



SRT 5412

High Definition Digital Terrestrial Receiver

USER'S MANUAL



Important Safety Instructions

- To avoid electric shock, do not open the unit.
- There are no user-serviceable parts inside. Servicing can only be performed by qualified service personnel.
- Connection can only be to a 240V AC mains supply.
- All safety and operating instructions should be read before the product is operated.
- All warnings on the product and in this user's manual should be adhered to.
- The antenna cable must be earthed.
- Do not use attachments not recommended by the product manufacturer as they may cause hazards or damage the equipment.
- Do not overload adaptors, wall sockets or extension cables as this can result in unit failure or electric shock.
- For cleaning, use only a dry or lightly dampened cloth. Do not use liquid cleaners or aerosol cleaning products.
- Do not place this product on an uneven surface.
- Do not block the ventilation slots on the top of the unit.

Overview

Thank you for purchasing this Strong Digital Terrestrial Television Receiver.

This product has been manufactured in accordance with strict quality control procedures and is fully compliant with Australian specifications.

Your new receiver will enable you to experience superior picture and sound quality, widescreen images, extra channels plus a variety of new features.

- For a complete list of all of our digital television receivers— terrestrial and satellite—please go to our website: **www.strong-technologies.com**
- For general enquiries, please email us at **techau@strong-technologies.com**
- For technical assistance, please call our Technical Support Help Line on **1 800 820 030**

Main Features

- High Definition Multimedia Interface (HDMI) output
- Component output (Y/Pb/Pr)
- S-Video and Composite output
- Multi-video definitions: 576i/ 576p/720p/1080i
- Multi-language support
- Tuner loop-through
- Favourite channels and stations list
- 16:9 and 4:3 aspect ratios
- Subtitles and teletext
- 8 timer event settings
- COFDM demodulation
- Fully featured infra-red remote control
- Decodes high definition and standard definition broadcasts
- Dolby Digital audio output: S/PDIF optical
- Plays MP3 music from a USB memory stick
- Auto and manual channel searching
- Multi-band selection: 7M and 8M
- CD-quality audio (mono and stereo)
- EPG: Electronic Program Guide
- Signal level and quality indicators
- Parental guidance locking
- USB port for software upgrades
- DVB/T and MPEG-2 compliant
- Two power supplies: 12/24V DC (with supplied power cord) or 240V AC (with supplied power adapter)

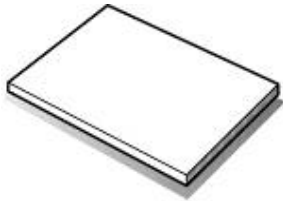
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Checklist of Accessories

The following accessories have been supplied with your **SRT 5412**. If any were not supplied, contact the retailer from whom you purchased the unit.

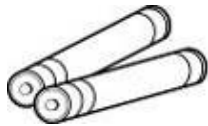
User's manual : 1



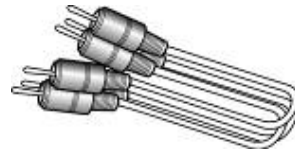
Remote control : 1



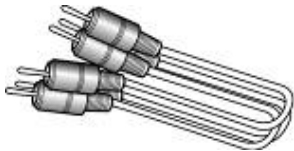
Batteries (AAA type) : 2



CVBS Composite Video and Audio Cable (yellow, white, red) : 1



Y / Pb / Pr Component Cable (blue, red, green) : 1



AC Power Adapter: 1



DC Power Cord: 1



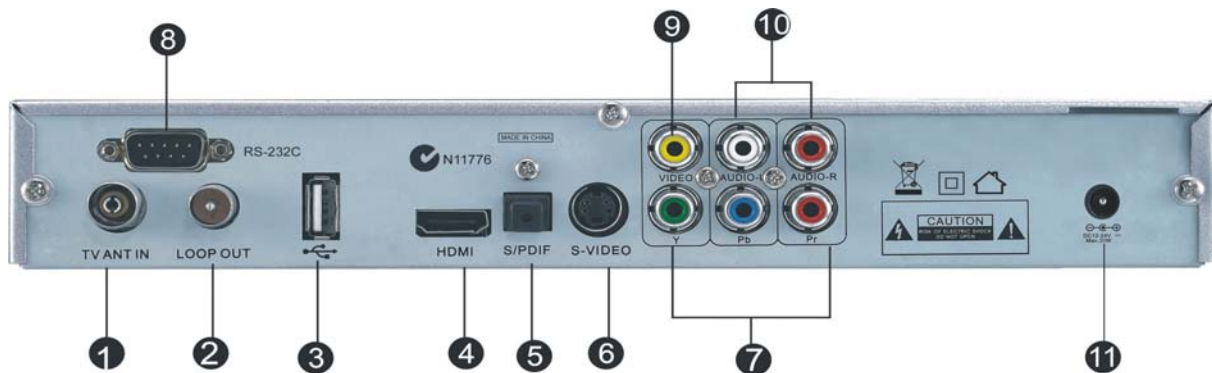
Controls and Indicators

Front panel



- 1** To switch the receiver between stand-by mode and power-on mode.
- 2** To select the next channel, or next option in a menu.
- 3** To select the previous channel, or previous option in a menu.

Rear panel



No.	Name	Connector	Function
1	TV ANT IN	IEC 169-24 female	Input from terrestrial antenna
2	LOOP OUT	IEC 169-24 female	Loop-through output to VCR, etc.
3	USB	USB 2.0 A-type cable	Music and software upgrades
4	HDMI	HDMI cable	HDMI video-and-audio connection
5	S/PDIF	Fibre optic	Digital audio output (optical)
6	S-Video	MINI-DIN	S-VHS video output
7	Y/Pb/Pr RCA Component	RCA cinch (green/blue/red)	Component connection (Y/Pb/Pr)
8	RS-232	DB-9	Serial port
9	Video RCA	RCA cinch(yellow)	Composite video connection
10	Audio (Left and Right)	RCA cinch <ul style="list-style-type: none"> • white: left audio • red: right audio 	Left and right audio for Component or Composite connection
11	DC power socket	-	To turn unit on or off



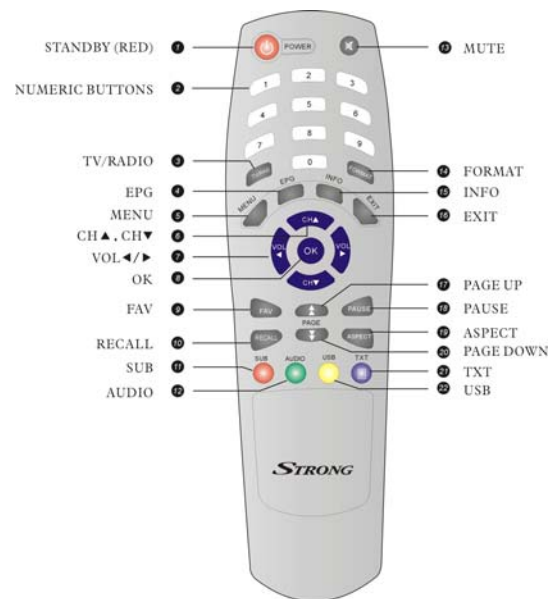
、 Note the presence of this symbol on the rear panel. This indicates that important operating and maintenance instructions accompany the product. These are set out in this manual. It is highly recommended that you read this manual thoroughly before using the product.



