

CP-2272E

Control Panel

User Guide

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EVERTZ MICROSYSTEMS LTD.

5288 John Lucas Drive,
Burlington, Ontario, Canada
L7L 5Z9

Phone:	+1 905-335-3700
Sales Fax:	+1 905-335-3573
Tech Support Phone:	+1 905-335-7570
Tech Support Fax:	+1 905-335-7571

Internet: Sales:	sales@evertz.com
Tech Support:	service@evertz.com
Web Page:	http://www.evertz.com



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IMPORTANT SAFETY INSTRUCTIONS

	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 product.

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service 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.

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC – SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

WARNING

DO NOT EXPOSE THIS EQUIPMENT TO DRIPPING OR SPLASHING AND ENSURE THAT NO OBJECTS FILLED WITH LIQUIDS ARE PLACED ON THE EQUIPMENT.

WARNING

TO COMPLETELY DISCONNECT THIS EQUIPMENT FROM THE AC MAINS, DISCONNECT THE POWER SUPPLY CORD PLUG FROM THE AC RECEPTACLE.

WARNING

THE MAINS PLUG OF THE POWER SUPPLY CORD SHALL REMAIN READILY OPERABLE.

INFORMATION TO USERS IN EUROPE

NOTE

CISPR 22 CLASS A DIGITAL DEVICE OR PERIPHERAL

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to the European Union EMC directive. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

INFORMATION TO USERS IN THE U.S.A.

NOTE

FCC CLASS A DIGITAL DEVICE OR PERIPHERAL

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARNING

Changes or Modifications not expressly approved by Evertz Microsystems Ltd. could void the user's authority to operate the equipment.

Use of unshielded plugs or cables may cause radiation interference. Properly shielded interface cables with the shield connected to the chassis ground of the device must be used.

REVISION HISTORY

<u>REVISION</u>	<u>DESCRIPTION</u>	<u>DATE</u>
1.0	First Release	May 2012

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1. OVERVIEW

The CP-2272E remote control panel features two small high resolution color LCD displays alongside an array of 72 full color dynamic LCD buttons, all of which are fully programmable. The two LCD displays intelligently interact with the panel's buttons and rotary controls, updating automatically as different operation facilities are selected.

Each of the 72 LCD buttons is capable of displaying a multiple character text string. They can also be configured with a menu structure which allows quick navigation through the systems. When a menu button is pressed some or all of the buttons change their function and legend. Their operation is then defined by the configuration setup for this new menu. The selection of a new menu can also be configured to change the graphical display of one or both the LCD screens.

The CP-2272E within the Evertz's MAGNUM control system, can interface with automated tielines and pathfinding, and advanced breakaway routing while still supporting basic routing concepts like levels and categories. The CP-2272E requires the EQX SERVER/MAGNUM Control System for router control.

The CP-2272E is a very sophisticated advanced panel that allows you to create a very powerful and very simple interface to your entire system. It is ideal for applications where a panel design with more LCD buttons is critical based on number of sources, destinations, levels to control etc. is desired. This makes it perfect in many different environments including Production areas, Technical Director areas, "Tape" areas etc. Considering its small foot print the CP-2272E is perfect for use as an advanced system control panel in truck and mobile applications.

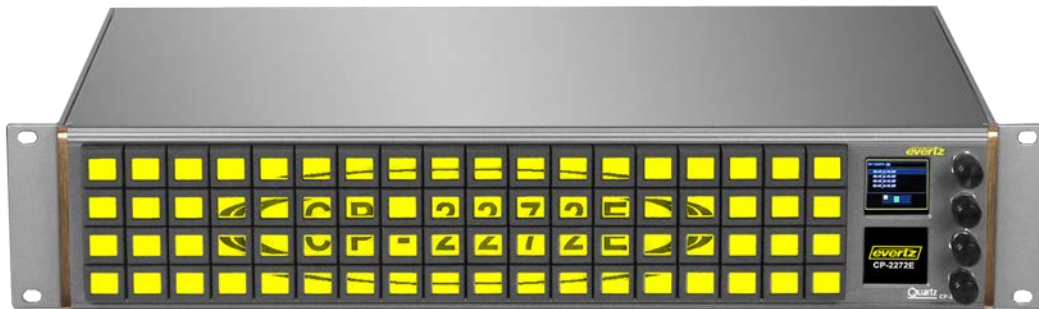


Figure 1-1: CP-2272E Control Panel

Features:

- Flexible feature or menu driven configurations providing quick and simple access
- Two small high quality LCD displays which dynamically react with the panels buttons and rotary controls
- Easily reconfigured for regularly changing environments
- Advanced control system interface
- Fully programmable buttons

2. INSTALLATION

2.1. REAR PANEL

Figure 2-1 shows the rear view of the CP-2272E control panel. The CP-2272E is a 2RU panel with various connection ports. Sections 2.1.1 to 2.1.5 describe the function of the connectors on the rear panel.

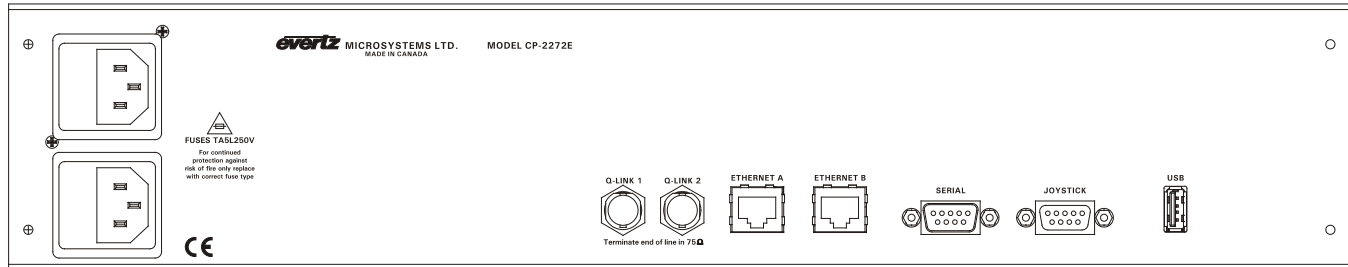


Figure 2-1: CP-2272E Rear Panel

2.1.1. Serial Connections

SERIAL: Serial port 1, female 9 pin D connector that is used as the RS-232 console port.

