USER MANUAL

NET-TOUCH4KV

WALL PANEL CONTROL FOR PXN SERIE

MAJORCOM:

INDEX

1. IMPORTANT REMARK

WARNING : SHOCK HAZARD - DO NOT OPEN

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING (If applicable) : The terminals marked with symbol of ⚡ may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires installation by an instructed person or the use of ready-made leads or cords.

WARNING : To prevent fire or shock hazard, do not expose this equipment to rain or moisture.

WARNING : An apparatus with Class I construction shall be connected to a mains socket-outlet with a protective earthing connection.

2. IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Unplug the apparatus during lightening sorts or when unused for long periods of time.
13. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

14. Disconnecting from mains: Switching off the POWER switch all the functions and light indicators of the amplifier will be stopped, but fully disconnecting the device from mains is done unplugging the power cord from the mains input socket. For this reason, it always shall remain readily operable.

15. Equipment is connected to a socket-outlet with earthing connection by means of a power cord.

16. The marking information is located at the bottom of apparatus.

17. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on apparatus.

WARNING : This product must not be discarded, under any circumstance, as unsorted urban waste. Take to the nearest electrical and electronic waste treatment centre.

MAJORCOM accepts no liability for any damage that may be caused to people, animal or objects due to failure to comply with the warnings above.

3. IMPORTANT NOTE

Thank you for choosing our NET-TOUCH4KV wall panel control.

It is **VERY IMPORTANT** to arefully read this manual and to fully understand its contents before any connection in order to maximize your use and get the best performance from this equipment.

To ensure optimal operation of this device, we strongly recommend that its maintenance be carried out by our authorised Technical Services.

The NET-TOUCH4KV wall panel control has a warranty of 3 years.

The schemes and diagrams shown in the manual correspond to the models compatible with round installation box, available from products with serial numbers higher than those specified below. (*) :

MODEL	SERIAL NUMBER
NET-TOUCH4KV	266010001

(*)Note : The operation and characteristics of the NET-TOUCH4KV panels compatible with a round case are identical to those existing in their previous versions, and which were compatible only with square boxes..

4. INTRODUCTION

NET-TOUCH4KV is a wall panel control compatible with the MAJORCOM NET MANAGER application.

It allows remote control functions over PXN autio matrix serie, such as audio source selection, volume adjustment, preset selection, etc.

4.1 MAIN FEATURES

•   Single European electrical box format, compatible with flush and surface installation (surface box supplied as standard)
•   Compatible with circular base installation box, with diameter ≥ 60 mm, from products with serial number equal to or greater than those specified in the previous chapter
•   Power over Ethernet (PoE) or optional external power supply (not included)
•   Ethernet communication interface, RJ45 connector
•   128x128 pixels LCD display
•   Digital rotary control (encoder) + 4 programmable keys: 4KV and EX models
•   PXN matrix serie remote control functions: audio source selection, preset selection, volume / MUTE adjustment, equalization settings, etc.
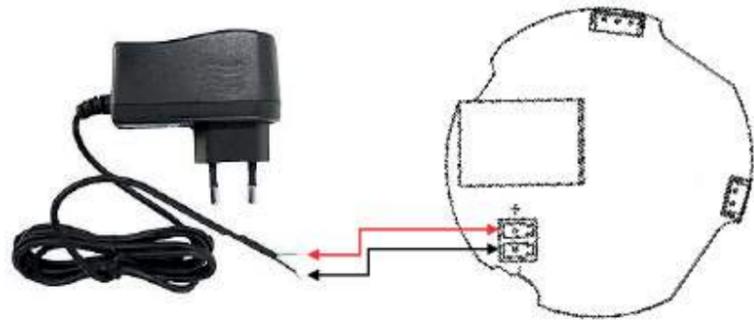
5. INSTALLATION

Installation of the NET-TOUCH4KV comprises the following steps, depending on the desired type of installation.

