Satlink Satellite Meter WS 6980 HD DVB -S2 / DVB -T2 / DVB -C

USER’S MANUAL
CONTENTS

1. GUIDE .............................................................................................................................................. 2
   1.1 IMPORTANT SAFETY INSTRUCTIONS ................................................................................... 2
   1.2 UNPACKING .............................................................................................................................. 2
   1.3 PRODUCT OVERVIEW & ILLUSTRATION .............................................................................. 3
   1.4 INSTALLATION OF METER ........................................................................................................ 4

2. OUTLINE ............................................................................................................................................ 5

3. THE MENU OSD INSTRUCTION ................................................................................................. 6
   3.1 DVB-S2 ......................................................................................................................................... 6
   3.2 DVB-T2 ......................................................................................................................................... 9
   3.3 DVB-C .......................................................................................................................................... 11
   3.4 SPECTRUM ................................................................................................................................. 13
   3.5 LOOP SEARCH ............................................................................................................................ 14
   3.6 OPTICAL POWER ......................................................................................................................... 14
   3.7 OTHERS ....................................................................................................................................... 14
   3.8 SYSTEM SETTING ....................................................................................................................... 20

4. TECHNICAL SPECIFICATION ......................................................................................................... 22

5. TROUBLE SHOOTING ..................................................................................................................... 24
1. **GUIDE**

1.1 **IMPORTANT SAFETY INSTRUCTIONS**

Thank you for choosing our product. Before installation, we would like to remind you some notes, which is very important for operating safely and properly, as follows:

- Be sure to read this user manual before starting your operation.
- You must install the dish with correct direction and angle. If the dish is not working properly, contact your local dealer.
- 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.
- Keep meter placed in clean space with sufficient ventilation.
- Do not cover the meter with or place it on a unit that emits heat.
- Clean the case by a soft cloth with a little washing liquid.
- 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.

1.2 **UNPACKING**

Open the package and make sure it includes all below items, if any missing, please contact the reseller for replacement.

1. Digital Satellite Meter
2. User’s manual
3. AV cable
4. Car charger cable
5. Power Adaptor
6. Strap of carrying case
7. DC 12V connect line

NOTE: Please refer to our actual configuration.
## 1.3 PRODUCT OVERVIEW & ILLUSTRATION

