DeviceWell®

USER MANUAL

Please read it carefully before using it.

AV Delayer

PD8601

深圳市中帝威科技有限公司

Shenzhen DeviceWell technology co. LTD

AV Delayer

http://www.devicewell.com

Precautions

About this device:

●This device belongs to the high-frequency video processing equipment. Therefore, please strictly observe the following points:

●Non-professionals are not allowed to disassemble the equipment case without permission. Do not repair it yourself to avoid accidents or damage to the equipment.

●Do not spill any chemicals or liquids on or near the equipment.

●The power supply of the device will generate heat during operation. Therefore, keep the working environment well ventilated to avoid damage to the device due to excessive temperature.

●Do not place system equipment in a location that is too cold or too hot.

●Operate the equipment in an environment where the temperature is between 0-70 degrees Celsius (32-158 degrees Fahrenheit) and the humidity is between 10% and 80%.

●Try to keep the product environment clean and avoid dust, otherwise there is a danger of destroying the product.

●When using the product, keep it away from electromagnetic fields.

● Do not dispose of this product as normal waste. This product is designed to be recyclable.

Copyright:

●When using this unit for video and/or audio switching, publishing over the Internet, or the like, in some cases it may be necessary to authorize the copyright owner of the video or audio. In order to protect copyright, please strictly observe the following points when using this device:

●When connecting a recording device to this unit and recording video or audio, be sure to follow the relevant copyright laws.

●It is prohibited by law to display or publish third-party copyrighted video and audio materials, or to allow private or public access without the permission of the copyright holder.

●Even if you have the right to display or publish, for example, editing activities that use this unit to erase or disassemble the original content may still be prohibited by law. For the purpose of copyright protection, the specifications of the video and audio signals that can be input may change without notice due to software upgrades or feature extensions.

●According to copyright laws, recorded video and audio may not be used for purposes other than personal preferences without the permission of the copyright holder. Please note that even if it is based on personal preference,

●It may also limit shooting during live performances, performances or exhibitions.

Contents

1. Overview

1.1 Introduction

The DeviceWell audio and video delayer PD8601 is a delayer that can delay the output of sound and video. The PD8601 delayer automatically recognizes the standard definition HD SDI signal and provides 0-30 seconds delay for the video signal. 30 seconds delay. The user can control the content to be broadcasted, and can be widely applied to various real-time broadcast occasions. It has two XLR terminal input audio signals, which can be connected to the sound output from the mixer or directly connected to the microphone. It has two XLR terminals to output audio signals, which can be connected to the speaker for playback.

The PD8601 audio and video delayer supports up to 8 SDI audio and video signal source inputs. Each input signal can be connected to one SDI delay output (which can set the delay for output audio and video) and one SDI auxiliary output (live output). Support 1 channel XLR balanced audio input; 1 channel XLR balanced audio output to audio and other equipment
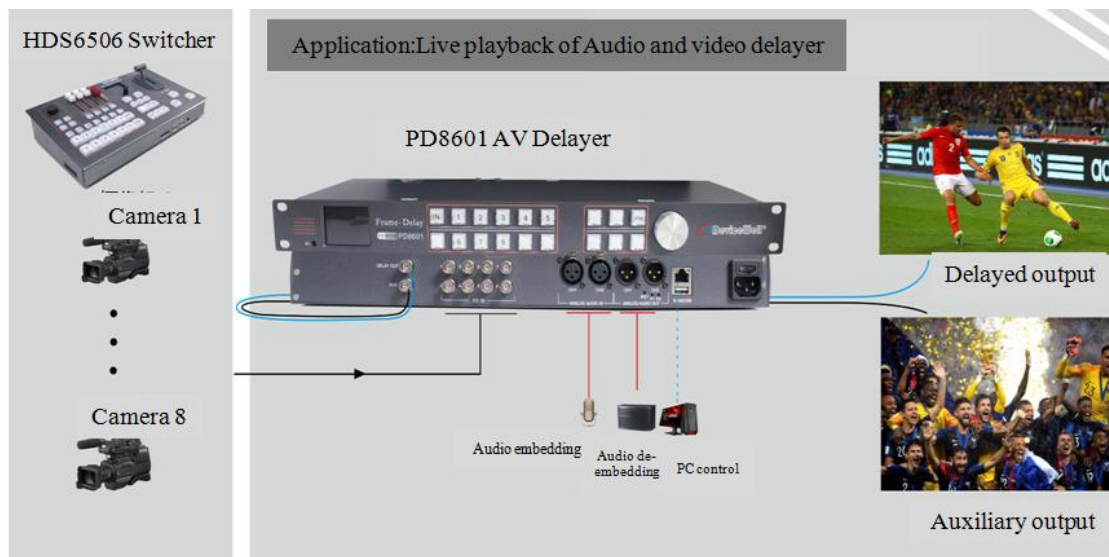
2. **Functional Characteristics**