5.1 INSTALLATION ON SURFACE OR FLUSH

1. Remove the trim frame and front panel cover, held in place by magnets. You can use the magnet provided as a tool, by making contact in the upper right corner of the cover and gently pulling on it.
2. Connect the RJ-45 connector on the CAT5 or higher cable that will connect the unit to the local installation network. If necessary - see note below - connect external power.
3. Screw the device to the surface box or flush box.
4. Replace the frame and front panel and secure the rotary encoder knob.

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5.2 INSTALLATING AN EXTERNAL POWER SUPPLY

In case of not having a PoE type power received in the control panel directly from the connection port of the network switch to which it is connected, it is possible to power thepanel through an optional external power supply :

External power supply connection (rear view of the printed circuit board)

Note : if the external power supply is used, it will be necessary to cut the cable, since the connection to the panels is made by bare cable, as shown in the previous diagram.
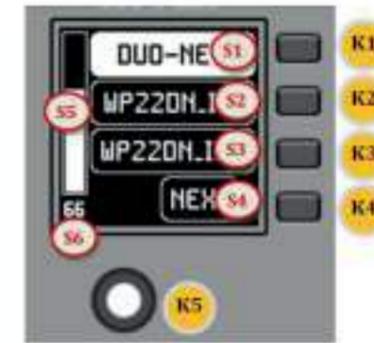
6. UNIT MANAGEMENT

6.1 UNIT MANAGEMENT IN STANDARD OR INDIVIDUAL MODE

Note : This section deals with the operation of a NET-TOUCH4KV unit in standard or individual mode, being able to take control of a zone of the installation. It is also possible to use it in "MULTI" mode, being able to take control of more than one zone. For more information, please refer to the section *Units operation in multi mode*.

The NET-TOUCH4KV has the following possible remote control functions on the PXN autio matrix serie, programmed from the MAJORCOM NET MANAGER :
* Selecting sources or presets from a preset list
* Adjusting the volume of a preset signal
* MUTE ON/OFF of the same previous signal

Front panel controls / on-screen information

Physical controls :
* **K1 to K4** : keys directly associated with adjacent functions displayed on the screen
* **K5** : digital rotary control, or encoder, with rotary and pulsation functions

Information fields shown on the screen :
* **S1 to S4** : text fields 1 to 4
* **S5** : Adjusted volume indicator (signal level)
* **S6** : textual value of the adjusted volume (signal level)

Once the unit is connected to the network, powered (via PoE or optional external power supply) and correctly configured, the main screen will display an image similar to the following :

Main screen, example

Text fields S1 to S3 show the first three options that can be selected using keys K1 to K3. Field S4 shows the text «NEXT», inviting you to press the K4 key to display more options suitable for selection. The total number of selectable options is defined by managing carousels of audio inputs (sound sources) or presets for each control panel, using the MAJORCOM NET MANAGER application.

If there are 4 or fewer selectable options, the screen will show them directly in fields S1 to S4, without adding the «NEXT» function as an option associated with the K4 key.
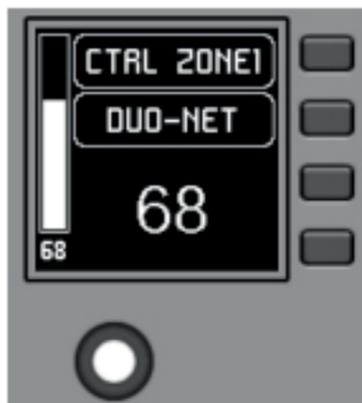
In the example above, which uses a carousel of audio sources as selectable options, we see the following information :

• **S1**, option 1 (currently selected = shown in negative): audio input labeled DUO-NET. Selectable (=actionable) by pressing the key K1
• **S2**, option 2: audio input labeled FM TUNER. Selectable by pressing the K2 key
• **S3**, option 3: audio input labeled ePLAYER1. Selectable by pressing the K3 key
• **S4**, option 4: Move to the next screen of valid options by pressing the K4 key
• **S5**, Vu-meter showing the currently set volume of the audio signal the remote panel is pointing at (this signal can be an output, an input, a matrix crossover point, or sending the currently selected source to the destination output)
• **S6**, value of the currently set volume of the audio signal to which the remote panel is pointing or the «MUTE» symbol if the audio signal is muted

The following picture shows the selected FM TUNER input, and another volume adjustment value in the Vu-meter, in this case the sending value of this input (sound source) to the destination output (83).

