



Pace DC757X

www.pacemicro.com

Operator's Manual



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SAFETY INFORMATION

This digital set-top has been manufactured and tested with your safety in mind. However, improper use can result in potential electric shock or fire hazards. To avoid defeating the safeguards that have been built into your set-top, please observe the precautions discussed in this document.

WARNINGS ON YOUR SET-TOP



The lightning flash with arrowhead symbol, within a triangle, is intended to alert you to the presence of uninsulated "dangerous" voltages within your set-top's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within a triangle is intended to alert you to the presence of important instructions in the literature accompanying your set-top.

OTHER WARNINGS

To reduce the risk of electric shock, do not remove the cover of your set-top. There are no user-serviceable parts inside it.

Do not perform any servicing unless you are qualified to do so. refer all servicing to qualified service personnel. servicing the set-top yourself will invalidate the warranty.

To reduce the risk of fire or electric shock, do not expose this set-top to rain or moisture.

On the rear panel of your set-top there is a tamper-evident label that states 'Warranty void if broken or removed'.

INSTALLATION

The installation of your set-top should be carried out by a qualified installer and should conform to local codes.

Note to the installer

This reminder is provided to call the attention of the cable-TV-system installer to Section 820-40 of the National Electrical Code (USA), which provides guidelines for proper grounding and, in particular; specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as is practical.

Service address:
Pace Micro Technology (Support Services) Ltd.
3701 FAU Boulevard, Suite 200, Boca Raton
Florida, 33431, U.S.A.

IMPORTANT SAFETY INSTRUCTIONS

Before you install or use the apparatus, you must read and understand these Important Safety Instructions. At all times when using the apparatus you must follow these Important Safety Instructions to reduce the risk of fire, electrical shock and injury to persons.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into the outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

SAFETY INFORMATION (CONT.)

In addition to the Important Safety Instructions, please read the Safety Information below.

Power sources

You must operate your set-top only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your dealer or local power company. If you move your set-top between locations at different temperatures, allow it to reach room temperature before you apply power to it.

Water and moisture

Do not expose your set-top to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on your set-top. See also item 5 in the Important Safety Instructions.

Lightning

For added protection for your set-top during a lightning storm, or when it is left unattended and unused for long periods of time, disconnect the cable system from your set-top. See also item 13 in the Important Safety Instructions.

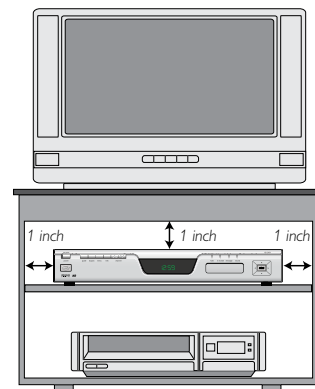
Placement and mounting

Do not place your set-top on an unstable or uneven surface. Your set-top may fall, causing serious injury to a child or adult and serious damage to your set-top. If you mount your set-top, for example to a wall or ceiling, follow the manufacturer's instructions and use a mounting accessory recommended by the manufacturer. See also item 12 in the Important Safety Instructions.

Ventilation

Slots and openings in the casing of your set-top are provided for ventilation, to ensure reliable operation of your set-top and to protect it from overheating.

- Never block the ventilation openings by placing your set-top on a bed, sofa, rug or other similar surface.
- Never cover the ventilation openings with items such as newspapers, table-cloths or curtains.
- Do not place your set-top in a built-in installation such as a bookcase or rack unless proper ventilation is provided or you have adhered to the manufacturer's instructions.
- It is recommended that you maintain a minimum distance of 1 inch around your set-top for sufficient ventilation.



See also item 7 in the Important Safety Instructions.

Entry of objects and liquids

Never push objects of any kind into your set-top through openings as they may touch dangerous voltage points or short-out parts that could result in fire or electric shock. Never spill liquid of any kind on your set-top.

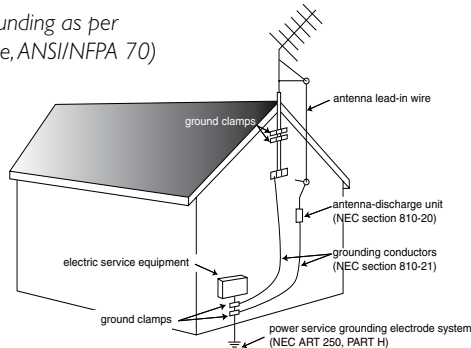
Transporting

Move the combination of set-top and cart with care. Quick stops, excessive force and uneven surfaces may cause the combination of set-top and cart to overturn. See also item 12 in the Important Safety Instructions.

Outdoor antenna grounding

Be sure that any outside antenna or cable system connected to your set-top is grounded so as to provide some protection against voltage surges and static charges that have built up. Article 810 of the National Electrical Code (USA), ANSI/NFPA 70 provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna-discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes and requirements for the grounding electrode. See the diagram below.

(Example antenna grounding as per National Electrical Code, ANSI/NFPA 70)



Risk of fire or scorching

Never place naked flame sources, such as lighted candles, on or adjacent to your set-top.

Ambient temperature

The operating temperature range of your set-top is 32-104°F. If the ambient temperature around your set-top falls outside this range, you must correct this in order for your set-top to work correctly and safely. For example, if the temperature is too high, switch on the air conditioning.

Overloading

Do not overload wall outlets, extension cords or other power outlets as this can result in a risk of fire or electric shock.

Replacement parts

When replacement parts are required, be sure that the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards. See also item 14 in the Important Safety Instructions.

Safety check

Upon completion of any servicing or repairs to your set-top, ask the service technician to perform safety checks to determine that your set-top is in its proper operating condition. See also item 14 in the Important Safety Instructions.

SAVE THIS INFORMATION FOR FUTURE REFERENCE

SAFETY ASPECTS OF CONNECTIONS

Full details of the rear panel are on page 8.

Connecting

Do not connect your set-top (or any other equipment such as a TV or VCR) to the power supply until you have properly connected all the other cables.

Your set-top operates with a 120V AC, 60 Hz power supply. Do not connect your set-top to any supply other than this.

This set-top is equipped with a two-wire power cord, with a polarized plug at one end. The other end of the cord is fitted with a polarized connector, which is shaped such that it can be fitted only one way into the power input jack of your set-top. Connect this end first, before inserting the polarized plug into the wall socket-outlet.

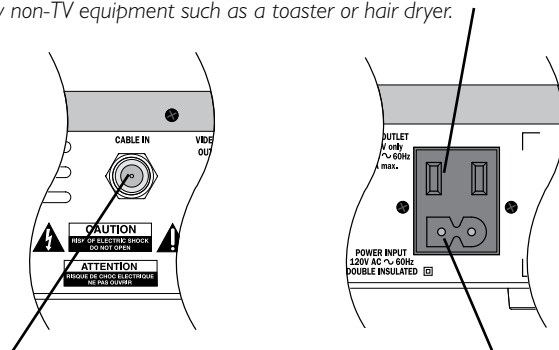
Disconnecting

Disconnect your set-top from the power supply before you disconnect any other equipment from its rear panel.

The only way to disconnect your set-top from the power supply is to remove the power cord from the wall socket-outlet. Your set-top must therefore be installed near to the wall socket-outlet, which should be easily accessible.

The **POWER OUTLET** plug is designed only for connection to the AC power cord for a **TV**. The maximum power it can supply is 500 watts.

Do not connect any equipment that uses more than 500 watts, or any non-TV equipment such as a toaster or hair dryer.



The **CABLE IN** connector is designed for connection to a cable network only.

You must not connect any other equipment, such as a VCR, to this input.

