

Operational Description

OVERVIEW

This product is designed for using Digital Satellite and allows you to enjoy a lot of broadcasting whenever you want to watch it anytime. By simply pressing the button of the remote control unit, the vivid picture and life-like sound of digital broadcasting that your TV portrays through this product, allows you to watch whatever channel you wish of the digital broadcasting.

Through this manual you will notice that the operation is easy to use.

This manual will help you get the most from this product and guide you through Installation, channel selection and many other functions.

In case you experience any difficulties to use this product, please consult the relevant section of this manual.

From now on, enjoy digital broadcasting with digital satellite receiver!!!

General Features



- 10days EPG (Electronic Program Guide)
- Full Compliant of MPEG-2 Digital & DVB broadcasting
- 950-2, 150 MHz input Frequency (IF Loop Throughout)
- Variable Input Symbol Rate (1-45Msps)
- Multi Language OSD
- Automatic PAL/NTSC Conversion
- Fast Channel Change
- 5,000 Channel TV & Radio Program
- Flexible reception of SCPC & MCPC from C/Ku-Band Satellites
- S/PDIF (Digital Audio or Dolby AC3 Stream out)
- Timer Function (Automatic Turn On/Off by Setting Function)
- 256 Colors (Graphic Use Interface) Number
- PIG (Picture In Graphic)
- 5 Favorite List & 100 programs per each
- Powerful Channel Editing Function
 - Sorting: Alphabetic, Satellite, FTA/Scramble, Parental Lock
 - Move, Delete, Favorite Edit
 - Parental Lock, Channel Rename, Channel Skip
- Manual PID/Satellite & TP/Network Scan
- **Blind Scan**

Operational Description

- Satellite Scan – Simultaneous Scan with various Satellites
- DiSEqC 1.2 & USALS Compatible
- Comparable of Setting the Frequency for SMATV System
- Software Upgrade via **USB Memory Stick** or RS232C (Receiver to Receiver, PC to Receiver)
- UHF- Ready
- S-VHS Out
- Universal Remote Control

Operational Description

. HOW TO USE THE REMOTE CONTROL KEY

| Key | Function |
|---|---|
|  | Turns this receiver on/off. In the standby mode, it is automatically changed to TV mode that enables to watch terrestrial TV broadcasting. |
| TV/SAT | Toggles between TV & SAT |
| TV/VCR | Toggles between TV & VCR |
| TIME | Time shows current Time |
|  | Sounds Off/On |
| INFO | Shows channel information, such as channel number, channel name, Frequency, Polarity, Symbol Rate, Video PID, Audio PID and PCR PID |
| EPG | Shows program information |
| TV/RADIO | Toggles between the TV service and radio service |
| PAUSE | Holds the picture or release the pause |
| SIG | Shows signal quality |
| AUDIO | Selects audio mode (Stereo, left only and right only). Select language in case of Multilingual program. |
| MENU | Enters main menu screen. Or exits menu screen |
| EXIT | Moves to upper menu |
| CH ▲▼ | Channel up/down Moves the cursor upward/downward in the menu screen |
| OK | Shows Channel list. Confirms selection |
| VOL ◀▶ | Volume down/up Change the value of a selected line |
| LAST | Returns to previous program |
| FAV | Enter favorite program or Exit from Favorite program |
| 0~9 | Changes channel directly. Controls the numerical operation. Input the alphabet in the name edit screen |
| ▼ | Execute page down function in the menu |
| ▲ | Execute page up function in the menu |



Operational Description

| | |
|-----|-----------------------------------|
| SAT | Classifies satellite by satellite |
| ??? | ??? |
| TTX | Teletext |
| SUB | Subtitle |

Operating Principle

- Select an item by using up and down key and change the value of the highlighted (selected) item by using keys shown on the screen. Press OK to enter to the sub-menu if there is no instruction marks on the screen.
- The items is automatically stored and moved the upper menu by pressing the 'EXIT' key
- You can return to normal mode at any time by pressing the menu key from the menu mode

FRONT PANEL

1. POWER
To put Power in and out of standby mode.
2. VOLUME
To make volume up and down.
3. CHANNEL
To move up and down in the menus, To change channels.
4. Menu
To enter main menu screen.
5. Exit
To move to upper menu.
6. Select
To enter selected menu screen.
7. Display
To show channel number, error messages, remote control commands and time in standby mode.



