

USER MANUAL

EW-SCREEN



MAJORCOM:

Manual to download in PDF format on www.majorcom.fr

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1. IMPORTANT REMARK



WARNING: SHOCK HAZARD - DO NOT OPEN
AVIS: RISQUE DE CHOC ÉLECTRIQUE - NE PAS OUVRIR



The lightning flash with arrowhead symbols, 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 the symbol of “” may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires the 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 and 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 lightning 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 the 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 it to the nearest electrical and electronic waste treatment center.

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

3. IMPORTANT NOTE

Thank you for choosing our **EW-SCREEN MajorcomNet digital control device**.

It is **VERY IMPORTANT** to carefully 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 authorized Technical Services.

MAJORCOM **EW-SCREEN** comes with a **2-year warranty**.

4. INTRODUCTION

EW-SCREEN is a device of the MajorcomNetfamily that can be programmed to control one or more networked MajorcomNetdevices; it can even control a full installation, a project combining a multitude of different MajorcomNetdevices: PXN88 etc. It is fully programmable through the MajorcomNetManager application (*).

(*) Refer to the MajorcomNetManager Application manual for more information. The MajorcomNetManager application is available for download at www.majorcom.fr.

The EW-SCREEN is suitable for wall mount installation using the included VESA 75 bracket, or any other VESA75 compatible bracket or stand.

It features a 10" capacitive touch screen displaying the graphic User Control Panels (UCPs) that have been programmed in the MajorcomNetManager application software, the ones that the end user will handle to control the installation.

4.1. Main features

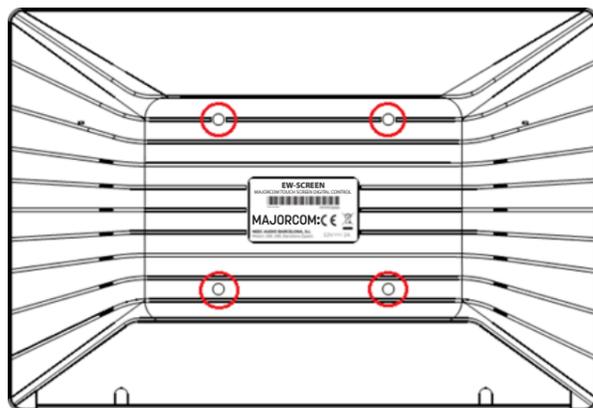
- 10.1" IPS screen, 1280x800 pixel resolution
- 16:9 aspect ration
- Capacitive & multitouch panel
- PoE supply compatible
- External power supply compatible (external universal PSU included + multi-plug AC set)
- Ethernet Base-Tx 10/100Mb interface

5. INSTALLATION AND CONNECTIONS

5.1. Installation

EW-SCREEN is suitable for surface and desktop mount:

- Surface mount: a VESA75 wall mount bracket is included with the product. It is composed of two parts: the metal plate that must be assembled to the back panel of the EW-SCREEN unit, with the 4 included screws, and the metal plate that must be assembled to the wall or surface. Once both plates have been assembled and secured, the unit can be fixed fitting them together and screwing the included security screw, with the included tool for it



Note: the VESA75 standard allows mounting the EW-SCREEN unit using other third-party VESA75 brackets or stands

- Desktop mount: the unit includes a stick shaped support that can be screwed to a thread at the back panel of the EW-SCREEN unit, once the back panel connections cover is removed (fixed by 2 screws). Once installed, this stick allows to hold the EW-SCREEN unit on a desktop surface, in a position closed to the vertical.