2.1.2. Joystick

This male DB9 connector is used for connection to a camera control unit to allow the joystick push buttons to override the router.

2.1.3. QLINK 1 / 2

These ports are not used at this time

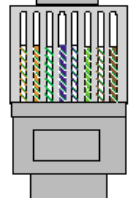
2.1.4. USB Control

This USB 2.0 Port is used for USB-based firmware upgrades of the CP-2272E.

2.1.5. Ethernet Connection

The panel uses 10Base-T (10 Mbps), 100Base-TX (100 Mbps) twisted pair Ethernet cabling systems. Ethernet Port A and Port B are not bonded redundant network connections. Only one Ethernet can be connected at one time. When connecting for 10Base-T systems, category 3, 4, or 5 UTP cable as well as EIA/TIA – 568 100Ω STP cable may be used. When connecting for 100Base-TX systems, category 5 UTP cable is required. The cable must be “straight-through” with an RJ-45 connector at each end. Establish the network connection by plugging one end of the cable into the RJ-45 receptacle of the card and the other end into a port of the supporting hub.

The straight-through RJ-45 cable can be purchased or can be constructed using the pin-out information in Table 2-1. A colour coded wiring table is provided in Table 2-1 for the current RJ-45 standards (AT&T 258A or EIA/TIA 258B colour coding shown). Also refer to the notes following the table for additional wiring guide information.



Pin #	Signal	EIA/TIA 568A	AT&T 258A or EIA/TIA 568B	10BaseT or 100BaseT
1	Transmit +	White/Green	White/Orange	X
2	Transmit –	Green/White or White	Orange/White or Orange	X
3	Receive +	White/Orange	White/Green	X
4	N/A	Blue/White or Blue	Blue/White or Blue	Not used (required)
5	N/A	White/Blue	White/Blue	Not used (required)
6	Receive –	Orange/White or Orange	Green/White or Green	X
7	N/A	White/Brown	White/Brown	Not used (required)
8	N/A	Brown/White or Brown	Brown/White or Brown	Not used (required)

Table 2-1: Standard RJ-45 Wiring Colour Codes

Note the following cabling information for this wiring guide:

- Only two pairs of wires are used in the 8-pin RJ-45 connector to carry Ethernet signals.
- Even though pins 4, 5, 7 and 8 are not used, it is mandatory that they be present in the cable.
- 10BaseT and 100BaseT use the same pins (a crossover cable made for one will also work with the other).
- Pairs may be solid colours and not have a stripe.
- Category 5 cable must use Category 5 rated connectors.

The maximum cable run between the router and the supporting hub is 300 ft (90 m). The maximum combined cable run between any two end points (i.e. router and PC/laptop via network hub) is 675 feet (205 m).

Devices on the Ethernet network continually monitor the receive data path for activity as a means of checking that the link is working correctly. When the network is idle, the devices also send a link test signal to one another to verify link integrity. The rear panel is fitted with two LEDs to monitor the Ethernet connection.

100: This Amber LED is ON when a 100Base-TX link is last detected. The LED is OFF when a 10Base-T link is last detected (the LINK LED is ON). Upon power-up the LED is OFF as the last detected rate is not known and therefore defaults to the 10Base-T state until rate detection is completed.

LN/ACT: This dual purpose Green LED indicates that the card has established a valid linkage to its hub, and it identifies whether the module is sending or receiving data. This LED will be ON when the module has established a good link to its supporting hub. This gives you a good indication that the segment is wired correctly. The LED will BLINK when the module is sending or receiving data. The LED will be OFF if there is no valid connection.



The Ethernet ports on the CP2272E are not redundant. Only one port should be wired and active

2.1.6. Power Connections

The CP-2272E power supply operates on a +12V and automatically senses the input voltage. Power should be applied by connecting a 3-wire grounding type power supply cord to the power entry module on the rear panel. The power cord should be minimum 18 AWG wire size; type SVT marked VW-1, maximum 2.5 m in length.

The IEC 320 power entry module combines a standard power inlet connector, two 5 x 20 mm fuse holders and an EMI line filter.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, GROUNDING OF THE GROUND PIN OF THE MAINS PLUG MUST BE MAINTAINED

2.2. MOUNTING

The CP-2272E is equipped with rack mounting angles and fits into a 19.04 inch by 3.47 inch by 3.911 inch (483.62 mm x 88.14 mm x 3.911 mm) rack space.

Cooling is achieved by fan-assisted convection. Air is drawn into the right side of the chassis and expelled as hot air from the left side of the chassis.



When installed in the equipment rack, ensure that the air flow from the right and left side vents is not blocked or restricted.

3. TECHNICAL DESCRIPTION

3.1. SPECIFICATIONS

3.1.1. Control

- Joystick Parallel contact closure TTL levels, D9 male
- Ethernet 10/100 base T, RJ45 connector

3.1.2. Electrical

Voltage: +12V
Power: 24 Watts maximum
Fuse Rating: 2A

3.1.3. Physical

Height: 3.47" (88.14mm)
Width: 19.04" (483.62mm)
Depth: 3.911" (99.34mm)
Weight: 3lbs (1.36kg)
Operating Temp: 0-40°C

3.1.4. Compliance

Safety: ETL Listed, complies with EU safety directives
EMI/RFI: Complies with FCC Part 15 Class A regulations
Complies with EU EMC directive

4. FRONT PANEL CONTROL

4.1. FRONT CONTROL PANEL

The CP-2272E has both rotary encoders and programmable LED buttons on its front panel. There are 4 rotary shaft encoders and a total of 72 programmable LED buttons. Rotary encoders are used to access and adjust panel settings. There are two display windows which are used to display source, destination and level information.