To reduce the risk of electric shock, do not remove any panel of the **SRT 5412**. Even when the unit is turned off, voltages may be present within it that are of

sufficient magnitude to constitute a risk of electric shock.

Remote Control



- 1. STANDBY:** To switch to stand-by mode when the receiver is on (or vice versa)
- 2. Numeric Keys (0–9):** To choose a channel directly, or to enter numeric information in a menu
- 3. TV/RAD:** To switch between TV and radio (and vice versa)
- 4. EPG (Electronic Program Guide):** To show the TV and radio program guide
- 5. MENU:** To display the main menu, or return to a previous menu
- 6. CH (▲/▼):** To change the channel, or to move the cursor up or down in a menu
- 7. VOL (◀/▶):** To change the volume in viewing mode, or to change an option or setting in a menu
- 9. FAV:** To display the favourites list in viewing mode, and to select a favourite
- 10. RECALL:** To return to the previous channel or station
- 11. SUB:** To turn subtitles on or off
- 12. AUDIO:** To choose speakers (left, right or stereo), audio format and audio language
- 13. MUTE:** To turn the sound on or off
- 14. FORMAT:** To cycle through the video definitions: 576i, 576p, 720p and 1080i
- 15. INFO:** To show information about the current program
- 16. EXIT:** To close the current menu and return to normal viewing
- 17. PAGE ▼/▲:** To move to the next or previous

8. OK: To show the channel list in viewing mode, and to select an item (or confirm a choice) in a menu

18. PAUSE: To freeze the screen

19. ASPECT: To cycle through the aspect ratios: 16:9 and 4:3

page (if there is more than one page)

20 .PAGE ▼/▲: To move to the next or previous page (if there is more than one page)

21. TXT: To show Teletext

22. USB: To lay music from a USB memory stick, or to upgrade the software

Installing the batteries in the remote control

1. Press down on the retaining catch on the lid of the battery recess on the remote control and remove the lid.
2. Insert two AAA batteries into the recess.
Be careful to insert the batteries as shown in the diagram inside the recess.
3. Replace the lid over the recess and gently push down on the lid until it snaps firmly into place.

Quick Start

This section explains how you can quickly set up your *SRT 5412* using the cables provided. For detailed instructions, see "How to Connect" on page 11.

1

Install batteries in the remote control. See page 9.

2

Connect the *SRT 5412* to the antenna wall plate. See page 11.

3

Using the supplied Component cable (blue-red-green) or the yellow lead of the supplied Composite cable, connect the *SRT 5412* to the TV. Make sure you match the colour of a lead with the colour of a socket. (This step provides video output to your TV.) See "How to Connect" on page 11.

4

Connect the white and red leads of the Composite cable between the *SRT 5412* and the TV, again matching the colour of a lead with the colour of a socket. (This step provides audio output to your TV.) See "How to Connect" on page 11.

5

Turn on the *SRT 5412* and the TV. The Strong Technologies banner appears on your TV screen, followed by a message asking if you want to automatically search for channels and stations. (If you don't see the banner and message, press **EXIT** and then **FORMAT** on the remote control until you do.)

6

Press **OK** to automatically scan for digital broadcasters in your area. When the scanning is finished, the menu closes and a local digital TV channel will be showing.

See "Basic operations" on page 16 for general instructions on using the *SRT 5412* to select TV channels and radio stations.

How to Connect

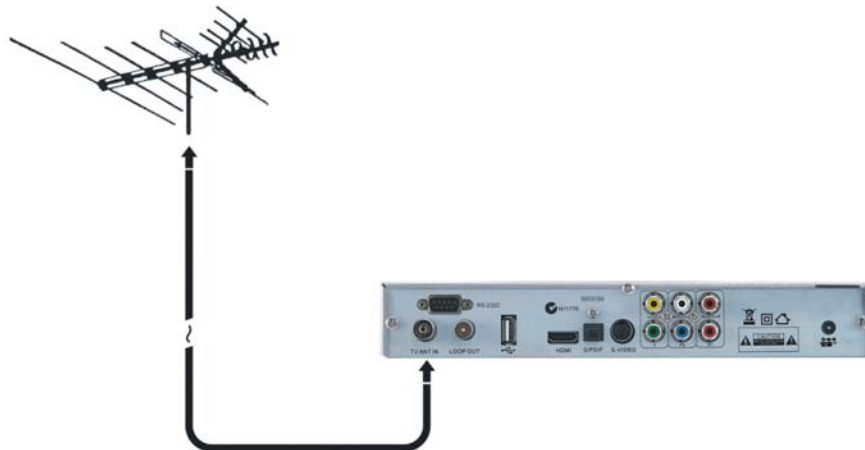
Refer to the diagram on page 8 for the location of the sockets identified by numbers in the procedures in this section.

Make sure you have installed the batteries in the remote control before you begin connecting the **SRT 5412** to your TV. Depending on the connection method you choose, you may need to adjust certain settings using the remote control before you can see a digital broadcast.

Step 1: Connect to the antenna

Connect the antenna lead coming from your antenna wall plate to the TV ANT IN socket on the **SRT 5412** (socket 1).

TIP: You probably already have an antenna lead coming from your antenna wall plate to the TV ANT IN socket on the back of your TV. If so, simply unplug the lead at the TV and plug it into the TV ANT IN socket on the **SRT 5412**.



Step 2: Choose an installation method

There are a number of methods of connecting the **SRT 5412**. These methods are labelled A, B, C and D below.

NOTE: The various video connection options available provide differing degrees of video quality. In ascending order of quality, these connections are **Composite** (good), **S-Video** (better), **Component** (better again) and **HDMI** (best).

A: High Definition Multimedia Interface

If your TV has an HDMI socket, connect an HDMI cable between the HDMI socket on the **SRT 5412** (socket 4) and the HDMI socket on your TV.

A HDMI connection incorporates video and audio. You do not need to make separate connections for audio.

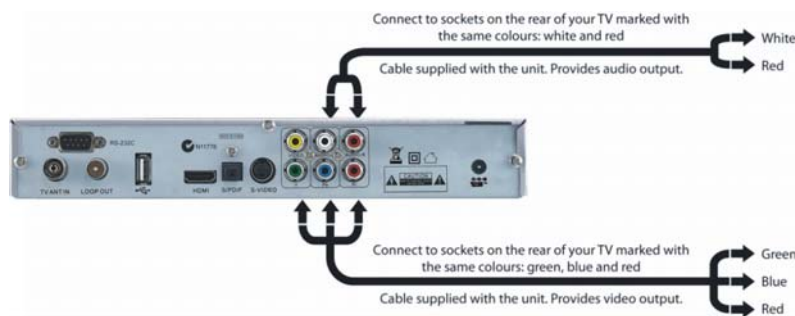
An HDMI cable is not provided with the **SRT 5412**.