The DeviceWell audio and video delayer PD8601,is a delayer with 8 SDI signal inputs and two SDI audio and video signal outputs(supporting one delay output and one auxiliary output).No need for expert knowledge, just a simple operation to fully understand the audio and video delay. This unit can be used in radio and television, live broadcast and various activities.

- Support 220V AC power supply system;

- Support LCD information system settings;

- Support 8 channels of SDI input, 2 channels of SDI output (one SDI audio and video signal source delay output and one SDI audio and video auxiliary output);

- SDI output supports seamless switching; it can be cut from 8 channels and 1 channel; (the input resolution must be unified)

- Audio and video signals support 1-30 seconds delay output, maximum support 30s delay, can be set through the front panel knob;

- Support 1 set of XLR analog balanced audio input (audio plus embedded); 1 set of XLR analog balanced audio output;

- 2 Channel SDI can output seamlessly, and 1 channel can be configured as no-delay output;

- The front panel has buttons, knob and LCD panel for easy operation and display of real-time status.
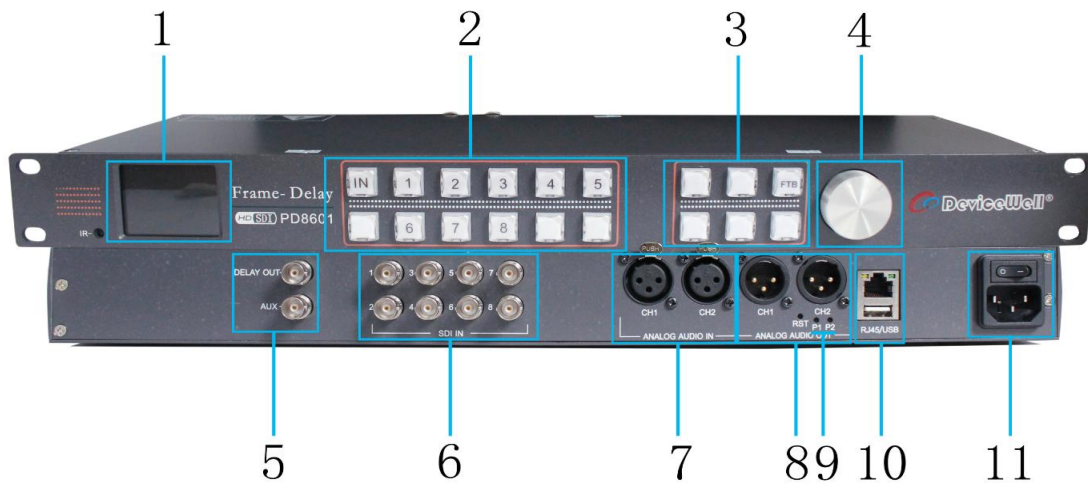
- Support FTB output black field.