Operational Description

REAR PANEL

| NO | NAME | FUNCTION |
|----|------------------|--|
| 1 | S-VHS | Super Video output to TV or VCR |
| 2 | UHF | Option for UHF Remote Control lit |
| 3 | S/PDIF | For digital audio output |
| 4 | RS232 | Serial port used for software upgrade |
| 5 | L | Left Audio Output |
| 6 | R | Right Audio Output |
| 7 | Y | Component Video Output |
| 8 | Pb | Component Video Output |
| 9 | TV OUT | Output to TV |
| 10 | IF OUTPUT | IF Loop-through output to 2 nd receiver |
| 11 | IF INPUT | IF INPUT from LNB to receiver |
| 12 | Modulator Switch | CH 3/4 Switch |
| 13 | ANT IN | Input from terrestrial TV antenna |
| 14 | Pr | Component Video Output |
| 15 | VIDEO | Composite Video Output |
| 16 | AC SWITCH | AC Power ON/OFF (Reset Function) |



Operational Description

Specification

| | |
|---|--|
| Embedded Smart Card Slot | 1 Smart Card Reader |
| USB2.0 with On-The-Go | 1 Host |
| Front-End | |
| 1 Input Connector | F-type, IEC 169-24 |
| IF Input Frequency | 950MHz to 2150MHz |
| IF Loop Throughout | 950MHz to 2150MHz |
| IF Frequency | Zero-IF |
| Input Level | -65 dBm~-25 dBm |
| LNB Power | 13 /18VDC / 500mA Max |
| DiSEqQc Control | Diseqc 1.2 & USALS Compatible |
| Band Switch | 22KHz Tone |
| Demodulation | QPSK |
| Symbol Rate | 1~45 Msps(SCPC,MCPC) |
| Viterbi Decoding Rate | 1/2,2/3,3/4,5/6 and 7/8 |
| Reed Solomon Decoding | FEC: 204, 188. t=8 |
| MPEG transport Stream A/V Decoding | |
| Demultiplex | According to ISO/IEC 13818-1 |
| Input syream | Max. 90Mbit/s |
| Aspect Ratio | 4:3, 16:9 |
| Video Resolution | 720x576 (PAL), 720X480 (NTSC) |
| Audio Decoding | MPEG Layer I & II |
| Audio Mode | Single Channel /Dual Channel, Stereo, Joint Stereo |
| Audio Sampling Frequency | 16/22, 05/24/32/41, 1/48 khz |
| Microprocessor & Memories | |
| Main Processor | VIRGO SE |
| CPU Clock | 150 MHz |
| Flash Memory | 8 Mbyte |
| SDRAM | 32 Mbyte |
| EEPROM | 32 Kbit |
| Data port | |
| Connector | 9 Pin D-Sub Type |
| Protocol | RS232 Asynchronous |
| Data Rate | Max. 19.2Kbps |
| RF Modulator | |
| Connector | IEC 169-24, Male/ Female |
| Frequency | CH3 (61.25MHz), CH4 (67.25 MHz) |
| Output Channel | CH 3-4 |
| TV Standard | NTSC |
| Preset Channel | Ch3-4,Changeable by Menu Screen |
| Front Panel | |
| 4 Digits LED | Channel Number Display |
| 8 keys | Volume Up/Down, Channel Down/Up, OK, Power, Menu, Exit |
| Smart Card Interface | 1 Slot |
| USB Memory Card Slot(Max. 500mA) | 1 Host |
| Rear Panel | |
| IF Input | F-type Connector |
| IF Loopthrough output | F-type Connector |
| 6 Phone (Cinch) | Video, Audio L, Audio R, YPbPr |
| S/PDIF Optical | |
| S-VHS | |
| UHF | |
| Modulator | |
| RS232 Serial Port | 9 Pin D-Sub Type |
| Remote Control | |
| Type | IR Remote |
| Battery | 2x1.5V AAA Type |
| Electrical and Mechanical | |
| Input Voltage | AC 90 -240V, 60Hz |
| Power Consumption | Max. 25 Watts |
| Standby Power | Less than 11 Watts |
| Size(WxHxD) | 290x200x55mm |
| Weight | 2.1kg |