



PACE TDC575D SET-TOP

CUSTOMER SERVICE AND INSTALLATION GUIDE

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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 the set-top, please observe the precautions discussed in this document.

#### WARNINGS ON THE SET-TOP





The lightning flash with arrowhead symbol, within a triangle, is intended to alert you to the presence of uninsulated "dangerous" voltages within the 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 the set-top.

# OTHER WARNINGS

To reduce the risk of electric shock, do not remove the cover of the 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 settop yourself will invalidate the warranty. To reduce the risk of fire or electric shock, do not expose this settop to rain or moisture.

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

To avoid possible damage to the internal hard disk, do not pick up or otherwise move the set-top while it is connected to the power supply. If you want to move the set-top, first disconnect it, then wait at least 30 seconds before continuing. You should handle the settop carefully, as any damage you cause to the internal hard disk (or any other component) will invalidate the warranty.

## INSTALLATION

The installation of the 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 groundingtype 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.

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

#### **Power sources**

You must operate the 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 the home, consult the dealer or local power company. If you move the set-top between locations at different temperatures, allow it to reach room temperature before you apply power to it.

# Overloading

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

# Lightning

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

# **Placement and mounting**

Do not place the set-top on an unstable or uneven surface. The set-top may fall, causing serious injury to a child or adult and serious damage to the set-top. If you mount the 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 the set-top are provided for ventilation, to ensure reliable operation of the set-top and to protect it from overheating.

- never block the ventilation openings by placing the 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 the 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;
- maintain a minimum distance of 2 inches around the set-top for sufficient ventilation.

See also item 7 in the Important Safety Instructions.

#### Water and moisture

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

# Entry of objects and liquids

Never push objects of any kind into the 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 the set-top.

#### Risk of fire or scorching

Never place naked flame sources, such as lighted candles, on the set-top.

#### Outdoor antenna grounding

Be sure that any outside antenna or cable system connected to the 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.



#### 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.

#### **Ambient temperature**

The operating temperature range of the set-top is 32-131°F. If the ambient temperature around the set-top falls outside this range, you must correct this in order for the set-top to work correctly and safely. For example, if the temperature is too high, switch on the air conditioning.

#### **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 the set-top, ask the service technician to perform safety checks to determine that the set-top is in its proper operating condition. See also item 14 in the Important Safety Instructions.

#### SAFETY ASPECTS OF CONNECTIONS

Full details of the rear panel are on page 10.

#### Connecting

Do not connect the 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.

The set-top operates with a 120 V AC, 60 Hz power supply. Do not connect the 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 the set-top. Connect this end first, before inserting the polarized plug into the wall socket-outlet.

#### Disconnecting

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

The only way to disconnect the set-top from the power supply is to remove the power cord from the wall socket-outlet. The 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  $\mathbf{TV}$ . 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

POWER 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 the 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 the television screen.
- Sit at a reasonable distance from the 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 the set-top without written authorization from the manufacturer. Unauthorized modification could void your authority to operate the set-top.

## NOTE

The 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. The 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 the set-top does cause harmful interference to radio or television reception, which can be determined by turning the 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 the set-top and the receiver.
- Connect the set-top to an outlet on a circuit different from that to which the receiver is connected.
- · Consult a dealer or an experienced radio/TV technician for help

# **OVERVIEW**

- Read all the safety information on pages 2 through 7.
- Familiarize yourself with the front and rear panels of the set-top (see page 9 and page 10).
- Do you want to control a VCR from the set-top? If so, connect a VCR controller (IR transmitter) (see page 13).
- Is the set-top in a TV cabinet with closed non-transparent doors or somewhere else where its IR-receive window is blocked from view? If so, connect a remote "eye" (IR receiver) (see page 14).
- Decide how you want to connect the set-top (and to which equipment) and look at the table (right) to see which setup you should use.
- Be aware of menu settings that could affect your choice of setup (see page 57).
- Connect the equipment together according to your chosen setup, but do not yet connect the power cords (see pages 15 through 19).
- Connect the power cords and turn on the equipment (see pages 20 and 21).
- Check that you can see a picture on the TV and do any necessary tuning (see page 21).
- Check whether the user settings are appropriate for the TV being used and change them if necessary (see pages 26).
- Any problems? Consult the "Solving Problems" section on page 28, and view the set-top's diagnostic screens (see page 27).

