

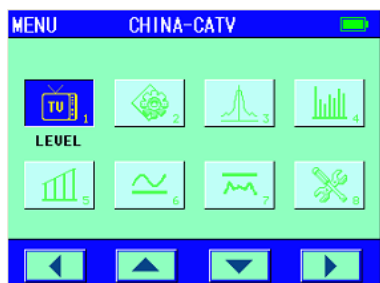


#### Features:

- Direct frequency input from 5(46)MHz ~ 870MHz
- DVB average power measurement
- Direct channel input of channel numbers
- Simultaneously displays video carrier and audio carrier strength, and V/A measurement
- Selectable dBmV, dBμV and dBm units
- Tilt measurement of three user definable channels
- Carrier-to-noise ratio measurement
- Trunk voltage measurement
- Large 128\*64 dot matrix LCD display with back light
- RS-232C port with PC communication function
- battery-powered handheld model, Internal Li-ion battery with included charger
- Rugged, compact and mobile, with rubber jacket, carry strap and manual
- Battery life: ≈8 hours

RA2002C

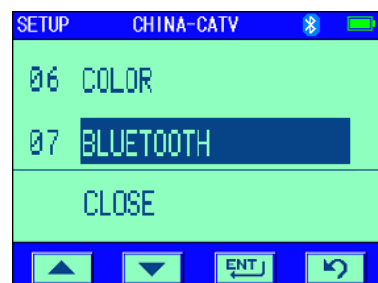
46~870MHz, COLOR LCD, channel level, C/N, V/A, trunk voltage, digital channel power, BER, MER, SPECTRUM, AUTO test, scan.



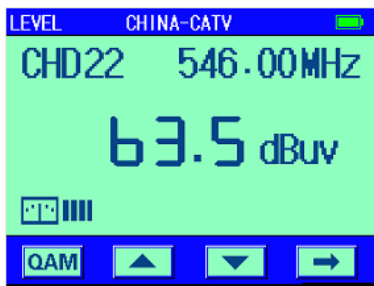
Main menu



Setup menu



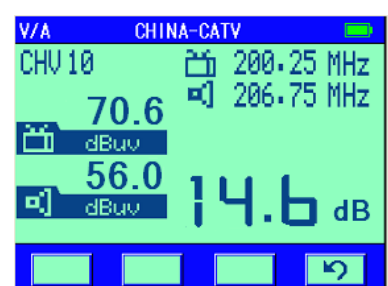
Bluetooth is option



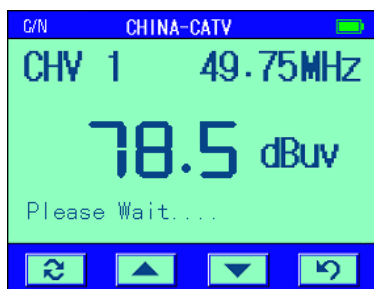
Test menu



QAM analysis menu



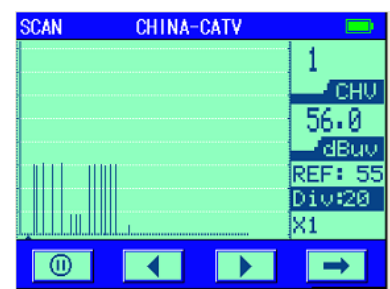
QAM analysis menu



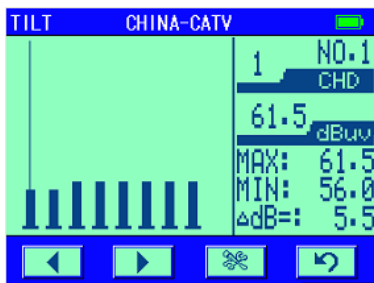
C/N Measurement



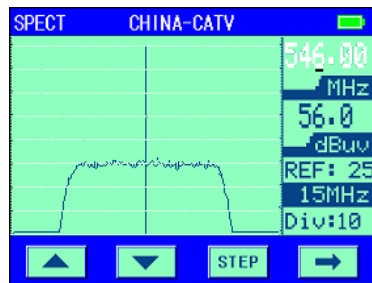
Voltage



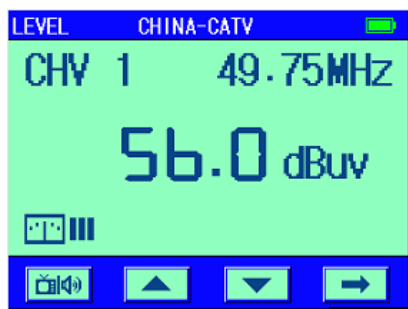
SCAN



TILT menu

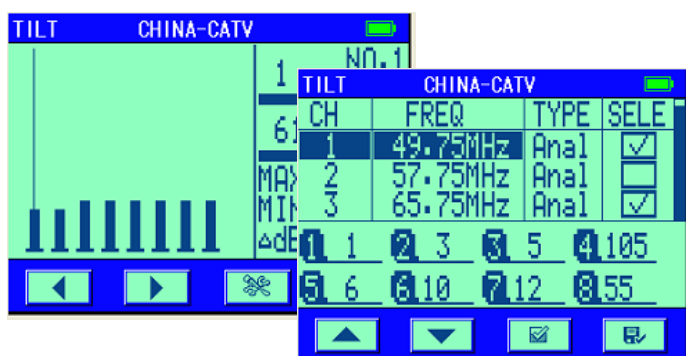


Sepctrum analysis



#### Unique features – Test menu

RA2002C	VS	Others
<ul style="list-style-type: none"> <li>Graphic bar</li> </ul>		No graphic bar
Indicates the value of the signal level or channel power.		Only displays as number.



