SAMSUNG

SFT-202
Digital Satellite Receiver

Instruction manual

Table of Contents

Safety and Precautions:

Thank you for purchasing the new SAMSUNG digital satellite receiver. For your safety and proper operation of your receiver, please take time reading this manual fully before installing and operating the receiver.

Safety notice:

DANGER! HIGH VOLTAGE! RISK OF ELECTRIC SHOCK!

Lethal voltages are present inside the unit. Always unplug the receiver completely from mains outlet before connecting or disconnecting anything.

No user-serviceable parts inside. Please refer all servicing to qualified service agents.

Never expose the unit to water, moisture, extreme cold or direct sunlight.

Slots are provided for proper ventilation for the unit, do not obstruct them.

Do not insert or drop small objects into the unit.

Install the unit in a well-ventilated location

Never cover the unit or operate the unit near any heat source.

It is advisable to unplug the unit from the mains, TV, and the satellite dish when a thunderstorm is expected.

Cleaning your receiver

Always unplug the unit from mains before cleaning the unit.

Do not use solvents of any kind to clean the unit, only use a soft-dry cloth.

SAMSUNG reserves the right to change specifications without prior notice.
This manual only covers the version of software supplied with the receiver.

Accessories:

User Manual: 1

Batteries: 2

UHF TV cable: 1

Remote Control Unit: 1
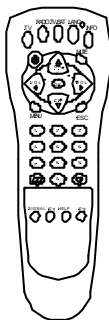
System Connection:

Please unplug all unites from mains outlet before installation. Once all connections are made please check again before connecting the equipment to the mains outlet.

The following shows a typical installation of a satellite receiver. If you require further assistance for the installation of your satellite receiver, please contact your local distributor.

Front Panel:

A   B C   D

SAMSUNG   DVB

E   F
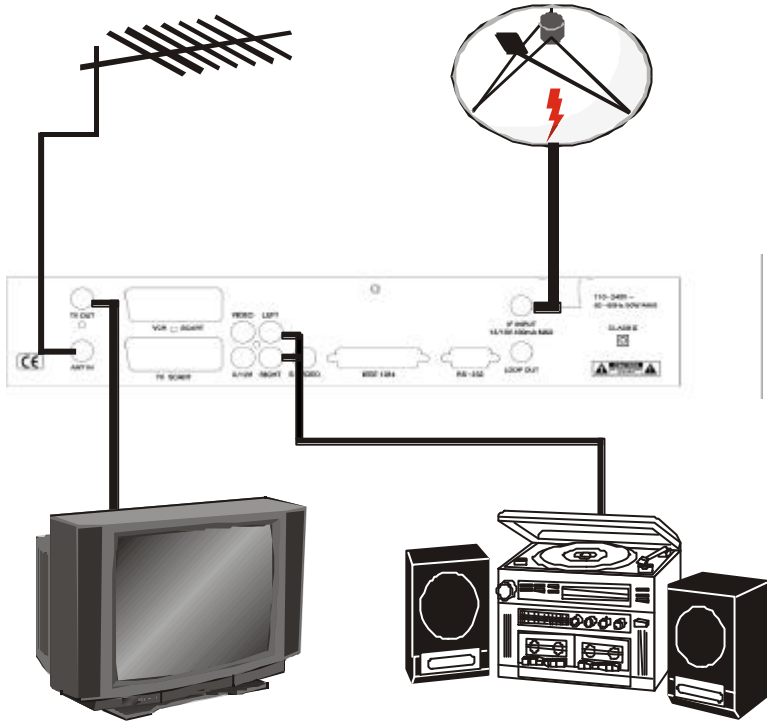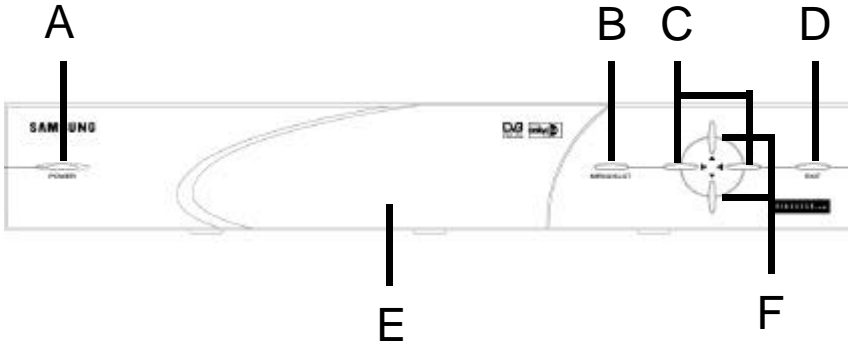
A. Standby: To switch the receiver on / off.
B. Menu: To enter the main menu.
C. Volume +/-:   To increase or decrease volume level.
D. Exit: To back step or exit from menu.
E. Display: Displays channel mode and channel number (see below*).
F. Channel +/-:   To change channels or move cursor in menu.

* Display modes:
The current viewing mode is displayed by your receiver:

Mode:	Menu info bar:	Front panel LED display:
TV	TV icon + Channel. No.	Channel Number
Radio	Radio icon + Channel No.	r + Channel No.
Favourites	Heart icon + Channel No.	F + Channel No.

Rear Panel:
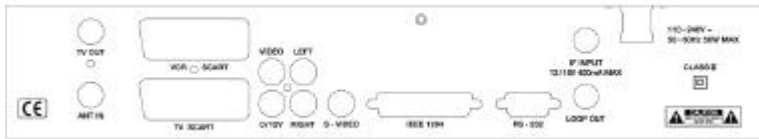
Please refer to the diagram above for all the connection possibilities of your receiver. Do not connect the unit to the mains socket until all other connections have been made and checked.

IF Input: Connect the cable from your dish to this connector.

Loop Out: If you have a second satellite receiver, connect the second satellite receiver's LNB input to this connector.

TV: Connect your TV UHF input to this connector.