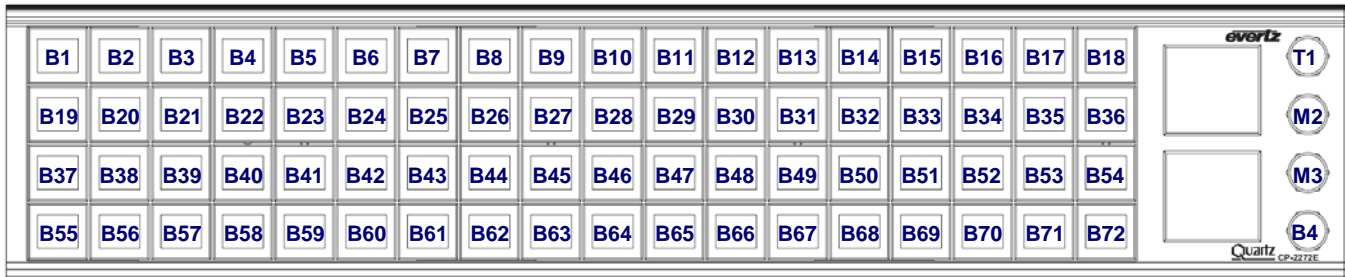


Figure 4-1: CP-2272E Front Control Panel

Please note that the blue labels in Figure 4-1 will NOT be displayed on the front panel of your CP-2272E device. The labels listed above are for reference purposes only when describing the panel controls in the following sections of the manual. The following chart describes the label and function of the associated button.

Labels	Description
T1	Top Rotary encoder
M2	Middle 1 Rotary encoder
M3	Middle 2 Rotary encoder
B4	Bottom Rotary encoder
B1 to B72	1 to 72 programmable LED buttons

4.2. MAIN MENU

To enter the setup menu of the CP-2272E control panel press and hold the top (T1) and bottom (BM4) rotary encoders on the far right side of the panel for approximately 6 seconds. The control panel configuration options will appear on the button located on the right side of the panel. The user can toggle through the menu options by pushing the button with the menu item name.

The menu items are outlined in the following table:

Menu Item	Menu Description
SETUP	Configuring the network setup
SHAFT Test	Tests the rotary encoders
CONTROLS	Intensity and font controls
KEY Test	Tests the LED buttons
GPIO Test	Tests the General Purpose Inputs
TFT Test	Tests that the TFTs are all functioning properly
EXIT	Exits the Configuration menu
REBOOT	Reboots the control panel
SHUTDOWN	Shuts down the control panel

4.2.1. Setup

The user can access the setup menu by pushing the **Setup** option by pushing the button called **Setup**. The **Setup** menu will enable the user to set various network parameters. The changes to the settings can be done with a single **Save and Exit**, user does not need to **Save and Exit** after each change. The following parameters can be modified from this screen:

Menu Item	Menu Description
IP Addr	Enables the user to set and change the IP Address of the control panel
Netmask	Enables the user to set the Netmask Address of the control panel
Broadcast	Enables the user to set the Broadcast Address of the control panel
Gateway	Enables the user to set the Gateway Address of the control panel
Save and Exit	Pushing this option will save any changes made to the setup menu
Exit	Pushing this option will revert all changes and exit to the setup menu
Undo	Pushing this option will revert all changes

4.2.1.1. Setting the IP Address of the Control Panel

The **IP Addr** menu item is used to set the IP address of the CP-2272E control panel.

The IP address is displayed in the following format:

aaa.bbb.ccc.ddd

To change a value, push the button containing the value you want to change and use top level rotary encoder to change the IP Address values. To change the value, rotate the encoder clockwise or counter-clockwise. To move to the next three digits of the address, push the next button containing the value you want to change.

Once the IP address is set, use the **Save and Exit** button to save the changes and return to the top level Setup menu.

4.2.1.2. Setting the Netmask

The Netmask menu item is used to set the netmask address of the CP-2272E control panel.

The netmask is displayed in the following format:

aaa.bbb.ccc.ddd

To change a value, push the button containing the value you want to change and use top level rotary encoder to change the Netmask values. To change the value, rotate the encoder clockwise or counter-clockwise. To move to the next three digits of the address, push the next button containing the value you want to change.

Once the Netmask is set, use the **Save and Exit** button to save the changes and return to the top level Setup menu

4.2.2. Setting the Broadcast Address

The **Broadcast** menu item is used to set the broadcast address for the CP-2272E control panel.

The broadcast address is displayed in the following format:

aaa.bbb.ccc.ddd

To change a value, push the button containing the value you want to change and use top level rotary encoder to change the Broadcast Address values. To change the value, rotate the encoder clockwise or counter-clockwise. To move to the next three digits of the address, push the next button containing the value you want to change.

Once the Broadcast address is set, use the **Save and Exit** button to save the changes and return to the top level Setup menu.

4.2.3. Setting the Gateway

The **Gateway** menu item is used to set the gateway address for the CP-2272E control panel.

The gateway address is displayed in the following format:

aaa.bbb.ccc.ddd

To change a value, push the button containing the value you want to change and use top level rotary encoder to change the Gateway Address values. To change the value, rotate the encoder clockwise or counter-clockwise. To move to the next three digits of the address, push the next button containing the value you want to change.

Once the Gateway address is set, use the **Save and Exit** button to save the changes and return to the top level Setup menu.

4.2.3.1. Saving Changes

Once all the appropriate changes have been made in the setup menu, push **Save and Exit** button to save the changes.