5.2. Connections

EW-SCREEN has 2 connectors available for the MajorcomNetoperation. Both are located behind the rear panel connections plastic cover, fixed to the EW-SCREEN unit back panel with 2 screws:

- DC Power: round jack for connection to the universal power supply provided with the product, 12 VDC, 2A
- Ethernet Port: RJ45 connector of the unit's network communication interface, as well as PoE DC supply compatible, in case the network switch is able to provide PoE (Power over Ethernet) to it. It can be directly connected (point-to-point) to a single MajorcomNetdevice, for its direct and exclusive control, or to an-Ethernet switch port belonging to the network the rest of the MajorcomNetdevices of the installation are connected to. The connecting cable can be a standard or crossover CAT5 or higher cable.

6. OPERATION

From MajorcomNetManager application, it's possible to create remote control panels for the system (UCPs) to manage one or more PXN88, etc. units in a networked installation. Each panel can consist of one or more pages that include graphics, text, volume controls, buttons, VU meters, LED indicators, and so on. In this way, each remote user may have his own control panel(s) custom tailored to his needs and privileges, and in one system, very simple control panels for some users can coexist with others, more complex and having higher levels of authorization.

Once the UCPs are created, included in an MajorcomNet project, the network needs a web server for the potential web clients that will control the installation thanks to the UCPs they can recall from the web server, locally visualized and managed. The web server can be one of these types of devices:

- A EW-SCREEN unit running the MajorcomNet project previously created with the MajorcomNetManager application
- A WPmSCREEN unit running the MajorcomNetproject previously created with the MajorcomNetManager application
- A MIMO4040DN matrix running the MajorcomNetproject previously created with the MajorcomNetManager application
- A Windows® PC running the created Majorcom NetManager project in "Deploy" mode

Note: It is important to note that just one of these devices running the MajorcomNetManager application and the same project can exist in a same network, and **never more than one at a time**, whatever the type, since all would simultaneously “fight” and try to take control of the hardware devices (PXN88, etc.) included in the project

As for the web clients, they can be of the following types:

- The main EW-SCREEN or W-SCREEN itself (if existing) that acts as a web server can be its own web client.
- Additional EW-SCREEN / W-SCREEN units enabled as web clients
- The PC (if existing) that acts as a web server can be its own web client
- Computers, tablets and the like, running an Internet browser (Internet Explorer, Google Chrome, Mozilla Firefox, etc.)
- Devices with Android operating system (tablets, smartphones), running MAJORCOM UCP v2 app
- Devices with Apple iOS (iPad, iPhone, etc.), running MAJORCOM UCP v2 app

Any of them can recover and operate UCPs pointing to the web server’s IP address.

Different web clients can simultaneously load different UCPs and operate the project at the same time, each one controlling a part of the system.

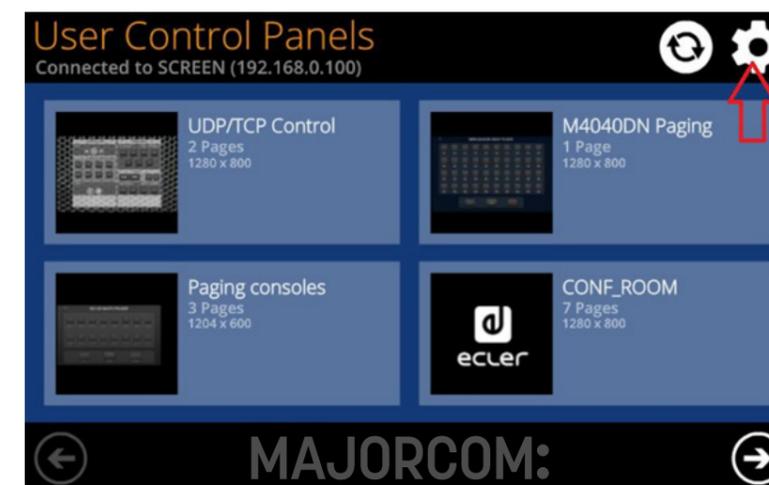
Note: please consult the user manual (chapters 10 and 11) of your MajorcomNetManager application for more information about programming UCP panels and the EW-SCREEN