<table>
<thead>
<tr>
<th>NO</th>
<th>Description</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LNB In</td>
<td>Connect to satellite antenna cable</td>
</tr>
<tr>
<td>2</td>
<td>ANT IN</td>
<td>Connect to antenna of DVB-T/T2 signal</td>
</tr>
<tr>
<td>3</td>
<td>DC OUT</td>
<td>DC 12V output for extern equipment (Please in kind prevail)</td>
</tr>
<tr>
<td>4</td>
<td>Optical fiber port</td>
<td>Connect optical device</td>
</tr>
<tr>
<td>5</td>
<td>Power Switch</td>
<td>Turn on/off meter</td>
</tr>
<tr>
<td>6</td>
<td>HDMI IN</td>
<td>Use HDMI cable to connect for HDMI IN</td>
</tr>
<tr>
<td>7</td>
<td>AV IN</td>
<td>Connect to AV port for meter</td>
</tr>
<tr>
<td>8</td>
<td>HDMI OUT</td>
<td>Use HDMI cable to connect for TV</td>
</tr>
<tr>
<td>9</td>
<td>AV OUT</td>
<td>Connect to AV port for TV</td>
</tr>
<tr>
<td>10</td>
<td>USB</td>
<td>Connect to USB memory</td>
</tr>
<tr>
<td>11</td>
<td>DC IN</td>
<td>Connect to adaptor input</td>
</tr>
<tr>
<td>12</td>
<td>Torch LED</td>
<td>Night lighting</td>
</tr>
<tr>
<td>13</td>
<td>Speaker</td>
<td>Speaker integrated</td>
</tr>
<tr>
<td>14</td>
<td>Power</td>
<td>Power indicator light</td>
</tr>
<tr>
<td>15</td>
<td>H/V</td>
<td>Vertical /Horizontal polarization voltage output light</td>
</tr>
<tr>
<td>16</td>
<td>22kHz</td>
<td>22kHz indicator light</td>
</tr>
<tr>
<td>17</td>
<td>LOCK</td>
<td>Signal lock indicator light</td>
</tr>
<tr>
<td>18</td>
<td>ANT</td>
<td>DC 12V OUT indicator light</td>
</tr>
<tr>
<td>19</td>
<td>OHG (Note1)</td>
<td>Charger indicator light</td>
</tr>
<tr>
<td>20</td>
<td>AV-S</td>
<td>If we connect AV IN; switch AV in/out for LCD and speaker</td>
</tr>
<tr>
<td>21</td>
<td>F1</td>
<td>Auxiliary function key</td>
</tr>
<tr>
<td>22</td>
<td>F2</td>
<td>Auxiliary function key</td>
</tr>
<tr>
<td>NO</td>
<td>Description</td>
<td>FUNCTION</td>
</tr>
<tr>
<td>----</td>
<td>----------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>23</td>
<td>F3</td>
<td>Auxiliary function key</td>
</tr>
<tr>
<td>24</td>
<td>F4</td>
<td>Auxiliary function key</td>
</tr>
<tr>
<td>25</td>
<td>Red &amp; TTXT</td>
<td>Red KEY &amp;Teletext interface</td>
</tr>
<tr>
<td>26</td>
<td>Green &amp; SUBT</td>
<td>Green key &amp; Subtitle interface</td>
</tr>
<tr>
<td>27</td>
<td>Orange &amp;TV/R</td>
<td>Orange key &amp; TV and radio switch</td>
</tr>
<tr>
<td>28</td>
<td>BLUE &amp;AUDIO</td>
<td>Blue key &amp; Audio interface</td>
</tr>
<tr>
<td>29</td>
<td>NEVIGATION KEY</td>
<td>Volume Control or move cursor, channel or change, confirm etc</td>
</tr>
<tr>
<td>30</td>
<td>MENU</td>
<td>Show the main menu on the screen or jump back to previous menu in sub-menu setting conditions</td>
</tr>
<tr>
<td>31</td>
<td>EXIT</td>
<td>Escape from present menu and save the settings</td>
</tr>
<tr>
<td>32</td>
<td>INFO</td>
<td>INFO key</td>
</tr>
<tr>
<td>33</td>
<td>MUTE</td>
<td>MUTE</td>
</tr>
<tr>
<td>34</td>
<td>0-9</td>
<td>Number key to select channels or enter programming</td>
</tr>
<tr>
<td>35</td>
<td>LCD</td>
<td>TFT LCD Screen</td>
</tr>
<tr>
<td>36</td>
<td>![Battery Icon]</td>
<td>When power on the meter, displays the battery level</td>
</tr>
<tr>
<td>37</td>
<td>Battery</td>
<td>Removable Battery</td>
</tr>
</tbody>
</table>

**Note1:** When the battery charged sufficient, the charge indicator is going out. When the battery is insufficient, indicator flashing.

### 1.4 INSTALLATION OF METER
2. **OUTLINE**

- 7 Inch High Definition TFT LCD Screen
- Fully DVB-S/S2/T/T2/C, MPEG-2/MPEG-4 compliant
- MPEG-2 / H.264 Hardware decoding
- Digital meter for signal strength and quality
- Constellation analyzer
- Spectrum analyzer
- Supports scan of Auto, Blind, Manual or NIT
- Sound and Light Alarm for Locking Signal
- Auto Calculate Angle of AZ, EL
- Supports DISEQC 1.0/1.1/1.2, Unicable, 0/22kHz Tone
- Speaker Integrated
- Support both AV out and AV in
- Support both HDMI out and HDMI in
- Support compass function
- Optical Power measurement
- LNB short protect
- 7.4V/3000mAh Li-Ion Battery Included
- Software upgrade via USB port
- Easy to carry
3. THE MENU OSD INSTRUCTION

If you have installed and connected the cables to the receiver, pressing \( \text{MENU} \) to display the Main Menu.