ANT: Connect your TV antenna to this connector-only in
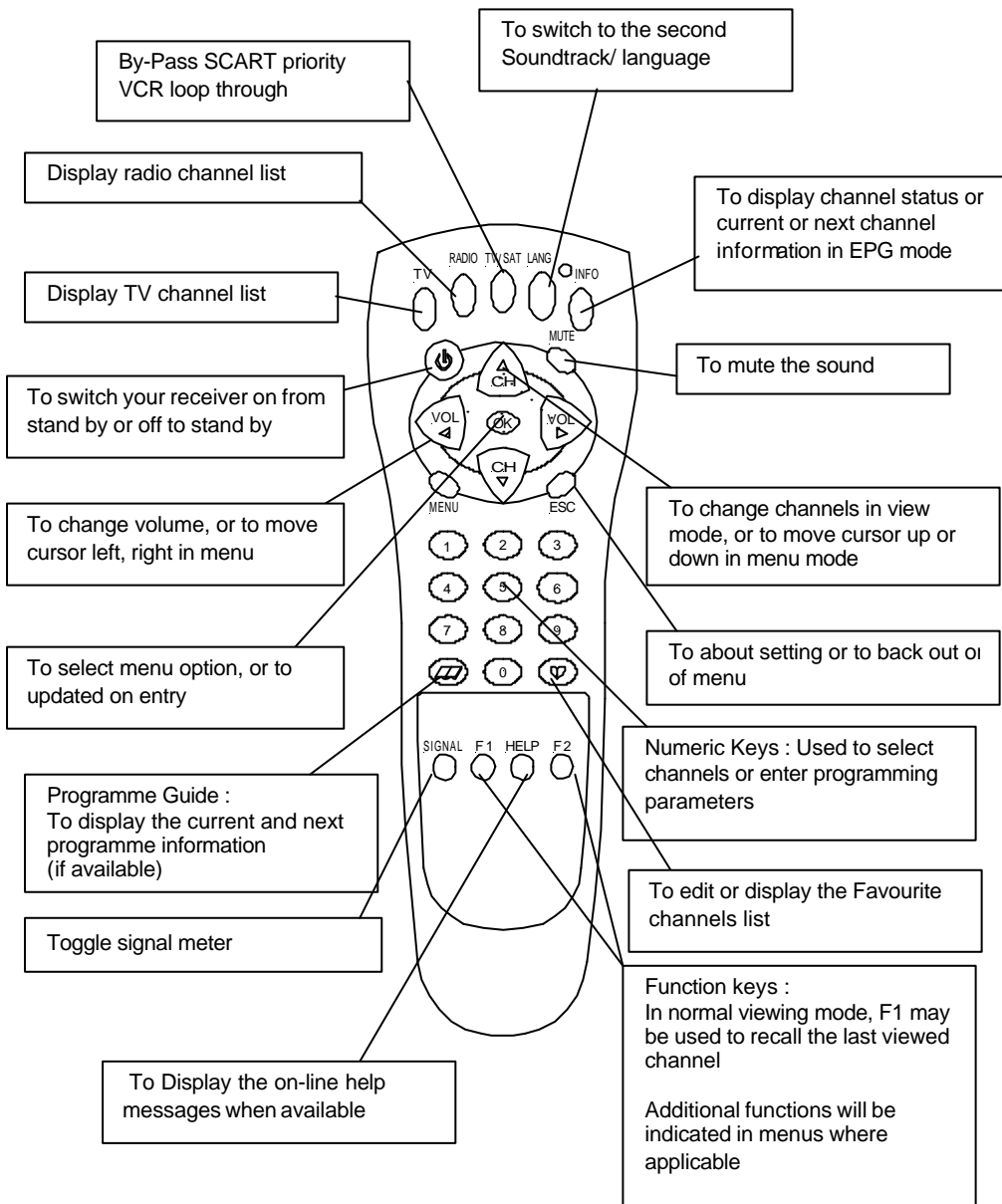conjunction with TV UHF output.

TV SCART: Use this connector to connect you TV to the receiver via a SCART cable.

VCR SCART: Use this connector to connect you VCR to the receiver via a SCART cable.

Video: Composite video output for connecting to a monitor etc.

0/12V: 0 or 12V output for external control switch.

Audio L/R: Audio outputs for connecting to an external stereo amplifier.

S-Video Out: Additional output for recording with a VCR / camcorder with S-ideo capability.

RS232:   You can connect the receiver to a PC via this connector (advanced users only).

IEEE 1284:   High-speed data port for connecting with a PC (advance users only).

Once ALL the connections are made and CHECKED, you may connect the unit to the main supply.

Remote Control Unit:

By-Pass SCART priority
VCR loop through

To switch to the second
Soundtrack/ language

Display radio channel list

To display channel status or
current or next channel
information in EPG mode

Display TV channel list

RADIO TV SAT LANG   O INFO

TV

MUTE

To switch your receiver on from
stand by or off to stand by

To mute the sound

VOL   OK   VOL
◄   ►

CH
▽

To change volume, or to move
cursor left, right in menu

MENU   ESC

To change channels in view
mode, or to move cursor up or
down in menu mode

To about setting or to back out or
of menu

To select menu option, or to
updated on entry

Numeric Keys : Used to select
channels or enter programming
parameters

SIGNAL F 1 HELP F2

Programme Guide :
To display the current and next
programme information
(if available)

To edit or display the Favourite
channels list

Toggle signal meter

Function keys :
In normal viewing mode, F1 may
be used to recall the last viewed
channel

Additional functions will be
indicated in menus where
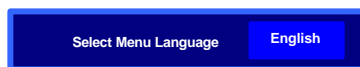applicable

To Display the on-line help
messages when available

Quick Start:

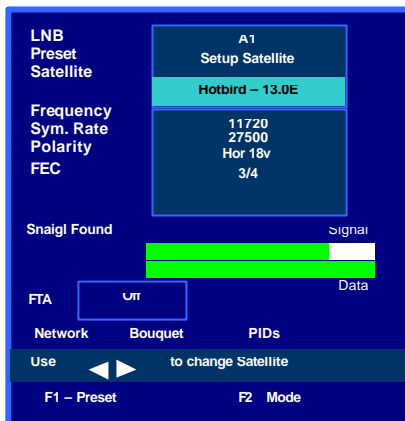After initialisation, the Language selection screen will be displayed.

By using the LEFT/RIGHT keys, you may select the different menu languages available. Once you have selected the desired menu language, press OK to continue with set-up.

Select Menu Language	English

After selecting the menu language, the receiver will display the Channel Tuning Menu:
(Menu, Channel Setup, OK)

Preset Entry:

Move the cursor to highlight the "Satellite" box and use the LEFT/RIGHT keys to scroll through the pre-stored satellites. For example, if your dish is aimed at the Astra satellite, when Astra is selected, you should see both signal meters reading a good signal level. The receiver will then prompt you to press OK to start tuning to all the channels on Astra.