B: Y/Pb/Pr (Component) using the supplied RCA blue–red–green cable

For Component video, connect to your TV with the supplied Y/Pb/Pr Component cable (with blue, red and green leads). Connect the leads between the Y, Pb and Pr sockets on the **SRT 5412** (socket group 7, taking care to match the colour of a lead with the colour of the socket), and the corresponding Component sockets on your TV. (The Component sockets on the TV have the same colour-coding.)

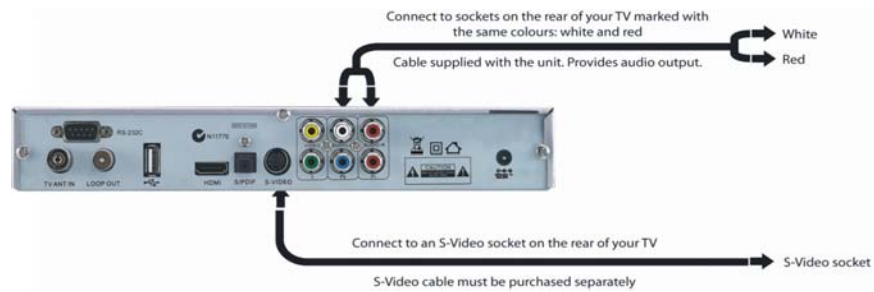
You will need to make separate connections for left and right audio via the audio sockets in socket group 9. This can be done using the supplied RCA cable. (Match the colour of the plugs with the colour of the sockets.)



C. S-Video (Y/C) connection

If your TV has a 4-pin Mini Din S-Video socket, you can connect an S-Video cable between socket 6 on the **SRT 5412** and the corresponding S-Video socket on your TV. (An S-Video cable is not supplied.)

You will need to make separate connections for left and right audio via the audio sockets in socket group 9. This can be done using the supplied RCA cable. (Match the colour of the plugs—white and red—with the colour of the sockets.)



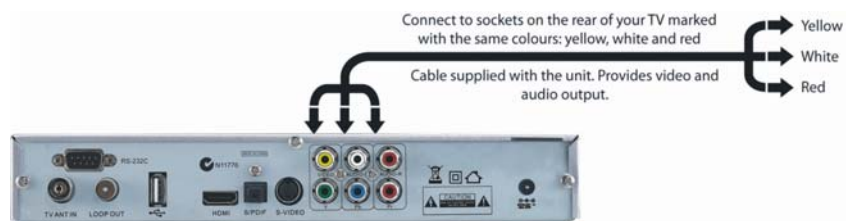
IMPORTANT NOTE: An S-Video connection will only output signals with a video definition of 576i. However, the *SRT 5412* is designed primarily to output higher quality signals—signals with a video definition of 1080i—and this is the default setting. As a result, you will see only a blank screen when you first make an S-Video connection. To get proper reception, press the **FORMAT** button on the remote control. Keep doing so until a picture appears. (The video definition rates will appear on the screen on the front of the *SRT 5412*. The rate you need is 576i.)

D: CVBS (Composite) using the supplied RCA red–white–yellow cable

Using the appropriate socket colour-coding on sockets 8 and 9, you can connect to your TV with the supplied red–white–yellow RCA cable. This gives you CVBS (Composite Video) and MPEG-2 stereo audio.

For video, connect the yellow RCA lead between the yellow video socket (socket 8) on the *SRT 5412* and the corresponding socket on your TV.

For audio, connect the same RCA cable between the white and red sockets in socket group 9 and the corresponding sockets on your TV. Match the colour of the leads—white and red—with the colour of the sockets. (All three leads of the cable—yellow, white and red—should be plugged into the same socket group on your TV.)



IMPORTANT NOTE: A CVBS connection will only output signals with a video definition of 576i. However, the *SRT 5412* is designed primarily to output higher quality signals—signals with a video definition of 1080i—and this is the default setting. As a result, you will see only a blank screen when you first make a CVBS connection. To get proper reception, press the **FORMAT** button on the remote control. Keep doing so until a picture appears. (The video definition rates will appear on the screen on the front of the *SRT 5412*. The rate you need is 576i.)

Step 3: Optional connections

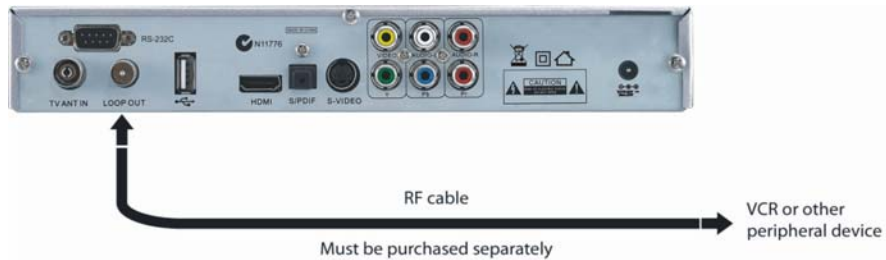
Dolby Digital

Dolby digital bitstream audio S/PDIF can be achieved using an optical cable. (This cable is not supplied.) The cable should be connected between socket 5 on the **SRT 5412** and the S/PDIF socket on your Dolby Digital decoder amplifier.



Looping Out (for VCR recording)

In order to watch one channel while recording another on a VCR, connect an RF cable (not supplied) between the LOOP OUT socket on the **SRT 5412** (socket 2) and the RF IN socket on your VCR. Note that VCR recordings are only analogue, not digital.



Getting Started

First-time use

Once you have connected the **SRT 5412** to your antenna and to your television, you need to:

1. Turn on the television.
2. Using a DC power supply (12V or 24V) connect the DC power cord between the power supply (for example, a DC supply in your car or caravan) and the power socket on the back of the receiver (number 11 in the diagram on page 7). If necessary, turn on the DC power supply..
3. Select the video or AV input channel to which the **SRT 5412** is connected: this can be done by pressing the TV/AV or VIDEO button on your TV remote control. (Refer to your TV user's manual for instructions.)

The Strong Technologies banner appears on your TV screen, followed by a message asking if you want to automatically search for channels and stations. (If you don't see the banner and message, press **EXIT** and then **FORMAT** on the remote control until you do.)

4. To search for available channels and stations, press **OK** on the remote control. The **Auto** window appears and the searching begins.

If you want to search for channels and stations yourself, see "Rescanning for channels and stations" on page 25 for instructions and ignore the rest of this procedure.

As channels and stations are found, they are displayed on the **Auto** window.



When the **SRT 5412** can find no more channels and stations, the search ends and one of the TV stations found will appear on the screen.

NOTE: You can now start watching digital TV stations and listening to digital radio stations. However, there are settings that you should consider that will improve your enjoyment of your **SRT 5412**. These are explained in "User Settings" on page 28. But if you want to start watching TV straight away, see "Basic operations" on page 16 for instructions.

Operation

Basic operations

Selecting a channel

There are a number of ways to select a TV channel or radio station:

- **Number pad on the remote control:** If you know the channel number, enter the number using the number keys on the remote control and then press **OK**. (If you don't press **OK**, the channel selected appears after approximately 2 seconds.)

