



User Manual

MP-USB41-3.2

USB3.2 Gen2 4X1 Switcher

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Version: MP-USB41-3.2_V1.0

Preface

Read this user manual carefully before using the product. Pictures shown in this manual are for reference only. Different models and specifications are subject to real product.

This manual is only for operation instruction, please contact the local distributor for maintenance assistance. The functions described in this version were updated till AUG 19th, 2025. In the constant effort to improve the product, we reserve the right to make functions or parameters changes without notice or obligation. Please refer to the dealers for the latest details.

FCC Statement

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference.

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.



SAFETY PRECAUTIONS

To ensure the best from the product, please read all instructions carefully before using the device. Save this manual for further reference.

- Unpack the equipment carefully and save the original box and packing material for possible future shipment.
- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- Do not dismantle the housing or modify the module. It may result in electrical shock or burn.
- Using supplies or parts not meeting the products' specifications may cause damage, deterioration or malfunction.
- Refer all servicing to qualified service personnel.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Do not put any heavy items on the extension cable in case of extrusion.
- Do not remove the housing of the device as opening or removing housing may expose you to dangerous voltage or other hazards.
- Install the device in a place with fine ventilation to avoid damage caused by overheat.
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Unplug the power cord when left unused for a long period of time.
- Information on disposal for scrapped devices: do not burn or mix with general household waste, please treat them as normal electrical wastes.

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1. Product Introduction

MP-USB41-3.2 is a 4 way USB switcher with max 10Gbps bandwidth and can switch to 5Gbps . It support 4 USB devices shared 4.5A MAX current which is compatible with most high-power camera.

MP-USB41-3.2 support Auto , manually, RS232 control, TCP control to switch USB device to one USB host and can check every USB device's current. It has two USB-C host and 2 USB-A host, one USB-C host can transport 100W max power to charge connected host, the other USB-C support to upgrade USB HUB.

1.1 Features

- Support USB 3.2 Gen2, 10Gbps, support switch to 5Gbps
- Support front panel, GUI and RS232, TCP , GPIO control
- USB devices shared 4.5A max current, compatible with most large-power camera
- 100W power support to charge connected host

1.2 Package List

- 1x MP-USB41-3.2
- 2x Mounting Ears with 2 Screws
- 4x Plastic Cushions
- 1x Power Adapter (24V DC 6.5A) with EU standard cable
- 1x 4 Pin terminal block
- 1x User Manual

Note: Please contact your distributor immediately if any damage or defect in the components is found.

2. Specification

USB Host	
Host Port	(2)USB-C, (2)USB-B
USB Standard	USB 3.2 Gen2
USB Device	
Device Port	(2)USB-A, (2)USB-C
USB Standard	USB3.2 Gen2
Control	
Control port	(1)RS232, (1)TCP/IP, (1)GPIO
Control Connector	(1)4-pin terminal block, (1)RJ45,(1) Buttons
General	
Bandwidth	10 Gbps (support switch to 5Gbps)
Operation Temperature	-10 ~ +55°C
Storage Temperature	-25 ~ +70°C
Relative Humidity	10% - 90%
Power Supply	DC 24V 6.5A
Power Consumption	140W (Max)
Dimension (W*H*D)	185mm x 23mm x 110mm
Net Weight	500g±10g

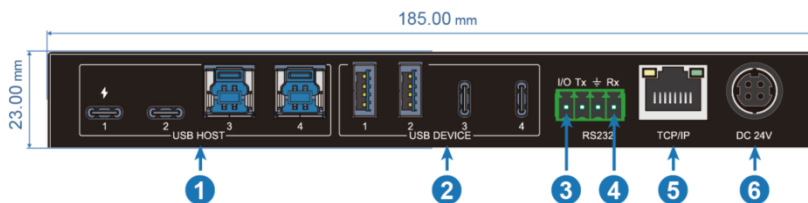
3. Panel Description

3.1 Front Panel



- ① **POWER LED:** Shows the status of the device, The LED illuminates blue when power is applied, the LED illuminates red when it is standby.
- ② **Host LED 1~4:** Shows the output host, which LED illuminates blue, then USB device is switched to which Host. When switched to a host and there is no source, then blue LED will flash three times.
- ③ **Select button:** A host choosing button with internal blue LED. Click the button to choose host, Long press select button for 3s to set Auto choose mode.