EPILEPSY AND ON-SCREEN IMAGES

Certain people are susceptible to epileptic seizures or losing consciousness when faced with certain types of flashing lights in our daily environment.

These people are exposed to the risk of seizures if they watch certain television images or if they view certain images while they are browsing the Web. These phenomena may appear even when the subject has no previous history of this problem or has never suffered an epileptic seizure.

If you, or a member of your family, has already suffered symptoms linked to epilepsy (seizure or loss of consciousness) in the presence of stimulation by light, please consult your doctor before using this product.

If you or any person using the equipment experiences dizziness, involuntary movements or convulsion, please immediately stop viewing and consult a doctor.

When you are browsing the Web or playing a Web-based game, take the following precautions:

- Use the equipment in a well-lit room, and turn down the brightness of your television screen.
- Sit at a reasonable distance from your television screen.
- Take a break for ten minutes every hour.

You should avoid using the Web if you are tired or have lost some sleep.

REGULATORY INFORMATION

CAUTION: Do not attempt to modify your set-top without written authorization from the manufacturer. Unauthorized modification could void your authority to operate your set-top.

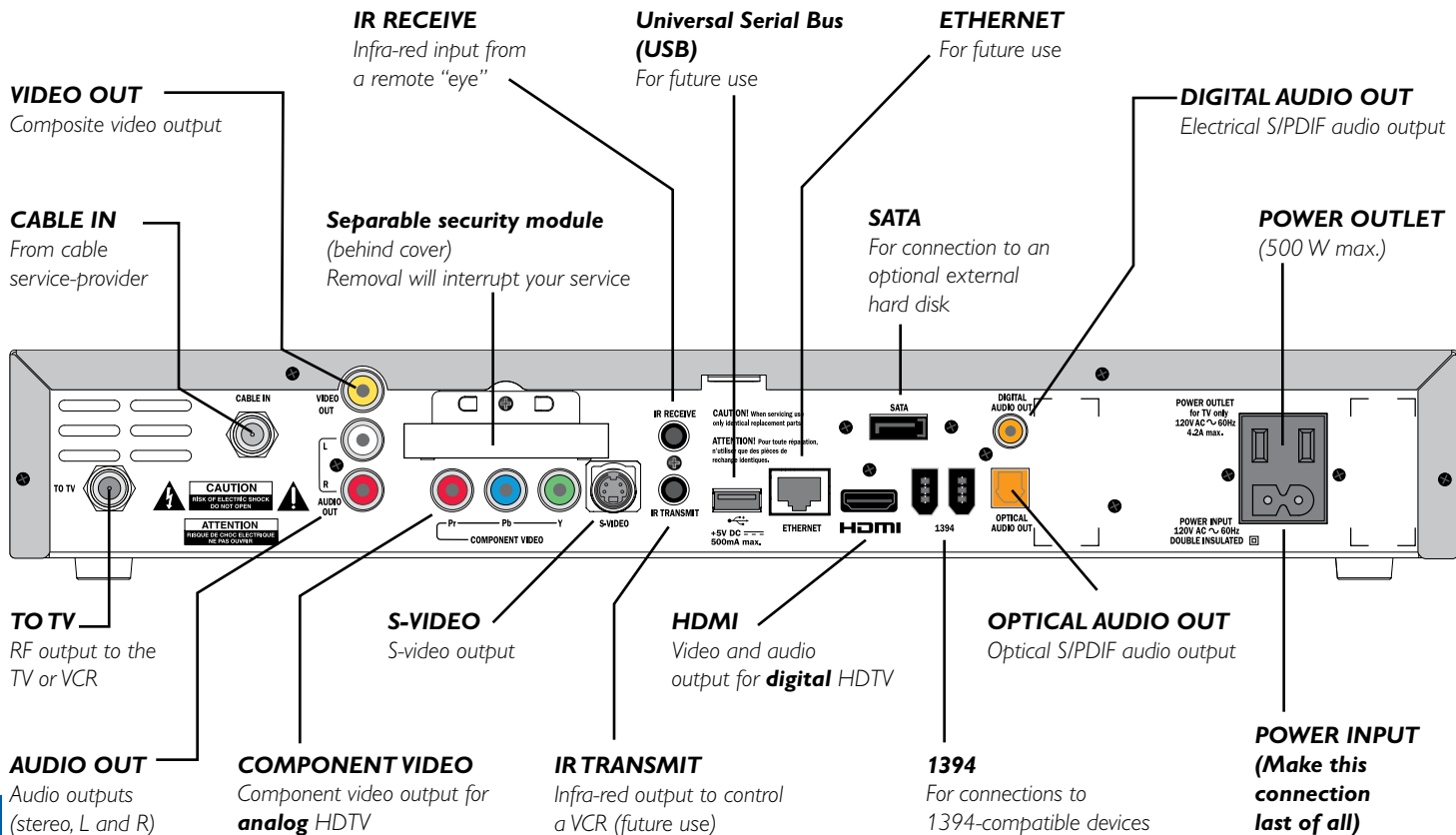
NOTE


Your set-top has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Your set-top generates, uses and can radiate radio-frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If your set-top does cause harmful interference to radio or television reception, which can be determined by turning your set-top off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between your set-top and the receiver.
- Connect your set-top to an outlet on a circuit different from that to which the receiver is connected.
- Consult your dealer or an experienced radio/TV technician for help.

REAR PANEL



| | | | |
|---|---|--|--|
| CABLE IN | Connect the cable service here. | HDMI (High Definition Multimedia Interface) | If your HDTV has an HDMI, connect it here for a digital audio/video connection (instead of using the AUDIO and 3 analog COMPONENT VIDEO connectors). |
| TO TV | Connect to the RF/antenna input on your TV or VCR (optional). | ETHERNET | Connect to an optional PC network (future use). |
| VIDEO OUT | Connect to the video composite input on your VCR (or a standard TV). | SATA | Connect to an optional external hard disk. |
| AUDIO OUT | Connect to the L and R audio inputs on your stereo TV, stereo VCR or optional stereo amplifier. | 1394 | Connect to 1394-compatible devices. |
| Separable security module (behind cover) | Removal will interrupt your service. | DIGITAL AUDIO OUT | Connect to the electrical digital audio input on optional digital audio equipment, such as an audio decoder or home theater receiver. |
| COMPONENT VIDEO | If your HDTV does not have an HDMI (see below), connect your HDTV here. | OPTICAL AUDIO OUT | Connect to the optical digital audio input on optional digital audio equipment. |
| S-VIDEO | Connect to the S-video input (if present) on your VCR or TV. | POWER OUTLET | Connect your TV's power cord here to provide AC power to your TV. |
| IR RECEIVE | Connect to an optional remote "eye". | POWER INPUT | Connect your set-top's power cord here. |
| IR TRANSMIT | Connect to an optional VCR controller (future use). | | |
| USB  (Universal Serial Bus) | Connect to compatible optional equipment that supports a USB 2.0 interface (future use). | | |

CONNECTING THE EQUIPMENT

Your set-top fully complies with international DVB (Digital Video Broadcasting) standards. In order for you to view programs broadcast in high-definition, your set-top must be connected to a suitable HDTV or computer monitor. Your set-top is also compatible with standard-definition TVs and VCRs.

Your equipment should have been connected up by your installer. However, if you need to disconnect and re-connect your equipment, please read pages 10 to 14.

On pages 12 and 13 there are two typical connection set-ups for an HDTV, VCR, DVD player and home theater receiver.

These set-ups make efficient use of the connectors on your set-top. However, depending on your other equipment and the connectors on it, the person who installed your system may have chosen to connect things up differently.

Both set-ups allow stereo recording and play-back of video tapes. You hear stereo sound from the home theater's loudspeakers.