To choose a radio station using the number keys, press **TV/RADIO** first and then enter the number. (For example, 201 is the number for ABC Dig Jazz.)

NOTE: The *SRT 5412* uses the Logical Channel Numbering system (LCN) by default. Some samples of primary LCN channel numbers are:

- 1 = Ten network and affiliates
- 2 = ABC
- 3 = SBS
- 7 = Seven network and affiliates
- 9 = Nine network and affiliates

Secondary channels can be selected by pressing the primary number followed by another number. (For example, pressing 2 gives you ABC1, and pressing 22 gives you ABC2.)

-
- **Channel list:** Press **OK** on the remote control. This displays the channel list. (To list radio stations instead of TV channels, press **TV/RADIO** before pressing **OK**.)

Press **CH▼** or **CH▲** on the remote control until the channel or station you want is highlighted and then press **OK**.



TIP: Press a **PAGE** button to quickly scroll through a long list of channels.

- **Menus:** To choose a channel or station from the main menu, press **MENU** on the remote control, select **TV Channel** or **Radio Channel** and press **OK**. Press **CH▼** or **CH▲** on the remote control until

the channel or station you want is highlighted and then press **OK**.

- **Favourites list:** Press **FAV** on the remote control to see the first channel or station in your favourites list. Press **CH▼** or **CH▲** to see each favourite in turn. Pause at the station or channel you want. See “Favourites” on page 19 for instructions on creating a favourites list.
- **Scroll:** Press **CH▼** or **CH▲** on the remote control to scroll through the channels in channel number order. (You can also scroll through the channels in order by pressing the channel up and channel down buttons on the front panel of the **SRT 5412**.)
- **By EPG:** Press **EPG** on the remote control, select the channel from the electronic program guide (EPG), and press **EPG** again. The EPG is explained on page 24.
- **Previous channel:** Press the **RECALL** button to return to the previous channel or station.

Adjusting the volume

While you are watching TV or listening to the radio, press **VOL◀** or **VOL▶** on the remote control to decrease or increase the volume respectively.

Turning off the sound (muting)

To turn off the sound altogether, press the **MUTE** button on the remote control (button 12 in the diagram on page 8). The mute icon is displayed on the screen. Press the **MUTE** button again to restore the sound.

Getting channel Information

- Press **INFO** on the remote control to display the information banner.



Information about the current and the next program is provided. The headings along the top of the banner are **HD** (High Definition), **AC3** (Digital Dolby), **TTX** (Teletext), **SUB** (Subtitles) and **FAV** (Favourites). A heading will be highlighted if the corresponding option applies (for example, if the broadcast is in high definition, if subtitles are available, if the current channel is in your favourites list, and do on).

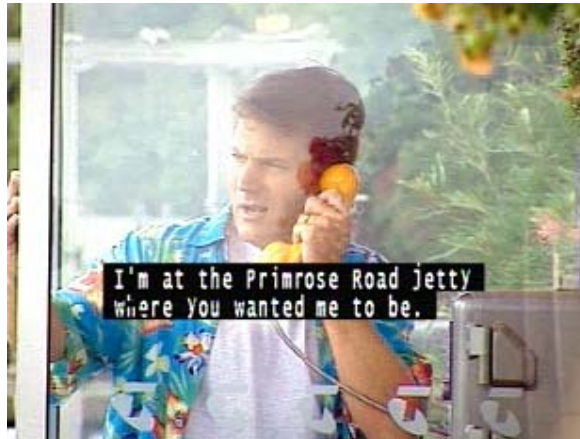
The information banner will stay displayed for a few seconds. To hide it sooner, press **EXIT** on the remote control.

TV/Radio switching

Press **TV/RADIO** on the remote control to switch between TV channels and radio stations (or vice versa).

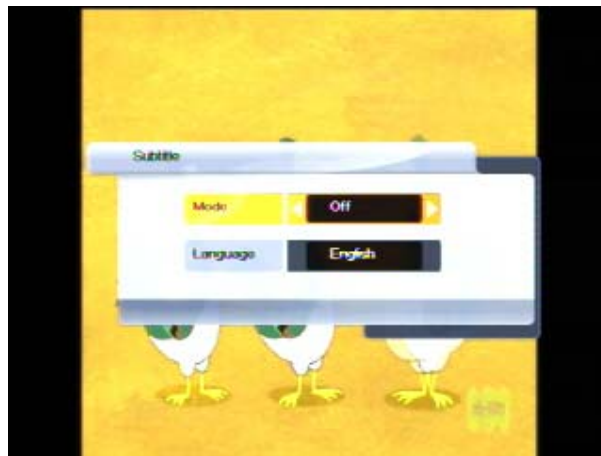
Closed captions

Closed captions are the spoken words written on the screen. This option is particularly useful for the hard-of-hearing.



To turn on closed captions (or turn them off):

1. Press the **SUB** button on the remote control. The Subtitle window appears.



2. With **Mode** highlighted, press **VOL◀** or **VOL▶** until the option you want—**On** or **Off**—is shown.
3. If the subtitles are being broadcast in more than one language and you want to choose a language other than the one shown on the screen, press **CH▼** to highlight the **Language** option and then press **VOL◀** or **VOL▶** until the language you want is shown.
3. Press **OK**.

Teletext

Teletext is a text-based data service. It is available only when the broadcasting signal carries such data.



1. Select a channel that is broadcasting teletext.
2. Press **TXT** on the remote control.
3. If necessary, select the language of the teletext service.
4. Press **OK**.
5. Select a teletext page by pressing the corresponding number or colour button on the remote control.

Press **EXIT** to cancel teletext and return to normal viewing.

Picture freeze

- Press **PAUSE** on the remote control to freeze the display.
- Press **PAUSE** again to resume normal viewing.

Favourites list

You can create a favourites list of channels and then select a channel from that list. This makes it easier to choose and switch between channels if there are many channels available in your area.

You display your favourites lists by pressing **FAV** on the remote control. You then press **CH▼** or **CH▲** to step through each favourite. Stop pressing when you reach the favourite you want.

Adding channels or stations to your favourites list

Follow this procedure to add channels or stations to your favourites list, or to remove them.

1. Press **MENU** on the remote control. The **Main Menu** appears.
2. If **Edit Program** is not highlighted in the main menu, press **CH▼** or **CH▲** until it is and then press **OK**. The **Edit Program** menu appears.



3. If you want to make a TV channel a favourite, make sure **Edit TV** is highlighted; if you want to make a radio station a favourite, make sure **Edit Radio** is highlighted. With the option you want highlighted, press **OK**.

A list of channels or stations appears.



4. Press **CH▼** or **CH▲** until the channel or station you want to select is highlighted.
5. Press the **AUDIO** button (the green button) on the remote control to mark the highlighted channel or station as a favourite (or to mark it for removal from your favourites list). An icon of a heart appears beside the channel or station name to indicate that it is to become a favourite (or the icon disappears if it was already a a favourite).
6. If you want to select another channel or station a favourite, repeat from step 4.
7. Press **MENU** or **EXIT**. A message appears asking you to confirm that you want to save the changes.
8. To proceed, press **OK**. To cancel, press **MENU** or **EXIT**.
9. Press **MENU** or **EXIT**. to return to normal viewing.