- DVB-S2
- DVB-T2
- DVB-C
- Spectrum
- Loop Search
- Optical Power
- Others
- System Setting

Press the keys of \( \uparrow \downarrow \leftarrow \rightarrow \) to move the cursor up or down in the menu interface, then use \( \text{OK} \) to confirm a selection.

3.1 DVB-S2

Select DVB-S2, then press \( \text{OK} \) into the Satellite Find.

3.1.1 SATELLITE

Press \( \leftarrow \rightarrow \) key into the satellite list. Use \( \uparrow \downarrow \) key to move the cursor, then press \( \text{OK} \) to select the satellite you want.
3.1.2 LOCAL FREQUENCY
Press ◀▶ key into the LNB list. Use ▲▼ key to move the cursor then press OK to select the LNB you want.

3.1.3 TRANSPONDER
Press ◀▶ key into the TP list. Use ▲▼ key to move the cursor then press OK to select the TP you want.

3.1.4 FREQUENCY
Frequency of the current transponder, Input the value by using the number keys.

3.1.5 SYMBOL RATE
Symbol rate of the current transponder, Input the value by using the number keys.

3.1.6 POLARITY
Press ◀▶ key to change vertical or horizontal of polarization.

3.1.7 TONE
Press ◀▶ key to turn on or off 22kHz TONE Switch.

3.1.8 BEEP TONE
Press ◀▶ key to Switch beep tone. If we open the beep tone, the beep of lock alarm will open when we enter into the search screen.

3.1.9 DISEQC MODE
Press ◀▶ key to set the type of port as diseqc1.0/1.1 or Unicable.
3.1.10 DISEQC TYPE & INPUT

If we select diseqc1.0/1.1, we can press ⬅️ key to set the port number. If select Unicable, we can press ⬅️ to select IF Channel, and use number key to input Center Frequency.

3.1.11 QUICK SEARCH

In the Satellite Find interface, you can press OK to enter the quick search. If you have set the Longitude and Latitude under the system setting, the angle of LNB, the orientation and elevation of antenna all will be displayed on the screen.

- TP Scan: Press the red key to search the current TP.

- Auto Scan: Press the green key to auto blind search the current satellite.
• **S/Q:** Press the orange key to enlarge showing of the signal strength and quality.

• **Constellation:** Press the blue key into the constellation.

### 3.2 DVB-T2

Select DVB-T2, then press OK into the Scan Setup.

#### 3.2.1 COUNTRY SETTING

Press ► key to change the default country.

#### 3.2.2 CHANNEL NO

Press ► key to change the channel number.

#### 3.2.3 FREQUENCY

Frequency of the current channel, input the value by using the number keys.

#### 3.2.4 BANDWIDTH

Press ► key to change the bandwidth, we can select 5, 6, 7 or 8M.
### 3.2.5 MODE

Press ◀▶ key to change the DVB standard, we have there types including T/T2/T+T2, you can select one you want.

### 3.2.6 BEEP TONE

Press ◀▶ key to switch beep tone. If we open the beep tone, the beep of lock alarm will open when we enter into the search screen.

### 3.2.7 ANTENNA SETTING

Press ◀▶ key to change the antenna power, we have there types including 5V/12V/24V, you can select one you want.

### 3.2.8 ANTENNA SETTING

Press ◀▶ key to power on or off the antenna.

### 3.2.9 QUICK SEARCH

In the Channel Find interface, you can press OK to enter the quick search.

- **Scan**: Press OK or red key to search current channel.

- **Auto Scan**: Press green key to auto search the current channel.
• S/Q: Press blue key to enlarge showing of the signal strength and quality.

• Constellation: Press the blue key into the constellation.

3.3 DVB-C

Select DVB-C, then press **OK** into the Scan Setup.

3.3.1 COUNTRY SETTING

Press **↑↓** key to change the default country.

3.3.2 CHANNEL NO

Press **↑↓** key to change the channel number.