(See next page)

LNB	A1
Preset	Setup Satellite
Satellite	Hotbird – 13.0E
Frequency	11720
Sym. Rate	27500
Polarity	Hor 18v
FEC	3/4

Snaigl Found — Signal

Data

FTA — Off

Network   Bouquet   PIDs

Use ◄ ► to change Satellite

F1 – Preset   F2   Mode

Note:

1. If you wish to only tune to a specific Network or Bouquet of channels, move the cursor to highlight the "Bouquet" box and use the LEFT/RIGHT keys to scroll through the pre-stored Bouquets. You should now see both signal meters reading a good signal level and the receiver will prompt you to press OK to start tuning all the channels from the selected Network or Bouquet.

2. If you only wish to download Free-to-Air channels, high-light the FTA box and turn the option to "on".

Provided your dish is installed correctly and aligned to the relevant satellite, both the Signal and Data bars should display a GREEN bar which denotes the following:

The first bar shows the actual satellite SIGNAL strength

You should see a GREEN bar showing your satellite signal is medium to good. If it is RED, this normally indicates that either your dish/LNB set-up is not adequate for this satellite, or your dish is not correctly aligned.

The second bar shows the quality of the DATA received

This GREEN bar indicates the DATA INTEGRITY of the signal received. If the bar is RED, this indicates that the DATA received is unreliable. This could cause the picture to break up, or disappear completely.

Note: If "No signal found' is displayed, check that the values entered are correct and are valid for the satellite your dish is installed for. (Please also refer to the "Advanced Users" and "Trouble Shooting' section to check that your LNB settings are correct).

Manual Entry (see also "Advanced User Guide"):
(See the "Advanced User Guide" section for more information on manual entry and other tuning options other than Auto set-up.)

Downloading Channels:

With a "Signal Found" message displayed the signal meters in the Channel Tuning Menu,and depending on whether you have selected a Satellite or Bouquet search.

Press the OK key to begin auto search (Satellite, Network or Bouquet).

```
Auto Channel Search
┌──────────────────────────────────────────┐
│  Astra 19.2E                               │
└──────────────────────────────────────────┘

TV channels        89    Radio channels       17
┌─────────────────────┐  ┌─────────────────────┐
│  Sky 1              │  │  BBC1               │
│  C N N             │  │  Virgin Radio       │
│  NBC               │  │  ITN                │
│  Movies 1          │  │                     │
│  Sky news          │  │                     │
└─────────────────────┘  └─────────────────────┘
Searching 11.381 GHz ...
```

The AUTO CHANNEL SEARCH screen will now be displayed:

Please wait for the receiver to process all the channels - this may take a few minutes. The time required to tune in all the channels on the selected satellite depends on the number of channels available. You may press the ESC key to stop auto tuning anytime.

All the channels found (TV and Radio) will be displayed in the two separate boxes provided in the "Auto Channel Search" menu. Once all the channels are found, the "Finished" message will be displayed at the bottom of the menu indicating that the process has finished.

Now press the OK key to store the new channels.

You should now be able to view the first channel found by your receiver. The channel number, channel information and the clock will be displayed at the top of the screen for a few seconds. You may recall this information banner by pressing the INFO key on your handset.

Note : Some channels are scrambled - only channel information will be displayed.

You may now either go and view your downloaded channels or continue to download channels from another bouquet or satellite.

Viewing your channels:

There are several ways to access the stored channels:

Using the UP/DOWN keys on the remote handset to access the channels sequentially.

Using the numeric keys (0-9) by typing the channel number to access the channels directly.

Using the TV key on your handset to display the TV channel list. Use the UP/DOWN keys to move the cursor to highlight the desired channel, then press OK to view that channel. You may also use the LEFT/RIGHT keys to skip to the next or previous page of the channel list for quicker scrolling.

Using the "Favourite Channels List" - You may add all your favourite TV and Radio channels into the "Favourite Channels List". Please see next section on instructions for using and editing favourite channels.

Multi-satellite:

As you download channels from different satellites, your digital satellite receiver will store in dedicated satellite groups. For more details please refer to the Advanced User Guide.

List by satellite:

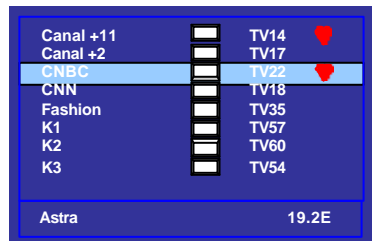To access your channels, press the TV (or Radio) key:

To access the list of channels on a different satellite, press F1 or F2 keys. Within each list you may use the Up/Down, Left/Right keys to highlight the required channel and press OK to select it.

1 CNN	Astra 19.2E
2 Sky	Use ▲▼ to change page
3 Cartoon	
4 TNT	
5 CNBC	Use ◄► to move cursor
6 STAR TV1	
7 MTV	Use OK to select
8 VH-1	Press ESC to exit

List in Alphabetical order:

Alternatively, from View mode you can list all the stored channels in alphabetical order by pressing TV (or Radio) twice in succession.

Use the Up/Down, Left/Right keys to highlight the channels and press OK to select it. In alpha mode, you can also use the F1/F2 keys to skip to the next letter to save time.

Canal +11		TV14 ♥
Canal +2		TV17
CNBC		TV22 ♥
CNN		TV18
Fashion		TV35
K1		TV57
K2		TV60
K3		TV54
Astra		**19.2E**

Note: At any time if you wish to return to your original cursor position, simply press the HELP key on your remote.

Favourite Channels

Before you can use the "Favourite Channels List", you must first add your favourite channels into the favourites list. Please refer to the instructions below:

1. In view mode press the TV button to display the TV channel list.
2. You will now see the TV listing with your current channel highlighted.

```
1  Discovery
```

3. Press the FAVOURITES key (heart shape) to add a favourite icon next to the channel name. This channel will be added to the "Favourites List". To add more channels to your "Favourites List" move the cursor to highlight another channel and press
the FAVOURITES key. (If you press the FAVOURITES key again it will remove the favourite icon).
4. Press the OK key to store the favourite settings.

In view mode press the FAVOURITES key to display the "Favourite Channel List".

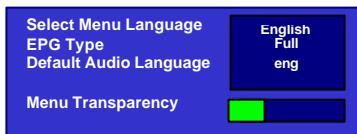To view your favourite channel, highlight it and press OK.

Canal +11		TV14 ♥
Canal +2		TV17
CNBC		TV22 ♥
CNN		TV18
Fashion		TV35
K1		TV57
K2		TV60
K3		TV54
Astra		**19.2E**

Electronic programme guide (EPG):

This receiver is equipped with a unique dual EPG system which gives you two easy ways to view the programme information (what's on now and what's on next)! When transmitted by the broadcaster, the EPG system can display a variety of programme information ranging from start and end times of a programme to additional information about the programme itself. You can easily select and view a programme on the EPG by highlighting it and pressing OK.