When acting on the K5 rotary control, aiming at modifying the volume to which it points, a different screen is temporarily shown, returning a few seconds to the previous or main screen. Example :

• **S1** : Name (label) assigned to the control panel, defined from he MAJORCOM NET MANAGER application. In the example «CTRL ZONE1».
• **S2** : option of the currently selected carousel. In the «DUO-NET» example.
• **S5, S6** : volume value being adjusted by rotary control, displayed in real time, and matching the same numerical value displayed in larger characters in the lower middle section of the display (68 in the example above).

Pressing the rotary control activates the MUTE function, if enabled for triggering from the NET-TOUCH4KV unit :

If the volume control function is not enabled for the NET-TOUCH4KV unit, turning or pressing the rotary control will temporarily display such a screen, with the central flashing "- -" symbols :

The long press (> 5 seconds) on the rotary control displays the configuration parameters of the unit: name, model, firmware version and Ethernet network connection parameters :
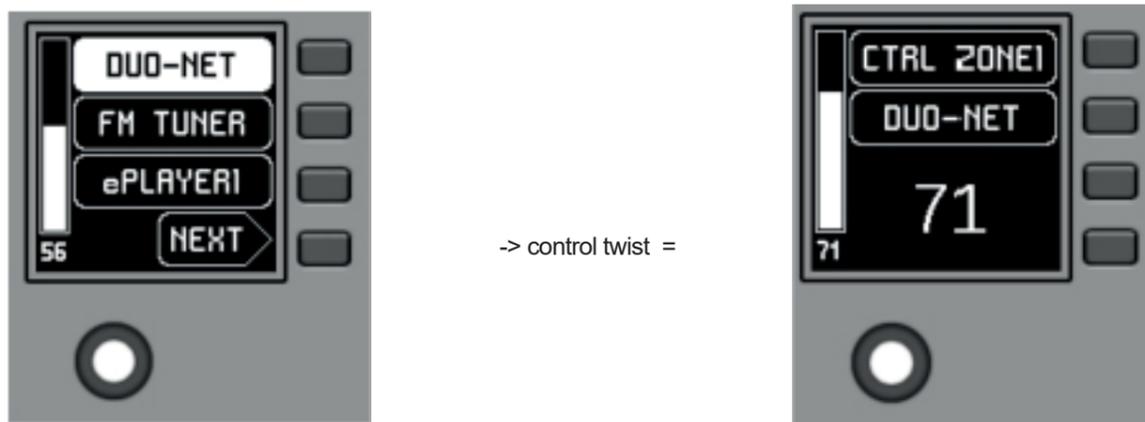
6.2 UNITS OPERATION IN MULTI MODE

From MAJORCOM NET MANAGER it is possible to include in a project panels such as NET-TOUCH4KV the «MULTI" type.

This type of panels are associated to a hardware unit NET-TOUCH4KV, WPNET4KV which is programmed to take the role of different individual panels. These individual panels can, in turn, have a one-to-one link with real NET-TOUCH4KV hardware units, or exist in the project only virtually.

In this way, by taking on the role of different individual panels, each with its specific programming, it is possible from a single hardware panel to act on different zones of a PXN autio matrix serie (panels with source selectors) and/or even opt to select different sets of presets (panels with preset selectors).