3.3.3 FREQUENCY

Frequency of the current channel, input the value by using the number keys.

3.3.4 BEEP TONE

Press **↑↓** key to switch beep tone. If we open the beep tone, the beep of lock alarm will open when we enter into the search screen.
3.3.5 QUICK SEARCH

In the Channel Find interface, you can press **OK** to enter the quick search.

- **Scan**: Press **OK** or red key to search current channel.

- **Auto Scan**: Press green key to auto search the current channel.

- **S/Q**: Press blue key to enlarge showing of signal strength and quality.

- **Constellation**: Press the blue key into the constellation.
3.4 SPECTRUM

- **SATELLITE-SPECTRUM**

- **TERRESTRIAL-SPECTRUM**

- **CABLE-SPECTRUM**

3.4.1 SATELLITE-SPECTRUM

Press ◄► key to change Frequency;
Press red key to change bandwidth;
Press green key to change vertical or horizontal of polarization;
Press orange key to switch 22K on or off;
Press blue key to change mode Show IF or RF.

3.4.2 TERRESTRIAL-SPECTRUM

When we enter into this interface, we can press ◄► key to scan some information about spectrum in different frequency point.

- Full/Ch: Press red key to make all the frequency points we can see on the window or to make some frequency points on it.
- Zoom: Press green key to enlarge showing the point you current select, and press again it will be back.
- Locked: Press orange key to lock all the current frequency points, and remain unchanged unless you press again.
- Scan : When the frequency points have been locked, you can press blue key to receive signal on a point.
3.4.3 CABLE-SPECTRUM

Please refer to Terrestrial-Spectrum.

3.5 LOOP SEARCH

We can see 8 TP or channel when we enter into this interface, and press OK to edit. There are 4 modes we can choose: DVB-S/S2, DVB-T, DVB-T2 and DVB-C. Press  key to change.

It will finish loop search after edition, then signal strength and quality of each TP or channel will be shown on your sight.

3.6 OPTICAL POWER

Please connect optical port, then we can test the optical power by selecting the wave length and PWR unit. The test result will display in the middle.

3.7 OTHERS

Press OK to enter Others.

3.7.1 CHANNEL

- S2<<>>T2_T_C

Press red key to switch DVB-S2 to DVB-T2/T/C, and press again returning to DVB-S2.
• **Lock**
Press ▲▼ key to select programs we want to lock, then press green key to lock them.

• **Del**
Press orange key to select “Delete Select” or “Delete ALL”.

• **Satellite**
Press blue key then press ◀▶ key to select single satellite or all satellite.

### 3.7.2 PROGRAM INFO

In the Program Info we can check the information of the current TV program.

### 3.7.3 EPG

Press ▲▼ key to change program. If the current program has EPG information, it will appear on the right side of the window. Press ◀▶ key to change date of the EPG.
3.7.4 MOVIE, MUSIC & PHOTO

Will need to play the files in the USB and insert it into the machine.

• Movie
Press red key to the mode option of play files and text encode, then press **MENU** return.
Press green key to change the folder file viewing to detailed list.
Press orange key to change mode to big Icon browsing.
Press the arrow keys to move the cursor, then press **OK** to enter the file.
In the play interface:
F1 Key: Normal play.
F2 Key: Pause.
F3 Key: Fast backward. Press F1 key return.
F4 Key: Fast forward. Press F1 key return.

• Music & Photo
Please refer to the Movie operating.

3.7.5 SATELLITE SETTING

In the all Satellites Setting:
Press blue key to clear all selecte of satellite.
Press orange key to selecte all satellites.
Press green key into auto scan interface.
Press red key into the Transponder interface.
Press **▲▼** key to move the cursor, then press **OK** to change the satellite select or unselect.
Press **◄►** to set the single satellite setting.
In the setting interface:
1. TP Manage: press red key into TP manager.
2. Auto Scan: press green key into auto scan.
3. LNB: Press **◄►** key then change the LNB frequency.
4. Transponder: Press ➩ key then change the current TP.
5. DiSEqc1.0: Press ➩ key to change the DiSEqC port.
7. Motor: Press ➩ key to change the DiSEqC port.