Selecting a favourite to watch or listen to

1. Press **FAV** on the remote control. The first channel or station or channel in your favourites list appears. Note that the information panel reads **FAV channel**.



2. If necessary, press **FAV** again until the channel you want to view appears. The **FAV** information banner disappears after a few seconds.

Organising channels and stations

The **Edit Program** option on the **Main Menu** enables you to delete and sort channels and stations.

Deleting channels and stations

You can delete channels and stations that you are never likely to watch or listen to. If you want to re-instate a channel or station that you have deleted, you will need to rescan for it. See "Rescanning for channels and stations" on page 25 for instructions.

1. Press **MENU** on the remote control. The **Main Menu** appears.
2. If **Edit Program** is not highlighted on the main menu, press **CH▼** or **CH▲** until it is and then press **OK**. The **Edit Program** menu appears.



3. If you want to delete a channel, make sure **Edit TV** is highlighted; or if you want to delete a station, make sure **Edit Radio** is highlighted. With the option you want highlighted, press **OK**.

A list of channels or stations appears.



4. Press **CH▼** or **CH▲** until the channel or station you want to delete is highlighted.
5. Press the **SUB** button on the remote control to mark the highlighted channel or station for deletion. An icon of a cross appears beside the channel or station name to indicate that it is to be deleted. (To unmark the highlighted channel or station, press the **SUB** button again.)
6. If you want to delete another channel or station, repeat from step 4.
7. Press **MENU** or **EXIT**. A message appears asking you to confirm that you want to save the changes (that is, delete the channels or stations you have marked for deletion).
8. To proceed with the deletion, press **OK**. To cancel the deletion, press **MENU** or **EXIT**.

Re-sorting channels and stations

You can sort channels and stations in number order or alphabetical order, or sort them so that your favourite channels and stations are listed at the top of the channel or station list.

1. Press **MENU** on the remote control. The **Main Menu** appears.
2. If **Edit Program** is not highlighted in the main menu, press **CH▼** or **CH▲** until it is and then press **OK**. The **Edit Program** menu appears.



3. If you want to resort a channel, make sure **Edit TV** is highlighted; if you want to resort a station, make sure **Edit Radio** is highlighted. With the option you want highlighted, press **OK**.
A list of channels or stations appears.



4. Choose a sort option:

To sort the channels or stations *numerical* order, press the **USB** button (the yellow button) on the remote control.

To sort the channels or stations in *alphabetic* order, press the **USB** button (the yellow button) on the remote control. (The **USB** button toggles the sort order between numerical and alphabetical order, that is, selects one order and then the other.)

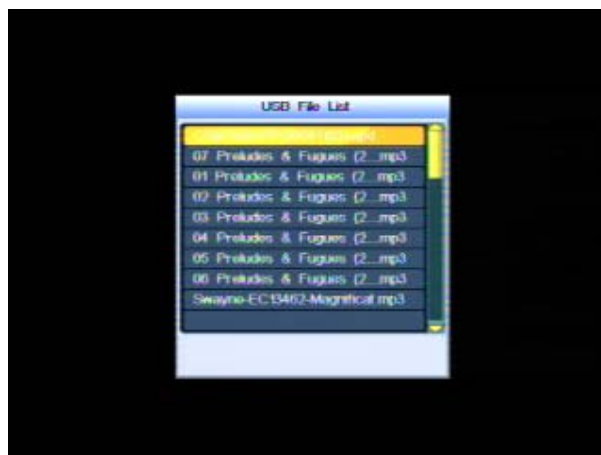
To sort the channels or stations so that your favourites are always at the top of the channel or station list, press the **TXT** button (the blue button) on the remote control.

5. Press **MENU** or **EXIT**. A message appears asking you to confirm that you want to save the changes (that is, the new sort order).
6. To proceed, press **OK**. To cancel, press **MENU** or **EXIT**.

Playing music

You can play MP3 music through your TV speakers. The music files need to be on a USB memory stick (not supplied with the **SRT 5412**). They must be at the root (or top) level on the memory stick, not inside a folder or directory.

1. Press the **USB** button (the yellow button) in the remote control. The **USB File List** screen appears.



2. Press **CH▼** or **CH▲** to highlight the track you want to play and press **OK**.
3. To play another track, repeat from step 2.

4. Press **MENU** or **EXIT** to stop playing and return to normal viewing.

Electronic Program Guide (EPG)

Some providers broadcast information about their programs. This information is available on screen via an electronic program guide, displayed by pressing **EPG** on the remote control. An example is shown below.



You can navigate through the EPG looking for information about channels and programs (explained in the next section) or press **EPG** or **EXIT** to close the guide.

Displaying program information

The information displayed when you press **EPG** is information about the channel that is showing at the time. At the top left of the screen is information about the current program on that channel; at the right of the screen is a list of upcoming programs.

- To display information about the programs on another channel, press **CH▼** or **CH▲** until the channel you want information about is highlighted at the bottom left of the screen.

To display more information than is currently shown about a selected channel, you can move between the channel name pane (at the bottom left of the window) and the program name pane (at the right of the window) and vice versa.

- To move to the program pane, press **OK**.
- To display program information for another day, press **OK** and then press **VOL◀** or **VOL▶** to step through the days.
- To scroll through the programs for a day, press **CH▼** or **CH▲**.
- To move back to the channel list in the left pane of the window, press **EXIT**.

Selecting a channel to watch from the EPG

1. With the channel name panel selected, press **CH▼** or **CH▲** until the channel you want to watch is selected.
2. Press **EPG** or **EXIT**. The current program of the selected channel is now showing.

Rescanning for channels and stations

The **Install** option on the main menu enables you to scan for—that is, detect—digital TV and radio stations available in your area. You will need to rescan if new channels or stations become available, if you want to reinstate a channel or station you have deleted, or if you move to a new location.

There are two scanning options:

- **Auto Search**

The *SRT 5412* will automatically search for all digital TV and radio stations it can detect and store their details.

- **Manual Search**

This option lets you search for a particular channel (or all channels from a specified broadcaster).

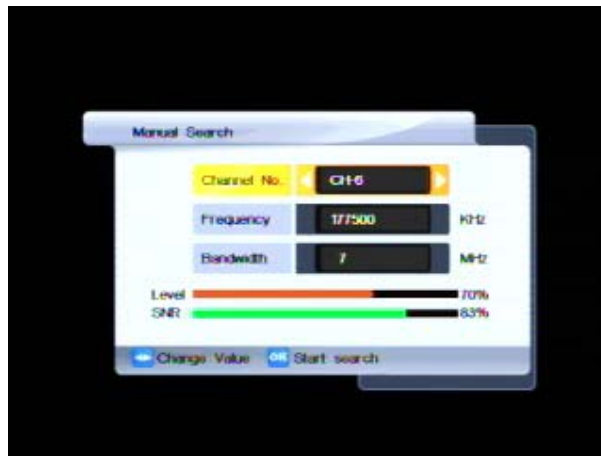
Automatic Search

1. Press **MENU** on the remote control.
2. If **Install** is not highlighted on the main menu, press **CH▼** or **CH▲** until it is and then press **OK**.
The **Install** sub-menu appears.
3. If **Auto Search** is not highlighted on the sub-menu, press **CH▼** or **CH▲** until it is and then press **OK**.
The **Auto** window appears, and the search begins automatically. When the search is finished, a channel that has been found will begin playing.