3.2 Rear Panel



- ① **USB HOST 1 ~ 4:** 2 USB-C and 2 USB-B host ports to connect USB Source . Host 1 USB-C support 100W charging connected device. Host 1 USB-C support to upgrade USB HUB firmware.
- ② **USB DEVICE 1 ~ 4:** connect with KM or camera devices.

- ③ **I/O:** 1 pin GPIO terminal block to set USB host switching
- ④ **RS232:** 3-pin terminal block to connect the RS232 control device (e.g. PC) or a third-party device to be controlled by RS232 commands.
- ⑤ **TCP/IP:** RJ45 port to connect the control device (e.g. PC) to control the switcher by GUI.
- ⑥ **DC 24V:** DC port to connect a 24V 6.5A power adapter.

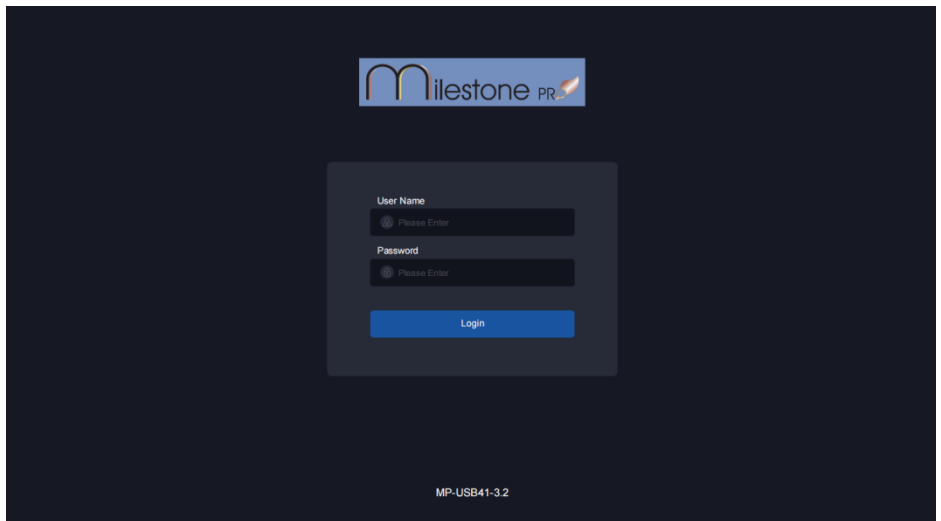
4. GUI Control

The switcher can be controlled via TCP/IP. The default IP settings are:

IP Address: 192.168.0.178

Subnet Mask: 255.255.255.0

First set your computer to the same IP group with your device, for example 192.168.0.99 to make sure communication device and your computer works. enter **192.168.0.178** in browser, it will enter into the device WEB UI log-in page:



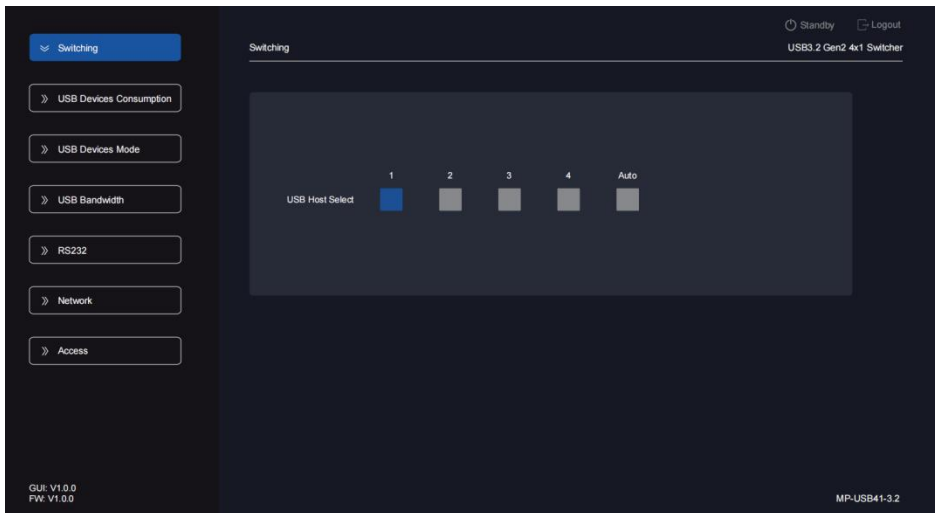
Username: admin

Password: Admin@1234

Type the user name and password, and then click **Login** to enter the WEB UI.