If we select DiSEqC1.2/USALS, press OK into the motor interface.
- Transponder: Press OK to change the current tp.
- Mode: A, Position
  A1 Direction: Press ➩ key to move direction to west or east.
  A2 Position: Set the satellite save position.
  A3 Store: Save the satellite position to set of A2.
- Mode: B, Drive to Zero
  Move the cursor to GO, then press OK, the motor will go to zero.
- Mode: C, Drive to stored position
  Move the cursor to GO, then press OK, the motor will go to position of we have saved in mode A Position.
- Mode: D, Drive to Satellite
  Move the cursor to GO, then press OK, the motor will go to position of auto calculate.
- Mode: E, Recalculate
  E1 Direction: Press ➩ key to move direction to west or east.
  E2 Recalculate: Recalculate the satellite position.
- Mode: F, Set East Limit or Set west Limit
  Limit the motor move to east or to west.
  F1 Direction: Press ➩ key to move direction to west or east.
  F2 Store: Save the satellite position of A2
- Mode: G, Set Limit enable or disable
  Set the limit enable or disable.
8. Unicable: Press ➩ key to select Unicalbe then press OK into the Unicable setting.
- Transponder: Press ➩ key to change the current TP.
- IF Channel: Press ➩ key to change SCR channel.
• Center Frequency: Use number key to input number.
• Store: Store the setting.

3.7.6 AUTO SCAN

In the Sat/Tp Manager submenu, select Auto Scan into Automatic SAT Scan.
• Satellite: Press ▶ key into the satellite list.
  Use ▲▼ key to move the cursor, then press OK to select the satellite of you want.
• Transponder: press ▶ key into the TP list.
  Use ▲▼ key to move the cursor, then press OK to select the satellite of you want.
• NIT: press ▶ key to switch network searcher on/off.
• Program: TV search type ALL/FTA.
• Scan Mode: scan mode select, we can select Default TP / One TP/Blind.
• Scan Select: scan all satellites of selected or the current satellite.

3.7.7 SAT/TP MANAGER

Press ▲▼ key to select the current satellite.
• Edit Sat
Press red key to edit satellite.
NO.: Satellite number.
W-E: Switch the satellite longitude west or east.
Longitude: Use number key input value.
Satellite Name: Press OK will open the keyboard, use the direction key input satellite name.
• Del Sat
Press green key to delete satellite, then press OK to confirm or press MENU to cancel.
• Add Sat
Press orange key to add a satellite.
• Scan Sat
Press blue key into auto scan interface.

Press ◄► key to TP manager.

• Edit Tp
Press red key to edit TP.

NO.: TP number.
Frequency: Use number key input value.
Symbol Rate: Use number key input value.
Polarity: Press ◄► to change polarity.

• Del Tp
Press green key to delete TP, then press OK to confirm or press MENU to cancel.

• Add Tp
Press orange key to add a TP. Please refer to TP edit operations.

• Scan Tp
Press blue key into TP scan interface.

3.7.8 COMPASS

• Sat Longitude
Press ◄► key to change satellite.

• Location
If you select Manual, you need manual input longitude and latitude by keyboard.
You can also press ◄► key to select a city you need, then press OK to confirm. Some data will display under the Location.

• Calibration
According to the menu demonstration speed to rotating machinery.
3.8 SYSTEM SETTING