Manual Searching

NOTE: Automatic searching (described above) is suitable in most cases. You might use manual searching if you have deleted a channel and now want to access it again. In this case, you would just search for that particular channel.

1. Press **MENU** on the remote control.
2. If **Install** is not highlighted on the main menu, press **CH▼** or **CH▲** until it is and then press **OK**.
The **Install** sub-menu appears.
3. If **Manual Search** is not highlighted on the sub-menu, press **CH▼** or **CH▲** until it is and then press **OK**.
The **Manual Search** window appears.



You can search by channel number or by frequency (and restrict the search to broadcasts within a particular bandwidth: 7 or 8 MHz).

4. To search for a channel by its number, select that number in the **Channel No** field.
5. To search for all channels broadcast on a particular frequency, press **CH▼** or **CH▲** until the **Frequency** field is highlighted and enter the frequency using the number keys on the remote control.
6. To restrict the search to broadcasts within a particular bandwidth, press **CH▼** or **CH▲** until the **Bandwidth** field is highlighted and then press **VOL◀** or **VOL▶** until the bandwidth you want is shown.

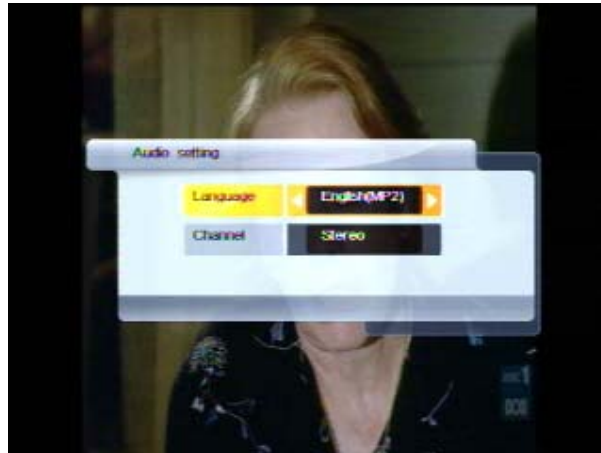
TIP: To avoid a fruitless search, check the strength and quality of the signal beforehand. These are shown by the **Level** and **SNR** bars at the bottom of the screen. Poor strength or quality indicates that it may be difficult to scan for that channel or that the reception might be too poor for you to comfortably watch the channel.

7. Press **OK** to begin scanning. When the search is finished, the channel will begin playing if it has been found; otherwise the previous channel will reappear.

Multi-language and Dolby Digital broadcasting

If a channel is being broadcast in more than one audio language, you can choose which language to listen to. Similarly, if a channel is being broadcast in more than one audio format, you can choose which format to listen to.

1. Press the **AUDIO** button (the green button) on the remote control. The **Audio setting** window appears.



2. If more than one audio language or format is being broadcast, pressing **VOL◀** or **VOL▶** will cycle through each language and format. Choose a language and format and press **CH▼**.

If a channel is being broadcast in Dolby Digital, the language will be shown with an AC3 suffix, as in **English (AC3)**. Non-Dolby broadcasts will have an MP2 suffix, as in **English (MP2)**.

3. You can also select the output mode for the audio language: stereo, left speaker or right speaker. With the **Channel** option highlighted, press **VOL◀** or **VOL▶** until the output mode you want is highlighted.
4. Press **OK** or **EXIT** to close the **Audio setting** window and return to normal viewing.

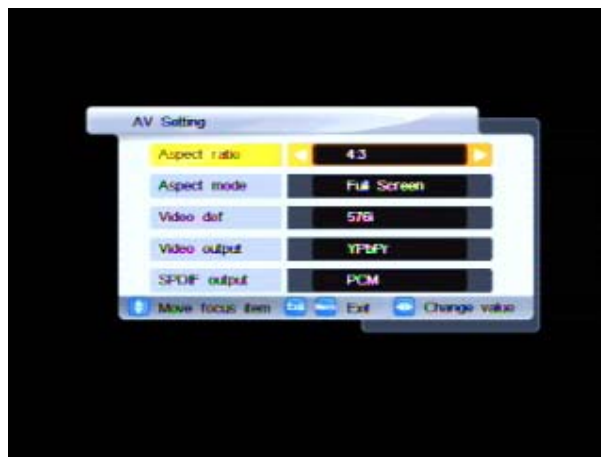
User Settings

Audio–Visual (AV) settings

1. Press **MENU** on the remote control. The **Main Menu** appears.
2. If **System Setting** is not highlighted on the main menu, press **CH▼** or **CH▲** until it is and then press **OK**. The **System Setting** menu appears.



3. If **AV Setting** is not highlighted on the menu, press **CH▼** or **CH▲** until it is and then press **OK**. The **AV Setting** menu appears.



With this menu you can control the following settings:

- Aspect ratio – 4:3 or 16:9
- Aspect mode – Full screen, Letterbox or Pan & Scan
- Video definition – 576i, 576p, 720p and 1080i
- Video output – YPbPr or YC
- S/PDIF output – PCM or AC3

Note that some of these settings are restricted by the type of connection you have made between the **SRT 5412** and your TV. For example:

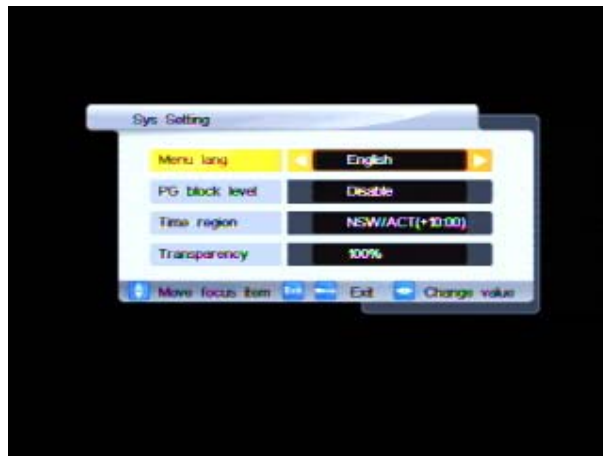
- If you have used an S-Video or a Composite connection, the **Video def** setting must be set to **576i**.
 - If you have used an S-Video connection, the **Video output** setting must be set to **YC**.
 - If you have used an HDMI connection, the **Video output** setting must be set to **YPbPr**.
 - If you have connected the **SRT 5412** to a Dolby Digital decoder amplifier, the **S/PDIF output** setting must be set to **AC3**.
4. Select an option you want to change. If necessary, press **CH▼** or **CH▲** until the option is highlighted.
 5. With the option you want to change highlighted, press **VOL◀** or **VOL▶** to step through the allowable values (shown in the panel at the right of the screen). Stop when the value you want is displayed.
 6. If there is another option you want to change, repeat this procedure from step 4.
 7. When you have finished, press **OK**.
 8. A message appears asking you to confirm that you want to save the changes. To proceed, press **OK**. To cancel, press **MENU** or **EXIT**.
 9. Press **EXIT** until you return to normal viewing.