4.1 Switching

Choose **Switch** mode: Auto or manually (default is Auto)



Manual Switch: Choose from number 1 to number 4 manually.

Auto: choose Auto option then host will follow device, device 1 to host 1, etc.

WEB UI introduction

1, The up-right corner of WEB UI is Standby button and Log-out button.

When press Standby button, the device will enter into standby mode immediately.

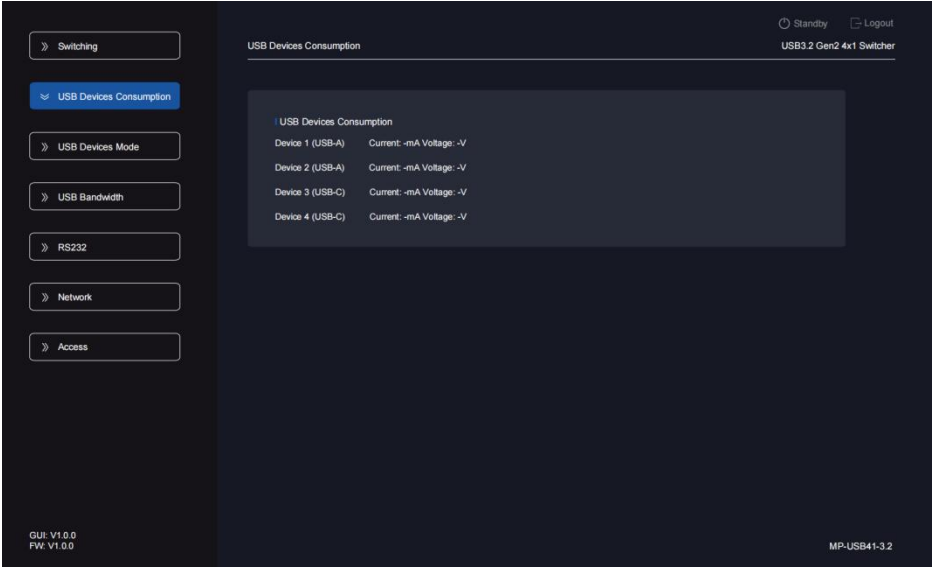
When press Log-out button, the WEB UI will logout immediately, please make sure every setting is save before log-out.

2, The down-right corner of WEB UI is the model of this device.

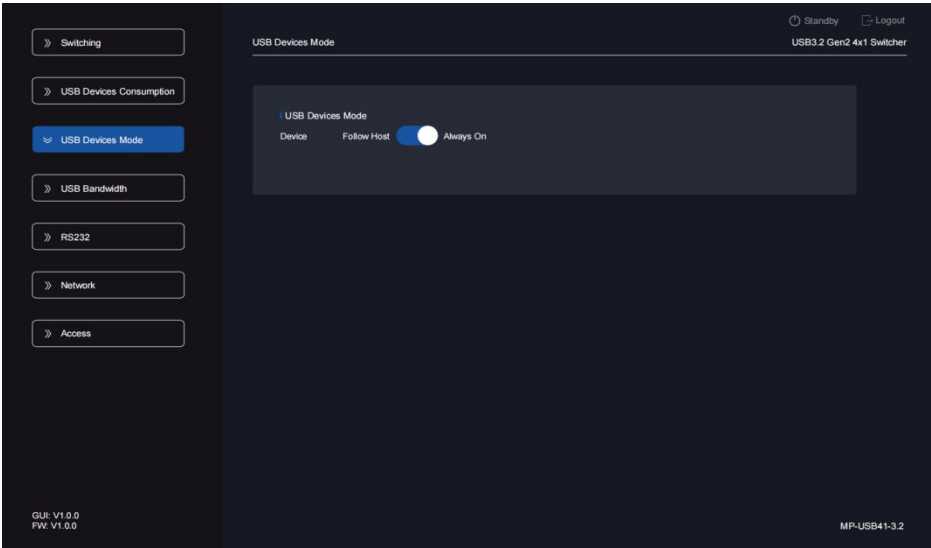
3, The down-left corner of WEB UI shows the version of WEB UI and Firmware.