You can also choose between a FULL or CONDENSED version of the EPG, using the "Preferences" section under the Installation Menu:

Select Menu Language	**English**
EPG Type	**Full**
Default Audio Language	**eng**
Menu Transparency	

```
TV Guide    (Current Prog. Info.)
   Channel    1 of 124    Time :   12:35

CNN International       Regional financial report
12:30 – 13:00

Eurosport              CART Indy Car series
12:00 – 14:00          8ʰ Round Detroit GP

Sci-fi Channel         Wonder Woman
12:30 – 13:00

NBC Europe             No Info.
12:30 – 12:45

        Press EPG key for current/next prog. Info.
            Use INFO key for more information
```

```
TV Guide (Current Prog. Info.)

  Channel     Time:    12:35    Scheduled

1.   CNN International      12:30 – 13:00
2.   Eurosport             12:00 – 14:00
3.   Sci-fi Channel        12:30 – 13:00
4.   NBC Europe            12:30 – 12:45
5.   Canal+ Swe            12:30 – 13:45

Regional financial report

     Press EPG key for current/next prog. Info.
          Use INFO key for more information
```

Full EPG

Condensed EPG

Selecting different audio channels:

In digital satellite broadcasts, multiple audio languages can be simultaneously transmitted by the programme provider.

Default audio setting:
The user can first select a default audio language via the "Preferences" menu for the receiver. Once the default audio language has been stored, all newly found TV/Radio channels will then be stored with the selected default audio language.

Multi-Channel Audio:
The broadcasters may transmit more than one language for any channel. By pressing the "LANG" key on the handset, the user can quickly find out what other languages are available for that channel. If the left side column of the Audio Control menu shows a selection of different languages, the user can select and store a new default language for that channel only - for that channel the receiver will always return to the newly stored default language.

Sometimes two different languages are broadcasted with one language on the Left Audio Channel (L) and a different language on the Right Audio Channel (R). When this is available, the "Audio Channel" column of the "Audio Control" menu will display the available audio channels and the user can then select either channel L or R for the desired language. Otherwise the default L+R setting would have the two languages "mixed" together and they will be heard at the same time.

From this menu, the left column indicates the default languages available and the right column indicates the available audio sub-channels. The User may then move the cursor to the L or R sub-channel and listen to decide whether the required language is available.

Language	Audio Channel
eng fra dan	L R L+R

Notes:

The left column is the default language setting and this option is storable. If the user changes the default language to another language, any new programmes which do not support the new default language may become silent. When this happens, the receiver will display the Missing Audio icon on the Information Banner, you can press the LANG key to select a different default language.

Missing Audio icon

Many broadcasters transmit multiple languages and programmes on a number of audio sub-channels. With this menu the user can listen to any of the sub-channels by moving the cursor to highlight them when available. The L and R audio sub-channels can vary from programme to programme so this is not stored and will revert to L+R (Stereo) when you change channel.

Additional Information:

When viewing a programme, pressing the info key will display the information banner.
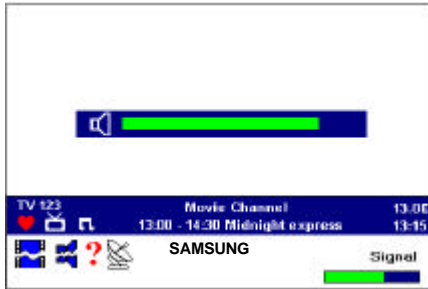

Note:
If the receiver was previously working on a channel and the" No Signal" icon appears, you may have one of the following problems:

Signal degraded heavily by poor weather
Channel no longer broadcasting and no carrier
was detected.
Dish not aligned to the correct satellite
LNB power switched off in the menu
Faulty cable or LNB.

The Signal and Data level meter:
Press the Signal key during view mode to display the signal and data level for the current channel. Use this feature to assist dish alignment or fault finding should there be a reception problem.
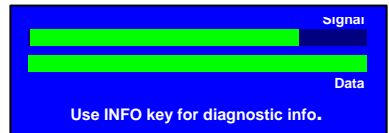
Diagnostic Information:
For more information on the receiving signal, press the INFO key to display the diagnostic Screen:

The diagnostic screen displays detailed broadcast information in real time. Press INFO key again to return to the signal meters or ESC to return to Picture.
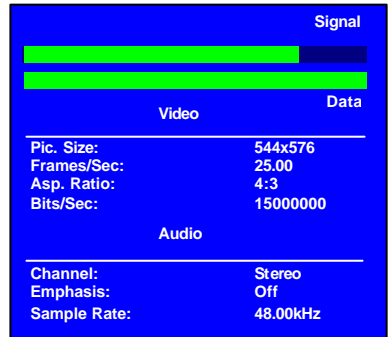
Memory Status:
At any time you can check the memory status on you receiver.
The indicator shows the amount of receiver memory used by the stored channels.

Press:
Menu, Channel Setup, Memory Status:
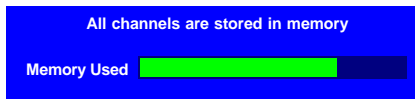
Parental Control:

To restrict unauthorised access to your receiver, two types of parental lock are provided:

Channel Lock:
This provides channel "lock out" facility to restrict the access of adult programme material.
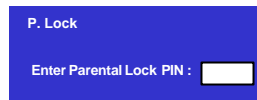
Menu Lock:
This will lock out the access of both the Channel Tuning and Installation menus from unauthorised users. This will reinforce the Channel Lock as it also prevents other users from re-tuning channels that are known to contain adult material.

To access the Parental Control menu:
Press Menu, Parental Lock, OK.

After the correct PIN (Personal Identification Number) has been entered, the following menu will be displayed:
**The default PIN is 0000. If you change your PIN, please remember to keep it in a safe place.**

Channel Lock:
This allows all channel locks to be either enabled or disabled all at once. First use the Lock/Unlock option to tag the individual channels to be locked, then switch the Channel Lock option ON or OFF.

Menu Lock:
This option toggles the menu lock ON or OFF. When menu lock is ON, you cannot access either Channel Set-up or Installation menus without entering a PIN.
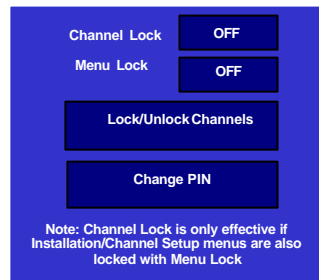
Note:
Once the correct PIN has been entered to temporarily disable a lock, this will remain "unlocked" until the receiver has been switched to standby mode.