System settings

1. Press **MENU** on the remote control. The **Main Menu** appears.
2. If **System Setting** is not highlighted on the main menu, press **CH▼** or **CH▲** until it is and then press **OK**. The **System Setting** menu appears.



3. If **Sys Setting** is not highlighted on the menu, press **CH▼** or **CH▲** until it is and then press **OK**. The **Sys Setting** menu appears.



With this menu you can control the following settings:

- Language for the on-screen menus
- Level of parental guidance (All, R and above, AV and above, MA and above, M and above, PG and above and G above)
- Time zone
- Transparency (that is, how much of the picture is visible through an information panel)

Note that the level of parental guidance (as determined by the **PG block level** setting) is controlled by a password. For example, if you have **MA and above**, then any program with a classification of MA or higher will be blocked unless the unit's password is entered.

The default password is **0000**. You can change the password. See the next section for instructions.

4. Select an option you want to change. If necessary, press **CH▼** or **CH▲** until the option is highlighted.
5. With the option you want to change highlighted, press **VOL◀** or **VOL▶** to step through the allowable values (shown in the panel at the right of the screen). Stop when the value you want is displayed.
6. If there is another option you want to change, repeat this procedure from step 4.
7. When you have finished, press **OK**.
8. A message appears asking you to confirm that you want to save the changes. To proceed, press **OK**. To cancel, press **MENU** or **EXIT**.
9. Press **EXIT** until you return to normal viewing.

PIN setting

The *SRT 5412* is shipped with a default personal identification number (PIN). The default PIN is **0000**. The PIN is required if you have enabled the parental lock (see "System settings" on page 29).

To change the PIN:

1. Press **MENU** on the remote control. The **Main Menu** appears.
2. If **System Setting** is not highlighted in the main menu, press **CH▼** or **CH▲** until it is and then press **OK**. The **System Setting** menu appears.



3. If **Pin Setting** is not highlighted, press **CH▼** or **CH▲** until it is and then press **OK**. The **Pin Setting** menu appears.



4. If you are changing the default or current PIN, make sure that **Enable** is selected for the **Pin Status** option. (If you are restoring the default PIN, press **VOL◀** or **VOL▶** to change this setting to **Disable**, press **OK** and ignore the rest of this procedure.)
5. Press **CH▼** to move to the **Old pin** option and enter the current PIN using the number keys on the remote control. (If you haven't previously changed the PIN, this will be the default PIN: 0000.)
6. Press **CH▼** to move to the **New pin** option and enter a new PIN. (A PIN must be four digits long.)
7. Press **CH▼** to move to the **Confirm pin** option and re-enter the new PIN.
8. Press **OK** to save your changes, and then **EXIT** to return to normal viewing.

Timer settings

You can set up to eight times at which specified channels will automatically come on or the unit will turn off. Follow this procedure to set or change a timer.

1. Press **MENU** on the remote control. The **Main Menu** appears.
2. If **System Setting** is not highlighted in the main menu, press **CH▼** or **CH▲** until it is and then press **OK**. The **System Setting** menu appears.



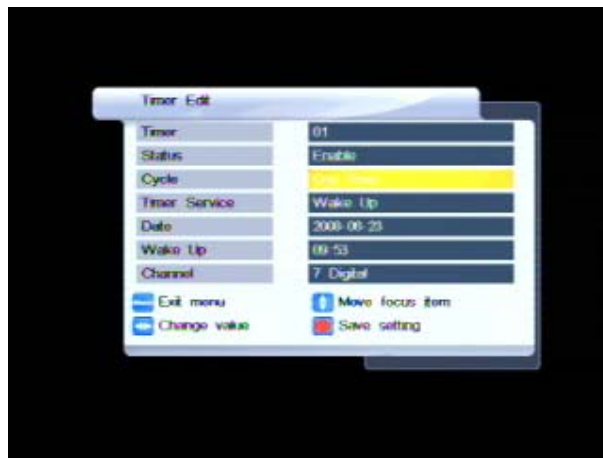
3. If **Timer Setting** is not highlighted, press **CH▼** or **CH▲** until it is and then press **OK**. The **Timer List** window appears.



4. If necessary, press **CH▼** or **CH▲** until the timer you want to select is highlighted and then press **OK**. The **Timer Edit** screen appears.



5. Press **CH▼** to select the **Status** field.
6. If you are setting a new timer, the **Status** field will read **Disable**. Press **VOL◀** or **VOL▶** to change this setting to **Enable**.
7. If you have selected a timer that has already been set and want to cancel it, press **VOL◀** or **VOL▶** to change the **Status** setting to **Disable**. Press the **SUB** button on the remote control to save your change, and then ignore the rest of this procedure.
8. All the timer options should now be available to you (see below). Press **CH▼** to select the **Cycle** option. You can set the timer to activate only once, every day or every week. Press **VOL◀** or **VOL▶** until the cycle option you want is displayed.



9. Press **CH▼** to select the **Timer Service** option. You can set the timer to come on (**Wake Up**) or turn off (**Sleep**). Press **VOL◀** or **VOL▶** until the timer service option you want is displayed.
10. Press **CH▼**. If you chose **One Time** or **Every Week** for the **Cycle** option, the **Date** option will now be selected. Use the number keys on the remote control to enter the date this timer will activate (or first activate) and then press **CH▼**.
11. Depending on what option you chose for **Timer Service** at step 9, the option now selected will either be labelled **Wake Up** or **Sleep Time**. Use the number keys on the remote control to enter the time you want the *SRT 5412* to turn on or turn off and then press **CH▼**.

Note that times must be entered using the 24-hour clock format. For example, 8 o'clock in the morning is entered as 0800, while 8 o'clock in the evening is entered as 2000.
12. If you chose **Wake Up** for **Timer Service** at step 9, the **Channel** option will now be highlighted. If you want to change the channel currently shown, press **VOL◀** or **VOL▶** until the channel you

want to see at wake-up time is displayed.

13. Press the **SUB** button on the remote control. Your timer settings are saved.
14. Repeatedly press **EXIT** until you return to normal viewing.

System Maintenance

You can upgrade the software in your *SRT 5412* as new versions become available. Information about the current version (and information about the hardware) is available from the menu to help you determine if you need to upgrade. This information might also be useful if you need to obtain technical support from Strong Technologies.

You can also reset the *SRT 5412* by reinstating the default settings it had when it left the factory.

System information

To display system information about your *SRT 5412*, such as the model number, software version, hardware version:

1. Press **MENU** on the remote control. The **Main Menu** screen appears.
2. If **System Info** is not highlighted on the menu, press **CH▼** or **CH▲** until it is and then press **OK**.

The **System Info** window appears.



Make a note of the information on this window if you are intending to contact Strong Technologies for technical support.