# Using the TV's baseband video and stereo audio connectors:

Standard-definition TV (+ optional home theater receiver)	Setup A
Standard-definition TV, VCR, DVD player, + home theater receiver	Setup B

# FRONT PANEL





# REAR PANEL (CONT.)

CABLE IN	Connect the cable service here.	
ΤΟ ΤΥ	Connect to the RF/antenna input on the TV or VCR.	
COMPONENT VIDEO OUT	If the TV has component video inputs, you can connect them to here.	
AUDIO OUT	Connect to the stereo audio inputs on the stereo TV, stereo VCR or optional stereo amplifier.	
VIDEO OUT	Connect to the video baseband input on the VCR (or a standard TV).	
S-VIDEO	Connect to the S-video baseband input (if present) on the VCR or TV.	
OPTICAL AUDIO OUT	Connect to the optical digital audio input on optional digital audio equipment.	
DIGITAL AUDIO OUT	Connect to the electrical digital audio input on optional digital audio equipment, such as an audio decoder or home theater receiver.	
TV PASS MODULE	Connect a TV pass® module, if required.	
SATA	Connect to an optional external hard disk.	
USB (Universal Serial Bus)	Connect to compatible optional equipment that supports a USB 1.1 interface, for example: a printer, digital camera, keyboard or mouse (for future use).	
ETHERNET	Connect to an optional PC network (for future use).	

<b>IR TRANSMIT</b>	Connect to an optional VCR controller.	
IR RECEIVE	Connect to an optional remote "eye".	
POWER OUTLET	Connect the TV's power cord here to provide AC power to the TV.	
POWER INPUT	Connect the set-top's power cord here.	

# **GETTING THE CABLES READY**

The following pages describe how to connect the set-top to a standard-definition TV and other typical equipment (VCR, DVD, and home theater receiver) using the cables listed below. The following pages also describe how to connect a VCR controller and remote "eye" to the set-top.

Below is a list of the set-top's rear panel connectors, listed with their respective connector and cable types.

Connector	Connector type	Cable type
CABLE IN / TO TV	male F-type	75 $\Omega$ coaxial
COMPONENT VIDEO OUT	male RCA jack	Component video 75 $\Omega$ coaxial
VIDEO OUT	male RCA jack	Video 75 $oldsymbol{\Omega}$ coaxial
AUDIO OUT	male RCA jack	Stereo audio coaxial
S-VIDEO	4-way male mini-DIN	S-video
DIGITAL AUDIO OUT	male RCA jack	75 $\Omega$ digital audio coaxial*
OPTICAL AUDIO OUT	Optical S/PDIF	Digital audio optical
IR RECEIVE	male 3.5 mm jack	IR remote ''eye'' cable
IR TRANSMIT	male 3.5 mm jack	VCR controller cable

\* Any cable connected to DIGITAL AUDIO OUT must be 75  $\Omega$  coaxial, not regular audio cable.

# CONNECTING A VCR CONTROLLER (IR TRANSMITTER)

You can control a VCR by connecting a VCR controller (IR transmitter) to the rear panel of the set-top. As an example, if you set up timers in the set-top (to switch to specific programs at set times), the emitter on the VCR controller will cause the VCR to record at those times.

The Pace VCR controller for use with this set-top is not supplied with the set-top. Contact the cable operator for details. It has an emitter that is designed to stick near to the remote-control sensor of the VCR it controls.

#### Installing the VCR controller

- 1. Refer to the VCR's user guide to find out where its remote-control sensor is. (This is also known as the IR or infrared sensor.)
- 2. Select a location on the VCR to attach the IR emitter. This must be within 3 inches of the remote-control sensor. Make sure the area is clean and dry.
- 3. Remove the covering from the adhesive strip on the IR emitter.
- 4. Making sure the round end points toward the remote-control sensor, stick the emitter onto the VCR.
- 5. Insert the 3.5 mm jack plug on the other end of the VCR controller into the socket labeled "IRTRANSMIT" on the rear panel of the set-top.
- 6. You must then use the on-screen menus to set up the set-top to recognize the brand of VCR that is being used. Consult the instructions for the on-screen menus and the instructions for the VCR controller for further details on how to do this.





# CONNECTING A REMOTE EYE (IR RECEIVER)

You may need to install the set-top in an equipment closet with closed non-transparent doors or some other location where the remote-control sensor (IR-receive window) on the set-top's front panel is blocked from view (for example, if the TV is wall-mounted). In that case, you need to connect a remote "eye" (IR receiver) to the set-top's rear panel. The IR signals from the remote control can be received by the remote eye and they then reach the set-top through the remote eye's cable. The remote eye is not supplied with the set-top.

