INSTALLER MANUAL

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CMH9000DAVE
Digital Interface Board
RS485 – IP
for
MESDAVE RS

SICURIT Alarmitalia S.p.A.
Via Gadames, 91 20151 MILANO
Tel. 0039.02.38070.1 r.a.
Fax 0039.02.3088067

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INTRODUCTION

The interface CMH9000DAVE allows installer to connect microwave MESDAVE200RS via Serial line RS485.

Combined with the software MicroDAVE, allows diagnostics and configuration of DAVE MW perimeter system, up to 8 pairs maximum.

The CMH9000DAVE via network cable (LAN interface through a switcher or directly by a crossover cables) is connected to the PC that hosts the software MicroDAVE.

The system is used on installations with DAVE MW series .

8 pairs of MESDAVE200RS (8 Transmitter + 8 receivers) are the maximum numbers of couples of MW that can be connected to each board (CMH9000DAVE).

The CMH9000DAVE can be connected directly to a video managment **Geutebrueck** through the LAN network. Accordin to the SDK Sicurit, other video or burglary system can be interfaced directly to our system.

The CMH9000DAVE is a peripherical universal board, for monitoring and managment by control from control unit "Hyper Power".

A CMH8OUT open collector unit (8 Output) can be directly connect through RS485, this board is needed when the installer require a remote event signal that can be connected in hardware way, to a thirth part as a control panel or synoptic display.

SPECIFICATION

Each board CMH9000DAVE consists of:

• Plug LAN 10/100 base T, allowing the connection to the PC, where the software MicroDAVE is installed.

• RS485Opto-isolated port (COM1) to interface with DAVE systems on the field.

• RS485 port (COM0, can be selected as RS485 or Rs232) to interface with the open collector output boards CMH008OUT (8 O.c: Output) needs to be selected it as RS485 line

• 4 open collector outputs (on board) can drive each MW

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• 4 balanced inputs (1 Kohm).

Through the appropriate connections and a correct programming SW, it is possible to control the parameters of installation and operation in a simultaneous way, every Tx and Rx pair of MW are displayed togheter in one windows on PC screen.

TECNICAL FEATURES

CMH9000DAVE

Power supply	**12.5V= ±15%**
Temperature range	**5/+40℃**
Current consumption (without considered the output load current)	**100 mA**
Balance Input	**4**
O.C. Output	**4**

SYSTEM COMPONENTS

CMH9000DAVE	Interface board RS485 / RS232 / IP
MicroDAVE	Setting and diagnostic Software for MESDAVE…RS

RESET DEFAULT VALUE

If a board does not respond at CMH9000DAVE by the select of the default address (192.168.1.222) or the installer forgotten the IP address, programmed, you can perform a reset of the board as follows:

1. Cut main power
2. Move ON the dips seven and eight
3. Power the board
4. Wait a few seconds
5. Move OFF the dips seven and eight
6. Power down and power again the board after 10 seconds.

Default address restore is done.

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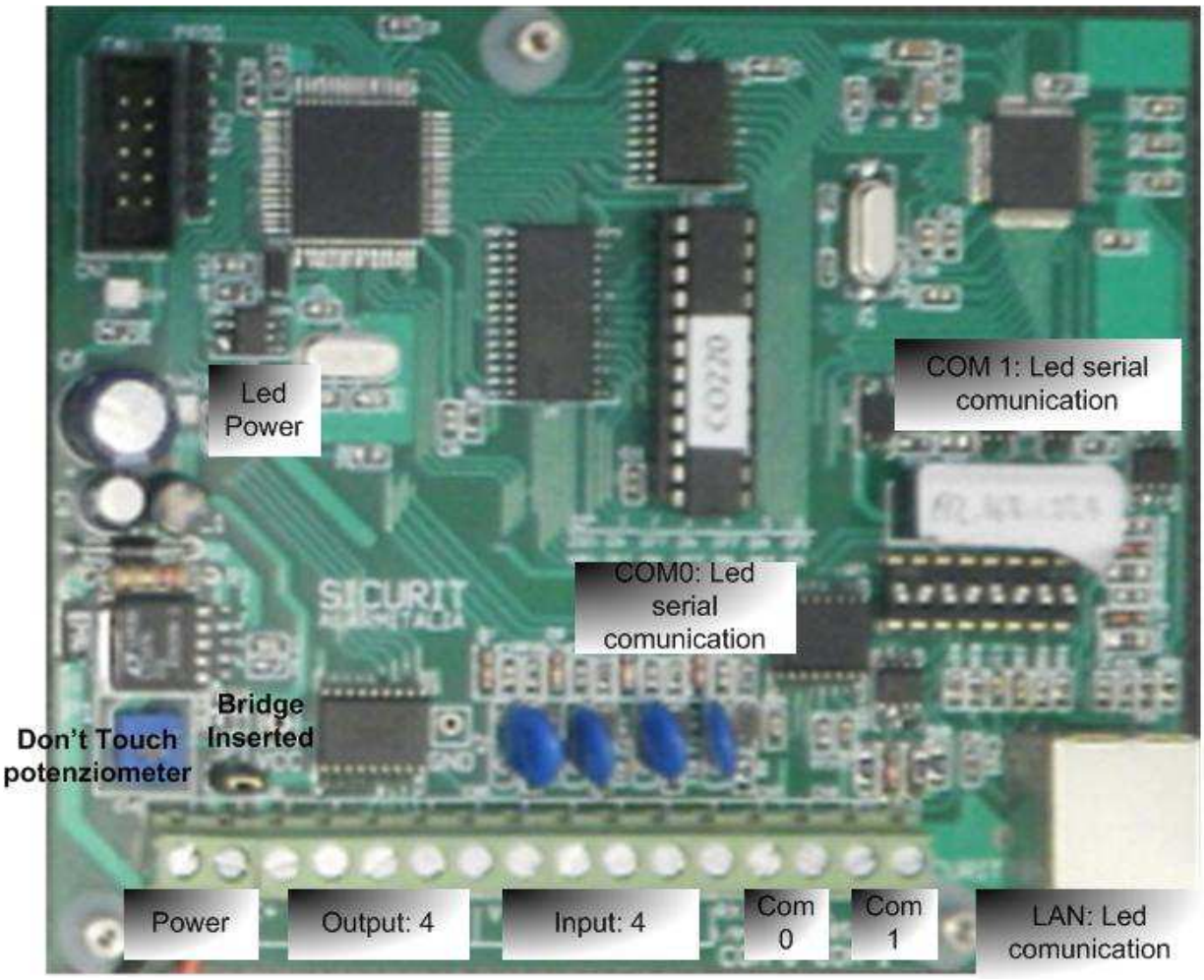
LAYOUT CMH9000DAVE