Although the RF cables (shown by dashed lines in the diagrams) are not absolutely necessary, we recommend that you connect them as a back-up and so that you can use the RF bypass. If you use the RF cables, you must tune our TV (and VCR) to your set-top's VHF output channel (3 or 4; consult your cable service-provider to find which channel it is for your location). Consult the manuals supplied with your TV and VCR for information on how to tune.

You can take advantage of the digital audio output from your set-top by connecting a suitable cable between your home theater receiver and the OPTICAL AUDIO OUT jack (as shown in the diagrams) or the DIGITAL AUDIO OUT jack.

WARNINGS

Do not connect your set-top (or any other equipment such as a TV or VCR) to the AC power supply until you have properly connected all the other cables.

Disconnect your set-top from the AC power supply before you disconnect any other equipment from its rear panel.

The only way to disconnect your set-top from the AC power supply is to remove the AC power cord (or switch the wall socket-outlet switch, if present, to its OFF position). Your set-top must therefore be installed near to the AC power socket-outlet, which should be easily accessible.

The power outlet is designed only for connection to the AC power cord for a TV. The maximum power it can supply is 500 watts. Do not connect any equipment that uses more than 500 watts, or any non-TV equipment such as a toaster or hair dryer.

The cable input is designed for connection to a cable network only. You must not connect any other equipment, such as a VCR, to this input.

Any cable connected to DIGITAL AUDIO OUT must be 75 ohm coaxial, not regular audio cable.

SET-UP A - HOME THEATER SYSTEM WITH HDTV (HDMI CONNECTION)

Set-up A (see page 12) uses an HDMI (high definition multimedia interface) connector to connect to the HDTV. This displays the highest quality picture on the HDTV and also means there will be no picture degradation on any future copy-protected programs (provided the link remains secure – see right).

Variation

S-video provides a better TV picture than composite video, therefore, if your TV and VCR have S-video connectors, replace the composite video connection with an S-video connection to your VCR, then connect directly via an S-video connection from your VCR to your TV (or loop through your home theater receiver if you prefer).

SET-UP B - HOME THEATER SYSTEM WITH HDTV (COMPONENT VIDEO / YPBPR CONNECTION)

Set-up B (see page 13) uses a component video connection to connect to the HDTV. This displays a high definition picture on your TV.

NOTE

How you set up your equipment may depend on your home theater receiver. For example, the optical and digital audio inputs may be associated with particular video inputs. Please see your home theater user information for further details.

NOTE

Copy protection via HDMI secure link

The HDMI link between your set-top and your TV/monitor should be a secure link. When your set-top is attached via a HDMI cable to an HDCP (High-bandwidth Digital Content Protection) -compliant monitor, the monitor and set-top negotiate a secure link, which allows your set-top to transmit full resolution video (picture) to your TV/monitor.

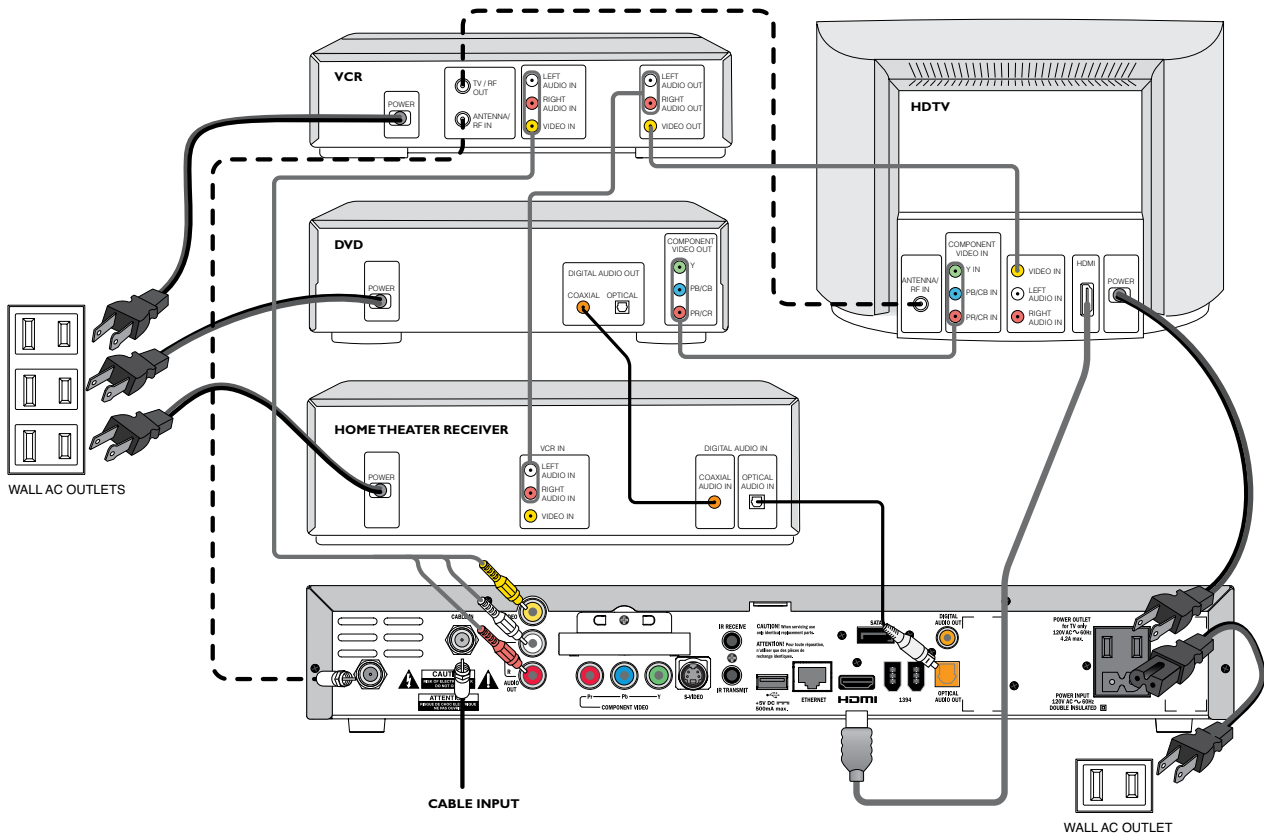
Not all monitors support HDCP. If your set-top is connected to a monitor that does not support HDCP, the following is displayed:

Your HDTV does not support HDCP. Please use the YPbPr component connection to watch TV.

The HDMI output is then disabled, so no picture is transmitted from this connector. In that case use the component video connectors to connect up (see Set-up B).

CONNECTING THE EQUIPMENT (CONT.)

SET-UP A



WARNINGS

Do not connect your set-top (or any other equipment such as a TV or VCR) to the AC power supply until you have properly connected all the other cables.

Do not defeat the safety purpose of the polarized plugs on power cords. A polarized plug has two blades with one wider than the other. This plug fits into the outlet in only one way; match the wide blade of the plug to the wide slot of the outlet.

CONNECTING YOUR TV TO THE AC POWER SUPPLY

If your TV has a rating of less than 500 W, connect the power cord from your TV into the connector labeled "POWER OUTLET" on the rear panel of your set-top. This saves a wall outlet (although, if your TV is rated 500 W or more, you must connect it to a wall outlet).

CONNECTING THE POWER CORD TO YOUR SET-TOP

Before you connect your set-top to a wall outlet, connect the polarized socket on the power cord into the plug labeled "POWER INPUT" on your set-top's rear panel.

CONNECTING EQUIPMENT TO THE WALL AC OUTLETS

Connect the polarized plugs on the power cords from your set-top, VCR and any other equipment into wall AC outlets. If these outlets have switches, switch them to ON.