- **Country Setting**
  Press ▲▼ key to change the country.
- **OSD Language**
  Press ▲▼ key to change the OSD language.
- **TV Format**
  Press ▲▼ key to change the TV format.
- **Video Output**
  Press ▲▼ key to change the video output format.
- **TV Resolution**
  Press ▲▼ key to change the TV resolution.
- **Digital Audio Output**
  Press ▲▼ key to change the digital audio output format.
- **Time Zone**
  Press ▲▼ key to change the Time Zone.
- **Channel Lock**
  Press ▲▼ key to switch channel lock on/off.
- **PWR Unit**
  Press ▲▼ key to change the PWR unit.
- **Speaker**
  Press ▲▼ key to switch speaker on/off.
- **Flashlight**
  Press ▲▼ key to switch Flashlight on/off.
- **12V**
  Press ▲▼ key to switch DC 12V output on/off.
- **KB-BackLight**
  Press ▲▼ key to switch delay time of back light.
- **Set Location**
  Press ▲▼ or OK to set location, longitude or latitude.
Location: we can press ◄► to change the city, then auto select longitude and latitude.
Longitude: we can use number key input value then select west or east.
Latitude: we can use number key input value then select south or north.
• Upgrade
Will update the file into the USB, then insert the machine. Press OK to update interface, use the direction key to select update file, and press OK to update.
Warning: Please don’t turn power off or pull out the USB, otherwise it will damage the machine’s software, and can’t boot again.
• Factory Setting
Press ◄► key, then press OK to confirm factory reset.
**NOTE:** if you set factory setting, all the user settings and the database will be reset.
• System Info
In the system setting, press INFO to check the system version.
# 4. TECHNICAL SPECIFICATION

<table>
<thead>
<tr>
<th>TRANSMISSION STANDARDS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DVB-S2/S, DVBT/T2, DVB-C</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SATELLITE INPUT/DEMODULATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Connector Type</strong></td>
<td>F Type</td>
</tr>
<tr>
<td><strong>Input Frequency</strong></td>
<td>950 to 2150 MHz</td>
</tr>
<tr>
<td><strong>Signal Input Level</strong></td>
<td>-65 to -25 dBm</td>
</tr>
<tr>
<td><strong>Band Switch Control</strong></td>
<td>22KHz</td>
</tr>
<tr>
<td><strong>LNB Supply</strong></td>
<td>13V/18V, IMax 400mA</td>
</tr>
<tr>
<td><strong>Demodulation Type</strong></td>
<td>QPSK, 8PSK, 16APSK</td>
</tr>
<tr>
<td><strong>Symbol Rate</strong></td>
<td>2&lt;Rs&lt;45Mband(SCPC/MCPC)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DVB-T/T2/C INPUT/DEMODULATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Connector Type</strong></td>
<td>Female Type</td>
</tr>
<tr>
<td><strong>Input Frequency</strong></td>
<td>48 to 862 MHz</td>
</tr>
<tr>
<td><strong>Signal Input Level</strong></td>
<td>-79.5dBm (MAX)</td>
</tr>
<tr>
<td><strong>ANT Supply</strong></td>
<td>5V, 12V/24V IMax 100mA</td>
</tr>
<tr>
<td><strong>Demodulation Type</strong></td>
<td>QPSK, 16QAM, 64QAM, 256QAM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LCD FEATURES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LCD Type</strong></td>
<td>TFT Transmissive</td>
</tr>
<tr>
<td><strong>Number of Dots</strong></td>
<td>800 x 3(RGB) x 480</td>
</tr>
<tr>
<td><strong>Active area (WxH)</strong></td>
<td>154.08 x 85.92 mm²</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AV output interface</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Connector Type</strong></td>
<td>3.5 mm jack</td>
</tr>
<tr>
<td><strong>Video Output</strong></td>
<td>CVBS</td>
</tr>
<tr>
<td><strong>Audio Output</strong></td>
<td>Stereo Audio L/R output</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AUDIO/VIDEO PROCESSING</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Video decompression</strong></td>
<td>MPEG-2 MP@HL, MPEG-1 Decoding, MPEG-4 ASP@L5 HD resolution, H.264 MP&amp;HP@L4, HW JPEG decoding</td>
</tr>
<tr>
<td><strong>Resolving rate</strong></td>
<td>PAL-25 frame@720<em>576, NTSC-30 frame@720</em>480</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td><strong>Signal compatibility</strong></td>
<td>Support conversion for different video formats</td>
</tr>
<tr>
<td><strong>Video Format</strong></td>
<td>4:3, 16:9, By Pan &amp; Scan and Letter Box conversion</td>
</tr>
<tr>
<td><strong>Audio Decompression</strong></td>
<td>MPEG-1 Layer I/II, MPEG-2 Layer I/II</td>
</tr>
<tr>
<td><strong>Audio Output Mode</strong></td>
<td>Stereo, Mono, R/L</td>
</tr>
<tr>
<td><strong>DATA SERVICE PORT</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Connector</strong></td>
<td>USB</td>
</tr>
<tr>
<td><strong>Data Protocol</strong></td>
<td>USB2.0 interface</td>
</tr>
<tr>
<td><strong>File Management System</strong></td>
<td>NTFS, FAT32, FAT16</td>
</tr>
<tr>
<td><strong>File Format</strong></td>
<td>wma, mp3, mp4, avi, jpg, jpeg, bmp, img</td>
</tr>
<tr>
<td><strong>MICROPROCESSOR</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Microprocessor</strong></td>
<td>NOVATEK</td>
</tr>
<tr>
<td><strong>Clock Frequency</strong></td>
<td>500MHz</td>
</tr>
<tr>
<td><strong>SDRAM Memory</strong></td>
<td>1Gbit DDR3</td>
</tr>
<tr>
<td><strong>POWER SUPPLY</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Li-Ion Battery</strong></td>
<td>7.4V/3000mAh (The machine behind labeling shall prevail)</td>
</tr>
<tr>
<td><strong>Adapter</strong></td>
<td>OUTPUT: DC12V/1.5A, INTUPT: 100~240VAC 50/60Hz (Will be subject to actual configuration)</td>
</tr>
<tr>
<td><strong>Power Consumption</strong></td>
<td>Max. 10W</td>
</tr>
<tr>
<td><strong>PHYSICAL CHARACTERISTICS</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Size (W x D x H)</strong></td>
<td>25 x 15.6 x 4 (cm³)</td>
</tr>
<tr>
<td><strong>Net Weight</strong></td>
<td>1kg</td>
</tr>
</tbody>
</table>
## 5. TROUBLE SHOOTING