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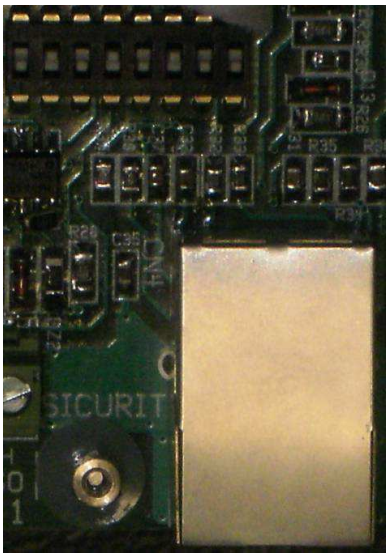
CABLING

Power

The first terminals to the left (V-) and (V +) are connected to the power wires to 12VDC.
The trimmer and the Jumper on the board must not be handled or removed.

IP Port



In the right part of board is present the Ethernet port 10/100 base T which connects the LAN cable on network trough switcher or directly (connect a single board) to a PC via crossover LAN cable.
When the communication is stabilized, an LED blinks regular on LAN connector.

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SERIAL LINE RS485, LOCAL PERIPHERAL BOARD

COM0

The serial port COM0 selectable via dip switches (see below) is used for connecting the module CMH008OUT (Open Collector outputs) that allow you to view and report the status of some parameters of each single optical head, enabling the system to be connected with the conventional power stations or synoptic tables..

DIP SWITCH SELECTION

On the board is present a bank of dip which should be selected as indicated in the figure, to set the serial COM0 as RS485 allowing to be configured and interfaced with CMH008OUT.

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SERIAL LINE FIELD RS485

COM1

The COM1 serial port is used to connect all MW units through 485 line.

The serial connection line based on two wires must be connect as follows:

COM1		RS485MW
L	……	**B**
H	……	**A**

The serial line board presents on the microwave unit must be powered from the terminals (-) and (+) with a 12VDC voltage, they are usually connected in parallel to the power terminal block present on the basic board of MW.

You can connect up to 8 pairs (8TX and 8RX) of MW coded DAVE200RS.

Each pair of MW shall have common address (TX1 RX1, RX2 TX2, etc.,.).

The addresses must start from the first (1) in succession and other following numerical cardinal order.

The address of the MW device is selected directly on MW unit by dipswitch, either Tx or Rx.

The selection of the MW address (1 to 8) takes place via the selection of the first 4 dip switches (binary way) of the banks of dip present below the RS485 boards of MW.

The table below shows the correspondence between the address and dips selection

Address	**Dip 1**	**Dip 2**	**Dip 3**	**Dip 4**
1	**ON**	off	off	off
2	off	**ON**	off	off
3	**ON**	**ON**	off	off
4	off	Off	**ON**	off
5	**ON**	off	**ON**	off
6	off	**ON**	**ON**	off
7	**ON**	**ON**	**ON**	off
8	off	off	off	**ON**

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The communication bus (RS485) shall be cabled using a pair twisted cable of appropriate electrical characteristics (24 AWG 120 Ohm impedance, ref. Belden 9841 or equivalent).