4.2.3.2. Undo Changes

The **Undo Changes** option can be used when changes have been made in the setup menu but the user no longer wants to apply these changes and wishes to revert to the original settings. As long as the changes have not been saved, the user can revert back to the original settings by pushing the **Undo Changes** button.

4.2.3.3. Exit

The **Exit** option can be used to exit the setup menu without saving or reverting changes

4.2.4. Performing a SHAFT Test

Entering the **SHAFT Test** mode enables the user to test the rotary encoders on the front of the CP-2272E control panel. To enter Shaft Test mode, push the **SHAFT Test** button.

The two last button columns on the right side of the panel display 0s. The following is a list of the items displayed on the second screen. Each row corresponds to a shaft encoder; the following table identifies the corresponding row and shaft encoder:

Screen Display	Shaft Encoder
Shaft Test	
0 0	Top Encoder (1)
0 0	
0 0	Middle Encoder (2)
0 0	
0 0	Middle Encoder (3)
0 0	
0 0	Bottom Encoder (4)
0 0	

The purpose of this test is to check the general functionality of each individual encoder. Watch the display as you turn and push each encoder; the values on the screen should change for the corresponding encoder. Rotating the encoder knob will increase (clockwise) and decrease (counter-clockwise) numbers displayed in the column and row for the selected encoder. Pushing the encoder knob in will increase the value of the first and second digits in increments of one.

4.2.5. Exit

Pushing any button on the CP2272E will exit the SHAFT Test menu.

4.2.6. Performing a KEY Test

Entering **KEY Test** mode enables the user to test that all 72 LCD buttons are functioning properly on the front of the CP-2272E control panel. To enter Key Test mode, push the **KEY Test** button from the main menu.

After pressing the KEY test button, all 72 LCD buttons should continuously flash and illuminate to indicate that all buttons are functioning properly.

To test each individual button, push one of the buttons and the flashing test should stop. The user can now test the functionality of each individual button. Pressing a button should illuminate it and key information for that button will be shown in the second display screen.

For example,

Key Test	
4 down 1	- indicates button ID #4 has been pushed down 1 time
4 up 1	- indicates button ID #4 has been depressed 1 time

To exit this test mode, push in the top right rotary encoder and you will return to the main engineering menu.

4.2.7. Performing a GPI Test

Entering **GPI Test** mode enables the user to view and test the presence of the General Purpose Inputs. To enter GPI Test mode, push the **GPI Test** button from the main

A list of GPIs will appear on buttons in the top, middle section of the panel. GPI button status colour will change as each GPI is triggered from the joystick port.

To exit this test mode, press button **Back** button and you will return to the main menu.

4.2.8. Performing a TFT Test

To enter TFT Test mode, push the **LED Test** button from the main menu. TFT test mode enables the user to check that the two TFTs are functioning properly. The user can toggle through different states to ensure the TFTs will be illuminated properly during normal operation. Each TFT will have buttons that trigger different tests for the TFT. Push a button with the test name you want to perform to trigger the test.

To exit the **TFT Test**, push the Exit button.

4.2.9. Controls

To enter the Controls Mode, push the **Controls** button from the main menu. The Controls mode enables the user to adjust LCD Intensity, TFT Intensity, Invert Text, Big Font, LCD Bold.

To change a value, push the button containing the value you want to change and use top level rotary encoder to change the value.

Menu Item	Menu Description
LCD Intensity	Sets the intensity level for the LCD buttons
TFT Intensity	Sets the intensity level for the TFTs
Invert Text	Inverts the text on the LCD buttons
Big Font	Uses all 3 lines for mnemonics that do not exceed 5 characters
LCD Bold	Sets text to bold

4.2.10. Exit Control

Selecting the **EXIT** option from the main engineering menu will return the user to the regular operation of the system.

4.2.11. Reboot Control

Selecting the **REBOOT** option from the main engineering menu will shut down and restart the panel.

4.2.12. Shutdown Control

Selecting the **Shutdown** option from the main engineering menu will completely shut down the panel

5. SYSTEM CONFIGURATION

5.1. UPGRADING THE CP-2272E PANEL

5.1.1. System Requirements

1. The user must have a laptop or PC connected to the same network as the CP-2272E.
2. In order to run the EQX / MAGNUM, you must have one of the following browsers installed on your machine: Firefox, Chrome or Safari.

5.1.2. Identifying the IP Address

The IP Address can be identified using the procedure outlined below or by referring to section 4.2.1.1.

1. To identify the IP address, hold down the top and bottom rotary encoders (T1 and BM4) for approximately 6 seconds.
2. When the main engineering menu appears, push to the **SETUP** menu button.
3. Next, select the **IP Addr** option and push in the *Menu* rotary encoder once again. Obtain the IP address, which will appear on the third display screen.
4. At this time, ensure that one of the above mentioned browsers from section 5.1.1 is installed on your machine.



Please note that the CP-2272E and the PC must be on the same network.

5.1.3. Upgrading Firmware on the CP-2272E

1. To upgrade firmware using the web interface, open a firefox web browser and enter the IP address of the CP-2272E into the address field, and then press the *<enter>* key. The *CP-2272E Web Updater* screen will appear, as shown in Figure 5-1.

