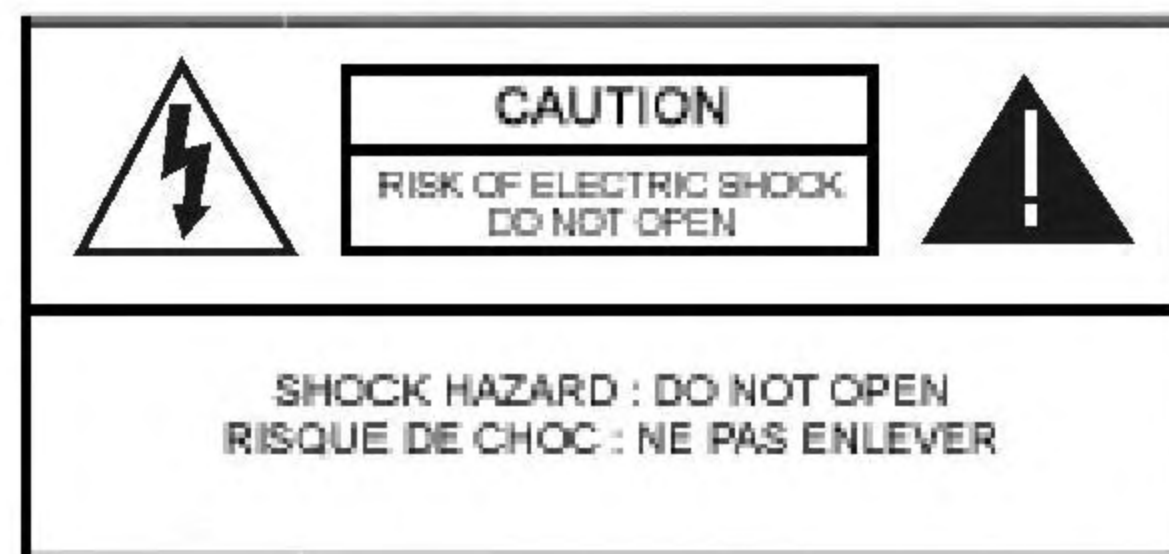# IMPORTANT SAFETY INSTRUCTIONS

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operation the equipment

1. Be sure to read this user manual before starting your operation.
2. Never open the cover. It is very dangerous to touch the inside stuff of the unit due to possible electric shock.
3. If you don't use this unit for long time, please pull the power plug out from the outlet. Do not use a damaged power cord.
4. Do not touch the power with wet hands. If there is liquid flow into the unit, pull out the power cord immediately because it may cause fire or electric shock.
5. Place the unit in a well ventilated and no heat environment.
6. You must install the dish with correct direction and angle. If the dish is not working properly, contact your local dealer.
7. Install the unit horizontally. Unbalanced installation may cause the unit to be damaged by itself.
8. When the unit is suddenly moved to a hot area from a cold area, it may cause some problems. In that case, turn off the power, and turn on again after 1-2 hours.
9. Install the unit in a place with:
   good ventilation
   suitable temperature
   no direct sunrays
   low humidity
   low vibration influence.
10. Do not put heavy objects on the unit.

This mark consists of two Graphical Symbols and warning message. The detailed specifications are as follows:

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

SHOCK HAZARD : DO NOT OPEN
RISQUE DE CHOC : NE PAS ENLEVER

CAUTION: To reduce the risk of electric shock, don't remove cover (or back). Equipment service and maintenance should be undertaken only by trained personnel.

10. Trouble Shooting

Problem	Possible Causes	What To Do
No display light up on front panel	Power cord is not well plugged	Check to make sure power cord is plugged properly into power socket.
No sound or picture, but the front panel red light is ON.	The unit is in standby mode.	Press the standby button.
No sound or picture.	The satellite dish is not pointing at the satellite.	Adjust the dish. Check the Signal Level in the Antenna Setup menu.
	No signal or weak signal.	Check the cable connections, LNB and other equipment connected between the LNB and the receiver, and/or adjust the dish.
Bad picture/ Blocking error.	The satellite dish is not pointing at the satellite	Adjust the dish.
	Signal is too strong.	Connect a signal attenuator to the LNB input.
	Satellite dish is too small.	Change to a larger dish.
	LNB noise factor too high.	Change to an LNB with lower noise factor.
	The LNB is faulty.	Change the LNB.
No picture (Video)	Tv is not in AV/EXT mode	Check the UHF channel fixed in your system and tune the UHF channel properly.
There is interference on your digital satellite channel.	The system is connected using RF cable and the output channel of the receiver interferes with an existing terrestrial channel or Video signal.	Change the receiver output channel to a more suitable channel,
The RCU is not working.	Out of battery	Change the battery.
	RCU is aimed at wrong direction.	Aim the RCU at the unit, and make sure no blocks between the front panel and RCU.

Note: If you still cannot resolve the problem with above reference, please contact the local dealer or their after-sales service center.