- 1. Select a location for the remote eye. This will typically be on the top or side of the TV, but could be in a different, but convenient, location. Make sure that it is in a position where there is a clear path between the remote control and the remote eye.
- 2. Make sure that you can conveniently route the cable. The cable on the remote eye is approximately 10 feet long, so make sure that the location you have chosen is within 10 feet of the IR RECEIVE jack on the set-top's rear panel.
- 3. Make sure the area where you will attach it is clean and dry.
- 4. A small adhesive patch is supplied with the remote eye. Remove the paper from one side of the patch and stick the patch to the back (larger, flat side) of the remote eye.
- 5. Remove the paper from the other side of the adhesive patch and stick the remote eye at the position you want. Make sure that the window at the curved end of the remote eye points toward the position from which the remote control will be operated.
- 6. Insert the 3.5 mm jack plug on the other end of the remote eye's cable into the socket labeled "IR RECEIVE" on the rear panel of the set-top.



The following pages describe how to connect the set-top to a standard-definition TV and other typical equipment (VCR, DVD player and home theater receiver). Some of the connections may change when extra equipment is added, or if some of the equipment shown in the diagrams is not present. For example, when a you add a home theater receiver, some cables that previously went to the TV can, instead, go to the home theater receiver.

On pages 16 through 19 two typical connection set-ups are shown. Set-up A is a basic configuration for a TV and home theater receiver. Set-up B is for a TV, VCR, DVD player and home theater receiver.

These set-ups make efficient use of the connectors on the set-top. However, depending on the other equipment and the connectors on it, you may choose to connect things up differently.

If you connect a VCR as shown, the set-up allows stereo recording and play-back of video tapes. You hear stereo sound from the home theater's loudspeakers.

Although the RF cables are not absolutely necessary, we recommend that you connect them as a back-up and so that you can use the RF bypass (but note that they will provide only mono sound to the TV and VCR).

If you also connect an optical audio connector, as shown, it means that the home theater receiver can take advantage of digital audio via the set-top's optical audio output.

#### WARNINGS

Do not connect the 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 the set-top from the AC power supply before you disconnect any other equipment from its rear panel.

The only way to disconnect the 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). The 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 the DIGITAL AUDIO jack must be 75 ohm coaxial, not regular audio cable.

# SET-UP A: STANDARD-DEFINITION TV AND HOME THEATER SYSTEM WITH BASEBAND VIDEO CONNECTION

The set-up shown on page 17 uses a baseband video connection to connect to the TV.

# Variations

Component video displays a much higher-quality picture on the TV than can be obtained using baseband video. Therefore, if the TV has component (YPbPr) connectors, replace the baseband video connection with component connections to the TV.

S-video also provides a better TV picture than baseband video. Therefore, if the TV has an S-video connector, replace the baseband video connection with an S-video connection to the TV.

# **Cable Wiring Diagram A**





# SET-UP B: STANDARD-DEFINITION TV, VCR, DVD AND HOME THEATER SYSTEM WITH BASEBAND VIDEO CONNECTION

The set-up shown on page 19 uses a baseband video connection to connect to the TV.

# Variations

Component video displays a much higher-quality picture on the TV than can be obtained using baseband video. Therefore, if the TV has component (YPbPr) connectors, replace the baseband video connection with component connections to the TV.

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

# **Cable Wiring Diagram B**



#### NOTE

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



#### WARNINGS

Do not connect the 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.

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

The only way to disconnect the 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). The set-top must therefore be installed near to the AC power socket-outlet, which should be easily accessible.

# CONNECTING THE TV TO THE AC POWER SUPPLY

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

#### CONNECTING THE POWER CORD TO THE SET-TOP

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

## CONNECTING EQUIPMENT TO THE AC WALL OUTLETS

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

## TURNING THE SET-TOP ON AND OFF

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

Wait for a few seconds, then press the **power** button on the remote control to turn the set-top on. The **POWER** LED goes from red to blue, to show that the set-top is on.

If the **POWER** LED is neither red nor blue, there is a problem.

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

# TUNING THE TV AND VCR TO THE SET-TOP

The set-top's RF output port (labeled "TOTV") can transmit signals on either channel 3 or channel 4. The cable operator has set up the set-top to transmit on the channel that is suitable for the installation location and should have told you which channel this is. You must tune the TV and the VCR to this output channel so that programs can be watched and recorded through the RF coaxial cables. To do the tuning, refer to the diagram on page 20 and carry out the following steps.

- Make sure that all the equipment, including the set-top, is turned on. Make sure that you have NOT selected a baseband input at the TV. Make sure that the bypass feature is turned off (BYPASS is NOT lighted on the front panel).
- 2. On the VCR, switch the TV/VCR switch to "TV".
- 3. Tune the TV to the set-top's RF output channel (3 or 4, as stated by the cable operator).