TURNING YOUR SET-TOP ON AND OFF

After you have connected your set-top to the wall AC outlet (and switched this outlet ON, if it has a switch), the light next to the **power** button on your set-top's front panel should be red.

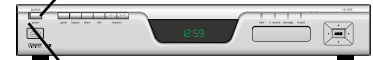
Wait for a few seconds, then press the button labeled **power** on the front panel of your set-top to turn it on. The light next to the **power** button goes from red to green, to show that your set-top is on.

If the light next to the **power** button is neither red nor green, there is a problem.

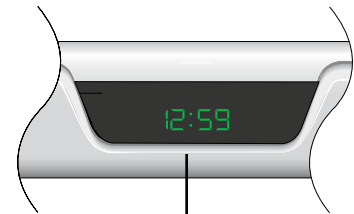
To turn your set-top on or off at any time, press the **power** button on its front panel or the **POWER** button on your remote control (first making sure your remote control is set to control your set-top).

Never turn off your set-top by simply disconnecting it from the power supply. If you need to disconnect your set-top, first stop any recording to an external hard disk (if there is one). Then turn off the set-top by pressing the **power** button on its front panel or on your remote control, so that the light by the **power** button goes red. Then wait 60 seconds before disconnecting your set-top at the wall AC outlet.

To turn on your set-top, press the **power** button.



The light next to the button changes from red to green.



Front panel display, showing the time (see page 34)

NOTES

It is important that, unless there is a lightning storm or you will be away from your home for a long time, you do not unplug your set-top at the wall AC outlet (or do not switch it off there, if the outlet has a switch). Your set-top cannot be updated with new features, through the cable, if it is disconnected from the AC power supply.

Depending on your set-top's settings, if you switch your set-top off, any TV that is attached to your set-top's POWER OUTLET may also turn off. For more details, see page 34.

USING YOUR REMOTE CONTROL

Your cable TV service-provider determines the digital channels, services and screen information that you see on your TV when you use your set-top and its remote control.

Consult the information supplied by your cable service-provider for details on how to make the most of the digital cable services. Also read the operating instructions that are supplied with your remote control.

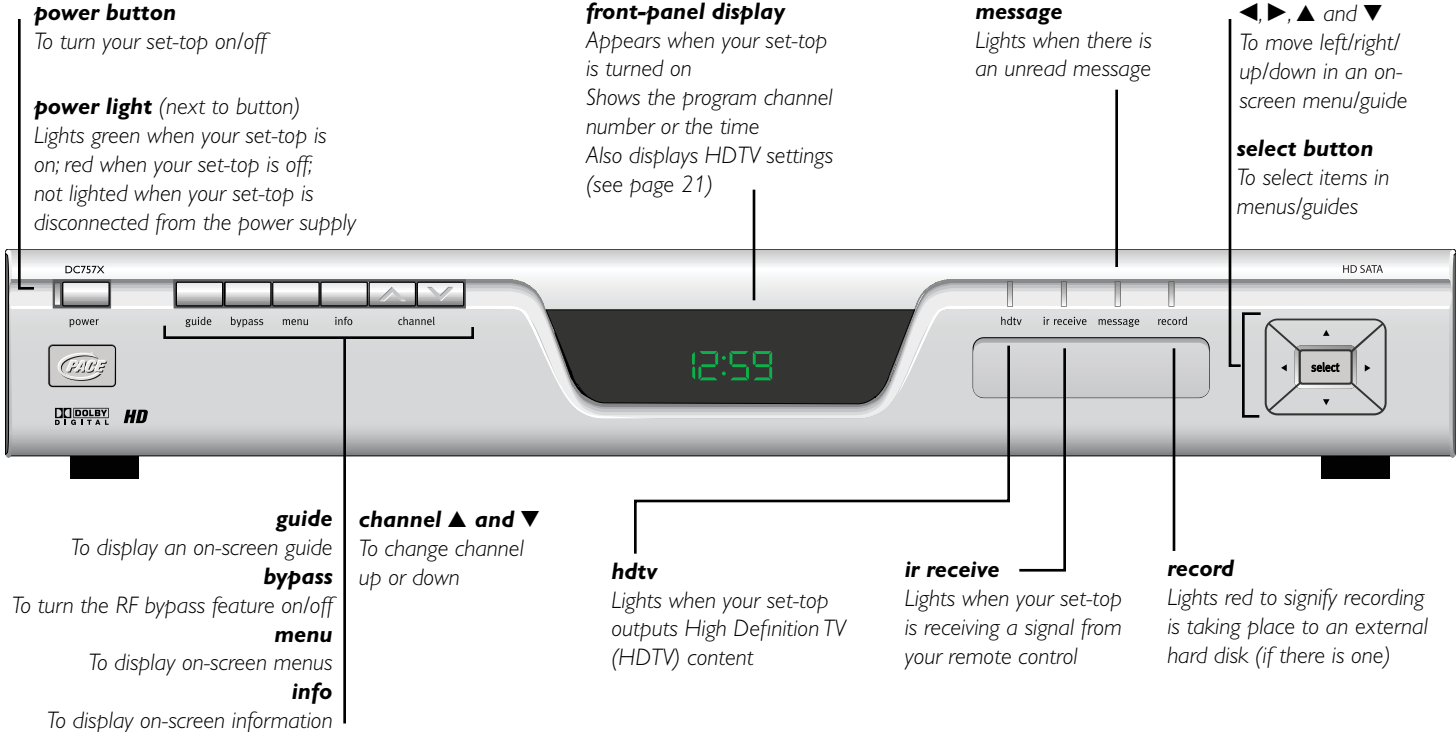
LIGHTNING STORMS

Occasionally, a lightning storm may affect your set-top. It may appear that it has stopped working, but you can easily restore its operation as follows.

Unplug your set-top's power cord at the wall AC outlet. Then plug this power cord in again at the wall AC outlet (and, if there is a switch by this outlet, switch it to its ON position).

USING THE FRONT-PANEL BUTTONS

You can use the buttons on the front panel to operate your set-top, if, for example, there is a problem with your remote control.



ADDING DIGITAL VIDEO RECORDER (DVR) FUNCTIONALITY

Your cable service-provider may enable a feature that allows an external hard disk to work with your set-top. If this is the case, you can attach a hard disk to the SATA connector on your set-top's rear panel and use it to record and play back digital television programs (many more hours than if you record using a VCR or DVD recorder). There is a **record** light on your set-top's front panel to show when recording is taking place. Most major brands of serial ATA hard disk are supported. You should not connect an external hard disk to a 1394 port or a USB port.

The recordings on the external hard disk are uniquely linked to the set-top on which they were made, so you cannot play them back or delete them with a different set-top.

Connecting an external hard disk

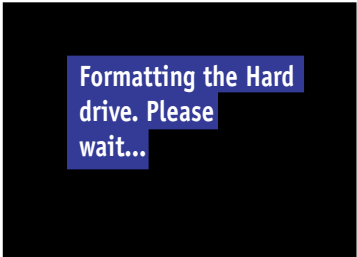
Turn off your set-top with the **power** button and then wait 60 seconds before disconnecting it from the wall AC socket. (You must not "hot plug" an external hard disk).

Connect the external hard disk, using an appropriate cable, to the SATA connector on your set-top.

Apply power to the external hard disk.

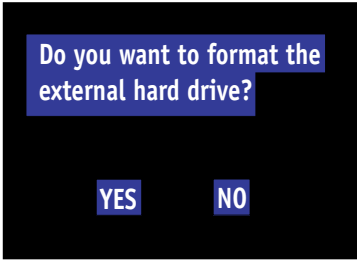
Reconnect your set-top to the wall AC socket and turn it on with the **power** button.