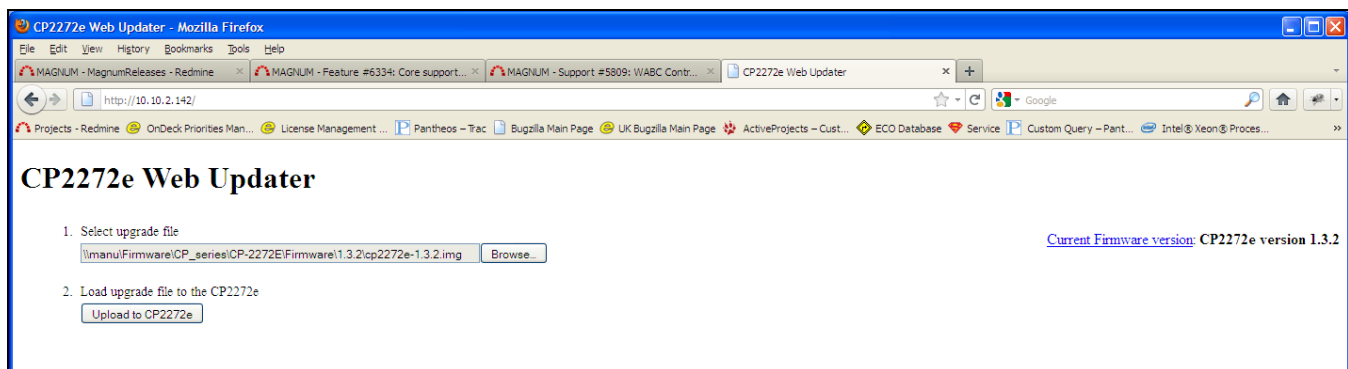


Figure 5-1: CP2272e Main Screen

- Using the **Browse...** button, navigate to the .img firmware file that you wish to update (Example: up-1.1.0.img).
- The user can load the upgrade file to the CP-2272E control panel by pressing the **Upload to CP2272e** button that appears once the file is selected. The firmware on the panel will now be updated and an uploading message will be displayed in the window as shown in Figure 5-2. Please be patient as this process may take several minutes.

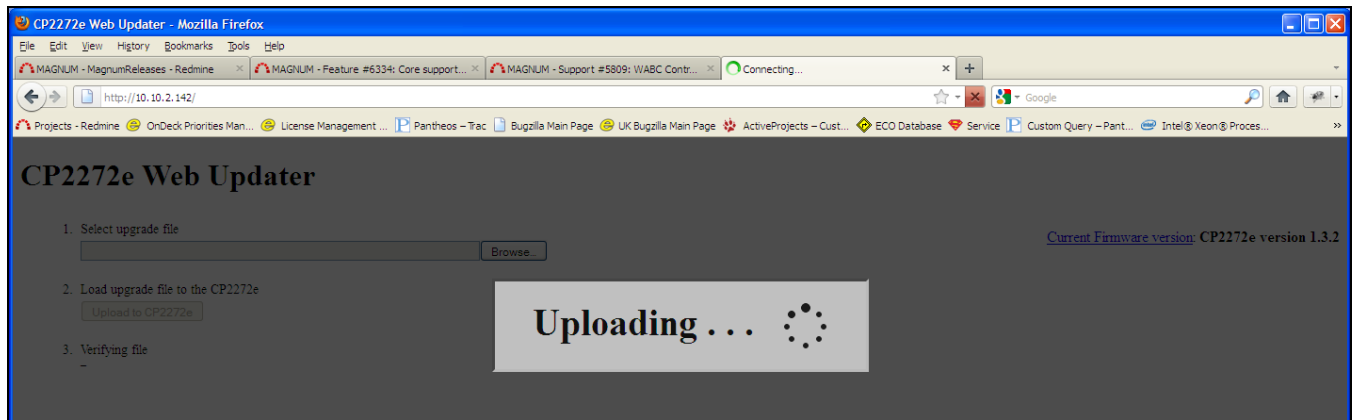


Figure 5-2: Uploading Progress Window

- When the firmware has been successfully uploaded, click on the **Upgrade the CP2272e** button, as shown in Figure 5-3. Selecting this button will upgrade the firmware file using the .img file you previously loaded.