The figure shows the dip switches on the transmitter board MESDAVE200RS MW.

The 4 dip switches on the top board (RS485 board) must be move on inside (as shown) to set the connection RS485, while if they are positioned close to the black connector (outside) allow the local connection via RS232.

The dip switches (6 DIP) under the RS485 board are used to select the device address of the MW head TX, according to the above table.

The pair of MW Tx and Rx shall have same device address. The figure shows the first device address (DIP 1 ON).

The figure here shows the dip switches ON receiver MESDAVE200RS.

The dip switch on the top board (RS485 board) must be set to internal position (as shown) for the connection RS485, while if they are positioned externally allows the local connection via RS232.

The dip switch bank(10 dips) under the board 485 is used to select the device address of the Rx head, according to the above table.

The pair MW, Tx and Rx must have the same device address.

The figure shows the device with address number 1 (DIP 1 ON).

The other functions of the dip switches are mentioned on MW installer manual.

If the serial field 485 has disorders (noise, capacitor parassite on cable), that involve the loss of communication with the board, insert a termination resistance 120Ohm on the latest MW, however, after checking the state of the connections and the quality and conformity of the serial cable installed.

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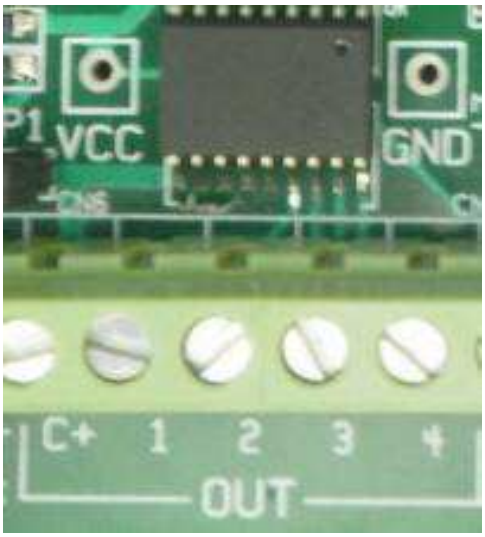
O.C. OUTPUTS



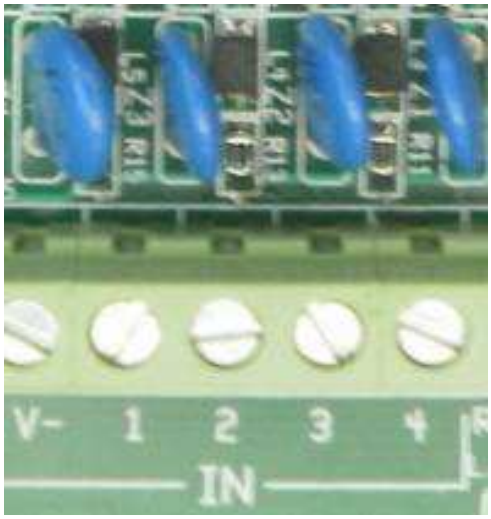
On each board CMH9000DAVE there are 4 outputs O.C. available for any local MW signal or to be used for interfacing with conventional control panel that accepts OC commands or with relays negative drived. May also be used for the control of synoptic signal..

Each output terminal can drive a resistive load up to 30mA at 24Vd.c. .

The terminal C+ is a positive reference voltage: 12V / 200mA.

BALANCED INPUT

Each board CMH9000DAVE has 4 balanced inputs (resistor 1Kohm) that allow the system to do interface with other equipment (relay contacts) and yet may be used as switch inputs and other features using our power-full monitoring system "Hyper Power" The terminal (V-) is the reference terminal for the inputs.



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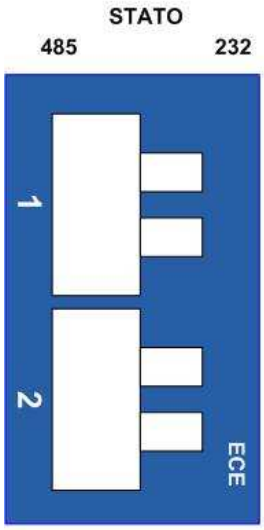
MICRODAVE

Functions and the set of the characteristics of the individual boards CMH9000DAVE, are specified in MicroDAVE SW installer manual.

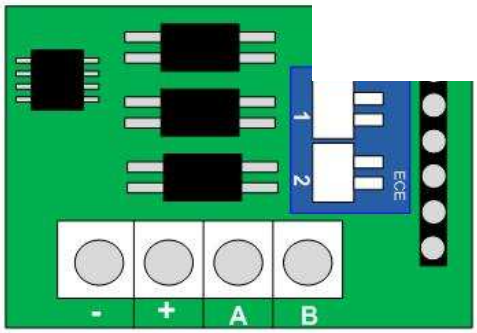
DaveSoft Switch 232/485 scheme



The switch, draw in white and located on the 485 board of the MesDave...RS, allow to select the type of comunication between the microwave and the remote card CMH9000DAVE.

