

889-0186

SE00311 (149)

User instructions**"Common Interface"****Features**

- 1.- Brilliant On Screen Graphic
- 2.- MPEG-2 Video (MP@ML), MPEG-1 Audio Layer1, Layer2 (Fully DVB Compliant)
- 3.- LNB Controlling Logic (0/22KHz Tone, 13/18V or 14/19V)
- 4.- SCPC/MCPC Receivable from C/Ku-Band Satellites
- 5.- Digital Tuner with Loop-through
- 6.- Frequency Input 950-2150 MHz & Wide Symbol Rate 1-45Mbps &
- 7.- DiSEqC 1.2 Supported
- 8.- User friendly OSD Menu with Full Function
- 9.- 256 Colors Graphic User Interface. Multi-language Menu
- 10.- Installation by Easy Setup Guide
- 11.- EPG (Electronic Program Guide) for On-screen Channel Information
- 12.- Small Screen Picture on EPG
- 13.- Multi-Lingual function according to the satellite and program provider
- 14.- Teletext function
- 15.- Subtitle Supported
- 16.- Capacity for Storing Multi Channel 4000 Channels, 1000 Transponders
- 17.- 3 Favorite Channel Lists
- 18.- Parental Lock Function
- 19.- RS232C Port for Additional Information Service and Upgrading System Software
- 20.- Variable Aspect Ratio (4:3,16:9) with Pan Vector or Letter Box
- 21.- Supported to PAL, NTSC of TV standard
- 22.- 2 SCART for TV, VCR
- 23.- PLL RF-Modulator UHF 21-69 with PAL I, B/G, D/K
- 24.- 4-digit 7-segment LED Display
- 25.- Displays local time on the front panel, when it is on stand-by mode
- 26.- Volume control
- 27.- IR remote control unit (RCU)
- 28.- Power recovery function
- 29.- Last channel memory function
- 30.- 2 Slot Common Interface for Viaccess, Conax, Crypto Works™, Nagravision, Irdeto and Mediaguard (SECA)

* PICKS-UP ALL FREE TO AIR CHANNELS + WITH USE OF CAM CARDS
CAN PICK-UP ENCRYPTED CHANNELS.

About the Smart Card and CAM Module

To be able to receive pay-TV channels you will need a CAM module and a smart card from the service provider of your choice. (The service provider is the distributor of the programs.) CAM modules and smart cards are licensed to service providers.

If you are subscribing to services from more than one service provider, you might have to change between different smart cards, or even between different CAM modules.

If no CAM module is inserted, you only watch "Free to Air" TV programs.

Note:

1) The main plug must not be plugged in before inserting the CAM module.

2) Insert the CAM module fully into the slot behind the lid in the front panel of the receiver towards the arrow on the module faces upwards and inwards.

3) Insert your card fully into the slot on the CAM module towards the arrow on the card faces upwards and inwards.

4) The CAM module and smart card may give special menus not described in this manual.

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Pannels and connections description

Fig. 1 - Front Panel

Key	Function
⏻	Turns the receiver On /Off.
MENU/OK	Shows the Main menu in viewing mode. Activates the highlighted menu item in menu mode.
EXIT	Exits from the current menu or cancels the current progressing operation if applicable.
▲ ▼ ◀ ▶	Incerases/deccreases volume & channels in viewing mode and moves the cursor in menu mode.
Display	In STAND BY mode, the 7-segment displays local time. The red LED is the STAND BY indicator.
----	2 slots for CAM and the smart card.

