Operation Manual DTVLINK-CB

DVB-C Meter

Ver： 1.1

WARRANTY

We provide a 12-month warranty against any defect in materials and workmanship from the date of shipment. This warranty is not transferable and not applicable to the used or demonstration products. The obligation of us arising from a warranty claim shall be limited to repairing, or as an option, replacing without charge, any assembly or component (except batteries and chargers).

We shall have no responsibility for any defect or damage caused by improper use, improper maintenance or for any product which has been repaired or altered by anyone other than us or an authorized representative.

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1. General Introduction

DTVLINK-CB DVB-C Meter is specially designed for installation and field technicians seeking to quickly ensure the quality of digital and analog cable services.

With Streamlined appearance design and simple user interface, DTVLINK-CB offers the most cost effective choice for a variety of applications. The digital measurements include, modulation error ratio (MER), and pre- and post-FEC bit error rate (BER).It also possesses the features expected in a good SLM including analog channel video level, video-to-audio level, full scan, and tilt etc.

This palm sized meter with only 350g weight allows the filed technicians to work for 4 hours continuously.

2. Panel Introduction

2.1 Appearance

LCD

Power on/off

Selection

Charging Port

Return

USB Port

Main Menu

Charging Indicator

RF Input

2-1

2

2.2 Keypad

2-2

、 ： Increase and decrease.

、 ： Left and right circularly selection.

：Power on/off(hold it over 3 seconds to power off) or Confirmation.

MENU：Main Menu.

ESC：Return to previous menu or cancel.

：Charger Indicator

2.3 Display Description

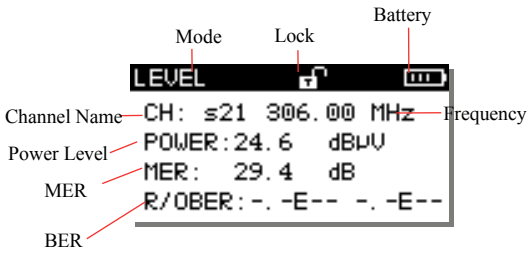

Figure 2-3

- Mode
- Lock
- Channel Name：The Frequency, Power Level, MER and BER are displayed on the same screen.
- Battery：Capacity of battery.

3. Power Supply

3.1 Battery

With a built-in 7.4V /1.6AH Lithium battery, the meter can continuously work for above 4 hours. When the battery voltage drops below 6.0V, DTVLINK-CB will automatically power off and then users must charge it with the attached charger for about 3 hours.

NOTE:

1. ***Only use the charger provided with the meter.***

2. Power off the meter when charging.

3. Lower temperature may cause the battery capacity reduction, but does not damage the battery.

4. Replace a new battery when the battery working time reduce.

3.2 Charging

Charge the meter before the first time use. Please charge the meter as follows:

1. Insert the charger output plug into DTVLINK-CB DC charge socket.

2. Connect the charger to AC 100V-240V Power and the charger indicator of meter is with red light.

3. When indicator switch to green, the instrument has been fully charged(It is suggested to charge extra one hour after indicator switched to green, which will be helpful to extend the battery life). Then you can disconnect the power and pull out the charger output plug.

NOTE: Only charge in the temperature 10□～35□.

4. Using the Instrument

Power on DTVLINK-CB, as Figure 4-1.

Figure 4-1

These icons are listed in DTVLINK-CB Main Interface: LEVEL, TILT, SCAN, C/N and SETUP. Press"Left and Right" to select the functions, press "ENTER" to enter the

function

4.1 Level Test

DTVLINK-CB can measure both analog and digital signal, as Figure 4-1-1Analog Signal Measurement Interface and Figure 4-1-2 Digital Signal Measurement Interface.