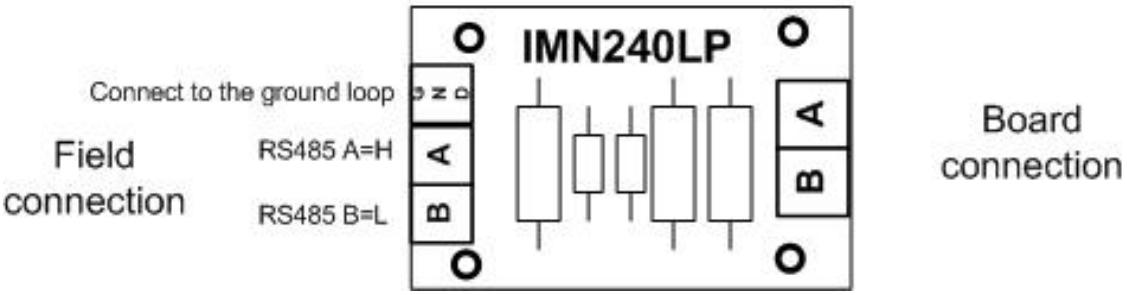
- With the two switches shifted on the left, the microwave will comunicate with the RS485 port

- With the two switches shifted on the right, the microwave will comunicate with the remote terminal with the RS232 port, through the USB connection cable included in the DaveSoft Package



Layout of the serial board on the microwave, with the switch

IMN240LP



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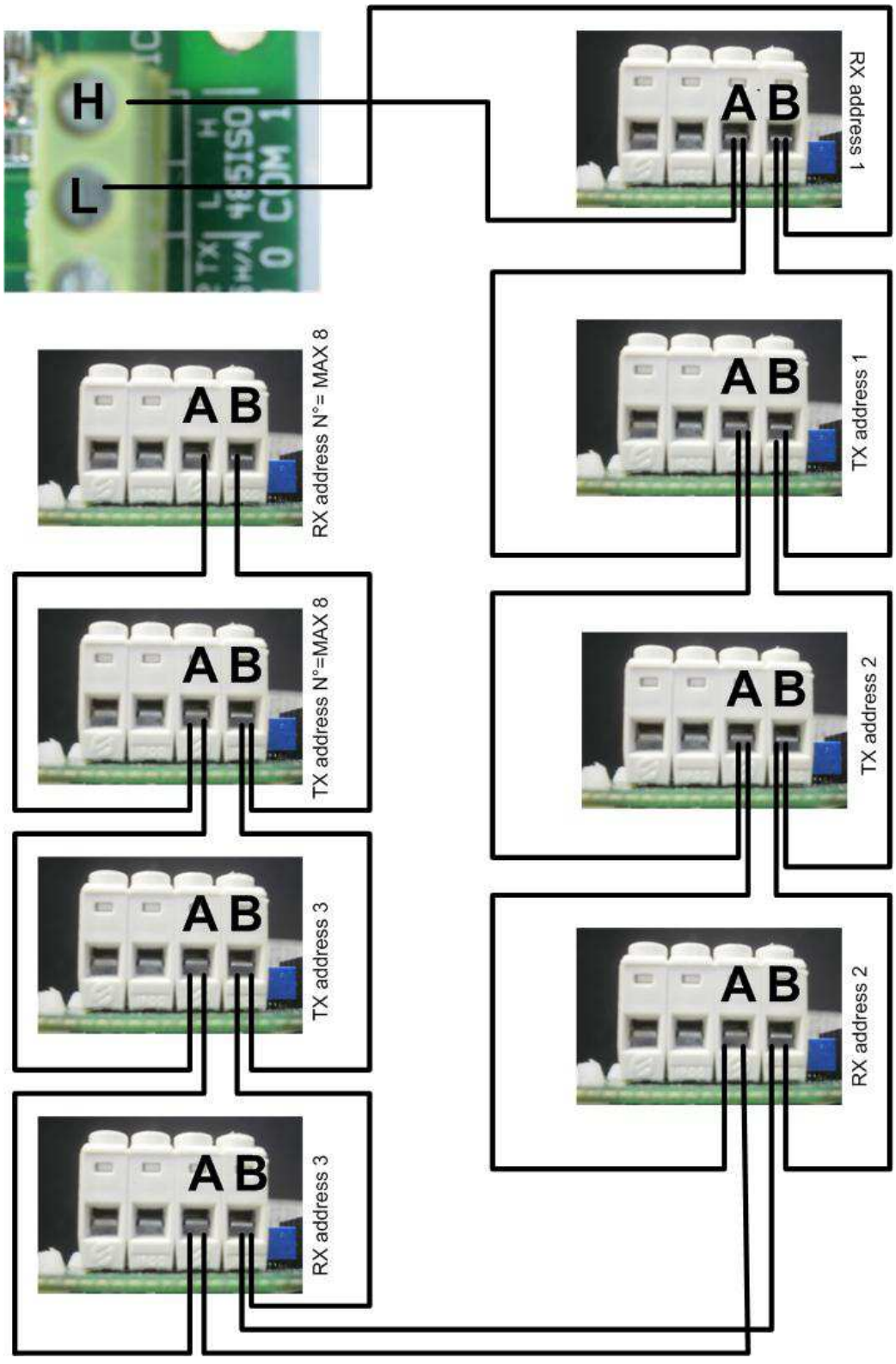
FIELD SERIAL LINE CONNECTION