4.2 USB Devices Consumption

USB Devices Consumption: For Device 1 to 4 Current and Voltage monitoring

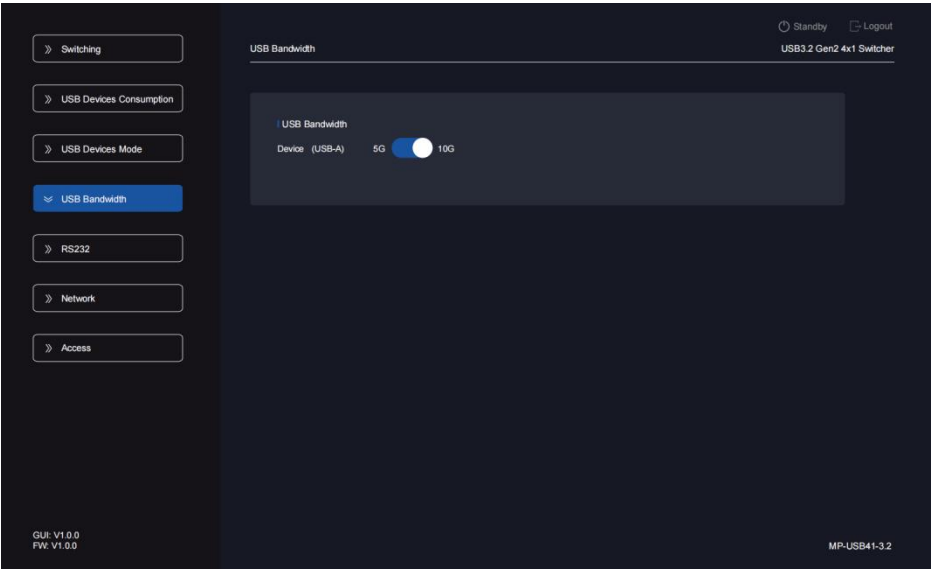


USB Device Mode: To set device follow host or always on.



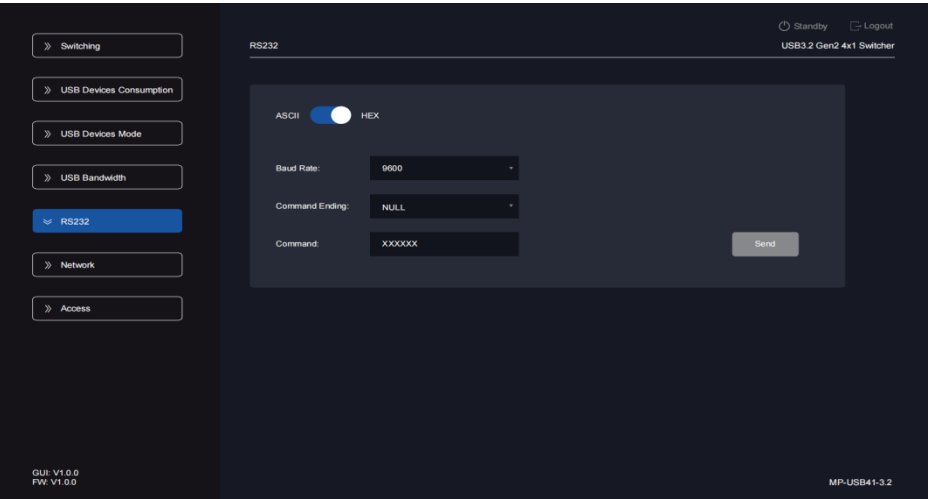
Device follow host is port to port mode, when you host 3 has a source, then host will use device 2 as an input. (Default is follow host)

USB Bandwidth: 2 USB-A port support switch Bandwidth from 5Gbps to 10Gbps. (Default is 5Gbps)



4.3 RS232

Set RS232 mode and configurations.