Lock/Unlock Channels:
Highlight this option and press OK to display the Channel Lock menu:-

Use UP/DOWN, LEFT/RIGHT to select the channels you wish to lock. press F2 to turn the LOCK tag ON and OFF.

Once you have tagged all the channels to be locked, press ESC to return to the Parental Control menu and make sure both Channel Lock and Menu Lock are switched to ON.

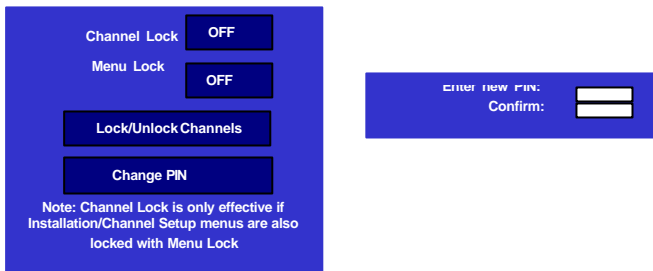Press ESC twice to return to viewing mode and switch the receiver to Stand-by and back to ON again.

Now go to any Locked Channel (e.g. TNT) and you will see that this is locked.
To Unlock, press F2 and enter the PIN number and press OK.
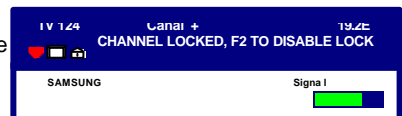
Changing the PIN:

The factory default PIN is set to: 0000. At any time the user may change this PIN code by accessing the "Change PIN" menu:

To change the PIN code, enter in the new PIN into the New PIN box and re-enter the same PIN again in the Verify Box to confirm.

If the two PINs are not identical, the change will be aborted and the user will be asked to either re-enter the new PIN or press ESC to abort the PIN change. If the PIN is accepted this will now be your new PIN.

Don't forget your PIN number!

Please write down your PIN code below and keep in a safe place.
If you have forgotten your PIN code, please call an Authorised Service Agent.

Factory PIN Code:

0 0 0 0

New PIN Code:

Please keep this section or this manual in a safe place.

Advanced users guide:

Tuning to different channel frequencies:

If the satellite you desire is not in the Preset listing, or you want to tune the receiver to a different set of channels, please follow the instructions below:

To access the tuning menu, press the Menu key:

Move the cursor to Channel Setup and press OK. Press OK on Tuning to access the Tuning Menu Press F1 to enter the Manual Tuning Menu.

By referring to your channel listings, enter the Frequency,Symbol Rate (use 0-9 keys), Polarity and FEC (Use LEFT/RIGHT keys) in the appropriate boxes for the channels you wish to tune to.

Note: If you are using more than one LNB, be sure to select the correct LNB (A, B,C or D) for your tuning parameters.You can change your LNB settings by highlighting the LNB settings button and pressing OK (see page 22).

You need to press OK to update the entered parameters and thereceiver will try to tune to the new settings.

If the message "Signal Found" is displayed and both the Signal and Data bar graphs are GREEN, you may now select a tuning method.

If the message "No Signal" is shown, please check that your tuning parameters are correct and amend if necessary.

Check you LNB settings are correct (you can access the LNB set-up menu by highlighting the LNB Settings button and press OK; see page 22 for LNB set-up information). If your tuning and LNB settings are correct, your dish may not be adequate to receive the signal or out of alignment with the satellite.

Manual Tuning Menu

Provided you are receiving a good Signal and Data, you may now proceed with one of the three download methods: Network, Bouquet, or Manual. You may highlight the FTA box and change the option to "on" to download Free-to-Air channels.
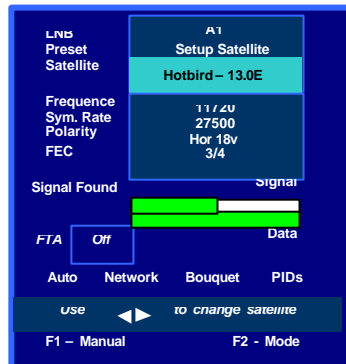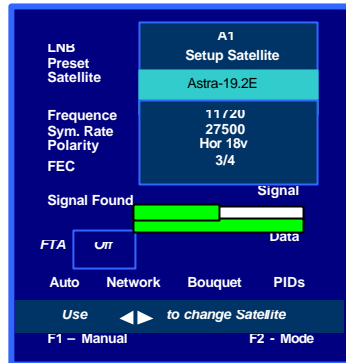
Tuning Modes:

Auto Tuning
From the select frequencies, the receiver will automatically search for all other frequencies within the tuning range and downloads them automatically into the receiver. Once the channels have been downloaded, all the TV and Radio channels will be displayed separately allowing the user to inspect them and decide whether they are to be stored or aborted. This option is not available in Manual tuning mode (F1).

Network and Bouquet Tuning
Within a digital broadcast transmission, many other network frequencies are provided to guide the receiver to tune to other Networks. Network tuning enables the receiver to download other channels from the same network. Use Bouquet tuning you only want to download channels from one channel frequency group. Bouquet Tuning is used when only the channels from the desired frequency are to be downloaded.

PID tuning
Apart from the usual channel parameters (Frequency, Symbol Rate, Polarity and FEC value), the broadcaster must include additional information (known as Packet Identifiers or PIDs) in their transmission to allow auto-tuning to work properly.

In "PID Tuning" you are required to enter the channel name and three other parameters: Video PID, Audio PID, PCR PID and Text PID (optional). These values can either be in Decimal (ranging from 0 to 9) or Hexadecimal (ranging from 0 to 9 and A to F for each digit).

After selecting from the Preset List, or Manually entering the basic channel parameters (Frequency, Symbol Rate, Polarity and FEC value), move the cursor to highlight the Manual button and press OK to start tuning.

Edit the Channel details by following the steps below:-

1. Use the UP, DOWN, LEFT/RIGHT keys, to move the cursor from one field to another.
2. Use the LEFT/RIGHT, F1 and F2 keys to enter the channel name.
3. Select the channel type whether it is a TV channel or a Radio channel.
4. Decide whether you would like to enter the PIDs in decimal or hexadecimal form.
5. Use the F1/ F2 and 0-9 keys to enter the PID values.
6. When you have finished and are ready to store and display that channel, press OK.

Note:
In order for manual tuning to be successful, the PCR PID must be entered. In many cases the PCR PID is not published. Fortunately, in nearly all cases the PCR is the same as the Video PID or the Audio PID or 8190 in decimal or 1FFE in hexadecimal.