#### Unique features- 8 channel TILT

RA2002C	VS	Others
<ul style="list-style-type: none"> <li>View 8 Channel TILT at the same time.</li> <li>View the test value by pressing one button.</li> </ul>		<ul style="list-style-type: none"> <li>3 Channel TILT</li> <li>can't display the test value of all channels.</li> </ul>



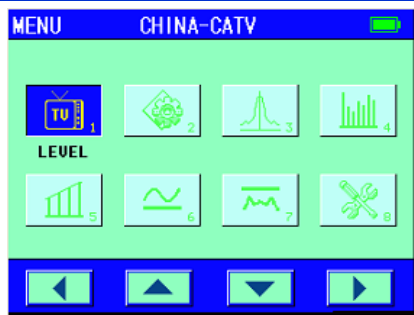
#### Unique features – Channel edit

RA2002C	VS	Others
<ul style="list-style-type: none"> <li>Channel plan can be edited on meter.</li> <li>Even the frequency can be edited.</li> </ul>		<ul style="list-style-type: none"> <li>Most can't be edited on meter.</li> <li>Even channel can't be edited, the frequency cant be edited.</li> </ul>



#### Unique features – Auto test

RA2002C	VS	Others
<ul style="list-style-type: none"> <li>Autotest allows you test up to 8 channels and get test result sheet by press one button.</li> </ul>		<ul style="list-style-type: none"> <li>Most other brands don't have auto test functions.</li> </ul>



RA2002C	VS	Others
<ul style="list-style-type: none"> <li>Most advanced calibration technology, use R&amp;S (Germany) digital signal generator, calibrate meter at high and low temperatures.</li> </ul>		<ul style="list-style-type: none"> <li>Most other brands use normal branded signal generators and calibrated at normal temperatures.</li> </ul>

## **Specification:**

### **QAM Analysis (Digital Channel)**

Support: 16/32/64/128/256QAM DVB-C;  
Demodulation type: ITU-TJ.83-AnnexA/AnnexB/AnnexC  
Symbol Rate: 1.00MS/s ~7.00MS/s  
Bandwidth: 1MHz~8MHz  
Frequency tuner: 50 KHz  
MER measurement range: 19~40dB  
BER Pre/post FEC measurement range: 10E-2 to 10E-9  
Tuning range: 46 MHz~870MHz  
Tuning mode: by channels or by frequency  
Power measurement type: QAM, QPSK, DOFDM

### **Frequency:**

Range: 46MHz—870MHz  
Resolution: 10KHz  
Bandwidth: 280KHz  
Frequency tuner: 50 KHz  
Accuracy:  $\pm 50$  ppm @ 20° C  $\pm 5^\circ$

### **Digital Channel Power (Average):**

Level range: 35 to 120 dBuV  
  
Accuracy:  $\pm 2.0$  dB@10° to 30°C (50° to 86°F)  $\pm 3.0$  dB@-10° to +40°C (14° to 104°F).  
  
Resolution: 0.1dB

### **Constellation (Optional)**

Display size: 64 and 256 QAM Constellation with zoom capability

### **Channel Type:**

Analog TV: TV  
Digital TV: QAM, QPSK  
FM channel: Single Frequency

### **Analog Level Measurement:**

Range: 25dBuV—120dBuV  
Accuracy:  $\pm 2$ dB  
Resolution: 0.1dB  
Input Impedance: 75ohm  
Wave detection: peak value

### **Channel Scan:**

Number of Channels: 200 channels max.  
Scanning speed: 4 channels / sec  
Scale: 1, 2, 5, 10, 20 dB/div  
Zoom: 1X, 2X, 4X three levels of magnification or full Channel Plan scan.  
Marker: 1 (frequency and signal level)

**Spectrum Analysis:**

Bandwidth: Ranging between 4.5MHz, 9MHz, 27MHz, 54MHz, and full span.

Scale: 1, 2, 5, 10, 20 dB/div

Marker: 1 (Frequency and signal level)

**Carrier-Noise Ratio (C/N):**

Input range: 65dBuV (minimum input level).

Measurement range: 30 to 54 dB

Accuracy:  $\pm 2$ dB

Resolution: 0.1dB

**Tilt measurement:**

Number of channels: 8

Resolution: 0.1dB

**Trunk Voltage measurement:**

Input range: 0-100VAC

Accuracy:  $\pm 1.5$ V Resolution 0.1V

Resolution: 0.1V

**Auto-Test**

Number of channels: 8

Tests: Level or digital channel power

**Others:****Channel Plan:**

Number of Channels: 200 channels max

Number of Learned Channel Plan: 17 max. 8 preset, 8 editable by PC, 1 user defined.

**Power Supply:**

Battery: 11.1V 1.5AH Li-ion battery,

Charger: AC 100V-240V/50Hz

Working Time:  $\geq 8$  hours (full charged battery).

Auto power off: Selectable (10 min, 20 min, 30 min, always on)

Charging Time: 5-10 hrs.

Connector type: F81 connector.

Display: 320\*240 Color LCD

**Communication Port:**

RS-232C

**Storage:**

256 Kb of memory;

Up to 200 complete scan files (200 channels, max); less if other files (Level, Tilt, QAM, Spectrum) are saved

**Gross weight:** 1 kg

**Net weight:** 0.5kg (with rubber jacket)

**Dimensions:** 85mm\*160mm\*40mm

**Package:** 220mm\*177mm\*62mm

**Ordering guide:**

<b>Model</b>	<b>Main Features</b>
<b>RA2002Q</b>	46~870MHz, 128*64 B/W LCD, digital power
<b>RA2002C</b>	46~870MHz, 320*240 Color LCD, digital power, (MER, BER is optional).