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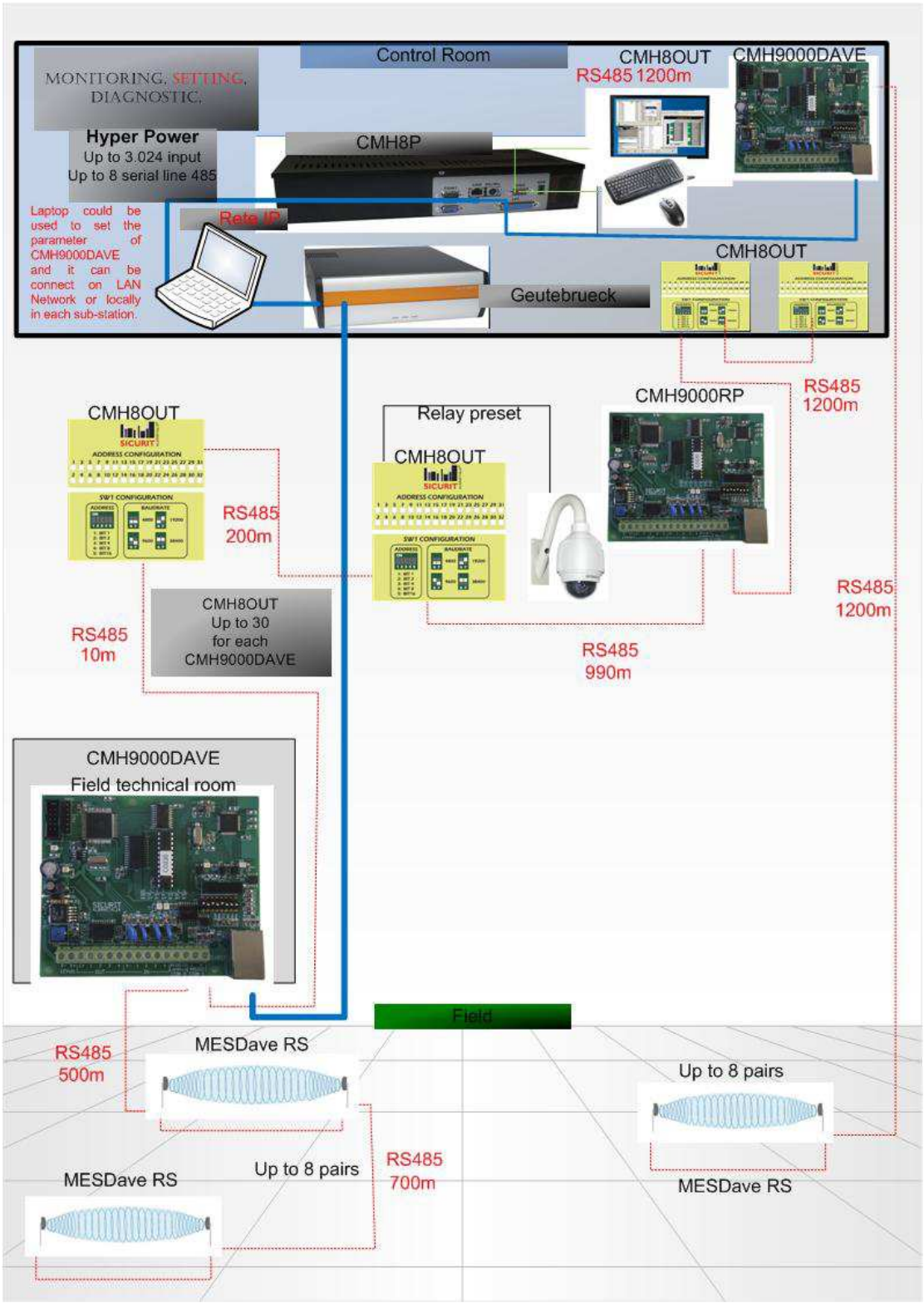
GENERAL HARDWARE TIPOLOGY