The Teletext PID is optional and can be ignored when the value is unknown.

Setup Satellite:

If your desired satellite position is not on the Preset List, you can manually edit an existing satellite or add a new satellite name to the preset list.

To add a new satellite to your list, you must first enter the channel tuning mode:

**Press Menu, Channel Setup, OK:**

From the Channel tuning menu press F1 to enter manual tuner mode.

You will now see a Setup Satellite button on the right hand side.

Highlight the Setup Satellite button, press OK.

You will now see the Setup Satellite menu:

In the Setup Satellite menu you may either press F1 to edit the highlighted satellite details, or you may press F2 to add your own satellite to the listing.
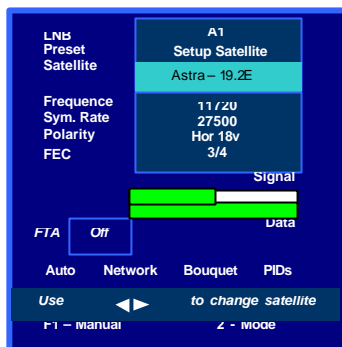
In either case you will then be required to enter the new parameters in the boxes provided:

Satellite: Enter the satellite name
Position: Enter the satellite position in degrees, then the decimal place and either E or W (East or West).

Press OK when finished. Your new satellite will be added to the Manual list on the screen.

Highlight the new satellite in the list and press OK to return to the Channel tuning menu. You will find your new satellite displayed in the Satellite box.

Enter the transponder parameters and check for signal availability.

Commence downloading your new channels.

Now any manual channels downloaded under these parameters will be listed under the satellite name you have entered.

Note:
In the Manual Tuning Menu, you can use the F2 key to toggle between the receiver's preset satellite list and the manually added satellite list.
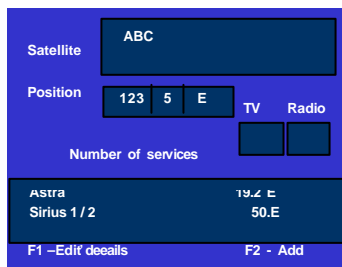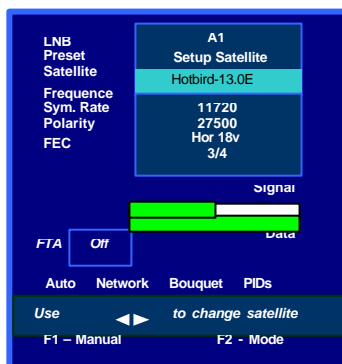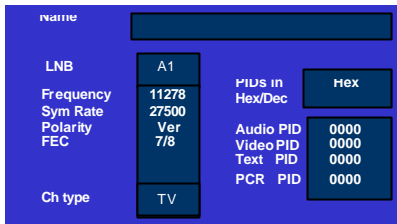
Editing channels:

Should you wish to modify or view details of a particular channel, you may do so by using the Edit Channel Details menu.

Please note that apart from editing the channel name, editing any of the channel parameters will cause the channel to either be lost or changed (different audio/video). This menu is best used for checking channel parameters downloaded from the broadcaster.

To access the Edit Channel Details menu:

Press the MENU key, select Channel Setup, then select Edit Channel Details and press OK.

By using the UP/DOWN, LEFT/RIGHT, F1/F2 and the OK/ESC keys, you may move to any field to edit the associated parameters (the operation is similar to using the manual tuning menu). Once all changes have been made, Press OK to retune to these new parameters.

Name			
LNB	A1	PIDs in Hex/Dec	Hex
Frequency	11278		
Sym Rate	27500	Audio PID	0000
Polarity	Ver	Video PID	0000
FEC	7/8	Text PID	0000
		PCR PID	0000
Ch type	TV		

Note: It is important to identify whether the channel is TV or Radio so that the channel is stored under the appropriate channel list (TV or Radio List).

Arrange:

The channel sort facility allows you to "drag and drop" channels to your preferred location. Within the "Channel Setup" menu, you will find the Sort Channels option:

Move the cursor to highlight "Arrange" in the Channel Setup menu and press OK.

Use the TV or Radio keys to select the listing you wish to sort.

Use the UP/DOWN/LEFT/RIGHT keys to move the cursor, highlight the channel you wish to move and press OK to select It.The selected channel now will move with the cursor.

Use the UP/DOWN/LEFT/RIGHT keys to move the channel to the new location.

Press OK to "drop" the selected channel into the new position or ESC to cancel the change.

Repeat for all other channels or press ESC again to store the new settings and Return to the previous menu.

TV Channels

1	Sky 1	Radio	list radio channels
2	CNN		
3	NBC		
4	Movies 1	OK	select channel
5	Sky News		
6	Discovery		
7	Kiosk 2	ESC	exit
8	NRK 1		

TV Channels

1	Sky 1	Radio	list radio channels
2	CNN		
3	NRK 1	OK	select channel
4	NBC		
5	Movies 1		
6	Skynews	OK	
7	Discovery	ESC	exit
8	Kiosk 2		

Sort Free to Air Channels

This function automatically separates the scrambled channels from the free-to-air channels by actually checking each channel for video and audio. The user first decides whether to sort TV or Radio channels (or both at the same time), and then selects whether to delete the scrambled channels or simply move them to the end of the channel list.

Depending on the number of channels to be sorted, the time taken to complete the process will vary and the progress bar will indicate progress in percentage.

To change the mode of operation, use the Left/Right or OK key.
Use F1 key to start the sorting progress and ESC to abort.

The Sort Unscrambled Channels Menu:

Mode:
Select either to delete all scrambled channels or move all scrambled channels to the end of the channel list.

Mode	Move to end of list
Scope	TV Channels
Channel	PPV Movie
Progress	
Available	**Unavailable**
Press F1 to proceed, ESC to abort.	

Scope:
Select sort TV channels only, Radio channels only, or sort both at the same time.

Channel:
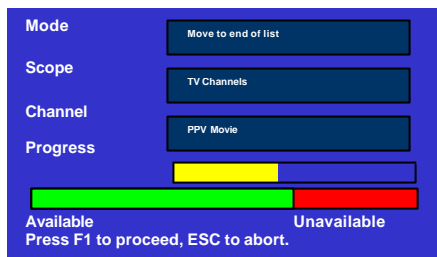Displays the current channel being checked.

Progress:
Displays the sorting progress in percentage.

Available/Unavailable:
Displays a visual ratio between free channels to scrambled channels.

N.B.: Please note that channels with no signal lock will not be moved or deleted.