# TURNING ON AND TUNING IN (CONT.)

You should now be able to see on the TV a program that is coming from the set-top. If you can not see a program, check that the RF coaxial cables are securely and correctly connected (see the setup diagrams). If there is still a problem, check with the cable operator that you are using the correct RF output channel.

4. When you can see a set-top program on the TV, switch the TV/VCR switch on the VCR to "VCR".

If you can still see the picture on the TV, everything is tuned correctly. If the picture disappears, carry out the following final step.

5. Tune the VCR by setting the VCR's RF output channel to the same RF channel number as the set-top and TV (either 3 or 4, as stated by the cable operator).

Everything should now be tuned correctly.

#### NOTE

Regardless of the program channel number selected on the set-top (and shown on its front-panel display), the RF output channel number will always be fixed (either 3 or 4, as quoted by the cable operator). The TV and VCR must be tuned to this channel if you want to watch and record programs through the RF coaxial cables.

Find out from the cable operator whether the set-top's RF output is channel 3 or channel 4 (see step 1)



Set the VCR's RF output to the same channel number as the set-top's RF output (see step 5)



Tune the TV to the same channel number as the set-top's RF output (see step 3)

# **RF BYPASS**

#### USING RF BYPASS

You use the RF bypass feature to make the regular (analog) channels bypass the set-top and pass directly to the TV and/or VCR.

For the RF bypass to work, the equipment must be connected by RF leads (see the diagram, right). Other connections are possible in addition to those shown (see page 17) provided that the RF connection is included.

When you turn on the bypass, you can use the TV's remote control to tune to any of the regular (analog) channels and watch that channel on the TV. At the same time, you can record a different channel (digital or analog) on the VCR. For this to happen, you must turn on the set-top (so that front-panel **POWER** LED is blue), select on it the channel you wish to record and set up the VCR to record from the set-top.

When you turn off the bypass, you see on the TV the channel that is selected on the set-top. This is the same channel that the VCR receives. So, when the bypass is off, you can record only the channel that you are watching on the TV.



#### Turning bypass on and off

To turn on the bypass feature, press the **bypass** button on the remote control. To turn it off, press **bypass** again.

While the bypass is on, the word BYPASS is lighted on the set-top's front panel.

#### About the bypass feature

If the TV has an RF input only, you can watch only regular (analog) channels while the bypass feature is turned on. You must turn off the bypass in order to watch the channel that the set-top is tuned to.

If, however, the TV has additional inputs such as baseband inputs and has been connected up as shown on page 17, you can watch the channel that the set-top is tuned to without turning off the bypass. You do this by selecting the appropriate input on the TV.

If the stereo TV has picture-in-picture capability, you can turn on the bypass feature so that there are two inputs to the TV: (1) a regular channel through the bypass and (2) the set-top's channel through the video/stereo audio cables. You could achieve the same effect by using an external RF splitter instead of the bypass feature.

# THE SET-TOP'S DVR FUNCTIONS

The TDC575D set-top has an internal hard disk that is used to record and play back television programs, giving much more control of the viewing experience. For example, you can pause live television and resume viewing from the point at which you left off. You can also use the set-top to record favorite programs, and you can watch one program while recording another.

With the TDC575D set-top you can:

- 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 digital video
- Record one program while watching another
- Record two programs while watching a previously recorded program
- Schedule the set-top to record a program or a whole series
- Fully manage the stored recordings
- Back up digital recordings to a VCR
- Retain full control over any parental viewing restrictions you have set up

You control the TDC575D DVR functions using the remote control; consult the information supplied by the cable operator for more details. Also read the operating instructions that are supplied with the remote control.

#### NOTE

The exact functionality of the DVR depends on the on-screen program guide. For more details, consult the information supplied by the cable operator.

# USING THE SETUP MENUS

The Setup menus allow you to make further settings to control how the set-top works. These are available from the TV Guide and should be fully described in the information provided by the 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 the set-top and TV work. See the table below for information about these.

ltem	Setting	Options	Notes	
Cable Box Setup	AC Outlet	Switched, Unswitched	If setting is "Switched", the AC outlet on the set-top's rear panel is <i>on</i> when the set-top is <i>on</i> , and <i>off</i> when the set-top is <i>off</i> , so any TV that is therefore receiving its power from this AC outlet will switch off when the 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 the 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 40.	
	Configuration		Allows you to view the configuration of the set-top.	
Audio	Default Audio Track	Channel Default, English, Espagñol, Français, Português	Set the language track that the set-top first attempts to use when tuning to a channel. "Channel Default" means the set-top will use the default audio track for the program. Selecting a language means it will use the corresponding language track, if available.	
	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 in the TV screen.	