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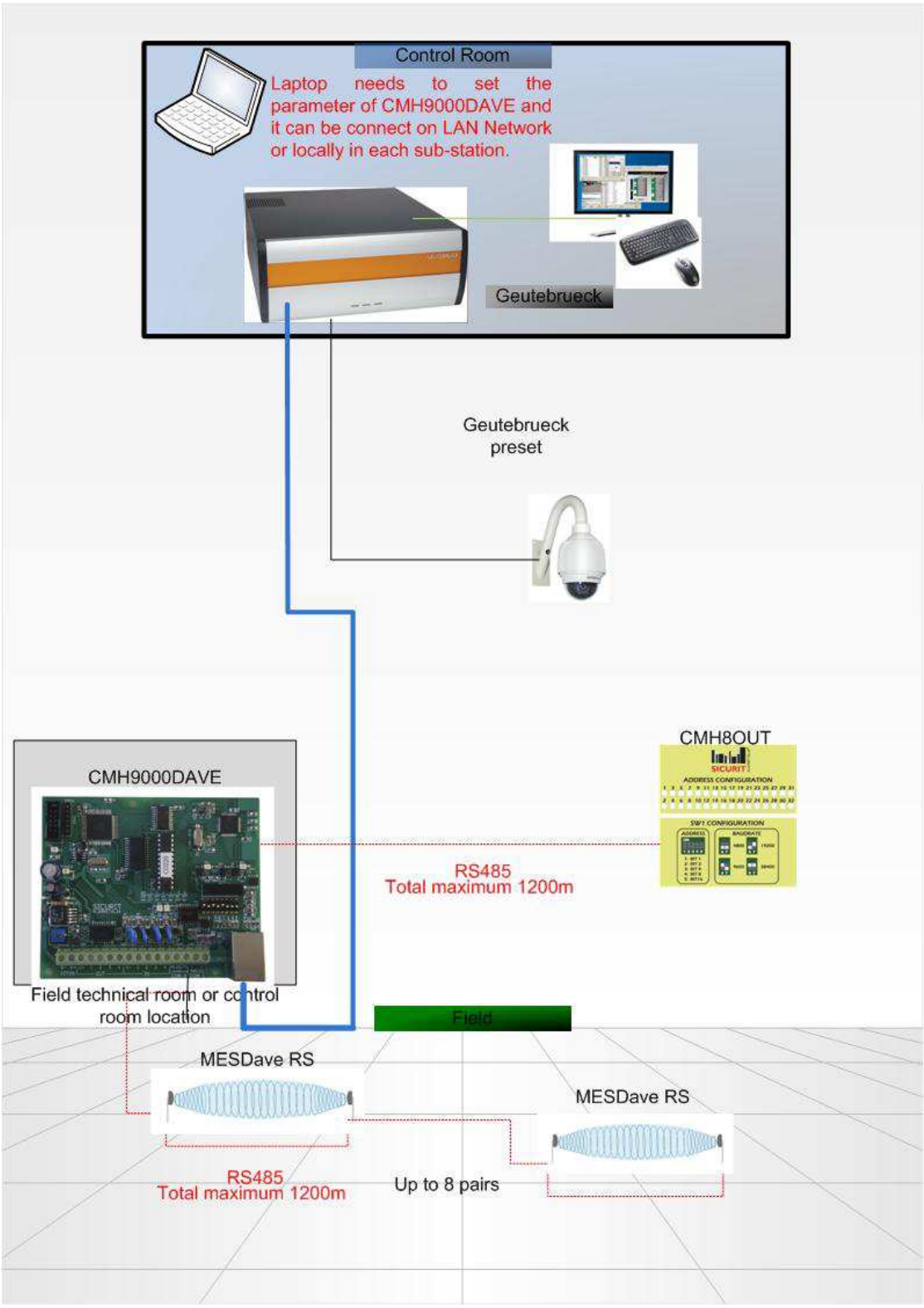
THIRD PART INTERFACING HARDWARE TIPOLOGY