Note: the Majorcom NetManager application is available on www.majorcom.fr

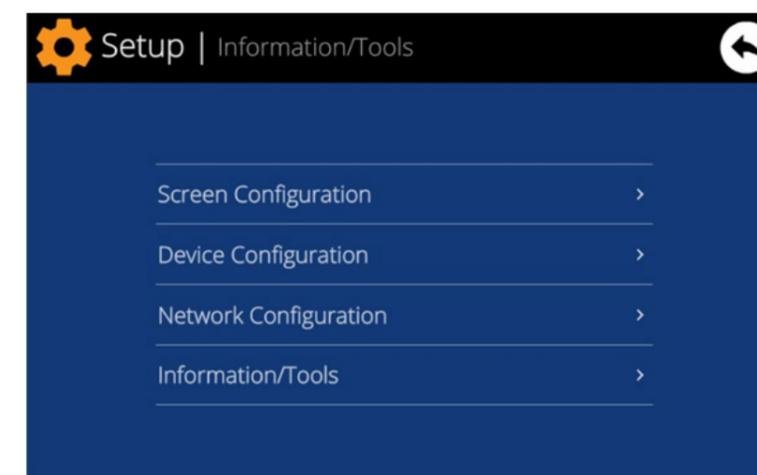
7. LOCAL CONFIGURATION OF THE UNIT

EW-SCREEN settings and configuration menus can be accessed locally from the touch screen of the device itself. The same settings are remotely accessible when the screen is under the control of a remote computer running the Majorcom NetManager application.

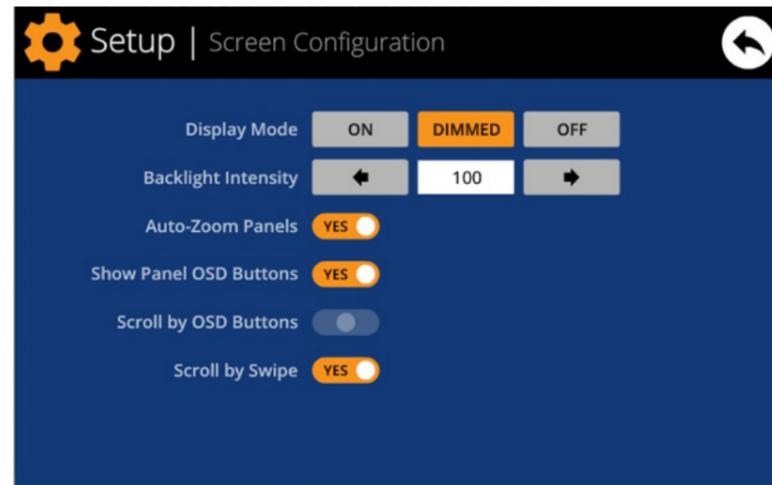
Local access to the configuration menus can be done by clicking on the SETUP icon, from the home page of the unit:



The available configuration menus are the following:



7.1. Screen Configuration menu



This menu allows setting different parameters affecting the displayed items and controls on the screen of the unit:

- **Display mode:** behavior of the screen dimming in sleep state, after 10 seconds of user inactivity on the touch screen. The available modes are: ON (always lit), DIMMED and OFF (unlit)
- **Backlight Intensity:** brightness intensity of the screen when it is not in sleep mode.
- **Auto-Zoom Panels:** when activated, the graphic control panels (UCPs) are automatically resized to match the maximum visible area, no matter the original resolution they were created in the MajorcomNetManager project file.