Other items and options may be available on these screens. The menus may be subject to change in the future, as the set-top advances with new technology.

# DISPLAYING DIAGNOSTIC SCREENS

#### DISPLAYING THE DIAGNOSTIC INFORMATION SCREENS

The Diagnostic Information screens provide "read-only" information about the configuration of the set-top. This includes information on, for example, addressing, memory, current channel, status information, etc.

First of all, make sure that the set-top is connected to the TV by the S-video, baseband video (RCA) or RF (TO TV) connection, and set the TV to its appropriate input.

Ensure the set-top is turned on (the **POWER** LED on the front panel should be blue).

#### To display the Diagnostic Information screens:

- 1. Press and hold the **power** button on the remote control, then immediately (within 2 seconds) press the **select** button.
- 2. Release both buttons.

The Diagnostics Main Menu (see right) will then be displayed on the TV.

- Use the ▲ and ▼ buttons to move the on-screen cursor through the list of Diagnostic screens, then use the select button to view the chosen sub-menu or information screen. To exit a sub-menu and return to the preceding level, press ◄.
- 4. To remove the Diagnostic Information screen, and return to normal TV viewing, press the **power** button on the remote control twice.

DIAGNOSTIC	S MAIN MENU
> 01 GENERAL STATUS	14 MAC FREQ TABLE
02 PURCHASE STATUS	15 MESSAGE TYPES
03 OOB STATUS	16 IN BAND PAT
04 IN BAND STATUS	17 IN BAND PMT
05 AV STATUS	18 TASK STATUS
05 UNIT ADDRESSING	19 IB MCA STATUS
07 SOFTWARE AND HW VER	20 FP/LED DIAG
08 CURR CHAN STATUS	21 INTERFACE STATUS
09 RENEWABLE SECURITY	22 DVR STATUS
10 UPSTREAM MODEM	23 HDD STATUS
11 APP CODE MODULES	24 CONTENT LISTING
12 MEMORY CONFIG	25 SYSTEM INFO
13 INTERACTIVE INFO	

Diagnostics main menu

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
Is anything lighted on the set-top's front panel? YES	NO	Power may not be reaching the 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.	Check that the wall AC power outlet is working (for example by plugging in a lamp). Try a new power cord. See also page 61.
Does the remote control operate the set-top? YES	NO	The set-top may not be turned on. Check if the <b>POWER</b> LED on the front panel is blue. If it is red, press the <b>power</b> button on the remote control to turn on the	Check that nothing is blocking the path from the remote control to the front panel (or remote eye, if you are using one). Check that any remote eye is securely plugged into the set-top.
•		set-top.	Check that the remote control is currently set to operate the set-top (consult the instructions supplied with the remote control).
Please see the next page			If the remote control will still not operate the set-top, replace the batteries in the remote control.

Check		Suggested solution	Further checks, if there is still a problem
Can you see a picture on the TV screen? YES	NO	The TV and other equipment may not be turned on. Check that they are plugged into AC power outlets and turned on. <b>Note:</b> If you have connected the TV to the POWER OUTLET (AC outlet) on the set-top, when you turn off the set-top, the 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".	Make sure the bypass feature is turned OFF (the word BYPASS on the front panel is not lighted). Check that you have selected the appropriate AV input on the TV: COMPONENT VIDEO (YPbPr) or VIDEO IN (depending on how the system is connected up). If the video path between the set-top and the TV loops through other equipment (such as a VCR) you may need to turn off this equipment for the loopthrough to work
Is there any sound? YES V Please see the next page	NO	Check that the audio cables are securely and correctly connected.	Check that you have not muted the sound on the set- top and/or TV. Adjust the volume control on the set-top and/or TV. If you are using a home theater, check it is set up correctly.

# SOLVING PROBLEMS (CONT.)

Check		Suggested solution	Further checks, if there is still a problem
Can you hear stereo sound?		First check that the program is likely to have stereo sound (an old movie, for example, may not be in stereo). Check the TV Guide Setup Menu, Audio settings (see page 34). The Stereo Output may be set to "Mono". Change it to "Stereo".	If the TV is mono, you will only hear stereo sound if you have a stereo audio amplifier and speakers or home theater connected to the stereo VCR or set-top. This is also the case if the stereo TV has only an RF input.
Can you see only regular (analog) channels but not any digital channels?		The bypass feature may be turned on. Press the <b>bypass</b> button on the remote control to turn the feature OFF (make sure the word BYPASS is not lighted on the front panel).	