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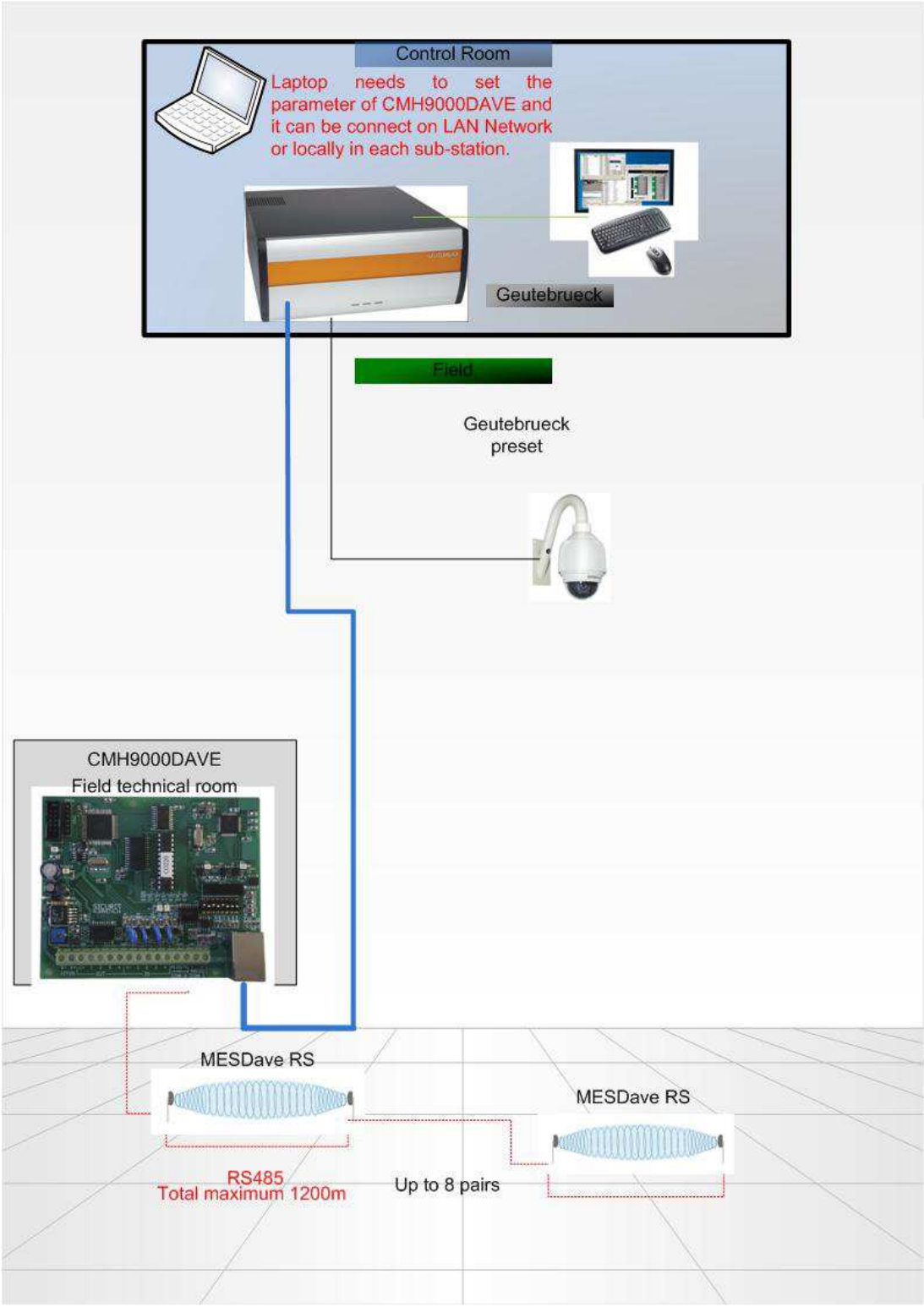
GEUTEBRUECK VIDEO CONNECTION



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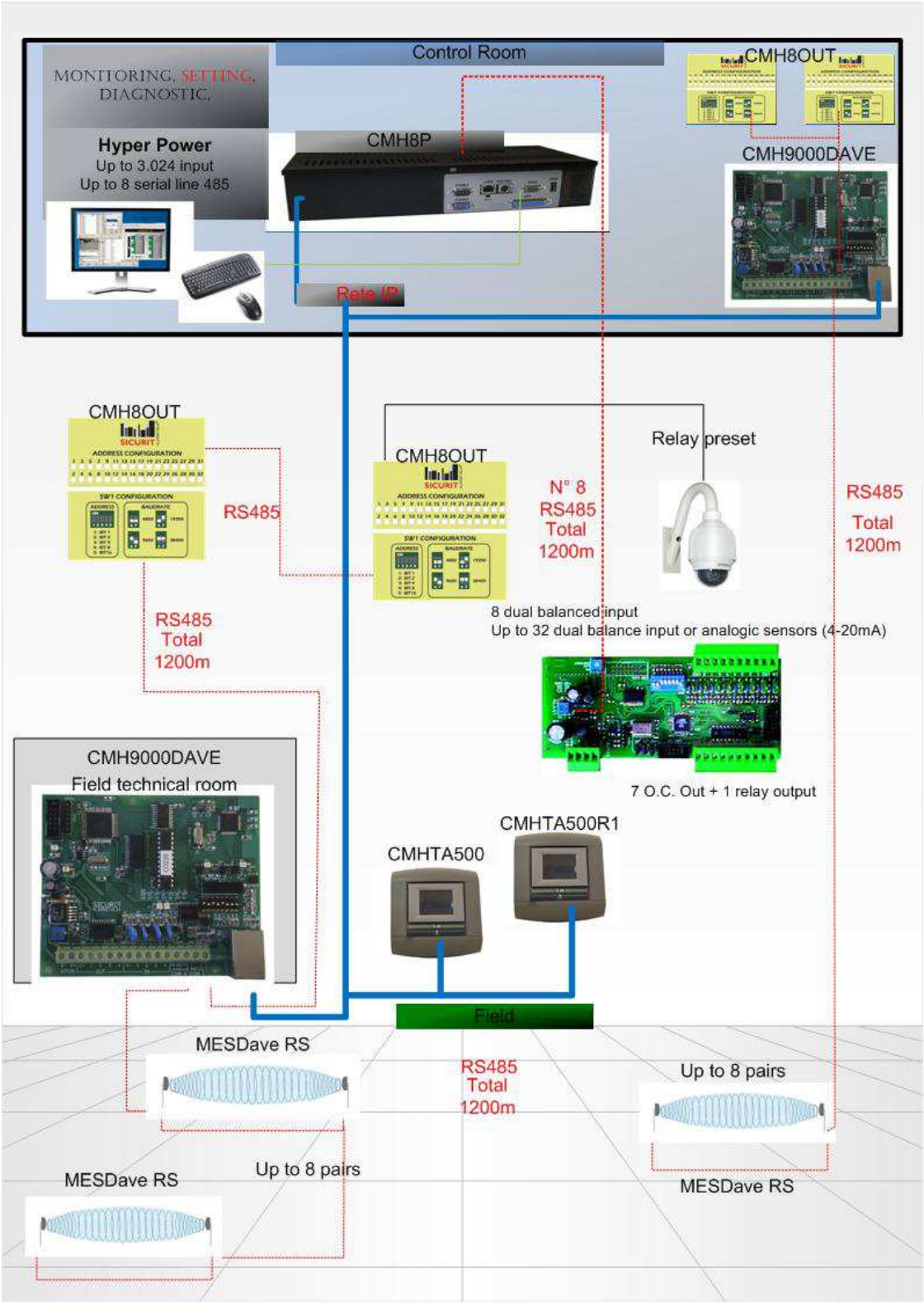
HYPER POWER INTERFACING HARDWARE TIPOLOGY