4.4 Network

Standby Logout
USB3.2 Gen2 4x1 Switcher

» Switching
» USB Devices Consumption
» USB Devices Mode
» USB Bandwidth
» RS232
» **Network**
» Access

MAC Address: 44-33-4C-C9-35-12

DHCP ☒ Static IP

IP Address: 192.168.0.178

Subnet Mask: 255.255.255.0

Gateway: 192.168.0.1

Confirm

GUI: V1.0.0
FW: V1.0.0

MP-USB41-3.2

Set MP-USB41-3.2 IP mode: DHCP or Static IP(default is Static).

When set as DHCP, user cannot change the IP settings.

4.5 Access

The screenshot displays the 'Access' configuration page of a USB3.2 Gen2 4x1 Switcher. On the left is a sidebar with navigation links: 'Switching', 'USB Devices Consumption', 'USB Devices Mode', 'USB Bandwidth', 'RS232', 'Network', and 'Access' (which is highlighted in blue). The main content area is titled 'Access' and includes a 'Standby' icon and a 'Logout' link. It contains five sections: 1. 'Credentials' with a 'Password' field set to 'admin' and a 'Confirm' button. 2. 'Front Panel Lock' with a toggle switch currently set to 'ON'. 3. 'Firmware Upgrade' with a file path 'C:\' and a 'Confirm' button. 4. 'Auto Standby' with a time field set to '10' minutes and a 'Confirm' button, with a note 'Fill in 0 to disable auto standby mode'. 5. 'Restore Factory Defaults' with a 'Confirm' button. At the bottom left, it shows 'GUI: V1.0.0' and 'FW: V1.0.0'. At the bottom right, it shows 'MP-USB41-3.2'.

» Switching

» USB Devices Consumption

» USB Devices Mode

» USB Bandwidth

» RS232

» Network

» Access

Access

Standby Logout

USB3.2 Gen2 4x1 Switcher

Credentials

Password: admin Confirm

Front Panel Lock

OFF ☒ ON

Firmware Upgrade

C:\ Confirm

Auto Standby

10 mins Confirm

Fill in 0 to disable auto standby mode

Restore Factory Defaults

Confirm

GUI: V1.0.0
FW: V1.0.0

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Front Panel lock: Lock or unlock the Select button on the front panel, when locked user can unlock the select button through RS232 command and WEB UI .(default is off)

Firmware upgrade: Press the content area to choose firmware from local storage, then press confirm button to start firmware upgrade.

Auto Standby: set auto standby time when there is no host source detected. When set auto standby time to 0, the system will disable the function.

Restore Factory Defaults: reset all settings to factory status.

5. RS232 Control

Connect the RS232 port to control device (e.g. PC) with RS232 cable. The switcher can be controlled by sending RS232 commands.

The below command lists are used to control the switcher. The RS232 control software (e.g. docklight) needs to be installed on the control PC to send RS232 commands.

After installing the RS232 control software, please set the parameters of COM number, bound rate, data bit, stop bit and the parity bit correctly, and then you are able to send command in command sending area.

Baud rate: 9600

Data bit: 8

Stop bit: 1

Parity bit: none

Note:

- *In the commands, “[” and “]” are symbols for easy reading and do not need to be typed in actual operation.*
- *Type the command carefully, it is case-sensitive.*

The ending mark of command is "\r\n"

	RS232 Command	Example feedback
1	HELP	List commands 01.HELP 02.STATUS 03.RESET 04.REBOOT 05.BAUDRATE <x> 06.POWER:ON 07.POWER:OFF 08.POWER STATUS 09.USB <y> 10.AUTOSWITCH:ON 11.AUTOSWITCH:OFF 12.AUTOSWITCH STATUS 13.LOCKED 14.UNLOCKED 15.DEVICE POWER MODE <y> 16.DEVICE POWER CONSUMPTION 17.SET IP <xxx.xxx.xxx.xxx> 18.SET MASK <xxx.xxx.xxx.xxx> 19.SET GATEWAY <xxx.xxx.xxx.xxx> 20.SET ETHMAC <xx-xx-xx-xx-xx-xx> 21.DHCP:ON 22.DHCP:OFF 23.DHCP STATUS 24.RS232SEND:<y>:<z>:<aaa> 25.STANDBYTIME <x> 26.TYPEA SPEED <x>