A MULTI panel, once programmed, will show on the screen the information of the individual panel from which it is taking the role :
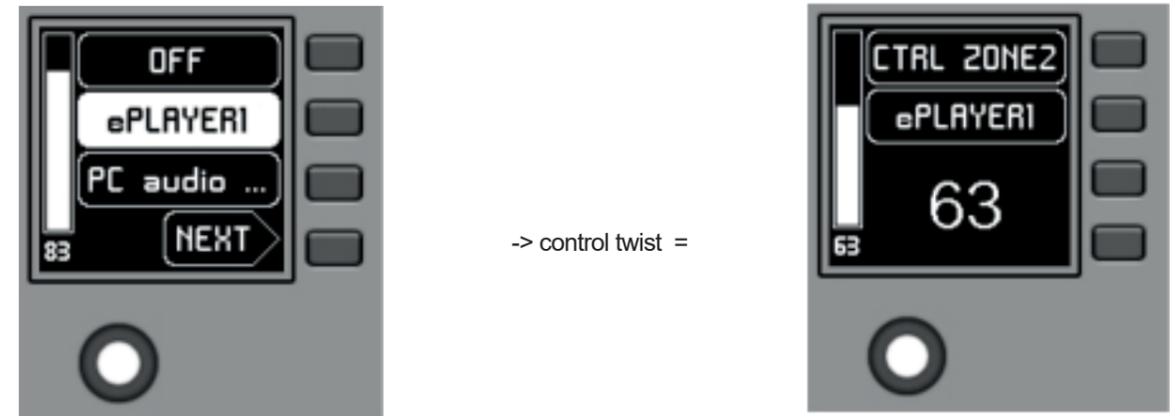

-> control twist =

The image above shows how a control programmed as NET-TOUCH4KV MULTI MULTI is taking on the role of an individual NET-TOUCH4KV called «CTRL ZONE1», so that it shows the carousel options and the rest of the carousel information.

A long press on the rotary control (>5 seconds) gives access to the role change menu of this MULTI type hardware panel :

In the previous example it can be seen that there are two possible individual panels as options for the MULTI panel to take its role: CTRL ZONE1 and CTRL ZONE2. By means of K1 and K2, in this case, it is possible to select one or the other. Example by selecting the individual panel CTRL ZONE2 (key K2) :

-> control twist =

It can be seen in this case that the selection carousel options and the rest of the information of the individual panel WP-NET4KV «CTRL ZONE2» are different from those of the previous panel «CTRL ZONE1».

From the MAJORCOM NET MANAGER application it is possible to define :
- Number of individual panels included
- Specific programming of each of the above, and link or not to real panels hardware
- Number of NET-TOUCH4KV type MULTI
- Programming of the same: selection, from the list of individual panels type NET-TOUCH4KV previously defined, of which of them will be part of the list of options to take their role.

Once the unit is connected to the network, powered (via PoE or optional external power supply) and correctly configured from MAJORCOM NET MANAGER application, the main screen will display an image similar to the following :

Main screen, example

Text fields S1 to S3 show the first three options that can be selected using keys K1 to K3. Field S4 shows the text «NEXT», inviting you to press the K4 key to display more options suitable for selection. The total number of selectable options is defined by managing carousels of audio inputs (sound sources) or presets for each control panel, using the MAJORCOM NET MANAGER application.

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• S5, Vu-meter showing the currently set volume of the audio signal the remote panel is pointing at (this signal can be an output, an input, a matrix crossover point, or sending the currently selected source to the destination output)
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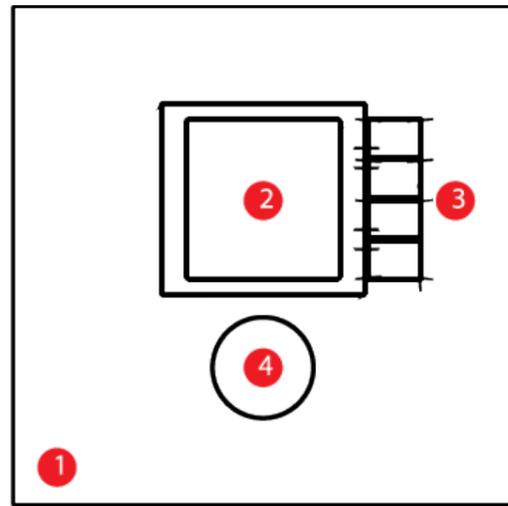
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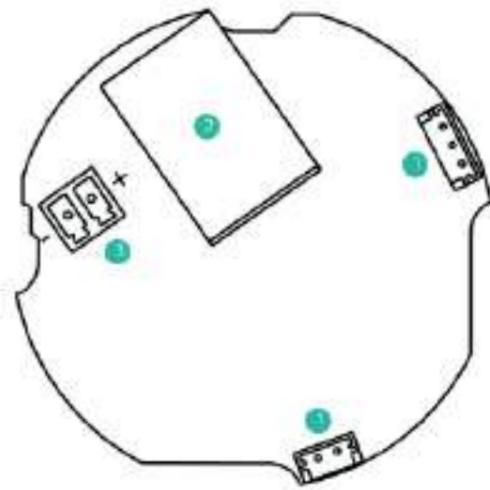
7. NOTE