Deleting Channels:

You can choose one of the two following methods:-

    Delete Channels -   you may select individual channels for deletion.
    Clear All Channel Info -   you may delete all channels in one operation.

1. Deleting Channels:
Move the cursor to highlight "Delete Channels" in the Channel Setup menu and press OK.

By default TV channels are listed, press the RADIO
key to access the Radio list.

Use the UP/DOWN/LEFT/RIGHT keys to move
the cursor, highlight the channels you wish to
delete and press F1 to tag the channels to be
deleted. Notice that the tagged channels now
have an "X" tag next to them (Pressing F1 will
remove the tag).

If you wish to tag all the channels, press F2.
(Pressing F2 again will remove all the tags)

If you wish to preview the channel before tagging,
press Info. You can tag channels while in pre-
view mode - changing channels with UP/DOWN
keys, and tagging them with F1. Press the Info
key to return to the "Delete Channels" menu.
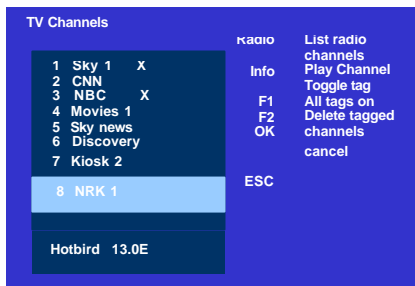
Once you have tagged all the unwanted
channels press OK to confirm.

Press F2 key to confirm deletion or
press any Other key to return to
the Delete Channels menu.

2. Clear All Channel Info:
Only use this option if you would like to DELETE ALL CHANNELS stored in your receiver. All stored
channels in the receiver will be erased at the end of the following procedure:

From the Main Menu select Channel Setup and Delete.

You will be prompted with a warning screen:

Follow the on-screen messages to proceed
in deleting all your channels or to abort.

Finally, press OK to confirm deletion of all
channel information.
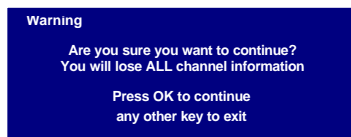
Note:
The above procedure will delete all stored channels in the receiver's memory. Any modifications made
to the receiver's set-up (LNB settings, Parental Lock etc.) will NOT be affected. For instructions on
how to reset the receiver to factory condition please refer to the Reset to factory defaults section in this
manual.

Installation:

LNB:

The installation menu provides access to LNB settings and features. These can expand the receivers capabilities as well as customising the receiver to your preference.

Press Menu and select Installation to access the Installation menu:
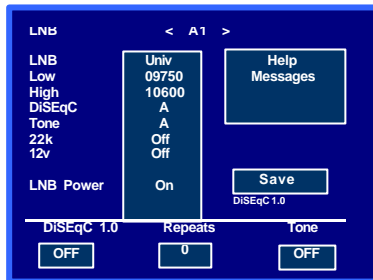
The default LNB setting is as per the diagram above.

LNB Power:
This toggles the LNB power supply on and off. This option should be set to ON. With the LNB power switched off, all control signals for LNB, switches and DiSEqC will also be disabled.

LNB A1 to D4:
Up to sixteen universal LNBs can be conntected to your digital receiver. For each LNB (A1 to D4) you may specify the type and control method of the LNB.

L.O. Freq:
Enter the Local Oscillator Frequency in MHz of your LNB here. For LNBs with two L.O. frequencies, enter the Low Band L.O. frequency in the Low column and the High Band L.O. frequency in the High Column. (e.g. For a Universal LNB, the Low Band L.O. frequency is 9750 MHz and the High Band L.O. Frequency is 10600 MHz).

Tone:
Your digital receiver is equipped with switch controls 12V, 22kHz tone, as well as DiSEqC 1.0

DiSEqC:
With the DiSEqC options switched on you can select between LNBs from A to D.

Note:
You may use these controls independently to select different LNBs, and in addition you can use either in conjunction with DiSEqC switchs to increase the number of LNBs used. Up to maximum of sixteen LNBs can be used.
Note: Universal LNBs uses 22kHz to switch between Low Band and High Band and therefore the 22kHz control column is automatically disabled when Univ is selected in the LNB column.
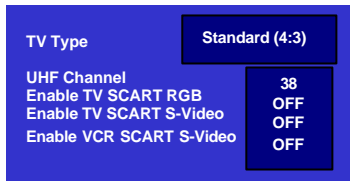
Save:
Highlight this button and press OK to store any changes made to this menu. If you exit by pressig ESC your changes will not be saved.

TV/VCR settings:

The TV/VCR menu contains various options that allow you to configure the receiver to suit your system:

Press Menu, select Installation to access the TV/VCR Menu:

TV Type	Standard (4:3)
UHF Channel	38
Enable TV SCART RGB	OFF
Enable TV SCART S-Video	OFF
Enable VCR SCART S-Video	OFF

The following options are available:

TV Type:
Select between a standard aspect ratio TV (4:3) or Wide-screen (16:9) TV.
16:9 mode is only active when a programme is transmitted in 16:9 format.
With a modern 16:9 TV, the switch to 16:9 mode is automatic if connected via a full SCART.
With a modern 4:3 TV, 16:9 mode will produce a "Letter Box" format if connected via a full SCART.

UHF Channel:
Use this option to change the TV UHF modulator output channel. The default channel is CH38. If this is already occupied by a local TV channel, VCR or you are experiencing picture interference, use this option to re-tune your satellite receiver to a different UHF channel. Remember to re-tune your TV and VCR to the new channel.

Enable TV SCART RGB:

When OFF, the TV SCART outputs composite video signal. If you have a RGB compatible TV, switch this option to ON to enjoy better picture quality.

Enable TV SCART S-Video:

      Select this option only if your TV is S-Video compatible.
      Note: 1. If your TV is not compatible, a Black and White picture will result.
            2. This option is NOT available if TV SCART is set to RGB.

Enable VCR SCART S-Video:

      Select this option only if your VCR is S-Video compatible.
      Note: 1. If your VCR is not compatible, a Black and White picture will result.
            2. This option is NOT available if TV SCART is set to RGB.

Preferences:

This menu allows you to customise the receiver to suit your individual needs.

To access the Preferences menu: Press Menu, select system.

Select Menu Language:
You may change the default menu language.
The number of languages available depends
on the receiver's software version.

EPG Type:
You can change the Electronic Programme
Guide format between FULL EPG or
CONDENSED EPG.
(See EPG section under Accessing Channels).