If the external disk needs formatting, your set-top will do this automatically and inform you by means of a pop-up dialog box on your TV screen (see right).



Formatting the Hard
drive. Please
wait...

Message for a new external hard disk



Do you want to format the
external hard drive?

YES NO

*Message if the external hard disk has previously been formatted on a PC. Use the arrow and **select** buttons to choose.*

Using the external hard disk for DVR functions

Your set-top can tune to only one digital channel at a time, so you cannot record one program while watching a different one (but see also page 20). However, many DVR functions are available if your cable service-provider enables the SATA connection.

With your set-top and attached external hard disk you could:

- Pause live TV
- Instantly replay live TV
- Fast forward up to the point of live TV
- Watch a scene in slow motion
- Rewind through a program you have been watching
- Record high definition digital pictures (as well as the regular standard definition)
- Record a program while watching a previously recorded program
- Schedule your set-top to record a program or a whole series
- Fully manage your stored recordings
- Back up your digital recordings to a VCR or DVD recorder
- Retain full control over any parental viewing restrictions you have set up

Consult the information supplied by your cable service-provider for more details. Also read the operating instructions that are supplied with your remote control.

NOTE

The exact functionality of the DVR (digital video recorder) in your set-top depends on your on-screen program guide. For more details, consult the information supplied by your cable service-provider.

Do not confuse recording to the hard disk with recording to a separate VCR or DVD recorder, as mentioned on page 20.

USING RF BYPASS

You can use RF Bypass to watch the regular (analog) channels that are included in the cable service. It makes these channels “bypass” your set-top and pass directly to your TV and/or VCR.

To use RF Bypass:

- Your set-top must be installed with the correct connections from the rear panel to your TV or VCR (see the note, right); and
- The RF Bypass feature must be switched to “On” in the Setup menu (see page 34).

Each time you want to use RF Bypass, you then press the **BYPASS** button on your set-top’s front panel. When you have finished using RF Bypass, press the **BYPASS** button again.

For you to start using RF Bypass, your set-top must be turned on. However, once set, RF Bypass will work even if you turn your set-top off.

When RF Bypass is on: you can use your TV’s remote control to tune to any of the available regular (analog) channels and watch that channel on your TV (the path is the RF cable). You can, at the same time, use your set-top’s composite video and L & R audio outputs to record on your VCR the digital channel that your set-top is tuned to. (This channel number is shown on your set-top’s front panel.)* This means that, when the bypass is on, you can watch a regular (analog) channel on your TV and, at the same time, record a *digital* channel on your VCR.

When RF Bypass is off: you see on your TV the channel that your set-top is tuned to. This is the same channel that your VCR receives. So, when RF Bypass is off, you can record on your VCR only the program that you are watching on your TV.

NOTE

If you are not sure whether your set-top has been set up to allow RF bypass, check your installation. If there is a cable (RF cable) going from the TO TV connector on your set-top’s rear panel to your TV (or to your VCR and TV, as shown by the dashed line on pages 12 and 13) then RF bypass is correctly set up. Your TV and VCR also need to have been tuned to your set-top’s VHF output channel (3 or 4, depending on your location).

NOTE

* If the “Front LED Display” (see page 34) is set to “Current Time”, you will not see the channel number. To see the number of the channel your set-top is tuned to, you should set “Front LED Display” to “Current Channel”.

ABOUT USER SETTINGS

Your installer should have made the correct settings to make sure your set-top is compatible with your HDTV or TV. However you may wish to change some settings, for example if you purchase a new HDTV. You can make the following settings.

- TV Aspect Ratio (the screen's width-to-height ratio, or shape)
- TV Display Capability (screen resolution)
- Auto Pillarbox
- Closed Captions
- Front Panel Settings

You can also reset the user settings to the factory defaults.

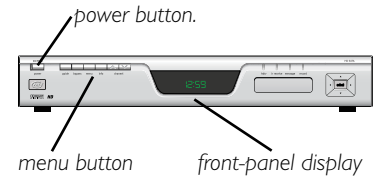
You use the ◀, ▶, ▲, ▼ and **select** buttons on either the front panel or your remote control to make the settings. You check and change the settings by looking at your set-top's front panel. You can also look at the on-screen menus, although please note, in some circumstances, these may not be visible.

Putting your set-top into “user settings mode”

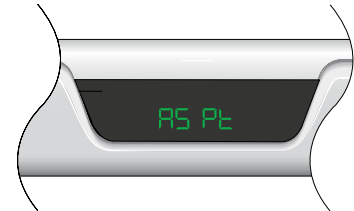
1. Make sure that your set-top is turned on.
2. Press the **power** button on your set-top, then, *within 1 second*, press the **menu** button.

The front panel displays “ASPt” as shown far right. Depending on the set-up, you may also see the User Settings menu, shown right, on your TV screen.

3. When you have finished making changes (see pages 22 to 30), press the **power** button to remove the User Settings menu and return to normal viewing.



| USER SETTINGS |
|-----------------------|
| TV Aspect Ratio |
| TV Display Capability |
| Auto Pillarbox |
| Closed Captions |
| Front Panel Settings |
| Restore Defaults |



ABOUT THE TV ASPECT RATIO

The TV that you have connected to your set-top has an aspect ratio (width-to-height ratio) of 4:3 (basic/standard) or 16:9 (widescreen). You must set the appropriate TV Aspect Ratio (4:3 or 16:9) on your set-top, so that it is compatible with your TV.

Setting the TV Aspect Ratio

If you have not done so, put your set-top into "user settings mode", as described on page 21. The front panel displays "ASPt".

The flow diagram on the far right shows how you use the **arrow** and **select** buttons on your set-top's front panel to change the display and make the settings. See also the instructions below.

1. To change the **TV Aspect Ratio**, press the ► button. The current TV Aspect Ratio (4:3 or 16:9) appears on the front panel. Depending on the set-up, you may also see the menu, shown right, on your TV screen.
2. Press the ▲ or ▼ button to choose the TV Aspect Ratio you want.
3. Press the **select** button to confirm the choice and change to that TV Aspect Ratio.
4. Press the ◀ button. The front panel will display "ASPt" again.
5. To continue making the settings, see the next section.

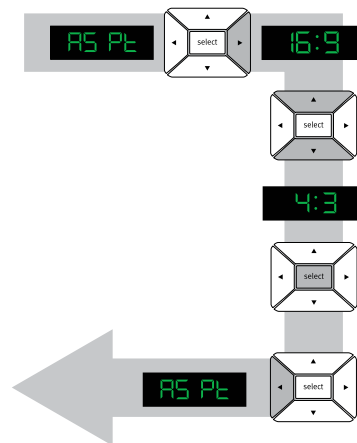


4:3 standard TV,
EDTV or HDTV



16:9 HDTV

| |
|-----------------|
| TV Aspect Ratio |
| 4:3 |
| 16:9 |



ABOUT TV DISPLAY CAPABILITY (RESOLUTION SETTINGS)

- **Your set-top** can transmit pictures to your TV in a range of resolutions (also called “Display Capabilities” - see below for the settings available). Generally, higher screen resolutions give better quality pictures. However, the quality will always depend on how the program was originally transmitted.
- **Different TVs** display different screen resolutions. For example, standard TVs display “480i”, EDTVs (Enhanced Definition TVs) display “480p” and most HDTVs display “1080i” or “720p”. Many HDTVs will display at more than one resolution. For more information, see the information supplied with your HDTV.

You must make the appropriate TV Display Capability setting(s) on your set-top, so that it is compatible with your TV. See the next page for full instructions.