Ceck that the unit is working with the latest firmware versions available.
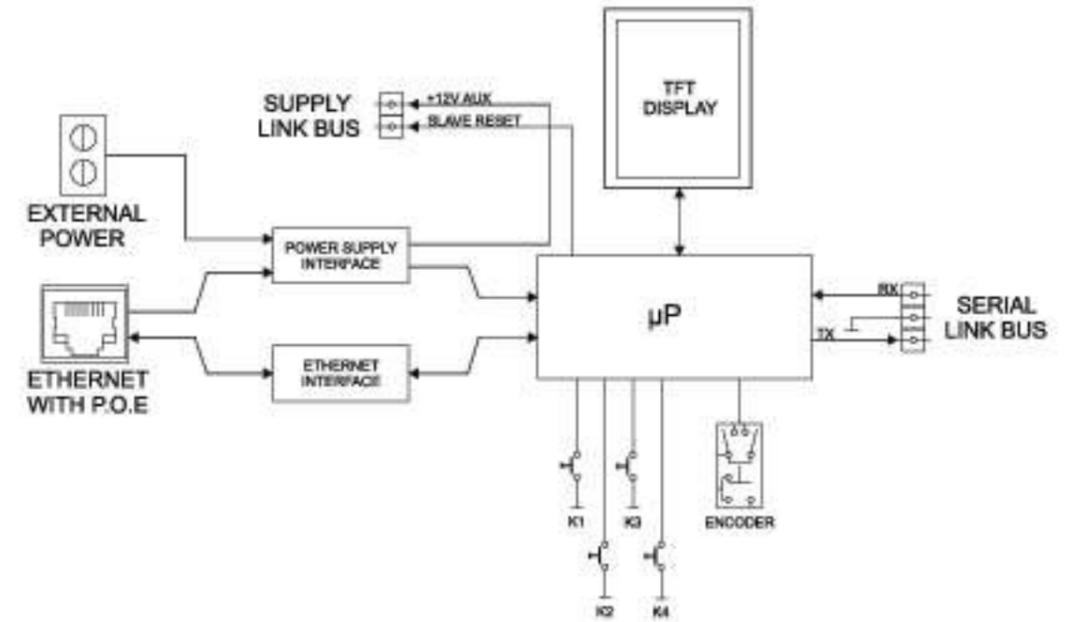
8. FRONT PANEL

(1) Front panel cover
(2) LCD screen
(3) Selection keys (K1 à K4)
(4) Rotary encoder (K5)

