	MICRO TECHNOL	OGY 399	THOMSON	445	_	
ASTRO	337 <b>-</b> 340	FERGUSON	357 <b>-</b> 361	MORGANS	401	THORENS	434	=	
BT SATELLITE	341	FINLUX	362 <b>-</b> 364	NOKIA	404	UNIDEN	435, 436	-	
BUSH	342	FTE	365, 366	ORBITECH	406, 407	WISI	437 - 440	_	
CAMBRIDGE	343	FUBA	367 <b>-</b> 369	PACE	408 -412	ZEHNDER	441	=	
CHAPARRAL	344	GALAXIS	370	PHILIPS	373 / 375			-	

DVD	hifi dvd/cd  tv = Lvcr/sat
THOMSON	200, 201
PHILIPS	202, 203
PANASONIC	204
TOSHIBA	205
PIONEER	206
SONY	207
DENON	208
SAMSUNG	209

LD	hifi dvd/cd tv - vcr/sat
DENON	221
HITACHI	222
MITSUBISHI	223
PHILIPS	224
SONY	225
SONY	226
THORN	228
PIONEER	229

CD	tv — vcr/sat
AKAI	603 -608
AUDIO TECHNICA	609
DENON	610, 611
HARMAN KARDON	612 -614
HITACHI	615- 620
JVC	621
KENWOOD	622 <b>-</b> 625
KODAK	626
LUXMAN	627

005

013, 019, 023

RADIOLA

MARANTZ	628 -630	SONY	652 <b>-</b> 6
MATSUI	631	TECHNICS	6
MCINTOSH	635	YAMAHA	625 <b>-</b> 6
MEMOREX	632 <b>-</b> 634	•	
NAD	636	-	
NAKAMICHI	637	-	
NIKKO	638	•	
ONKYO	639 <b>-</b> 641		
PANASONIC	642, 643	-	
PHILIPS	644	-	
PIONEER	645		
THOMSON	600, 602, 659	-	
SANSUI	646 -658	-	
SHARP	649 -651		

TV	hifi dvd/cd  tv — L vcr/sat
AKAI	008, 020
AKARI	028
BANG & OLUFSE	N 009, 019
BLAUPUNKT	023
BRANDT 000,	001, 010, 020
BRIONVEGA	019
BLUESKY	020
CGE	016
CONTINENTAL EI	DISON 004
DAEWOO	020, 025

FLBF	005, 015, 023
FERGUSON	000, 001
	003, 004, 010, 020
FINLUX	019, 020, 024
FISHER	008
FORMENTI	019
GOLDSTAR	020
GRUNDIG	016, 023, 024
HITACHI	007
IMPERIAL	016
JVC	013
KNEISSEL	020, 025
LOEWE	020
LOEWE OPT	TA 019, 020

MITSUBISHI	017, 018, 020	
MIVAR	016	
NOKIA	005	
NORDMENDE	000, 001, 010,	
	020	
ORION	005, 020	
PANASONIC/NATIONAL		
	005, 012, 026	
PHILIPS	019, 020, 021	
PHONOLA	019, 020, 021	
PIONEER	001, 005	
POLYTRON	020, 027, 029	

LUXOR

METZ

RADIOMARI	ELLI	019
REX		005
SABA	000, 001	, 005, 010
		019, 020
SALORA		005
SAMSUNG		020, 030
SANYO		008, 018
SCHAUB-LO	RENZ	005, 016,
		020
SCHNEIDER	019	, 020, 021
SELECO		005
SHARP		018, 022
SIEMENS		023

019, 020, 021

SINGER	001, 002, 019
SINUDYNE	019
SONITRON	800
SONY	014, 018
TELEFUNKEN	000, 001,
	002, 010, 020
TELEAVIA	001, 010, 020
THOMSON	000, 001, 002,
	010, 020
TOSHIBA	006, 016, 018,024
WEGA	019
YOKAN	020, 025
УОКО	020