3. Press **EXIT** or **MENU** twice to return to normal viewing.

Software upgrades

If a new version of the *SRT 5412* software becomes available, you can download the software to your PC and then transfer it to your *SRT 5412*. You will need a USB memory stick (not supplied with the *SRT 5412*). Watch the Strong Technologies website for announcements of software upgrades.

1. Once you have obtained an upgrade file, transfer it to a USB memory stick. You need to place the file at the root (or top) level on the memory stick, not inside a folder or directory.
2. Insert the stick in the USB port on the rear of the *SRT 5412* (socket 3 in the diagram on page 7).
3. Press **USB** (the yellow button on the remote control).

The **USB File List** appears.

4. Press **CH▼** or **CH▲** until the upgrade file you transferred to the USB memory stick is highlighted and then press **OK**.

The upgrade process may take a few minutes. When it is completed, a message appears at the bottom of the **USB File List** advising that you must now reset the **SRT 5412**.

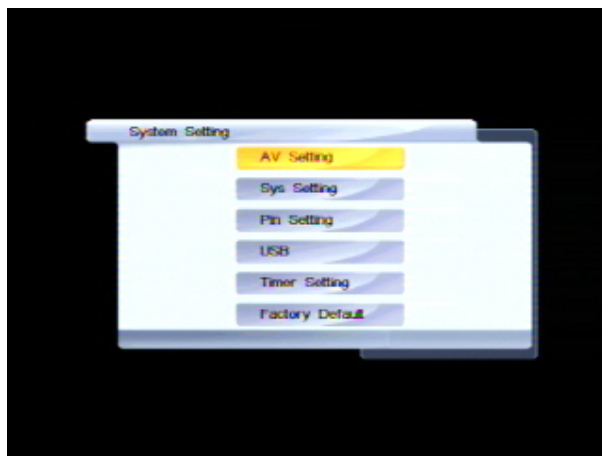
5. Press **EXIT** and then follow the procedure in the next section to reset the **SRT 5412**.

Clearing and resetting data

You can reset the **SRT 5412**, by restoring the unit to the default settings it had when it left the factory. This clears all channels, stations, preferences and other user settings. You will need to rescan for channels and stations before you can continue watching digital TV or listening to digital radio.

WARNING: This procedure returns the **SRT 5412** to its default factory settings. All data (such as time zone, channels, stations and timers) will be lost.

1. Press **MENU** on the remote control. The **Main Menu** screen appears.
2. If **System Setting** is not highlighted on the menu, press **CH▼** or **CH▲** until it is and then press **OK**. The **System Setting** menu appears.



3. If **Factory Default** is not highlighted on the menu, press **CH▼** or **CH▲** until it is and then press **OK**.
4. A warning message appears asking if you are sure you want to clear all services and restore factory settings. To continue, press **OK**. To cancel, press **MENU** or **EXIT** and ignore the rest of this procedure.
5. Another message appears asking if you want the **SRT 5412** to automatically search for channels and stations. To accept the automatic search press **OK**; otherwise, press **MENU** or **EXIT**.

NOTE: If you proceed with resetting the factory defaults and get a blank screen, press **EXIT**, and then press **FORMAT** until something appears on your screen.

6. if you didn't accept an automatic search, the **No Service!** message appears on the screen. You will now have to search for channels and stations yourself. See "Rescanning for channels and stations" on page 25 for instructions. If you accepted an automatic search, the **Auto** window appears and the search commences.

Troubleshooting

There may be a number of causes of abnormal operation. Occasionally receivers can hang (just as a PC will do from time to time). In this case, you should disconnect the **SRT 5412** from mains power, wait 30 seconds and then reconnect it to mains power. If the unit is still not operating correctly, refer to the following table for the indicated problem and likely solution.

Symptoms	Possible causes	Solution
Indicators on front panel do not light up	AC power cord is not connected	Check that the power cord is plugged into the wall socket. Make sure the power switch is on.
	The cables connecting the TV and the receiver are not properly connected	Make sure that the correct cable is connected between the TV and the receiver, and that the antenna is connected.
No picture and sound	The TV mode is not correct	Check that the correct video or AV input has been selected on your TV.
	Incorrect video definition	If you have a Composite or S-Video connection to your TV, video definition must be set to 576i. Press EXIT and then FORMAT on the remote control until you see a picture.
Picture and/or audio glitch	Insufficient signal strength	Check that the antenna cable is securely plugged in and that the signal is adequate.
	Electrical interference	Check that all antenna cabling is quad-shielded.
No sound	The receiver or TV is in mute mode	Press the MUTE button on the receiver and on the TV.
	Initial volume level has not been set on your TV	Select the desired TV volume level using the TV remote control.
Remote control is not working	Batteries not inserted	Insert batteries
	Batteries are flat	Change the batteries in the remote control.
	Remote control is outside the range of operation	Aim the remote control directly at the receiver.
Music files on a USB memory stick don't appear	Files are of wrong format.	Check that the format is, MP3.
	Files are not at the root or top level.	Move the files out of folders or directories.

Support

For Technical Assistance: Please call our Technical Support Help Line on **1 800 820 030**

For General Enquiries: Please email us at: **techau@strong-technologies.com**

Product Return Tracking: If you need to send your receiver to Strong Technologies for repair or evaluation, please keep a record of the unit's **serial number**. This will ensure ease of tracking and identification on your behalf.

Specifications

Tuner & Channel Decoder	Input Connector Antenna	IEC 169-2 Female
	Output Connector – RF Loop Out	IEC 162-2 Male
	Frequency range	174MHz–230MHz, 474MHz–868MHz
	Input impedance	75Ω
	IF bandwidth	7 and 8 MHz (switchable)
	Code Rate	1/2, 2/3, 3/4, 5/6, 7/8
	Guard Interval	1/4, 1/8, 1/16, 1/32
MPEG Transport Stream	Standard	MPEG-2 MP@L4.0 1920 × 1080 @ 50MHz
	Rate	64 Mbps
Video Decoding	Profile Level	MPEG-2 MP@L4.0 1920 × 1080 @ 50MHz
	Input Rate	80 Mbps
	Aspect Ratio	4:3, Letter Box, 16:9, Pan & Scan
	Video Resolution	1080i, 720p, 576p, 576i
Audio Decoding	Standard	MPEG Layer 1, 2, 3; Dolby AC-3, 12S S/PDIF
	Channels	Single, Dual Mono, Stereo, Joint Stereo, Dolby Digital bit-streams
Main System	Main Processor	ARM926
	Memory	4Mb Flash; 64Mb SDRAM
Audio & Video In/Out	HDMI	HDMI 1.2 connector ((with HDCP copy protection)
	Video Component	Y / Pb / Pr Component YUV
	Video SVHS	4-pin Din Connector
	Video Composite	RCA/Cinch, Video Output (CVBS)
	S/PDIF	Optical Digital Audio Output
	USB	USB 2.0
Power Supply	Input Voltage	100–240V AC
	Power Consumption	20W maximum
	Protection	Seperate internal fuse
	Type	Switch-mode
Physical	Dimensions	W250mm x H38mm x D175mm (case only)/185mm (to end of connectors)
	Weight	1.9 kg
	Optimum operating temperature	0–50°C



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