Select Menu Language	English
EPG Type	Full
Default Audio Language	eng
Menu Transparency	

Default Audio Language:
You can select or change the default language for your programmes with this menu. When tuning for new channels, the receiver will automatically search for the default language if available (See the "Selecting Different Audio Channels" section).

Menu Transparency:
Use this feature to adjust the transparency of the receiver's menus.

Set local time:

The Digital Satellite receiver is equipped with an internal clock. The time is displayed on the channel information banner and on the EPG so that you will never miss your favourite programme, wherever the programmes are transmitted from!

Offset from GMT:
Enter the time difference between your local
time and GMT in this box.

Local Time:
Some broadcasters may not transmit the time
together with their programme content. In this
case you may need to enter the local time of
your country here (Note: This is a 24hr clock).

Offset from GMT	+1
Local time	13 : 45

System Information:

The system information option on the Installation menu above displays software version numbers. This can be used to identify whether there is a newer version of software available.

As digital receiver technology is constantly
improving, newer and better versions of
software will become available in future to
further enhance your receiver. New software
updates will be available to your dealer and
On the Internet.

	SID x.x
Application	x.xx.xx
dd/mm/yyyy	
Boot	2.0
F P	1.x

Reset to factory defaults:

The Reset To Factory Defaults option is provided to enable the user to completely reset the receiver. Unlike the Clear All Channel Information option which allows the user to clear only the channel list, the Reset To Factory Defaults option will clear all changes made by the user, including Installation, Channel Setup and Parental Control changes.

Reset To Factory Defaults menu:

After pressing OK the following menu will be displayed:

This process has been designed to be lengthy to minimise accidental resetting of the receiver to it's the default condition.

Press F2 to proceed to the next step, any other key will return you back to the installation menu.

You are asked to confirm this once more. Pressing OK at this point will enable the "Reset to Factory Default" function.

Pressing any other key will return you back to the installation menu.

Beyond this point, all stored settings (including LNB, TV/VCR configurations, parental/installation access control, and preferences) will be lost.

This final screen confirms the receiver has been reset to factory defaults.

Warning

This will Reset All settings to default values

Press F2 to continue, any other key to exit

Stored settings, including LNB and TV/VCR configurations, parental/installation access control and preferences

Warning

Are you sure you want to continue?
All stored settings will be reset to default values

Press OK to continue
any other key to exit

Stored settings, including LNB and TV/VCR configurations, parental/installation access control and preferences

Warning

Stored settings reset to default values

Press any key to exit

Trouble shooting:

If you suspect there is a fault with your receiver, please check the following trouble shooting guide before calling an authorised service agent.

Warning! Under no circumstances attempt to repair the receiver yourself. Tampering with the receiver may result in fatal electric shock and will invalidate your warranty.

Symptom:	Possible cause:
No receiver display	Check that the receiver is plugged in and there is power at the mains socket.
Receiver is ON, but no picture or sound	Check that your TV is switched on
Receiver is on, no picture or sound except menus	Channel scrambled. Check tuning and set-up Check Signal and Data levels. Dish moved or LNB is faulty.
Interference on picture, sound OK	Local TV interference, tune the output to another channel, or connect to TV via SCART or phonos.
Interference on picture, noisy audio	Press Signal key and check if Signal and Data levels are good enough.
Receiver not responding to remote	Check remote batteries and that the receiver IR sensor is not covered (marked IR on the front panel).

Technical Specifications:

Electrical Specification

Video Inputs:	Input impedance 75Ω
	0.7V pk-pk on R/G/B,
	1V pk-pk on CVBS/Y
Video Outputs:	Output impedance 75Ω
	0.7V pk-pk on R/G/B,
	0.1V pk-pk on CVBS/Y into 75Ω load.
Audio Inputs:	Input impedance >50kΩAC coupled
Audio Outputs:	Output impedance 600ΩAC coupled
	Minimum load impedance 20kΩ
Mains power:	90-250VAC 50-60Hz

Connectors

4 x Phono/RCA:	Composite video out
	0/12V out
	Audio left
	Audio right
RS232:	9 Way D RS232 DCE serial port
Modulator/Bypass:	UHF in/out IEC male/female or:
	VHF in/out F-type (country dependent)
Satellite IF input:	F-type
Satellite IF loop out:	F-type

Tuner

Loop though Digital tuner with LNB input, and loop output
Full power loop through supported

Frequency Range at LNB input:	920-2150MHz
Input connector:	F-type female
Impedance:	75Ω
Input sensitivity:	-30 to -65dBm

LNB supply voltages

Supply voltage software switchable:	13V/18V
Current limit:	0 to 400mA
Software controlled LNB power on/off	
LNB 22kHz Tone switching:	
Amplitude:	0.6Vpp (±0.2V)
Frequency:	22KHz ± 2KHz
Duty Cycle:	50% (±20%)
Full DiSEqC specification V1.0 supported	
Universal LNB supported	
Software controlled on/off	
0/12V accessory switch:	Software controlled on/off

Demodulator and FEC

Demodulator:	Fully DVB compliant
Type:	QPSK
Filtering:	0.2 or 0.35 Square root raised cosine
Input symbol rate:	2 Msps to 45 Msps fully variable
Forward Error Correction:	
Code rates supported:	1/2, 2/3, 3/4, 5/6, 7/8 (Auto Sensed)

Transport, A/V Decoding

Demultiplexor:

PID Filters:	1 Video, 1 Audio, 30 general purpose (SI capable)
PCR recovery:	internal 27MHz PLL locked to PCR

Video Decoder:

Bitstreams Supported:	MPEG2 MP@ML to ISO/IEC 13818-2
	MPEG1 to ISO/IEC 11172-2
Video Resolution:	Up to 720 x 576 pixels at 25 fps for PAL
	Up to 720 x 480 pixels at 30 fps for NTSC
Video Memory:	16Mbit

Audio Decoder:

Type:	MPEG1
Layers:	I and II
Audio Modes:	Mono, Dual, Stereo, Joint Stereo
Output Sample Rates Supported:	16kHz, 22.05kHz, 24kHz, 32kHz 44.1kHz, 48kHz
Data rates supported	8 to 448 Kbps

PAL/NTSC Encoder:

Supported Outputs:	Composite, RGB, S-Video NTSC-M,
	PAL B,D,G,H,I,M,N,Nc
	(country dependent)

UHF/VHF Modulator:

Tuning Range:

(UHF):	CH21 to CH69
or	
(VHF):	CH3, 4
	(country dependent)

Processor and memory

System CPU:	40 MIPS, Cached
RAM:	512k standard
ROM:	1MB standard
EEPROM:	256kBit

Power consumption

Operational	30W max.