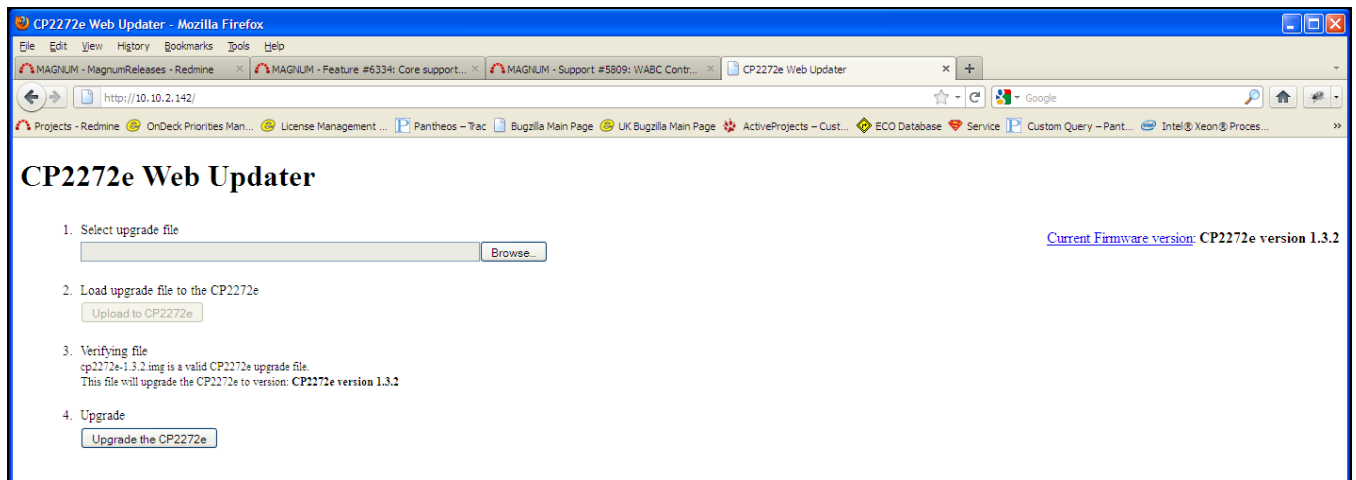


Figure 5-3: Upgrade the CP2272e

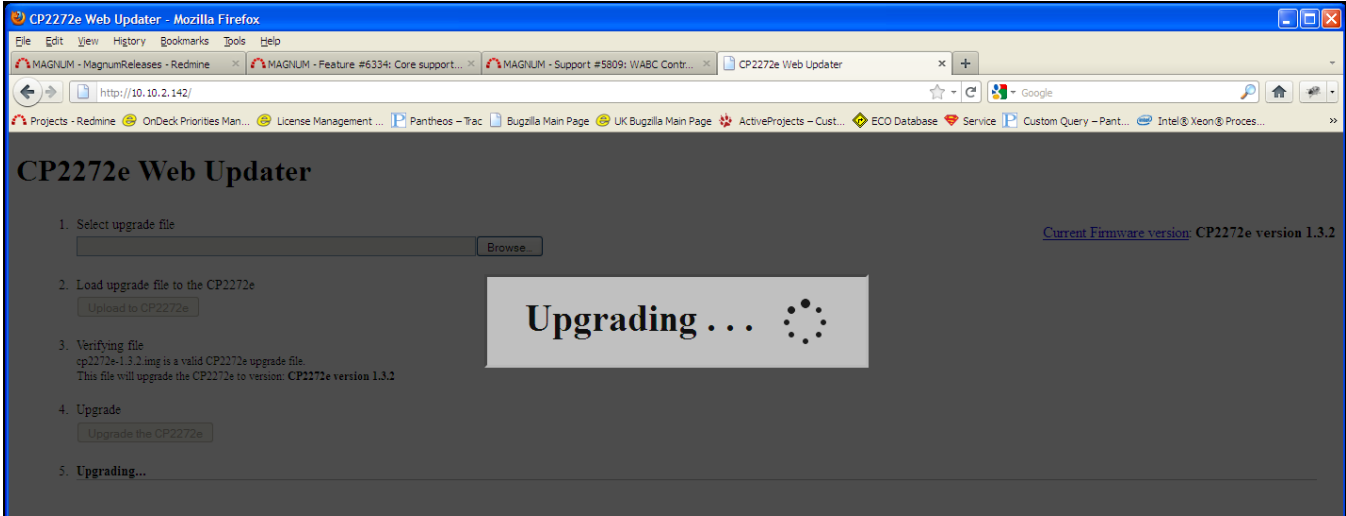


Figure 5-4: Upgrading Progress Window

5. Once the panel has been upgraded a message will be displayed to inform the user of a successful upgrade, as shown in Figure 5-5.
6. In order for firmware changes to take effect, the user must restart the CP-2272E control panel.

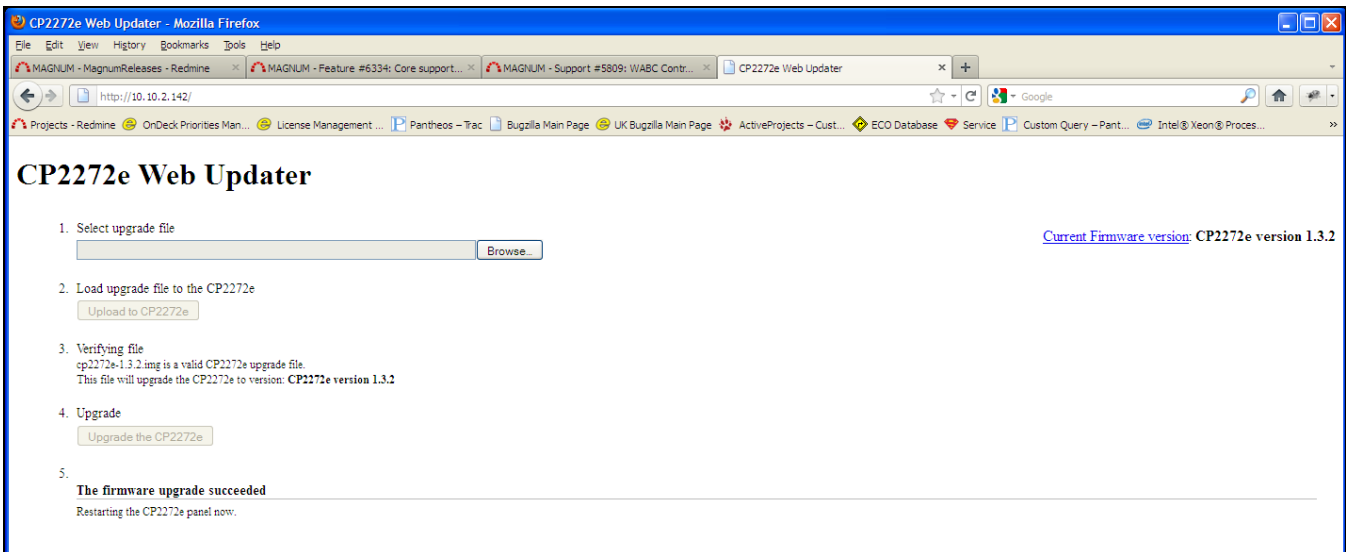


Figure 5-5: Successful Firmware Upgrade

5.1.4. Navigating to the Panel Configuration Page

The user can configure the CP-2272E using the EQX Server / MAGNUM Web Configuration Tool. The CP2272E will display “No Comms” if the panel cannot connect to the EQX / MAGNUM server.

1. Launch your EQX server / MAGNUM Web Configuration Tool in a web browser and log in to the server.
2. Navigate to the **Interfaces** menu, Single Profile and then select the **Add** button.
3. Enter the Name and IP address of the panel, select CP2272E as the panel type.

The screenshot shows a web-based configuration window titled "Add Single-Profile Panel". It features a form with the following fields:

- Name**: A text input field with an asterisk indicating it is required.
- IP Address**: A text input field with an asterisk indicating it is required.
- Model**: A dropdown menu currently showing "<none>".
- Clone**: A dropdown menu currently showing "<none>".