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VOIX	
AIWA	167, 168
AKAI	103 -107
BLAUPUNKT	108, 109, 162
BRANDT 101,	102, 112, 156
DAEWOO	140 147
FEDCUSON 10	1 102 112 152

	tr — respons
	155, 156, 157, 160
FISHER	135, 136, 137
FUNAI	130
GOLDSTAR	123, 134
GRUNDIG	161, 169, 170
HITACHI	110, 112, 122, 123

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JVC	106, 110, 113
MITSUBISHI	148, 149
NEC	139
NOKIA	103, 110, 135, 138
NORDMEND	E 101, 102, 112,
1	154, 156, 157, 158
ORION	124, 125, 126,
	127, 128, 129
PANASONIC	108, 109, 162

PHILIPS	161 -166
RADIOLA	161 -166
SABA	101, 102, 112, 153,
	155, 156, 157, 158
SAMSUNG	133
SANYO	119, 120, 121
SCHNEIDER	161 -166
SHARP	131, 132
SONY	115, 116, 117, 118

TELEAVIA 101, 102, 11	2, 155, 156
TELEFUNKEN 101	, 102, 112,
155	, 156, 159
THOMSON 101, 102	, 112, 154,
156	, 157, 158
TOSHIBA 110	, 111, 114

# Language Codes

For audio track and subtitle selection when operating DVD player only.

Abkhazian	6566	Kashmiri	7583	Tatar	8484
Afar	6566	Kazakh	7575	Telugu	8469
Afrikaans	6570	Kanyarwanda	8287	Thai	8472
Albanian	8381	Kirghiz	7589	Tibetan	6679
Amehanie	6577	Kirundi	8278	Tigrinya	8473
Arabic	6582	Korean	7579	Tonga	8479
Armenian	7289	Kurdish	7585	Tsonga	8483
Assamese	6583	Laothian	7679	Turkish	8482
Aymara	6588	Latin	7665	Turkmen	8475
Azerbaijani	6590	Latvian, Leltish	7684	Twi	8487
Bashkir	6665	Lingala	7678	Ukrainian	8575
Basque	6985	Lithuanian	7684	Urdu	8582
Bengali, Bangla	6678	Macedonian	7775	Uzbek	8590
Bhutani	6890	Malagasy	7771	Vietnamese	8673
Bihari	6672	Malay	7783	Volapuk	8679
Bislama	6673	Malayalam	7776	Welsh	6789
Breton	6682	Maltese	7784	Wolaf	8779
Bulgarian	6671	Maori	7773	Xhosa	8872
Burmese	7789	Marathi	7782	Yiddish	7473
Byelorussian	6669	Moldavian	7779	Yoruba	8979
Cambodian	7577	Mongolian	7778	Zulu	9085
Catalan	6765	Naru	7865		
Chinese	9072	Nepali	7869		
Corsican	6779	Norwegian	7879		
Croatian	7282	Occitan	7967		
Czech	6783	Oriya	7982		
Danish	6865	Oroma (Atan)	7977		
Dutch	7876	Punjabi	8065		
English	6978	Pashto, Pushao	8083		
Esperanto	6979	Persian	7065		
Estonian	6984	Polish	8075		
Faeroese	7079	Portuguese	8084		
Fiji	7074	Quechua	8185		
Finnish	7073	Ahaero- Romance	8277		
French	7082	Romanian	8279		
Frisian	7089	Russian	8285		
Galiean	7176	Samoan	8377		
Georgian	7565	Sangbo	8371		
German	6869	Sanskrit	8365		
Greek	6976	Sents Gaelic	7168		
Greenland	7576	Serbian	8382		
Guarani	7178	Servo-Croatian	8372		
Gujarati	7185	Sesotho	8384		
Hausa	7265	Setswana	8478		
Hebrew	7387	Sindhi	8368		
Hindi	7273	Singhalese	8373		
Hungarian	7285	Siswati	8383		
Icelandic	7383	Slovak	8375		
Indonesian	7378	Slovenian	8376		
Interlingua	7365	Somali	8379		
Interlingue	7369	Spanish	6983		
Inupiaic	7375	Sudanese	8385		
Irish	7165	Swahili	8387		
Italian	7384	Swedish	8386		
Japanese	7465	Tagalog 	8476		
Javanese	7487	Tajik 	8471		
Kannada	7578	Tamil	8465		