- **Show Panel OSD Buttons:** enables/disables the superimposed display of the navigation buttons in the corners of the displayed UCPs. The top corner buttons can scroll the panel pages (left and right) and the bottom corner buttons access the icon bar:



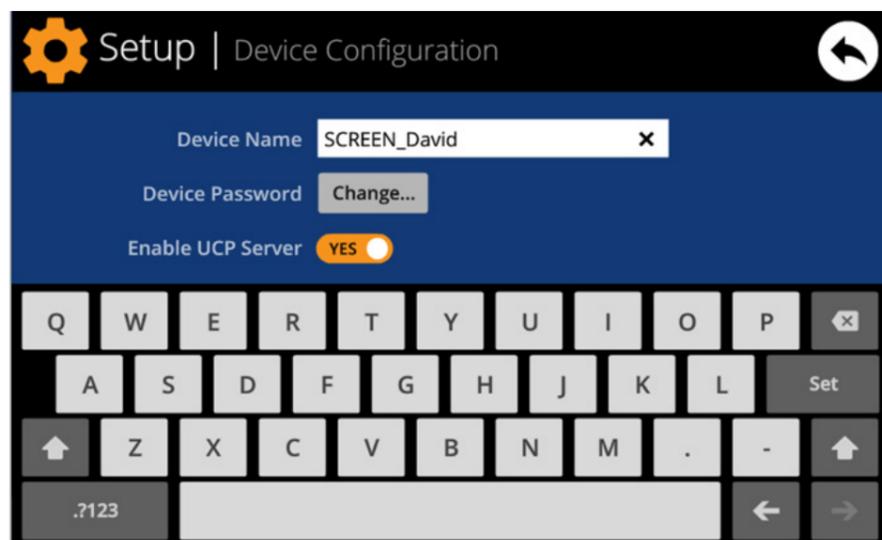
Note: even when the buttons are not displayed, they can still be active, so that pressing the top corners activates the horizontal scrolling between the panel pages and pressing the bottom corners displays the icon bar. This is an aspect that must be taken into account for the layout of the controls (buttons, sliders, knobs, etc.) on each UCP page during its design; the corners must be as free as possible if these OSD buttons will be used for scrolling between pages (top ones) and always free in the case of the bottom ones (icon bar display).

- **Scroll by OSD Buttons:** enables/disables the scroll action between pages pressing the top corners, even the OSD buttons are hidden
- **Scroll by Swipe:** enables/disables the scroll action between pages with a left or right swipe (press & drag) action on the screen.

The icon bar displays new accesses to the horizontal scrolling between the pages of a panel (to the left and right), access to the home page of the unit ("HOME" icon) and exit of the icon bar ("X" icon):



7.2. Device Configuration menu



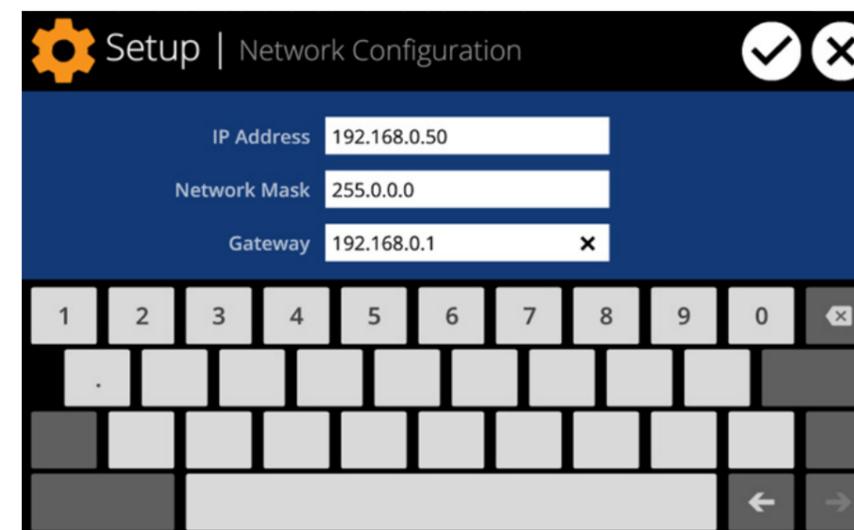
This menu allows adjusting the following parameters of the unit:

- **Device Name:** name of the device, as seen from other EW-SCREEN / WPmSCREEN devices, as well as from the MajorcomNetManager application
- **Device Password:** password for the protection of the device against the editing of its critical configuration parameters, requested for this purpose if enabled (enabled = other than blank password)
- **Enable UCP Server:** enables/disables the embedded UCP server service of the unit
 - **Enabled:** the MajorcomNetproject stored in the unit ("Local Project") will be fully functional, taking control of the hardware devices that are included in it (PXN88, etc.) and serving the UCP panels it contains to potential UCP clients on the network.
 - **Disabled:** the MajorcomNetLocal Project is deactivated, releasing the control over all included hardware (PXN88, etc.) and, consequently, also ceasing to serve UCPs for clients.

Warning: In the disabled status, another device or computer running a project containing all or some of the hardware devices existing in the EW-SCREEN's Local Project could take control of them. **Just one device and project can take control of the same hardware device at the same time**, so that units controlled by a device must first be released before trying to control them from another device:

- From Majorcom NetManager, you can release the devices controlled by the computer through the creation of a new project (File -> New Project), or by disconnecting them from the network one by one (right mouse button -> Disconnect)
- From a EW-SCREEN / W-SCREEN, you can release the devices controlled by the unit by setting the Enable UCP Server option on NO.

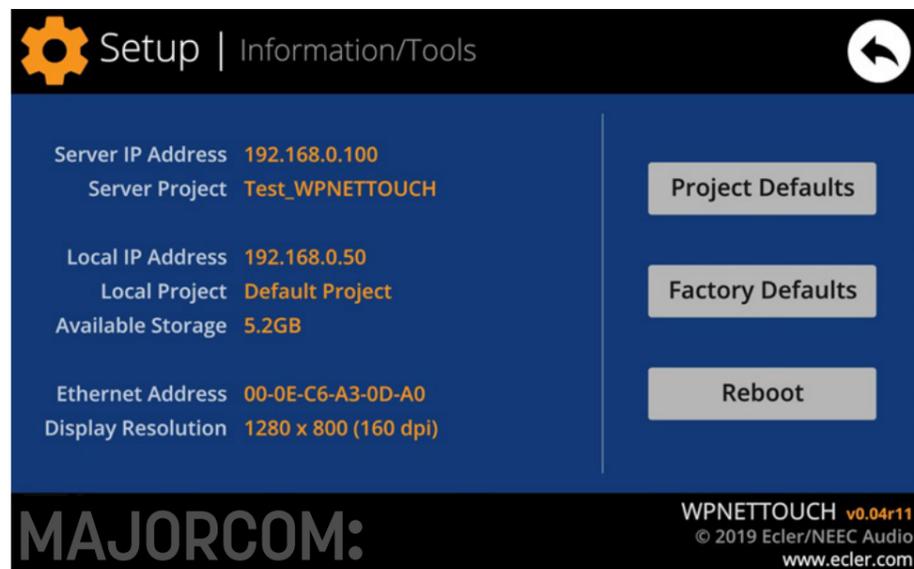
7.3. Network Configuration menu



This menu allows modifying the network connection parameters of the EW-SCREEN unit: IP address, network mask and gateways.

Note: neither the EW-SCREEN nor any other MajorcomNetdevice supports the protocol of dynamic allocation of IP addresses (Dynamic Host Configuration Protocol or DHCP), so it's always necessary to manually assign them static addresses.