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WARRANTY

Sicurit Alarmitalia Spa and/or its subsidiaries and/or its affiliates (" the Manufacturer") warrants its products hereinafter referred to as "the Product" or "Products" to be in conformance with its own plans and specifications and to be free of defects in materials and workmanship under normal use and service for a period of twenty-four months from the date of shipment by the Manufacturer. The Manufacturer's obligations shall be limited within the warranty period, at its option, to repair or replace the Product or any part thereof. The Manufacturer shall not be responsible for dismantling and / or reinstallation charges.

To exercise the warranty the Product must be returned to the Manufacturer freight prepaid and insured.

This Warranty does not apply in the following cases:

Improper installation, misuse, failure to follow installation and operating instructions, alteration, abuse, accident or tampering, and repair by anyone other than the Manufacturer.

This warranty is exclusive and expressly in lieu of all other warranties, obligations or liabilities, whether written, oral, express or implied, including any warranty of merchantability or fitness for a particular purpose, or otherwise. In no case shall the Manufacturer be liable to anyone for any consequential or incidental damages for breach of this warranty or any other warranties whatsoever, as aforesaid.

This warranty shall not be modified, varied or extended, and the Manufacturer does not authorize any person to act on its behalf in the modification, variation or extension of this warranty. This warranty shall apply to the Product only. All products, accessories or attachments of others used in conjunction with the Product, including batteries, shall be covered solely by their own warranty, if any. The Manufacturer shall not be liable for any damage or loss whatsoever, whether directly, indirectly, incidentally, consequentially or otherwise, caused by the malfunction of the Product due to products, accessories, or attachments of others, including batteries, used in conjunction with the Products.

The Manufacturer does not represent that the Product may not be compromised and/or circumvented, or that the Product will prevent any death, personal and/or bodily injury and/or damage to property resulting from burglary, robbery, fire or otherwise, or that the Product will in all cases provide adequate warning or protection. User understands that a properly installed and maintained alarm may only reduce the risk of events such as burglary, robbery and fire without warning, but it is not insurance or a guarantee that such will not occur or that there will be no death, personal damage and/or damage to property as a result.

The Manufacturer shall have no liability for any death, personal and/or bodily injury and/or damage to property or other loss whether direct, indirect, incidental, consequential or otherwise, based on a claim that the Product failed to function. However, if the Manufacturer is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause or origin, the Manufacturer's maximum liability shall not in any case exceed the purchase

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price of the Product, which shall be fixed as liquidated damages and not as a penalty, and shall be the complete and exclusive remedy against the Manufacturer.

Warning: The user should follow the installation and operation instructions and among other things test the Product and the whole system at least once a week. For various reasons, including, but not limited to, changes in environmental conditions, electric or electronic disruptions and tampering, the Product may not perform as expected. The user is advised to take all necessary precautions for his or her safety and the protection of his or her property

Thank you to choose SICURIT Product. This product is designed and manufactured with high quality materials which can be recycled and reused.

The symbol  means that the electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste and dispose it at your local community waste collection centre.

Please follow your local rules about electronic waste recycle.

This symbol mark and recycle system are applied in the EU (European Directivity WEEE) countries and could be not applied in other areas of the world.

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