In order to display the best picture every time, you should select **every** resolution that your TV is capable of displaying. This should ensure that programs are displayed with the minimum distortion.

TV Display Capability settings

- **480i** is standard definition NTSC and is transmitted in a 4:3 aspect ratio (see right)
- **480p** is enhanced digital TV and can be transmitted in either a 4:3 or 16:9 aspect ratio
- **720p** and **1080i** are HDTV and are transmitted in a 16:9 aspect ratio (see right)



*480i transmission:
The aspect ratio is 4:3*



*1080i transmission:
The aspect ratio is 16:9*

NOTE

When your HDTV is connected to your set-top via an HDMI, your set-top gets information from your HDTV about the HDTV's display capability. Your set-top uses this information to adjust its TV Display Capability settings.

Your set-top also records your HDTV's ID (identification), so that only one HDTV is supported at any one time. When your HDTV has updated your set-top's TV Display Capability settings, you may change them if you wish. Your changes will then be stored with the ID.

You can restore your set-top's TV Display Capability settings to their factory values, as described on page 31. You can also restore your set-top to the settings that your HDTV has passed to your set-top. To do this you must first restore the factory settings while your set-top is disconnected from your HDTV, then reconnect your HDTV via an HDMI cable.

Changing the TV Display Capability

If you have not done so already, put your set-top into “user settings mode”, as described on page 21. The front panel displays “ASPt”.

The flow diagram on page 25 shows how you use the **arrow** and **select** buttons on your set-top’s front panel to change the display and make the settings. See also the instructions below.

1. To change the **TV Display Capability** press the ▼ button. The front panel displays “res” (short for “resolution”), as shown in the flow diagram.

| TV Display Capability | |
|-----------------------|-------|
| 1080i | : YES |
| 720p | : NO |
| 480p | : YES |
| 480i | : YES |

2. Press the ► button. The first TV Display Capability resolution appears on the front panel (1080i, although it is displayed as 1080). Depending on the set-up, you may also see the TV Display Capability menu, shown right, on your TV screen.

| |
|-------|
| 1080i |
| Yes |
| No |

3. To check the resolution’s setting, press the ► button. * Either “yes” (selected) or “no” (not selected) is displayed. If you can see the on-screen menus, the menu shown right appears.

- If this is the correct setting, press the ◀ button. The front panel will display “1080” again.

- If you want to change the setting, press ▲ or ▼. (On the on-screen menu, the highlight moves between the available settings). Press the **select** button to confirm your choice and change to the new setting. Then press the ◀ button. The front panel displays “1080” again.

4. Press ▲ or ▼ to display each resolution in turn, and repeat step 3 for each. The available resolutions are: 1080i, 720p, 480p and 480i. (See pages 23 and 25 for more information about these).

5. When you are satisfied that all the TV resolutions are correct, press the ◀ button. The front panel displays “res” again. To continue making the settings, see page 26.

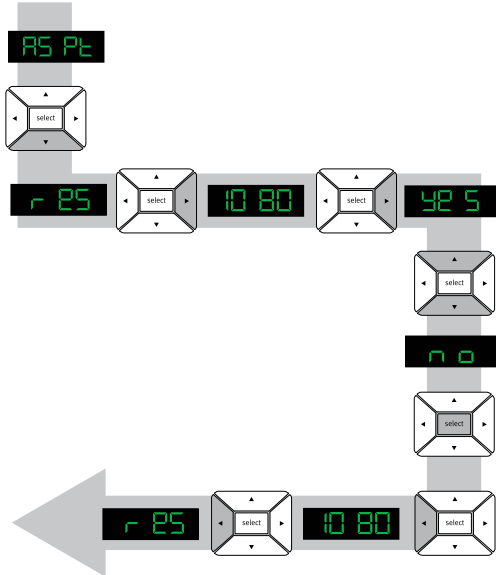
NOTE

*If you use the **select** button at step 3, it will change the setting. If you accidentally press the **select** button, and the menus disappear from your screen, immediately press the **select** button again to restore the menus.

Further information about the TV Display Capability

The TV Display Capability settings relate to equipment that is connected to the HDMI and COMPONENT VIDEO OUT connectors because the settings control the output at those connectors. If equipment is connected via a HDMI cable, that equipment may also pass information back to your set-top, which may affect what settings are available.

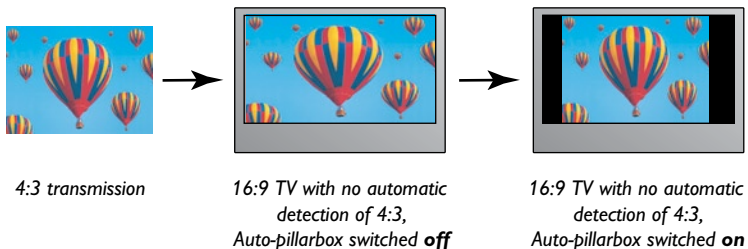
Generally, the TV Display Capability settings do not affect equipment connected to the VIDEO OUT and S-VIDEO jacks, because the output at these jacks will always be the standard definition 480i.



*This diagram shows an example only. Please make sure that, for **each** resolution, you select the correct setting (yes or no) that applies to your TV.*

AUTO PILLARBOX

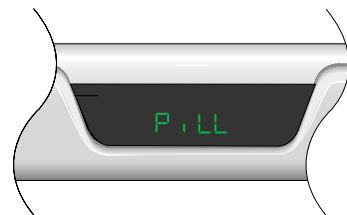
If your TV is a 16:9 TV that does not automatically detect 4:3 transmissions (and therefore does not add black bars to the sides of the picture), then 4:3 transmissions may display "stretched" to fit the 16:9 screen. If you do not want this effect, you can set your set-top to add black bars to the 4:3 picture, so that it is transmitted to your TV at a 16:9 aspect ratio. See the example below.



Changing the Auto Pillarbox setting

If you have not done so already, put your set-top into "user settings mode", as described on page 21. The front panel displays "ASPt".

1. To change the Auto Pillarbox setting, press the ▼ button until the front panel displays "PiLL", as shown right.



2. Press the ► button. Either “yes” (switched on) or “no” (switched off) displays. If you can see the on-screen menus, the menu shown right appears.
3. If you want to change the setting, press ▲ or ▼. Press the **select** button to confirm the choice and change to the new setting.
4. Press the ◀ button. The front panel displays “PiLL” again.

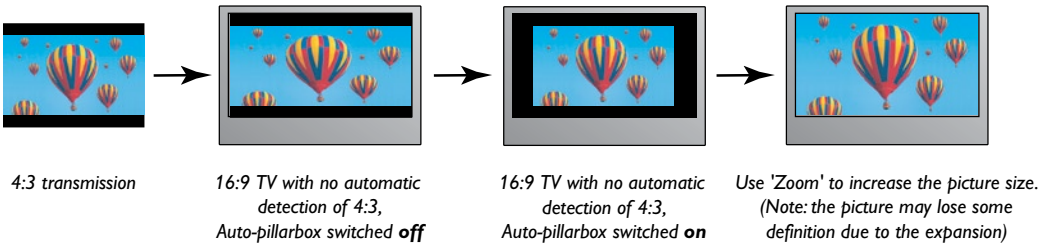


To continue making the settings, see the next section.

NOTE

16:9 picture in a 4:3 transmission

Sometimes 4:3 transmissions may contain a 16:9 picture, with black borders at the top and bottom. On a 16:9 TV this may display with black borders all the way around the picture. To remove these borders, you can use the “Zoom” button on your remote control. See the example below. For more information about using Zoom, see page 33.