3. SIZE: 483*157*44mm
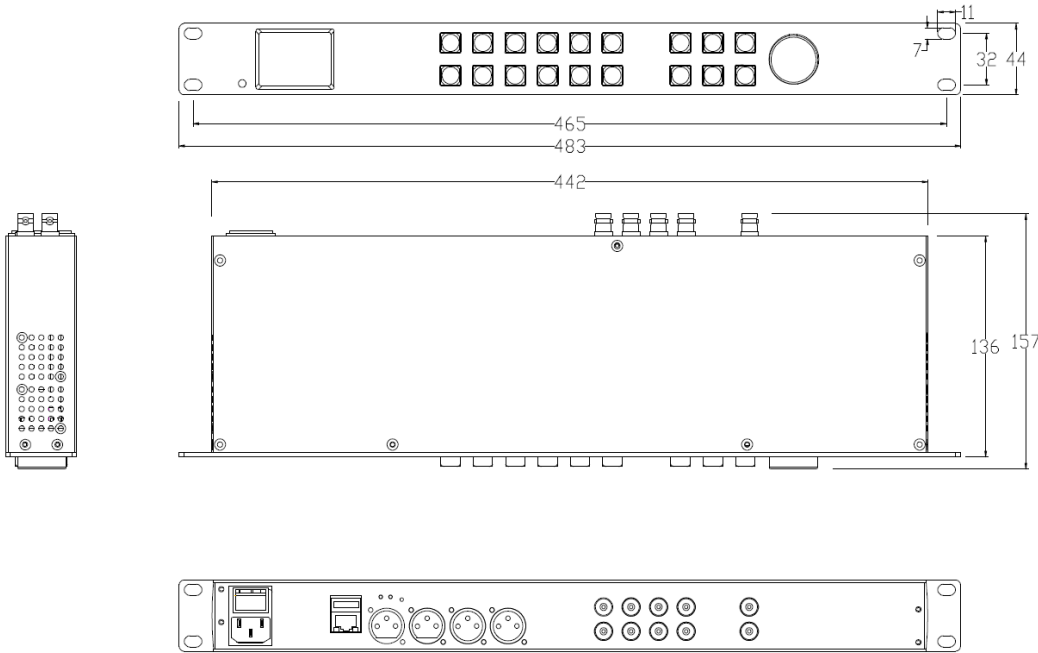
4.Interface Specification

4.1 Interface Introduction

The DeviceWell PD8601 interface is shown below.

No.	Definition	Description
1	LCD Screen	LCD Display Panel
2	Button Selection	Configuration Button of Input
3	FTB	FTB Output Black
4	Knob	LCD Menu Setting
5	SDI OUT	One SDI audio and video delay output and one SDI audio and video auxiliary output
6	SDI IN	8 SDI audio and video Input
7	AUDIO Input	One XLR balanced audio Input
8	AUDIO Output	One XLR balanced audio Output
9	P1/P2	Audio output indicator
10	RJ45/USB（Reserved）	Network Control Upgrade
11	AC Power socket and switch	220V AC Input

4.2 Parameters

Name	AV Delayer	
Model No.	PD8601	
Audio	Input/output Signal	XLR
	Connector	Canon head
	Signal amplitude	7V P-P
	Impedance	110 Ω
	Balanced	Adaptive
Video	Output Signal	SDI Video Signal
	Code Rate	270Mbps~3Gbps
	Connector	Standard
	Return Loss	>15dB 5MHz~3GHz
	Signal Amplitude	800mV±10%(SDI)
	Impedance	75 Ω(SDI)
	DC Offset	0V±0.5V
	Clock recovery	Optional
General Parameter	Power Supply	100-240V/AC 50/60Hz
	Rate	Less than 8W
	Host Size	Standard 1U
	Control Panel	Button Control Panel
	Weight	About 3 KG
	Operating Temperature	0℃~50℃ No condensation
	Storage Temperature	-20℃~75℃
	Operating Humidity	20%~70%RH
	Storage Humidity	0%~90%RH，No condensation

5. Control panel and interface

PD8601,a delayer that supports the 0-30 second delay setting, please take a few minutes to read this section, This chapter will introduce you to the panel and LCD display of DeviceWell Audio &Video delayer for your convenience and operation.

DeviceWell audio&video Delayer PD8601 is standard 1U chassis equipment, made of new aluminum alloy material. The new aluminum alloy has high strength characteristics, which improves the anti-drop,anti-shock resistance of the whole machine and the components inside the delayer. Ultra-lightweight features make the unit easier to transport and maintain without the need for additional equipment; it also offers unparalleled thermal performance.

In additional to the innovation of the outer casing, the PD8601 is also completely optimized for the interface connector. Environmentally friendly materials with new RoHS standards are more demanding in terms of durability and environmental protection, providing customers with more stable ,cost-effective and environmentally friendly products.

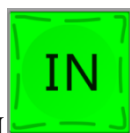## 5.1Description of Control Panel and LCD Menu

5.1.1 Button Operation Instructions

5.1.1.1 Channel Settings

Click the button on the control panel, then select the channel you want to frame delay. If I want to choose 1 channel.

After clicking the IN button, the button will turn green, then Press . It is possible to output and frame delay for 1-channel images, and the delay time is arbitrarily set from 0 to 30 seconds.