DATA SERVICE PORT	
Connector	9-pin D-sub female
Data protocol	RS232C interface. The DVB-DSR is seen as the Data Communication Equipment (DCE) and the PC (or other terminal) is seen as the Data Terminal Equipment (DTE).
Data rate	Maximum of 625K bits/s

POWER SUPPLY	
Type	Switching mode
Main input voltage	90v - 240V AC @ 50Hz/60Hz±5%
Nominal power consumption	30W

SAFETY	
Insulation resistance	more than 10MΩ at 500Vdc Ambient conditions of 28±2% & 70%RH
Withstand Voltage (Hi-Pot)	I/p to O/p:3kV(1 min)
Temperature Rise	<75 on winding & core; <50 on casting At 264Vac @ 50Hz
Safety Standard	Designed to meet IEC 9

MICROPROCESSOR	
Microprocessor	CONEXTANT
Clock frequency	130MHz
SDRAM Memory	8Mbyte
Flash memory	0.5M/1M/2Mbyte

PHYSICAL CHARACTERSTICS	
Front Panel	
Keys	7 Keys
Indicators	Power on/off
Remote control input	Infra-red STB
Display	4Digit (7Segment)
Rear Panel	
Connectors	1 LNB Input / 1 Loop through output (2F-type)
	2 x Audio L/R (RCA)
	1 x Video SIGNAL (RCA)
	1 x RS-232 (9-pin D-sub male)
	1 x S/PDIF or 0/12V (Optional)

Table of Contents

9. Technical Specification

| TRANSMISSION STANDARDS	
DVB, MPEG-2	
INPUT/ DEMODULATION	
Connector Type	2X F Type, 3/8-32UNEF-2A (1 input/1 loop through)
Input Frequency	950 to 2150 MHz
Signal Input level	-65 to – 25 dBm
Band Switch control	22 KHz
LNB Supply	13.0 + 0.5 V / 18V + 0.7 V, max 400 mA
Demodulation Type	QPSK / FEC Coding (DVB prETS 300 421)
Symbol Rate	2 < Rs < 45 Mbaud (SCPC/MCPC)
Video input	CVBS/75 unbalanced/5MHz
Audio output	"Left, Right"/600 unbalanced
Level	1.0V rms:±2dB into 10k
Audio input	"Left, Right"/10k unbalanced
Level	1.0V rms±2dB into 10k
AUDIO/ VIDEO PROCESSING	
Audio Decompression	MPEG-1 layer I and II / Musicam
Audio Outputs	Stereo Channel/Dual Mono/Joint Stereo/ Mono
Video Decompression	MPEG-2 Main Profile @ Main Levels With Letter
Video buffer	64 Mbits of SDRAM is provided
Data rate	up to 15Mbits/s (Max. burst rate: 228 Mbits/s)
Video output	PAL-25 frame @720 x 576 NTSC-30 frame @720 x 480

7.Game

There are several games attached in the receiver. Can be
played via remote control.
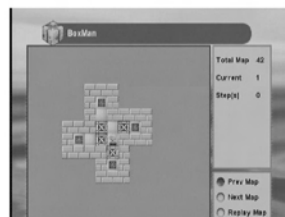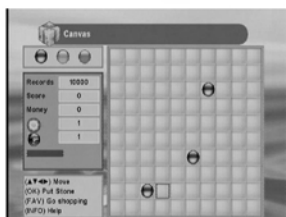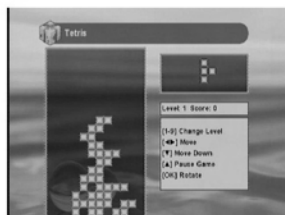
8. EPG (Electronic Program Guide)

Satellite Receiver provides EPG function
for you to get access to the TV Guide
(or Radio Guide if you are listening to radio
channels) that will show the titles and
other information of the current and next
programs on different channels. The
information is only available from the
network to which the channel you are
watching.
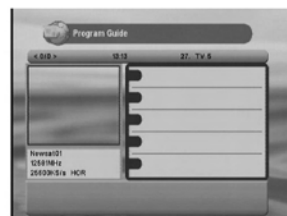
1. General Information

The digital satellite receiver allows you to view digital satellite programs. This
user's manual covers the installation of the receiver and the necessary steps
to operate various features. It also explains special features available only in
this receiver in details, which will help you to take full advantage of these features.

1.1 Main Features
● Fully MPEG2, DVB compliant
● Digital Audio with AC-3 support by SPDIF（Optional）
● PIG (Picture In Graphic) support DiSEqC 1.2 positioner for
   multi-satellites (63 satellites)
● C/Ku band control for each antenna
● Various channel editing functions (fav、 move、lock、 rename、delete and sort)
● User programmable various satellite & transponder information
● Automatic search for newly added transponder (Network Auto Search),
   stores up to 5000 channels
● Easy and fast software upgrade through RS-232 port
● Timer function, automatically turns On/Off by setting function
   (daily, weekly, monthly, one time)
● Automatic reserved channel moving system
● Electronic Program Guide (EPG)
● OSD Teletext (DVB ETS 300 706) and Subtitle function support
● VBI teletext support
● Antenna positioning help feature
● Multi video output CVBS, RGB
● Provides various switch types, LNB types and NTSC/PAL/SECAM monitor type
● SCPC/MCPC receivable from C/Ku band satellite
● Multi LNB controlled by DiSEqC 1.0/1.1/1.2 and 22KHz switching
● 256 color On-Screen-Display
● Automatic PAL/NTSC/SECAM conversion
● Automatic last channel saving

1.2 For Your Safety
● Keep receiver placed in clean space with sufficient ventilation.
● Do not cover the STB with or place it on a unit that emits heat.
● Clean the case by a soft cloth with a little washing liquid.
● Do not connect or modify cables when the receiver is plugged on.
● Do not remove the cover.
● Do not let the unit exposed to extreme heat, cold or humid conditions.
● No liquids or any other materials to come inside of the unit.

1.3 Unpacking
Please open the package and make sure the following items are inside:
● Remote Control Unit (RCU)   ● User's Manual
● Digital Satellite Receiver