MAKING CLOSED CAPTION SETTINGS

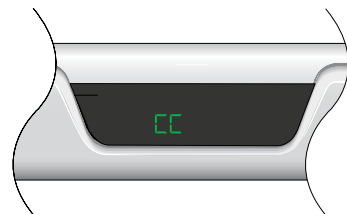
Closed captioning is a means of displaying alerts and subtitles on your TV screen, superimposed on whatever you are watching. You can turn closed captions on or off, as required, and you can also change the closed captions' appearance.

Turning closed captions on or off

If you have not done so already, put your set-top into "user settings mode", as described on page 21. The front panel displays "ASPt".

1. To change the Closed Captions setting, press the ▼ button until the front panel displays "CC", as shown right.
2. Press the ► button. Either "On" (switched on) or "OFF" (switched off) is displayed. If you can see the menus, the Closed Captions menu appears, see right.
3. If you want to change the setting, press the **select** button - the setting changes.
4. Press the ◀ button. The front panel displays "CC" again.

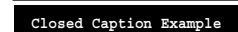
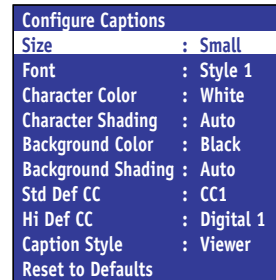
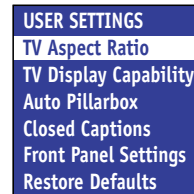
To continue making the settings, see the next section.



Changing the closed captions' appearance

If you want to change the closed caption's appearance, we recommend you use the on-screen menus, rather than the front-panel display.

1. If you have not done so already, put your set-top into "user settings mode", as described on page 21. The front panel displays "ASPT", and the User Settings menu, shown right, appears on your TV screen.
2. To change the Closed Captions appearance, press the ▼ button to highlight "Closed Captions", then press ►. The Closed Captions menu, shown right, appears.
3. Press the ▼ button to highlight "Configure Captions", then press **select**. The Configure Captions menu, shown right, appears.
4. Use the ▲ and ▼ arrows to highlight each option in turn. Use the **select** button to choose the setting you want (the setting changes each time you press **select**). Note: you must set "Caption Style" to "Viewer", in order for the changes to take effect.
5. When you have made all the changes you want to make, press ◀ twice to re-display the User Settings menu.



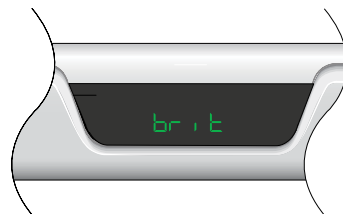
FRONT PANEL SETTINGS

Occasionally, the brightness of your set-top's front panel display may change, for example the display may dim automatically when your set-top is turned off. You can use the Front Panel Settings to set the brightness levels of the display at its brightest and dimmest.

Changing the Front Panel Display Settings

If you have not done so already, put your set-top into "user settings mode", as described on page 21. The front panel displays "ASPT".

1. To change the Front Panel Display settings, press the ▼ button until the front panel displays "brit", as shown right
2. Press the ► button. The Front Panel Setting menu, shown right, appears.
3. Press the ▲ or ▼ button to highlight "Dim Level" or "Bright Level" as required ("Dim Level" is the brightness of the display at its dimmest; "Bright Level" is the brightness of the display at its brightest.)
4. Use the **select** button to choose the setting you want (the setting changes each time you press **select**): "Low", "Std" (Standard) or "High".
5. When you have made all the changes you want to make, press the ◀ button to re-display the User Settings menu.



| Front Panel Setting | |
|---------------------|--------|
| Dim Level | : Low |
| Bright Level | : High |

REMOVING THE USER SETTINGS MENUS

When you have finished making changes, press the **power** button to remove the User Settings menu and return to normal viewing.

RESTORING THE FACTORY DEFAULT SETTINGS

If you wish, you can restore the user settings to their factory defaults. All the changes you have made will be lost and the settings will revert to those that were programmed in the factory. The factory settings are:

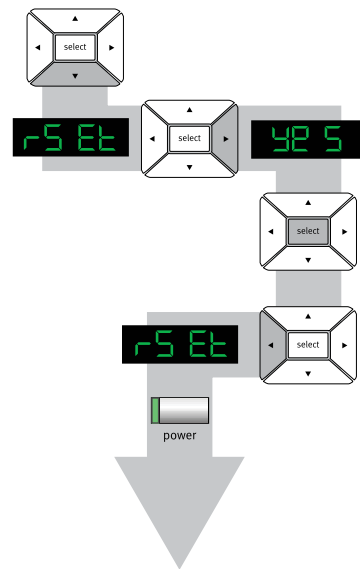
| User Settings menu item | Options | Factory default setting |
|-------------------------|-------------------------------|-------------------------|
| TV Aspect Ratio | – | 16:9 |
| TV Display Capability | 1080i 720p 480p 480i | Yes No Yes Yes |
| Auto Pillarbox | – | No |
| Closed Captions | – | Off |
| Front Panel Setting | Dim Level Bright Level | Low High |

MAKING USER SETTINGS (CONT.)

If you have not done so, put your set-top into “user settings mode”, as described on page 21. The front panel displays “ASPt”.

The flow diagram on the right shows how you use the **arrow**, **select** and **power** buttons on your set-top’s front panel to change the display and make the settings. See also the instructions below.

1. Press the ▼ button until the front panel displays “rSEt” (short for “**restore factory settings**”), as shown right.
2. Press the ► button. “yes” appears on your set-top’s front panel. (If you no longer wish to restore the factory settings, press the ◀ button.)
3. To restore the factory settings, press the **select** button.
4. The factory settings are restored. If you want to continue changing the settings, press ◀ then see the sections from page 21 onwards. If you have finished changing the settings, press the **power** button. Your set-top will switch on with the restored settings.



NOTES

If your set-top and HDTV are connected via a HDMI cable, your HDTV may pass information about the required settings back to your set-top (see page 23). If you wish to restore your set-top’s settings to those created by your HDTV, you should disconnect your set-top from your HDTV before you restore the factory default settings. When you reconnect your HDTV to your set-top via the HDMI cable, your HDTV will pass back the information again.

Always turn off your set-top, wait 60 seconds, then disconnect your set-top from the wall AC outlet before you connect or disconnect any other equipment to or from its rear panel.

USING “ZOOM” TO CHANGE THE PICTURE

Making the appropriate TV Aspect Ratio and TV Display Capability settings (see pages 21 through 27) should ensure that the picture on your TV screen is not distorted (stretched or squashed) and that it fills as much of the screen as possible.

However, even if you have selected the correct settings, there will be times when a program appears with black borders either at the top and bottom or at the sides of the picture (or sometimes even all the way round the picture). This happens because the aspect ratio (shape) of the **transmitted program** does not match the aspect ratio of your HDTV, or because the transmitted programme includes black borders as part of the transmission (see right).

Your remote control should have a “zoom function” button (could be labelled Zoom or Aspect), which you can use to change the TV picture until it appears as you want it to:

1. Press the “zoom function” button once to change the display.
2. Press it again to change the display again. Continue to press it in this way until the picture appears as you want it to.

Note: The effect that this button has on transmissions depends on the transmission itself. On some transmissions it may have no effect at all.



A 4:3 **transmission**, with a 16:9 picture. Dark bars are added at the top and bottom of the transmission



A 16:9 **transmission**, with a 4:3 picture in it. Dark bars are added at the sides of the transmission

USING THE SETUP MENUS

The Setup menus allow you to make further settings to control how your set-top works. These are available in your on-screen guide and should be described in the information provided by your service-provider. There may also be on-screen information to explain these menus.