Below the form, a legend states: "* = required". At the bottom right of the window, there are two buttons: "Add" and "Done".

4. Click the **Add** button to complete the panel addition.
5. Select the newly added CP2272E on the **Interface** page and click the edit button.
6. An **Interface Layout: CP-2272E** page will appear enabling the user to apply button key settings to the panel.

The screenshot displays the MAGNUM configuration interface for CP2272E. At the top, there is a navigation menu with options like HOME, SYSTEM, NAMES, INTERFACES, REPORTS, CONTROLS, ADMIN, and HELP. The main title is "Interface Layout: CP2272E - 1". Below this is a grid for configuring the interface layout. To the right of the grid are two black rectangular areas, each with a circular control knob. Below the grid is a "Sources" and "Destinations" section with a table listing 16 virtual devices. The table has columns for Order, Availability, Device, Port, Global Name, and Nameset Name. All devices are currently marked as "Unavailable". To the right of the table are "Key Settings" and "Subpanel Defaults" panels. The "Key Settings" panel includes fields for Type, Auto-Menu, Data, Legend, Attachment, and Subpanel. The "Subpanel Defaults" panel includes fields for Subpanel, Level(s), Destination, Highlight, Joystick Ports, and Key Colors.

Order	Availability	Device	Port	Global Name	Nameset Name
1	Unavailable	VIRTUAL	1	HDCAM01	HDCAM01
2	Unavailable	VIRTUAL	2	HDCAM02	HDCAM02
3	Unavailable	VIRTUAL	3	HDCAM03	HDCAM03
4	Unavailable	VIRTUAL	4	HDCAM04	HDCAM04
5	Unavailable	VIRTUAL	5	HDCAM05	HDCAM05
6	Unavailable	VIRTUAL	6	HDCAM06	HDCAM06
7	Unavailable	VIRTUAL	7	HDCAM07	HDCAM07
8	Unavailable	VIRTUAL	8	HDCAM08	HDCAM08
9	Unavailable	VIRTUAL	9	HDCAM09	HDCAM09
10	Unavailable	VIRTUAL	10	HDCAM10	HDCAM10
11	Unavailable	VIRTUAL	11	HDCAM11	HDCAM11
12	Unavailable	VIRTUAL	12	HDCAM12	HDCAM12
13	Unavailable	VIRTUAL	13	HDCAM13	HDCAM13
14	Unavailable	VIRTUAL	14	HDCAM14	HDCAM14
15	Unavailable	VIRTUAL	15	HDCAM15	HDCAM15
16	Unavailable	VIRTUAL	16	HDCAM16	HDCAM16

Figure 5-6: CP-2272E Configuration Interface in EQX Server

- The user can assign a function to each button on the control panel by selecting the button on the interface and then using the **Type** drop down menu in the *Key Settings* window to select an item from the list. The drop down menu provides various functions to choose from as shown in Figure 5-7 and described in Table 5-1.

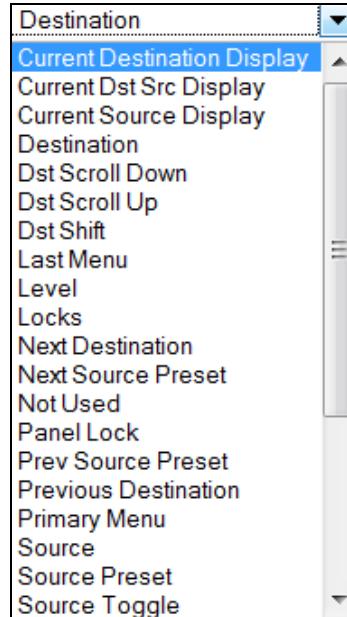


Figure 5-7: Type Drop Down Menu

Type	Description
Current Destination Display	Displays the name of the current destination selected.
Current Dst Src Display	Displays the name of the source routed on the current selected destination.
Current Source Display	Displays the name of the current source routed on a specific destination. The specific destination is defined during configuration.
Destination	Destination button.
Dst Scroll Down	Scroll down to the next available page of destinations.
Dst Scroll Up	Scroll up to the next available page of destinations.
Last Menu	Revert back to last selected menu.
Level	Toggles the level <i>on/off</i> to affect possible breakaways on subsequent takes. Displays the level name.
Locks	Allows access to the locks functionality.
Next Destination	Select the next available destination.
Next Source Preset	Select the next preset source.
Not Used	Defines the button as not being used.
Panel Lock	Locks the panel from accidental button pushes.
Prev Source Preset	Select the previous preset source.
Previous Destination	Select the previous preset destination.
Primary Menu	Allow creation of menus for source or destination groupings.

Source	Source button.
Source Preset	Preset a source, requires a Take confirmation before source is routed.
Source Toggle	This key toggles sources.
Src Scroll Down	Scroll down to the next available page of destinations.
Src Scroll Up	Scroll up to the next available page of destinations.
Static Destination	Destination button is not affected by destination order list changes; it will always be locked to the assigned position.
Static Source	Source button is not affected by source order list changes; it will always be locked to the assigned position.
Static Source Preset	Source Preset button is not affected by source order list changes; it will always be locked to the assigned position.
System Salvo	This key type allows one of the system salvos (defined by the salvo combo box) to be fired.
Take	This key takes the current preset source selection to the current destination on all the currently enabled levels. The button will display the currently routed source on the lowest enabled level, unless a legend is given to this key.
Take Clear	Clears the source preset after take.