9. REAR PANEL

(1) J102, J107 : panels interconnection connectors
(2) J104 : RJ-45 Connector
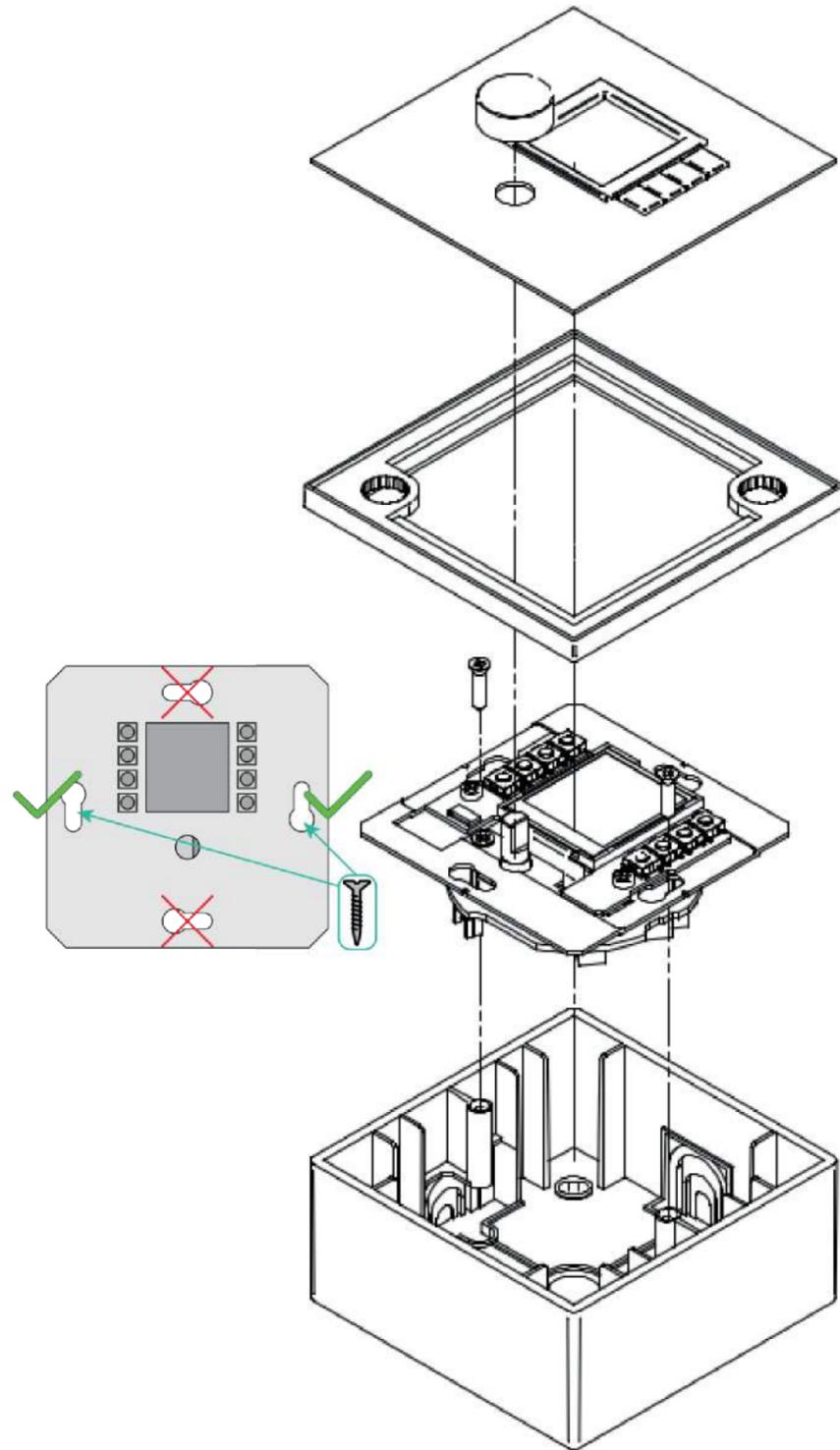**(3) J106 :** External power 24VDC connector

10. BLOCK DIAGRAM

11. TECHNICAL FEATURES

DIGITAL CHARACTERISTICS	
Control keys	Encoder, 4 Control keys
Indicators	LCD Display – 128x128 Pixels
Communication Standard	Ethernet
SUPPLY CHARACTERISTICS	
Poe Power supply	PoE: class 0 802.3af Poe PD compliant
External Power supply	12 - 24 V DC
Maximum Power Consumption	From PoE: 35mA / 1.6W From Ext Power: 1.5W (WP24-PSU power supply model, not included)
MISCELLANEOUS	
Connector	RJ45 Remote Port
Dimensions (WxDxH)	86 x 30 x 86 mm
Weight	120 g
Cable Quality	CAT-5e or better

12. ASSEMBLY DIAGRAM

13. PACKAGE CONTENTS

- One NET-TOUCH4KV wall panel control
- Frame for mounting on single-mechanism systems
- Screws for fixing to surface or flush box
- Magnet for cover removal
- Surface box
- User manual
- Warranty Card

NET-TOUCH4KV

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