However, please note there are certain items and settings that may affect how your set-top and TV work. See the table below for information about these.

| Item | Setting | Options | Notes |
|-----------------|---------------------|--|---|
| Cable Box Setup | Front LED Display | Current Time, Current Channel | If setting is “Current Time”, the time is displayed on the front panel when your set-top is switched on. If setting is “Current Channel”, the program channel number is displayed. |
| | AC Outlet | Switched, Unswitched | If setting is “Switched”, the AC outlet on your set-top’s rear panel is <i>on</i> when your set-top is <i>on</i> , and <i>off</i> when your set-top is <i>off</i> , so any TV that is therefore receiving its power from this AC outlet will switch off when your set-top is turned off. If setting is “Unswitched”, the AC outlet is <i>always on</i> , so any TV that is receiving its power from this AC outlet will continue to receive power whether your set-top is switched on or off. |
| | RF Bypass | Off, On | You must set this to “On” in order to use RF Bypass. For information about RF Bypass, see page 20. |
| | Configuration | | Allows you to view the configuration of your set-top. |
| Audio | Default Audio Track | Channel Default, English, Español, Français, Português | Sets the language track that your set-top first attempts to use when tuning to a channel. “Channel Default” means your set-top will use the default audio track for the program. Selecting a language means it will use the corresponding language track, if available. |
| | Optimal Stereo | | Selecting this option enables your set-top to regulate the volume to minimize sudden changes in volume, for example during a commercial break. |
| | Audio Output | TV Speakers, Stereo, Advanced | If you select “Advanced”, further settings are displayed, allowing you to set the Compression (to None, Light or Heavy) and the Stereo Output (to Mono, Stereo or Matrix Stereo). |
| Screen position | | | This allows you to adjust how the picture displays on your TV screen. |

If the installed system does not seem to be working properly, first make sure that all the cables are securely connected, then carry out the following checks, in the order shown

| Check | Suggested solution | Further checks, if there is still a problem |
|---|---|--|
| <p>Is anything lighted on your set-top's front panel?</p> <p style="text-align: center;">YES ▼</p> <p style="text-align: right;">NO ►</p> | <p>Power may not be reaching your set-top. Make sure that the power cord is properly plugged in. If there is a switch by the wall AC power outlet, switch it to ON.</p> | <p>Check that the wall AC power outlet is working (for example by plugging in a lamp).</p> |
| <p>Does your remote control operate your set-top?</p> <p style="text-align: center;">YES ▼</p> <p>Please see the next page</p> | <p>Your set-top may not be turned on.</p> <p>Check if the light next to the power button on the front panel is green. If it is red, press the power button on the front panel to turn on your set-top.</p> | <p>Check that nothing is blocking the path from your remote control to the front panel.</p> <p>Check that your remote control is currently set to operate your set-top (consult the instructions supplied with your remote control).</p> <p>If your remote control will still not operate your set-top, replace the batteries in your remote control.</p> <p>If there is still a problem, try to operate your set-top by using its front-panel buttons. If this works, then your remote control may be faulty.</p> |

SOLVING PROBLEMS (CONT.)

| Check | Suggested solution | Further checks, if there is still a problem |
|--|--|---|
| <p>Can you see a picture on your TV screen?</p> <p style="text-align: center;">YES ▼</p> <p style="text-align: center;">NO ►</p> <p>Please see the next page</p> | <p>Your TV and other equipment may not be turned on. Check that they are plugged into AC power outlets and turned on.</p> <p>Note: If you have connected your TV to the POWER OUTLET (AC outlet) on your set-top, when you turn off your set-top, your TV may turn off automatically, if the “AC Outlet” is set to “Switched” (see page 34). You may wish to keep this feature, or you may wish to set “AC Outlet” to “Unswitched”.</p> | <p>Make sure the bypass feature is turned OFF (the word BYPASS on the front panel is not lighted).</p> <p>Check that you have selected the appropriate AV input on your TV: HDMI, component video (YPbPr), composite video or S-video (depending on how your system is connected up).</p> <p>If the video path between your set-top and your TV loops through other equipment (such as a VCR), you may need to turn off this equipment for the loopthrough to work.</p> <p>If you are using the HDMI connection, make sure the connection goes directly from your set-top to your TV. If your set-top detects that the link is not secure, your set-top will not transmit a picture (see page 11). If you expect the link to be secure, try disconnecting and reconnecting the HDMI cable.</p> |

| Check | Suggested solution | Further checks, if there is still a problem |
|--|--|---|
| <p>Is the picture distorted or too small?</p> <p style="text-align: center;">NO ▼</p> <p style="text-align: right;">YES ►</p> | <p>Check that the TV Aspect Ratio and TV Display Capability, as set on your set-top, are appropriate for your TV (see pages 21 to 25). Change them if necessary.</p> | <p>If your TV is a 16:9 TV, you can use Auto Pillarbox to add black borders to 4:3 transmissions, so that the picture is not stretched (see page 26).</p> <p>If the TV Aspect Ratio and TV Display Capability settings are correct, try using Zoom to improve the picture (see page 33) or consult the instructions that came with your TV and try adjusting your TV's display.</p> |
| <p>Can you display menus and guides on the screen?</p> <p style="text-align: center;">YES ▼</p> <p style="text-align: right;">NO ►</p> | <p>If your TV is connected to the VIDEO OUT or S-VIDEO jacks, then you will see menus and guides only if the screen resolution 480i is set to "Yes" and 480p, 720p and 1080i are set to "No".</p> | <p>Use the front panel to check the user settings (see page 21) and change the TV Display Capability resolution settings if necessary (see page 23).</p> |
| <p>Is there any sound?</p> <p style="text-align: center;">YES ▼</p> <p style="text-align: right;">NO ►</p> <p>Please see the next page</p> | <p>Check that the audio cables are securely and correctly connected.</p> | <p>Check that you have not muted the sound on your set-top and/or TV. Adjust the volume control on your set-top and/or TV. If you are using a home theater receiver, check it is set up correctly.</p> |

SOLVING PROBLEMS (CONT.)

| Check | Suggested solution | Further checks, if there is still a problem |
|--|---|---|
| <p>Can you hear stereo sound?</p> <p>YES ▼</p> <p>NO ►</p> | <p>First check that the program is likely to have stereo sound (an old movie, for example, may not be in stereo).</p> <p>Check the on-screen Setup Menu, Audio settings (see page 34). The Stereo Output may be set to "Mono". Change it to "Stereo".</p> | <p>If your TV is mono, you will hear stereo sound only if you have a stereo audio amplifier and speakers or home theater connected to your stereo VCR or set-top.</p> |
| <p>Can you see and hear a DVD that you are trying to play?</p> <p>YES ▼</p> <p>Please see the next page</p> | <p>Check that all the audio and video cables are securely and correctly connected, including any to a home theater receiver that you may be using to enhance the sound.</p> | |

| Check | Suggested solution | Further checks, if there is still a problem |
|---|---|---|
| <p>Is the picture low quality, or “fuzzy”, when you are expecting to see an HDTV-quality picture?</p> <p style="text-align: center;">NO ▼</p> <p style="text-align: right;">YES ►</p> | <p>Some programmes may include “copy protection” which means, if your set-top is connected to your HDTV via the component video jacks, the picture is downgraded to standard TV quality. To prevent this from happening, use an HDMI (high definition multimedia interface) connection instead.</p> | |
| <p>Can you see only regular (analog) channels but not any digital channels?</p> <p style="text-align: right;">YES ►</p> | <p>The bypass feature may be turned on. Check in the Setup menu whether RF Bypass is On or Off. If bypass is on, use the menu, or press the BYPASS button on your set-top’s front panel, to turn the feature OFF.</p> | |

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