2	STATUS	<ul style="list-style-type: none"> - Model name: MP-USB41-3.2 - Model type: USB3.2 Gen2 4x1 Switcher - FW Version: 1.0.0 - Power: on - Front panel: unlocked - RS232 baudrate: 9600 - MAC: 00-B7-0F-30-5E-6A - DHCP: on - IP addr: 0.0.0.0 - IP Mask: 0.0.0.0 - IP Gateway: 0.0.0.0 - Telnet: on - Telnet port: 23 - Auto switch: off - USB: host 1 - USB devices power mode: always on - Type-A Port Speed: 5Gbps - Standby mode delay time: 10 mins
3	RESET	OK: Factory Default.
4	REBOOT	OK: System Reboot.
5	BAUDRATE <x>	OK: Set baudrate to 9600.
6	POWER ON	OK: Power on.
7	POWER OFF	OK: Power off.
8	POWER STATUS	- Power: on
9	USB:<y>	OK: All Devices switch to host 1.
10	AUTOSWITCH:ON	OK: Auto switch mode on.
11	AUTOSWITCH:OFF	OK: Auto switch mode off.
12	AUTOSWITCH STATUS	'- Auto switch: on
13	LOCKED	OK: Front panel locked.
14	UNLOCKED	OK: Front panel unlocked.

15	DEVICE POWER MODE <y>	OK: Set all USB devices power mode follow host. OK: Set all USB devices power mode always on.
16	DEVICE POWER CONSUMPTION	- Device voltage:[5096,5096,5050,5054](mV) - Device current:[4, 2, 79, 7](mA)
17	SET IP <xxx.xxx.xxx.xxx>	OK: IP addr: 192.168.0.178
18	SET MASK <xxx.xxx.xxx.xxx>	OK: IP Mask: 255.255.255.0
19	SET GATEWAY <xxx.xxx.xxx.xxx>	OK: IP Gateway: 192.168.0.1
20	SET ETHMAC <xx-xx-xx-xx-xx-xx>	OK: ETH MAC: 01-02-03-04-05-06
21	DHCP:ON	OK: DHCP on.
22	DHCP:OFF	OK: DHCP off.
23	DHCPSTATUS	'- DHCP: off
24	RS232SEND:<y>:<z>:<a aa>	OK: RS232SEND: 3:1:123456 123456 OK: RS232SEND: 3:2:31 32 33 34 35 36 123456
25	STANDBYTIME <x>	OK: Nerver go into standby mode. OK: Set 5 mins go into standby mode.
26	TYPEA SPEED <x>	OK: Type-A Port Speed 5Gbps.

6. Panel Drawing



7. Customer Service

The return of a product to our Customer Service implies the full agreement of the terms and conditions hereinafter. These terms and conditions may be changed without prior notice.

1) Warranty

The limited warranty period of the product is fixed 3 years.

2) Scope

These terms and conditions of Customer Service apply to the customer service provided for the products or any other items sold by authorized distributor only.

3) Warranty Exclusion

- Warranty expiration.
- Factory applied serial number has been altered or removed from the product.
- Damage, deterioration or malfunction caused by:

- ✓ Normal wear and tear.
- ✓ Use of supplies or parts not meeting our specifications.
- ✓ No certificate or invoice as the proof of warranty.
- ✓ The product model showed on the warranty card does not match with the model of the product for repairing or had been altered.
- ✓ Damage caused by force majeure.
- ✓ Servicing not authorized by distributor.
- ✓ Any other causes which do not relate to a product defect.
- Shipping fees, installation or labor charges for installation or setup of the product.

4) Documentation

Customer Service will accept defective product(s) in the scope of warranty coverage at the sole condition that the defeat has been clearly defined, and upon reception of the documents or copy of invoice, indicating the date of purchase, the type of product, the serial number, and the name of distributor.

Remarks: Please contact your local distributor for further assistance or solutions.