Fig. 2 - Rear Panel

Name	Function
ANT IN	Connect the antenna of TV to ANT IN.
TV OUT	Connect a conventional TV.
VIDEO	Salida de video.
AUDIO R	Audio output (right channel).
AUDIO L	Audio output (left channel).
TV	Connect to the TV with a SCART cable.
VCR	Connect to the VCR with a SCART cable.
LNB IN	Connect the satellite dish.
IF OUT	IF Out is a output port of the LNB IN signal.
RS232	Connect a Set-top box or a serial port of PC.
MAINS	To the mains socket. Make sure to check the power specification

Fig. 3 - Remote Control Unit (RCU)

Key	Function
⏻	Turns the receiver On/Off.
⊗	Turns the sound On /Off.
0 ... 9	Controls the numerical operation and especially changes program directly.
🎵	Switches between TV and Radio.
OK	Confirms the choices and selection with the highlighted menu item. While watching TV or listening to Radio you press the OK button, the channel list will appear.
▲ / ▼	Changes channels in viewing mode and moves up/down in menu mode.
◀ / ▶	Changes the volume level in viewing mode and settings in menu mode.
MENU	Shows the Main menu.
⬆ / ⬇	Moves to the next or previous list/text page if more than one page is available.
EXIT	Exits from the present menu and moves to the previous menu.
EPG	Shows the TV/Radio program guide.
ℹ	Shows the information of the current program. If you press this button again on the information mode, the detail EPC box will be shown. If you press the EXIT button, the box will be disappeared.
TXT	Shows the teletext contents if teletext is transmitted.
FAV	Shows the current favorite channel list.
⏻	Sets the time for turning the receiver off.
RCL	Moves to the previous channel.
AUD	Sets the output direction for speaker.
LANG	Shows the multi-language Audio information.

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Getting Started

Introduction

There are several ways of connecting the STB to your existing Audio/TV system. Some of the methods enable you to listen to music in stereo sound of CD like quality. Consult your local supplier for assistance in setting up an audio/video configuration best suited to your unique requirements.

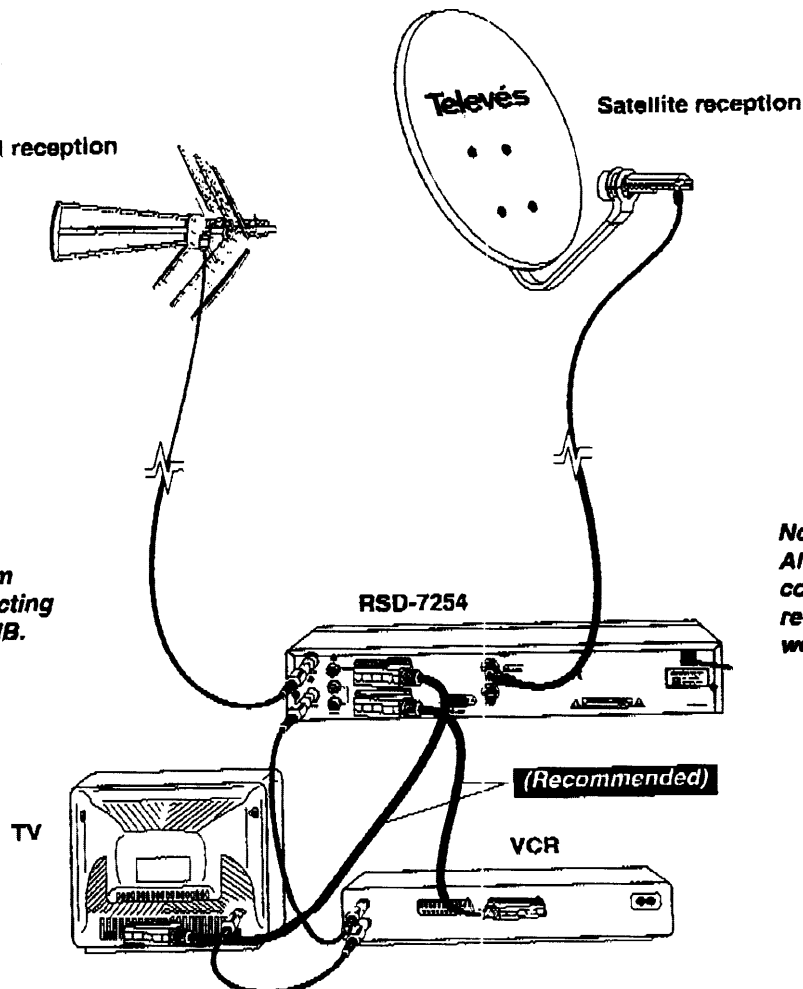
Hints to Quality TV System Configurations:

- Connect cables via audio/video outputs/inputs or SCART connector instead of RF connectors, where possible.
- Use an appropriate, correctly installed antenna system.
- The connectors should be firmly adapted by hand.
- Ensure that the system is properly earthed and protected against lightning.
- Connect the STB to high quality stereo TV and Hi-Fi equipment.

Connection

- 1.- Connect the TV antenna connector into the ANT IN socket on the STB.
- 2.- Connect the TV OUT socket on the STB to the RF IN (aerial) connector on the VCR.
- 3.- Use other flylead to connect the RF OUT socket on the VCR to the RF IN (aerial) connector on the TV.
- 4.- Connect the coaxial cable from the LNB into the socket marked LNB IN on the STB. The connector on the LNB IN should be turned until it is finger tight.
- 5.- Connect the power plug of the STB into the mains wall socket and switch the power ON

CAUTION:
Disconnect the STB from the mains before connecting or disconnecting the LNB.



Note:
All cables used for connecting the receiver should be well-shielded.

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Specifications

1. Tuner & channel

Input Connector	1 x F type Ohm
Output Connector	1 x F type 75 Ohm IF signal out
Frequency Range	950MHz to 2150MHz
Input Impedance	75 Ohm
Signal Level	-25 to -65dBm
IF Bandwidth	55 MHz / 8 MHz (under 5MSPS)
LNB power & polarization	Vertical +13V... +14V Horizontal +18V... +19V
22KHz Tone	Frequency 22 kHz \pm 2 kHz Amplitude 0.6Vp-p \pm 0.2Vp-p
DiSEqC control	Version 1.2, Tone burst A/B
Demodulation	QPSK
Input symbol rate	1 ... 45MSPS / SCPC, MCPC

2. Transport Stream

Transport stream	MPEG-2 ISO/IEC 13818
Profile & level	MPEG-2 MP @ ML
Input data rate	90 Mbit/s max.
Aspect ratio	4:3, 16:9
Video resolution	720 x 576 (PAL), 720 x 480 (NTSC)
Audio decoding	MPEG-1 Audio layer 1, 2, musicam
Audio mode	Stereo, dual channel, joint stereo, mono
Sampling rate	32, 44.1, and 48 KHz

3. Memory

Flash memory	1 Mbytes (up to 2 Mbytes)
Program DRAM	2 Mbytes
EEPROM	16 Kbit

4. AV & data in/out

SCART	TV x 1, VCR x 1
RGB video out	TV x 1 (SCART socket)
CVBS video out	RCA x 1, 2 x SCART socket (TV, VCR)
TV Standard	PAL, NTSC
Analog audio out	RCA x 2 (L-CH x 1, R-CH x 1) 2 x SCART socket (TV, VCR)
Data interface	Resolution 16 bit DAC Output Level 2 Vrms Max. Volume & Mute control RS232C, 38400 Baud, 9Pin SUB-D

5. PCMCIA

Number of slots	2
Type	I, II DVB Common Interface Standard

6. RF-Modulator

RF-connect	75 Ohm, IEC 169-2, male / female
Frequency	470 MHz to 860 MHz
Output channel	CH21 ... 69 (preset at CH 38)
TV standard	PAL D/K, PAL B/G, I

7. Power supply

Input voltage	AC 85 - 260 V, 50/60 Hz
Type	Conmut.
Power consumption	30W Max.

8. Physical specification

Size (W x H x D)	370 mm x 60 mm x 280 mm
Weight	about 1.5 Kg

9. Environment

Operating temperature	0 °C ... +40°C
Storage temperature	-40 °C ... +65 °C