7.4. Information / Tools menu

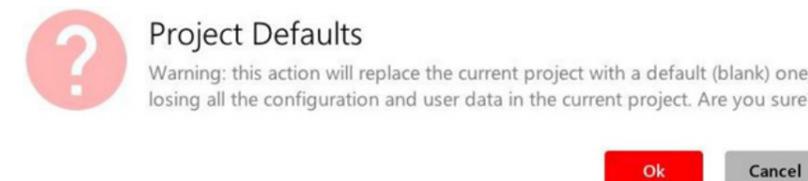


This menu displays the following information:

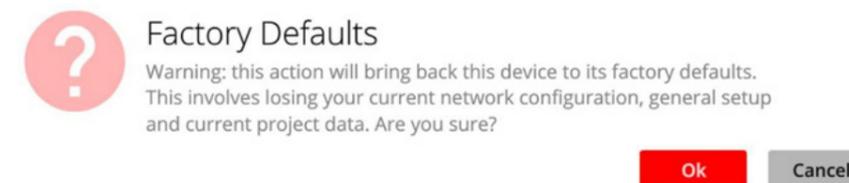
- **Server IP Address:** IP address of the UCP server device that the unit is connected to, as a UCP client. When the unit is connected to itself as a client, it will show its own IP address (= Local IP Address)
- **Server Project:** name of the project running in the server the unit is connected to as a UCP client (project running on the UCP server of the client)
- **Local IP Address:** IP Address configured for the EW-SCREEN unit
- **Local Project:** name of the project stored in the internal storage space of the EW-SCREEN unit. This project can be uploaded to the EW-SCREEN unit using MajorcomNet-Manager software app
- **Available Storage:** internal storage space available to upload a project file, which would include User Control Panels data and graphics
- **Ethernet Address:** MAC address of the NIC (network interface card) mounted in the EW-SCREEN unit.
- **Display resolution:** native screen resolution of the IPS panel of the unit (1280 x 800)
- **Firmware version:** shown at the lower right-hand side corner (in the above example v0.04r11)

And the following restore / reboot options:

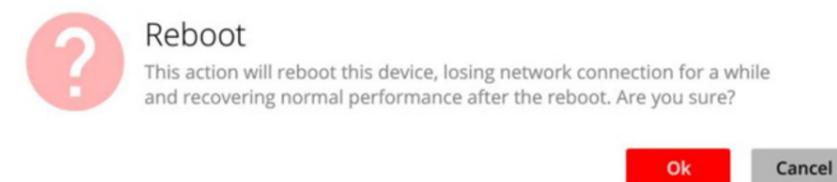
- **Project Defaults:** clears the project in memory, replacing it with a blank project, after warning that the process is irreversible:



- **Factory Defaults:** clears the entire configuration and all data in the unit, restoring the factory default settings, after warning that the process is irreversible:



- **Reboot:** reboots the unit:



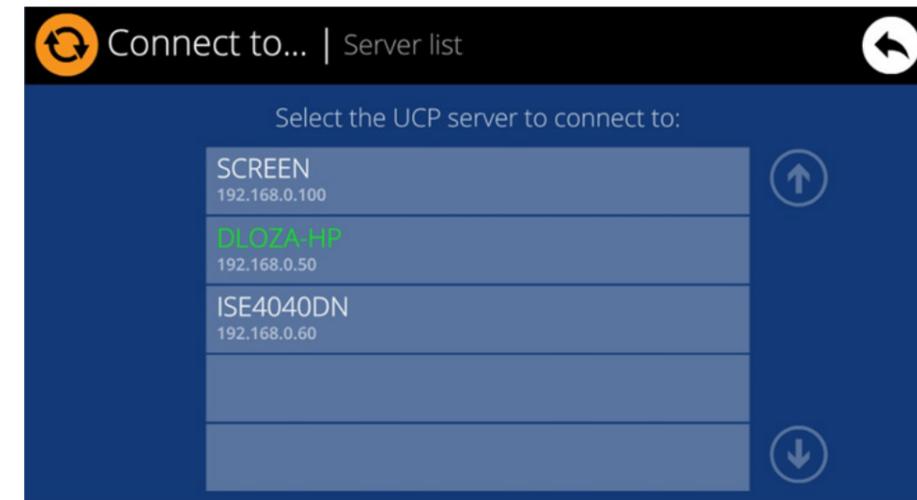
8. CONNECTION TO A UCP SERVER

From the home screen of the unit, the connection icon on the upper side of the screen will give access to the Connection page:



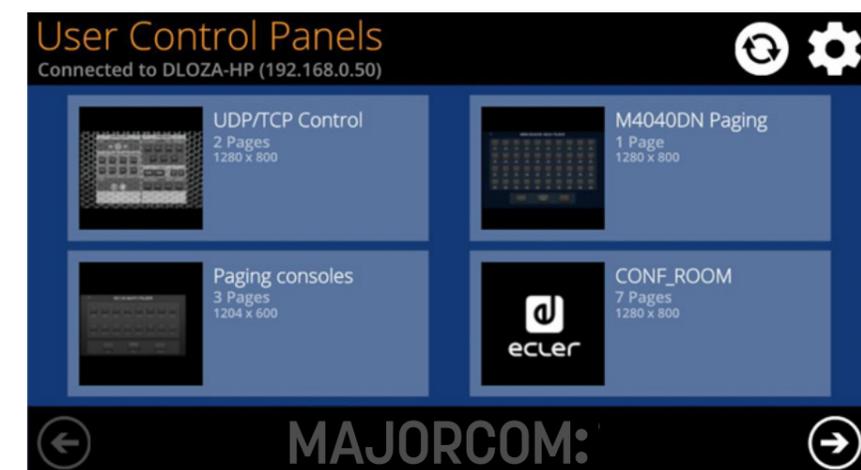
This page allows deciding the UCP server the unit will connect to as a client. The UCP server may be a computer, a matrix (Yes, it has an embedded UCP server in its engine!) another EW-SCREEN / W-SCREEN unit or even the same EW-SCREEN unit. In any case, the UCP server shall host and run a Majorcom NetManager project that includes a series of UCPs which can be remotely managed by any UCP client.

It is possible to directly enter the IP address of the server device, using the touch keyboard displayed on the screen, or to select a device from a list of automatically detected server devices, which is accessed by clicking on the grey button with the list icon to the right of the "Connect" button:



Note: in the list of detected server devices, the name of the EW-SCREEN unit under control will appear in green (the one matching with the Local IP Address)

After selecting a server unit or an IP address, using either of these two methods, pressing the "Connect" button will confirm the selection and start the process of connecting to the server. If this process is successful, the UCPs that the server makes available for the EW-SCREEN client will appear on the screen:



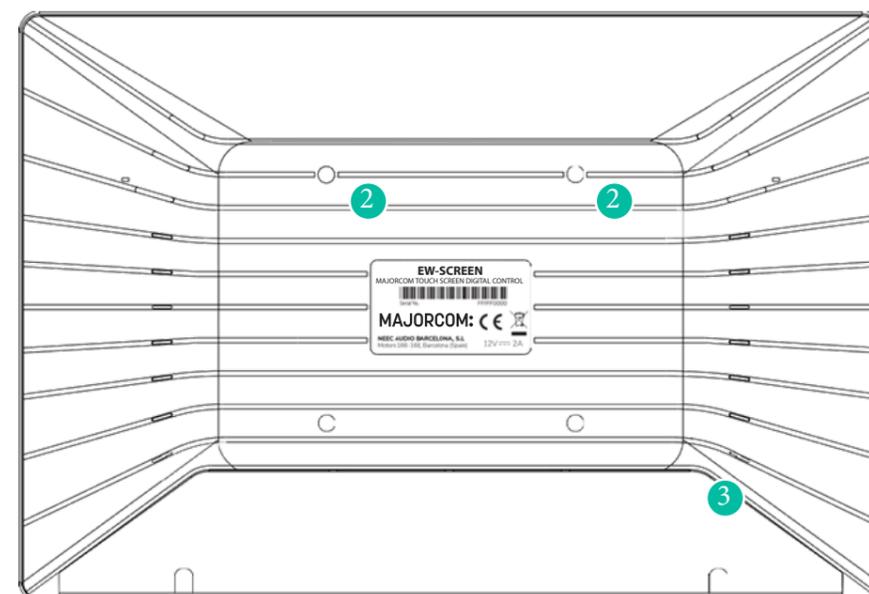
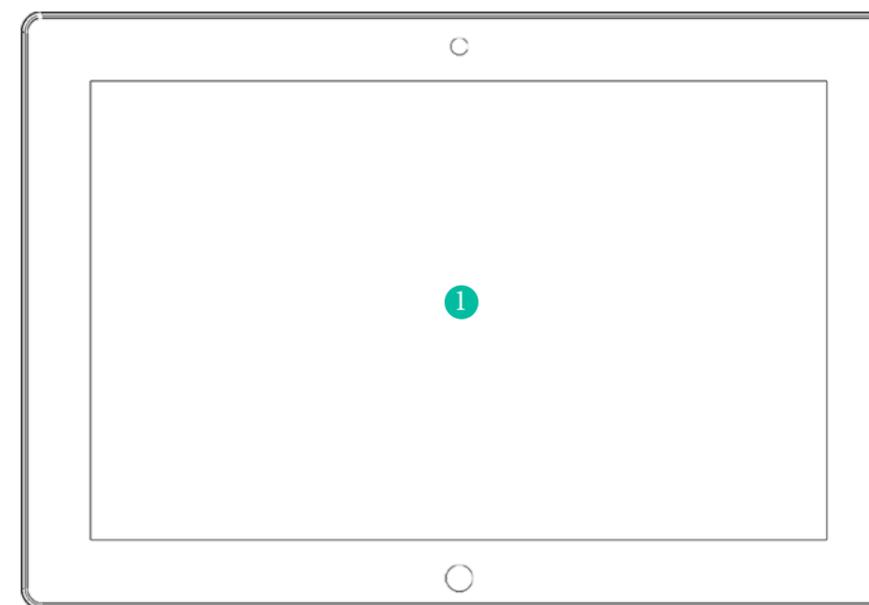
9. PACKAGE CONTENTS

- EW-SCREEN
- External PSU, universal, multi-AC plug
- Wall mount VESA75 bracket + screws set + security screw+ tool
- Desktop mount stick-shape support
- Quick User Guide and Warranty Card

10. FUNCTION LIST

1. Multitouch screen
2. VESA75 screw fixation holes
3. Desktop mount stick-shape support fixation hole
4. Power supply connector
5. RJ45 Ethernet Port connector
6. Unused connections

11. FUNCTION DIAGRAM



12. TECHNICAL FEATURES

| EW-SCREEN | |
|-----------------------------------|--|
| System | |
| CPU | RK3128 quad core processor clocked 1.6G |
| RAM | 1GB |
| ROM | 8GB |
| Screen | |
| Size | 10,1" IPS |
| Resolution | 1280x800 |
| Contrast ratio | 1300 |
| Brightness | 300cdm2 |
| Screen scale / Display area | 16:9 / 218x135mm |
| Backlight | LED |
| Touch-panel | Capacitive multi-touch |
| Network & Connectivity | |
| Ethernet | Supports PoE |
| Ethernet port | Ethernet Base-Tx 10/100Mb / 1GB CAT5e or better up to 100m. |
| Power | |
| External power supply voltage | 12VDC |
| DC current (max) | 350mA from 12V External Power Supply Voltage 125mA from PoE |
| Mains power consumption | 6W |
| General | |
| Bracket mounting holes | VESA 75mm |
| Dimensions WxHxD | 260x178x28 mm / 10.2"x7.0"x1.1" |
| Weight | 700 gr / 1.54 lb. |
| Accessories included | |
| AC power adapter | 100-240VAC 50-60Hz 12V / 2A, multi-plug |
| Mounting systems | VESA75 and desktop |

EW-SCREEN

User manual V1.1