Operation of Channel 2~8 sources are on the same principle.

5.1.1.2FTB Black Settings

When the situation is encountered during the broadcast, you can press the key [FTB] on the control panel; this button can instantly turn the two output screens into black. At this time, the FTB button [FTB] will be red and will blink until the button [FTB] is pressed again to turn off the black field.

2.1.2 Operation of LCD Menu
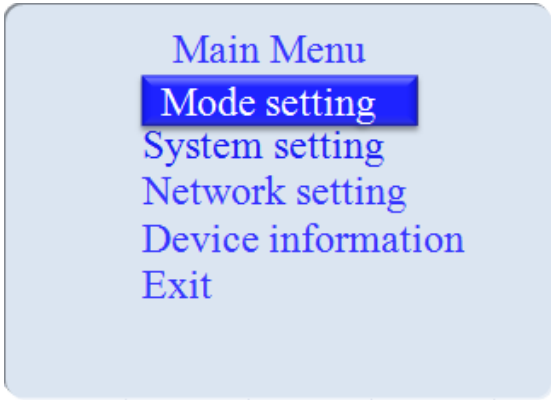
6.1.2.1Knob Description

The knob has three operating states, one is clockwise rotation, one is counterclockwise, and the other is pressed. Clockwise indicates increase or decrease, counterclockwise indicates decrease or upward, and press indicates selection and confirmation.
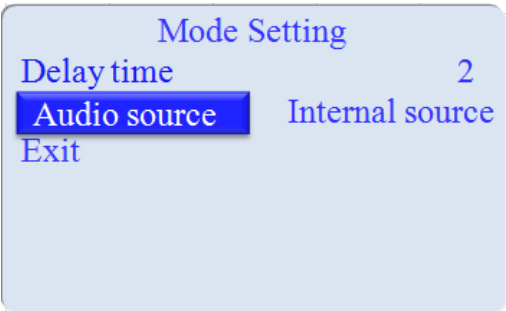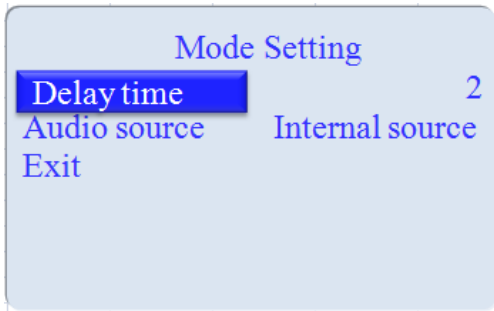
6.1.3Mode Settings

After the power is turned on, the LCD panel is displayed (as shown in the figure below). Press the knob to set the delay for the corresponding channel.

```
IN:1            1080P

    Delay time     2S
```
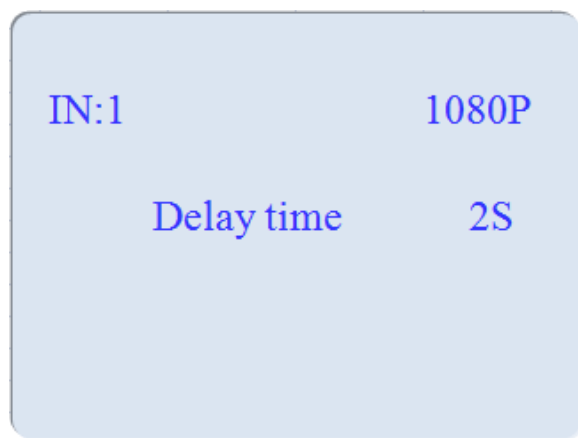
Press the knob to enter the mode setting (as shown below)

Main Menu
Mode setting
System setting
Network setting
Device information
Exit

Press the knob again to set the delay time and audio source selection (as shown below):

Mode Setting
Delay time   2
Audio source   Internal source
Exit

Mode Setting
Delay time   2
Audio source   Internal source
Exit

Delay time can be set from 0-30 seconds   Audio source can have internal source and external source selection settings.