Table 5-1: Type Drop Down Menu

8. A fully populated interface will look similar to the configuration shown in Figure 5-8.

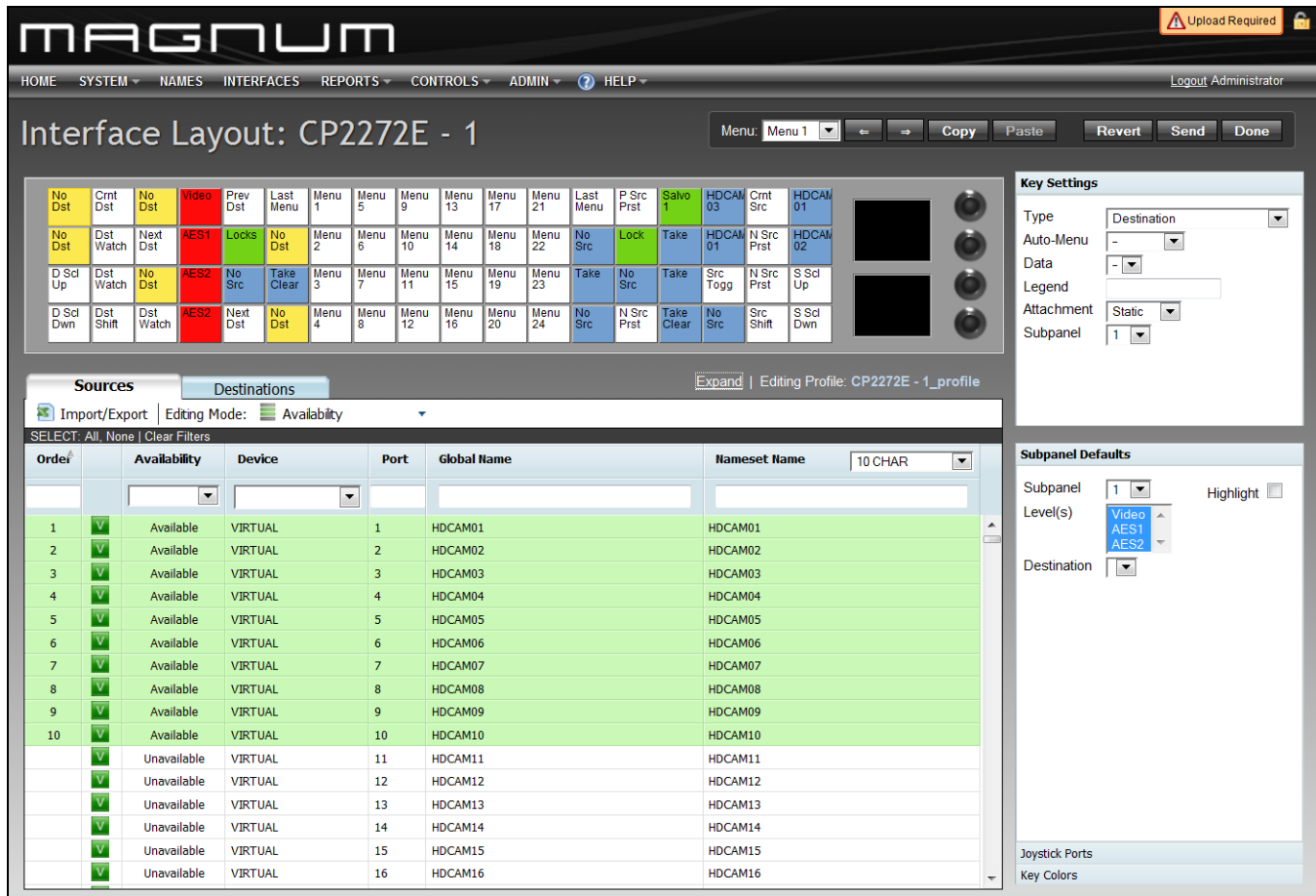


Figure 5-8: Populated Control Panel Interface

- The user can move the location of the buttons by selecting a button and holding the mouse down, then dragging the button to the desired location and releasing the mouse button to drop the button into place. Please refer to Figure 5-9.

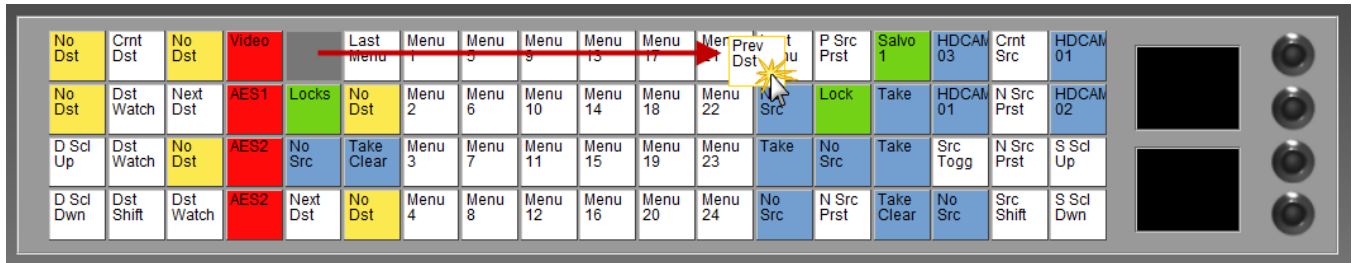


Figure 5-9: Moving Buttons using Drag and Drop

- In order to save and send the changes made on the interface to the actual CP-2272E panel, the user must select the **Send** button. When the **Send** button is selected, the button assignments will be transferred to the physical CP-2272E control panel.

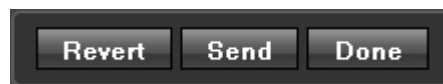


Figure 5-10: Control Buttons

- If the user has made changes and wishes to revert to the original panel layout, select the **Revert** button to clear the panel and switch back to its original configuration.
- Once all the changes are complete and have been sent to the physical CP-2272E control panel, the user can select the **Done** button to save the configuration and return to the main interface page.
- The CP2272E will display “Loading Configuration” on the buttons when the configuration has been sent to the panel.

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