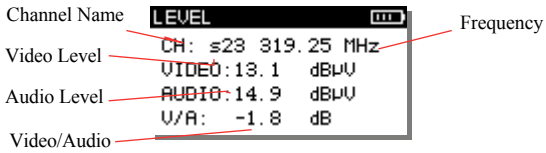

Figure 4-1-1 Analog Signal Measurement

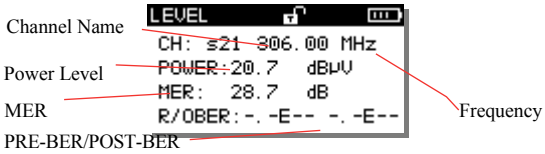

Figure 4-1-2 Digital Signal Measurement Interface

Press “Up and Down” to select CH,press “Left and Right” to edit the Channel parameters.

4.2 Tilt

Tilt/Level list test is the effective solution to check the flatness and splitter’s attenuation of cable system, DTVLINK-CB can get levels of 8 channels and observe the measurement result and graph easily.

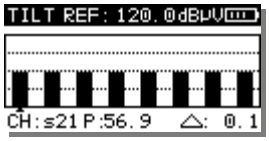

Figure 4-2-1 Tilt

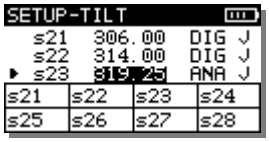

Figure 4-2-2 SETUP-TILT

4.3 Channel Scanning

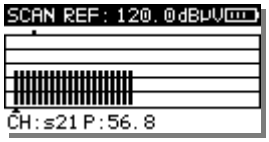

Figure 4-3 Channel Scanning

DTVLINK-CB support channel scanning function in order to test the flatness and amplitude of cable TV system quickly.

4.4 C/N

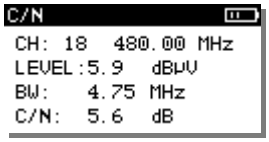

Figure 4-4 C/N

Press “Up and Down” to select CH,press “Left and Right” to edit the Channel parameters.

4.5 Trunk Voltage

As Figure 4-5, you can get the Trunk Voltage in this interface.

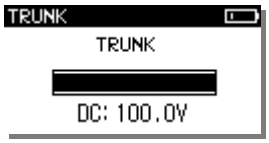

Figure 4-5

4.6 Setup

Press to select “SETUP” in the main menu. Press to setup interface as Figure 4-6.

Figure 4-6

4.6.1 System Information

The information of the instrument, Refer to Figure 4-6-1 It includes serial number, software version, hardware version and so on.

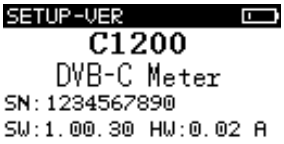

Figure 4-6-1

4.6.2 General

Press to select “Configure” in the figure 11 interface, then press to setup interface, as figure 4-6-2.

Figure 4-6-2

1. Backlight

Set the backlight ON and OFF by pressing ▼ or ▲, refer to Figure 4-6-3.

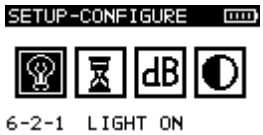

Figure 4-6-3

2. Shutdown Time

Set shutdown time for inactive keypad after 5 minutes, 15 minutes, 30minutes by pressing ▼ or ▲ .

Refer to figure 4-6-4.

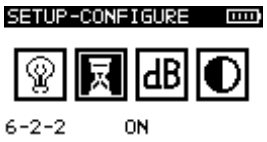

Figure 4-6-4

3. Level Units

Set level unit dBμV, dBmV or dBm by pressing ▼ or ▲ buttons. Refer to figure 4-6-5.

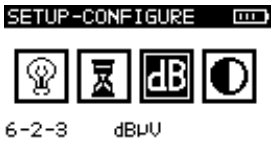

Figure 4-6-5

4. LCD Contrast

As figure 4-6-6. Press or to adjust the contrast .

Figure 4-6-6

4.6.3 Channel Plan Setup

A default Channel Plan is programmed in DTVLINK-CB when delivery. You can modify the Channel Plan parameters in this interface. As Figure 4-6-7:

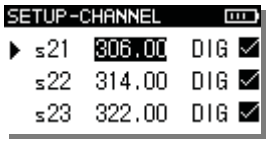

Figure 4-6-7

In the same time,you can also modify and edit the Channel Plan through Toolbox software on PC,and up

load the Channel Plan to DTVLINK-CB,or press "ENTER" to edit the selected plan by hand.