6.1.4System Settings

Main Menu
Mode setting
System setting
Network setting
Device information
Exit
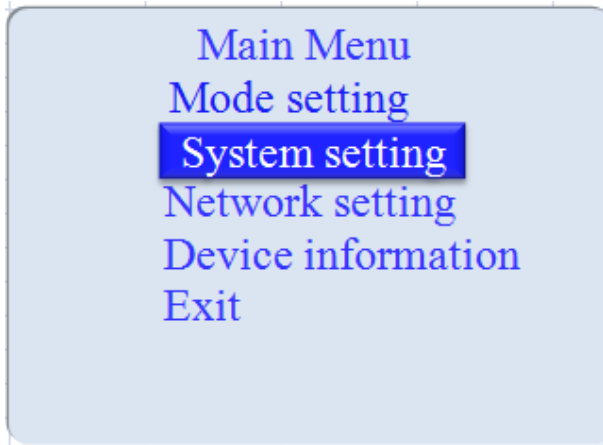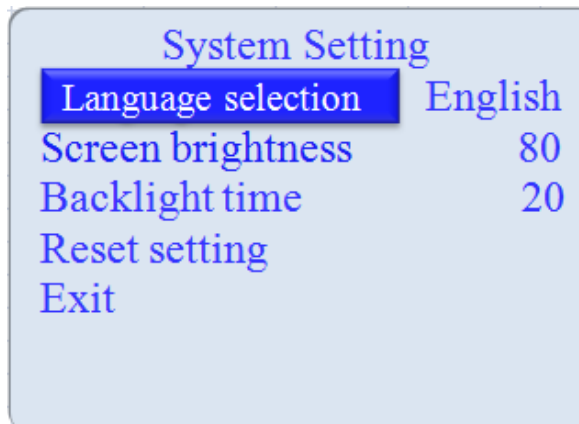
The system settings in the LCD menu can be used to set the displayed language, screen brightness, backlight time and reset. After pressing the system settings, the menu is displayed (as
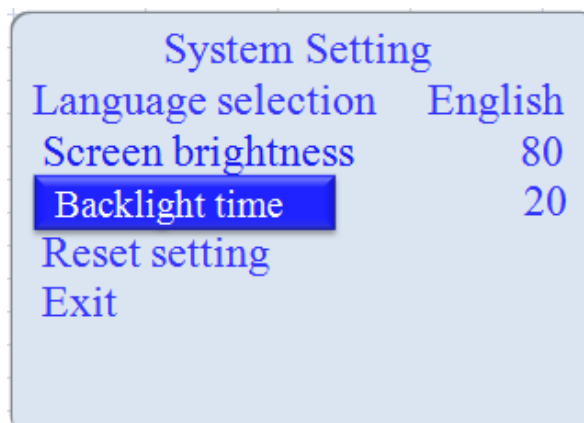
shown below).

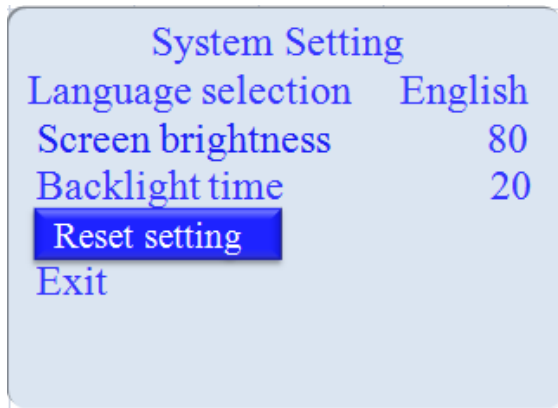After pressing the language selection, you can set the language selections:

After pressing the screen brightness, you can set the LCD screen brightness in 10-100 brightness:
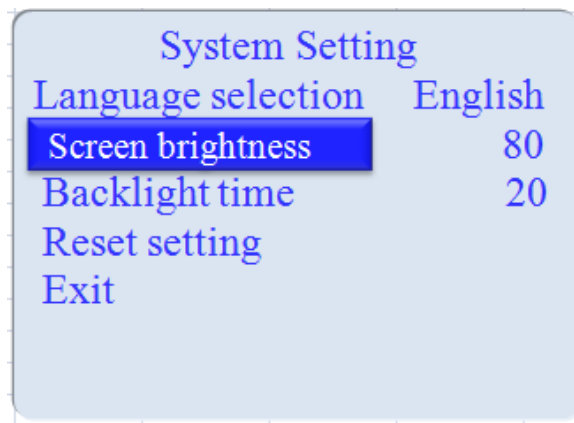
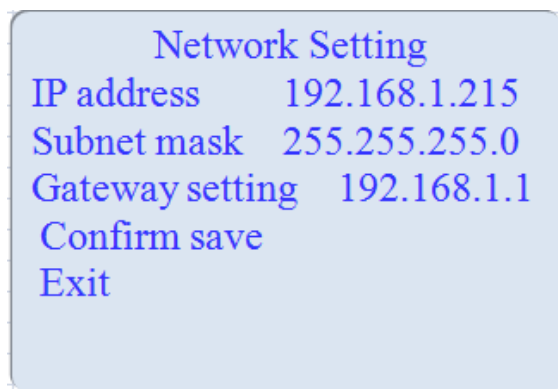The LCD backlight time can be set in the brightness of 5-100 after pressing the backlight time:
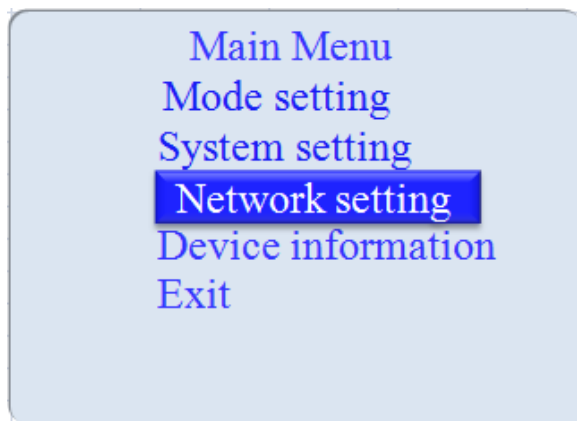

Pressing the reset setting that will return the machine to the audio and video just played:
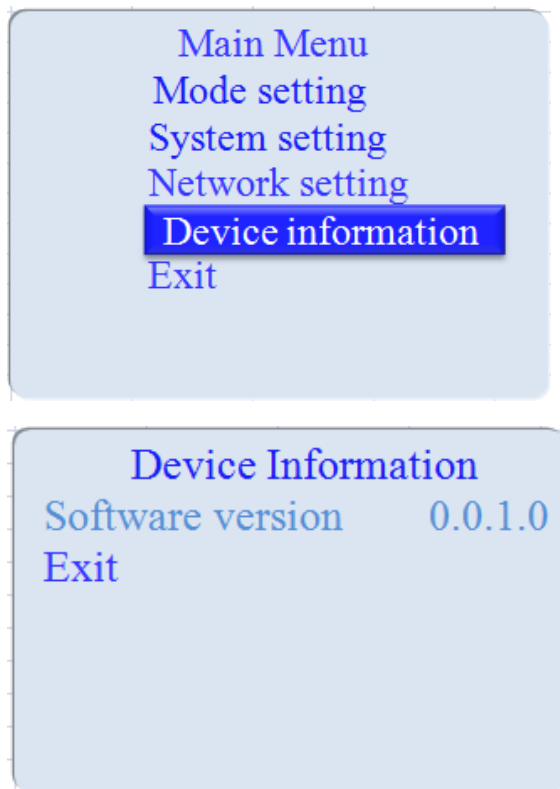
6.1.5 Network Settings

The network settings in the LCD menu can be modified by IP address, subnet mask and gateway settings. After confirming, click Save (as shown below).

PD8601

6.1.6 Device Information Settings

The equipment information in the LCD menu can know the version information of the current equipment (as shown below).

Maximum Delay Schedule

Resolution	Max Delay
1080P24、1080P25,、1080P30、1080I50	30s
1080P50	20s
1080P60	16s

7. Failure and Maintenance

7.1 Common Faults and Solutions

The output image is disturbed and may be disturbed by other devices.

When plugging in the audio and video interface, if there is obvious static electricity, the device power ground wire may not be good grounding, please ground in the correct way; otherwise it will easily damage the host and shorten the life of the mainframe.

When RJ45 (generally: computer serial port) cannot control the screen splitter, check whether the communication port set by the control software corresponds to the serial port of the connected device; check if the communication port of the computer is good.

7.2 Maintenance

Use a soft, dry cloth to clean the device. Do not use alcohol, paint thinner or benzene to clean. Make sure that the device is stored and operated in an environment away from liquids and stains.

7.3 Warranty information

The company guarantees that the process and materials of the product are not defective within 12 months after purchase from the company or its authorized distributors, under normal use and service support. We offer a one-year warranty after sale.