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Causes</th>
<th>What To Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>No display light up</td>
<td>Power switch is not on Run out of batteries</td>
<td>Check to make sure power on. Even on adapter</td>
</tr>
<tr>
<td>No sound or picture, but the front panel power light is ON.</td>
<td>AV IN jack insert, but no video input</td>
<td>Pull out AV IN cable</td>
</tr>
<tr>
<td>No sound or picture</td>
<td>The satellite dish is not pointing at the satellite.</td>
<td>Adjust the dish. Check the Signal Level in the Antenna Setup Menu</td>
</tr>
<tr>
<td>Bad picture/Blocking Error</td>
<td>No signal or weak signal</td>
<td>Check the cable connections. LNB and other equipment connected between the LNB and the meter and adjust the dish.</td>
</tr>
<tr>
<td></td>
<td>The satellite dish in not pointing at the satellite.</td>
<td>Adjust the dish.</td>
</tr>
<tr>
<td></td>
<td>Signal is too strong</td>
<td>Connect a signal attenuator to the LNB input</td>
</tr>
<tr>
<td></td>
<td>Satellite dish is too small</td>
<td>Change to a larger dish</td>
</tr>
<tr>
<td></td>
<td>LNB noise factor too high</td>
<td>Change to an LNB with lower noise factor</td>
</tr>
<tr>
<td></td>
<td>The LNB is faulty</td>
<td>Change the LNB</td>
</tr>
<tr>
<td>AV out No picture(Video)</td>
<td>The system is connected by SCART cable and TV is not in AV mode.</td>
<td>Check the UHF channel fixed in your system and tune the UHF properly.</td>
</tr>
<tr>
<td>The key is not working</td>
<td>Out of battery</td>
<td>Even on adapter</td>
</tr>
<tr>
<td></td>
<td>Key blocks</td>
<td>make sure no blocks between the front panel</td>
</tr>
</tbody>
</table>
USER’S MANUAL