In DIG channel press ▼ to STATUS 、TYPE、STANDARD、FREQ、SR、BW、TYPE， press ▶ to enter into parameters edition and press ▲ or ▼ to input parameters.As Figure 4-6-8、Figure 4-6-9、Figure 4-6-10:

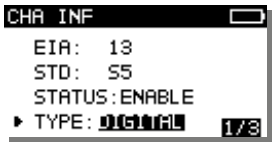

Figure 4-6-8

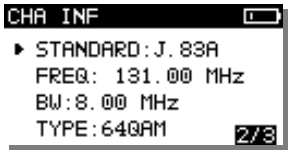

Figure 4-6-9

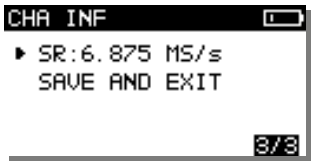

Figure 4-6-10

In ANA channel press ▼ to STATUS 、TYPE、FREQ、OFFSET， press ▶ to enter into parameters edition and press ▲ or ▼ to input parameters. As Figure 4-6-11、Figure 4-6-12:

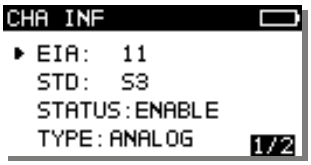

Figure 4-6-11

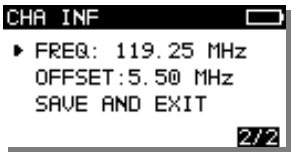

Figure 4-6-12

4.6.4 LIMIT Setup

As Figure 4-6-13, you can press ▼ to VIDEO 、VA、 POWER、MER， press ► to enter into parameters edition and press ▲ or ▼ to input parameters.

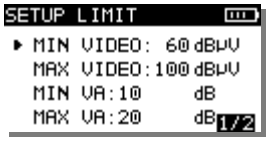

Figure 4-6-13

4.6.5 Battery State

The battery voltage is shown as a column graph as Figure 4-6-14. When the voltage is lower than 0%,the instrument will automatically power off.

Figure 4-6-14

4.6.5 Operation Mode

As Figure 4-6-15, you can set up the operation mode of DTVLINK-CB in this interface.

Figure 4-6-15

As Figure 4-6-16,DTVLINK-CB provides 5 kinds of operation mode for choice: 30s, 1min, 5min, 10min, ON. You can set the mode by pressing or

and  . If you

prefer to measure continuously,please choose “ON”,while if you only want to measure occasionally,please choose the other 4 modes with the proper measurement time you want,and these modes can consume less power.

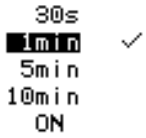

Figure 4-6-16

5. User Channel Plan

5.1 Upload and Download Channel Plan

The instrument can be connected with PC by USB cable to upload and download channel plan.

6. Specification

Analog CATV	
Frequency Range	5~1200MHz
Level	30~120dBμV
Accuracy	±2.0dB
RBW	300K
C/N	>50dB
C/N Accuracy	±3.0dB
Others	Channel Scan,Tilt,Trunk Voltage
DVB-C	
Frequency Range	5~1200MHz
Power Level	40~110dBμV

Power Level	±2.0dB
MER	>40
MER Accuracy	±2.0dB
BER	1E-3~1E-9
Modulation Type	16/32/64/128/256QAM (J.83A/C) 64/256QAM(J.83B)
SR	1~7Msps
Interface	
RF Input	75 Ω Type-F(f)
AC Adapter	12V/1.2A
USB	Mini-USB
Battery	
Capacity	7.4V/1.6A
Working Time	>4 hours
Charging Time	3 hours
Other Specification	
Dimension	153×93×42mm
Weight	358g

7. Accessories

Charger（PW09021915W）	1
USB Cable (P.900000421)	1
CD(Manual and Toolbox software)	1
Shoulder Strap（PKS30004603）	1
Soft Case（PK1S3000000）	1
Type-F(f) to Type-(f) adapter（	1
Manual	1

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