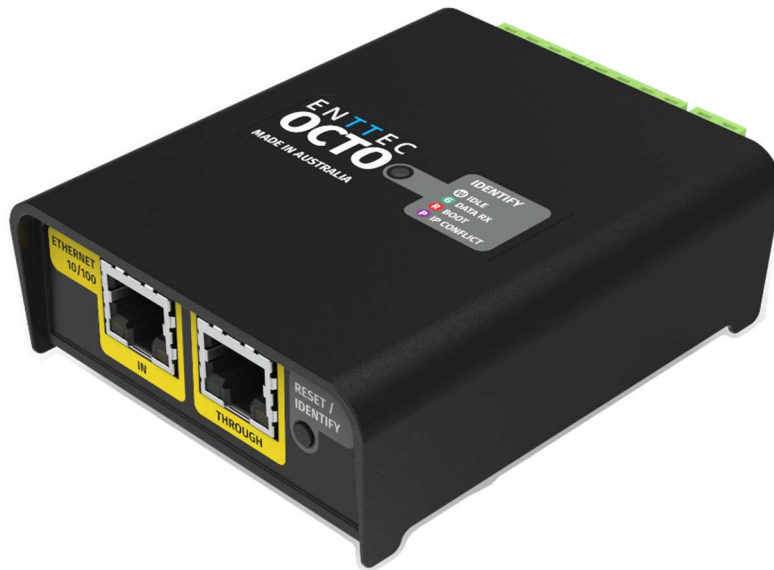


# OCTO – User Guide

8 universe eDMX to LED pixel controller with network chaining in a compact 4-module DIN-rail form factor



ENTTEC’s OCTO is a robust and reliable installation grade LED controller engineered to take any architectural, commercial or entertainment project to the next level.

With 8 universes of eDMX to pixel protocol conversion and network chaining between devices, the OCTO allows for fast deployment of LED strips and pixel dot systems compatible with a wide range of devices.



The OCTO is packed with installer-friendly features such as an identify button to check correct wiring, temperature monitoring, a wide input voltage range and intuitive configuration and management through its localhost web interface. All contained within a 4 DIN unit form factor.

The inbuilt Fx engine allows users to edit and create presets, using the OCTO’s web interface that can be configured to run standalone at power up.

## FEATURES

- **Two \* 4-universe pixel outputs with Data and Clock support.**
- **Support for up to 8 universes of Art-Net, sACN, KiNet and ESP.**
- **Easily extendable network - daisy chain ethernet connection between devices.**
- **DHCP or Static IP address support.**
- **Multiple pixel protocols supported, see: [www.enttec.com/support/supported-led-pixel-protocols](http://www.enttec.com/support/supported-led-pixel-protocols) .**
- **Surface or TS35 DIN rail mounting option.**
- **Intuitive device configuration and updates through the inbuilt web interface.**
- **Test/Reset button allows installers to quickly check wiring is correct without requiring a network connection.**
- **Simple Fx generator mode to create and execute preset effects on the fly, configurable to play from power up.**
- **Grouping functionality to reduce input channel count.**

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**Ensure you are familiarized with all key information within this guide and other relevant ENTTEC documentation before specifying, installing, or operating an ENTTEC OCTO. If you are in any doubt about system safety, or you plan to install ENTTEC's OCTO in a configuration that is not covered within this guide, contact ENTTEC or your ENTTEC supplier for assistance.**

**ENTTEC's return to base warranty for this product does not cover damage caused by inappropriate use, application, or modification to the product.**

## Electrical safety



- This product must be installed in accordance with applicable national and local electrical and construction codes by a person familiar with the construction and operation of the product and the hazards involved. Failure to comply with the following installation instructions may result in death or serious injury.
- This device can be damaged by excess voltage outside the operating range defined within this products datasheet.
- To reduce the risk of fire or electrical faults do not exceed the ratings and limitations defined in the product datasheet or this guide.
- Provide a means of locking out power to your installation for system servicing and maintenance.
- Before applying power to your installation, ensure your installation follows the wiring schematics defined within the guide.
- Ensure there are no opportunities for cables to short circuit and cabling cannot be snagged or pulled.
- Do not over stretch cabling to the OCTO's connectors and ensure that cabling does not exert force on the PCB.
- Before applying power to your installation, check that all power distribution equipment and cables are in perfect condition and rated for the current requirements of all connected devices and factor in overhead.
- Isolate your installation from power immediately if accessories power cables or connectors is in any way damaged, defective, shows signs of overheating or are wet.
- Do not 'hot swap' or 'hot plug' power to the OCTO or its accessories.
- Shut down power to the installation during cleaning or when the system is not in use.
- Before connecting OCTO's to a power supply, verify that it is appropriately fused and voltage is compatible.
- Ensure that no part of the installation is or can be connected to power until all work is complete.
- Isolate the installation from power immediately if the OCTO, its connectors, or power cables are in any way damaged, defective, show signs of overheating or are wet.
- Always refer to this product's safety notes and installation guidelines before handling or specifying it on your project.
- Do not leave loose wires around this device whilst in operation, this could result in short circuiting.
- Do not connect this device to a dimmer pack or mains electricity.
- Do not connect any of this devices DG V- (GND) connectors to earth.
- Ensure your installation is protected from short circuits and overcurrent.
- Ensure all connections are complete and secure before providing power to the device.

## System planning and specification



- To contribute to an optimal operating temperature, where possible keep this device out of direct sunlight.
- Pixel data is unidirectional. Ensure that your OCTO is connected to your pixel dots or tape in a way that ensures data is flowing from the OCTO to the 'Data IN' connection of your pixels.
- The maximum recommended cable distance between the OCTO's data output and first pixel is 3m (9.84ft). ENTTEC advises against running data cabling close to sources of electromagnetic interference (EMF) i.e., mains power cabling / air conditioning units.
- This unit has an IP20 rating and is not designed to be exposed to moisture or condensing humidity.
- Ensure this device is only operated within the specified ranges within the product datasheet.

## Installation

- Installation of this product must be performed by qualified personnel. If ever unsure always consult a professional.
- Always work with a plan of the installation that respects all system limitations as defined within this guide and product datasheet.
- Keep the OCTO and its accessories in its protective packaging until final installation.
- Note the serial number of each OCTO and add it to your layout plan for future reference when servicing.
- All network cabling should be terminated with an RJ45 connector in accordance with the T-568B standard.

## Protection from injury during installation



- Always use suitable personal protective equipment when installing ENTTEC products.
- Once installation is completed, check that all hardware and components are securely in place and fastened to supporting structures.

## Installation safety guidelines

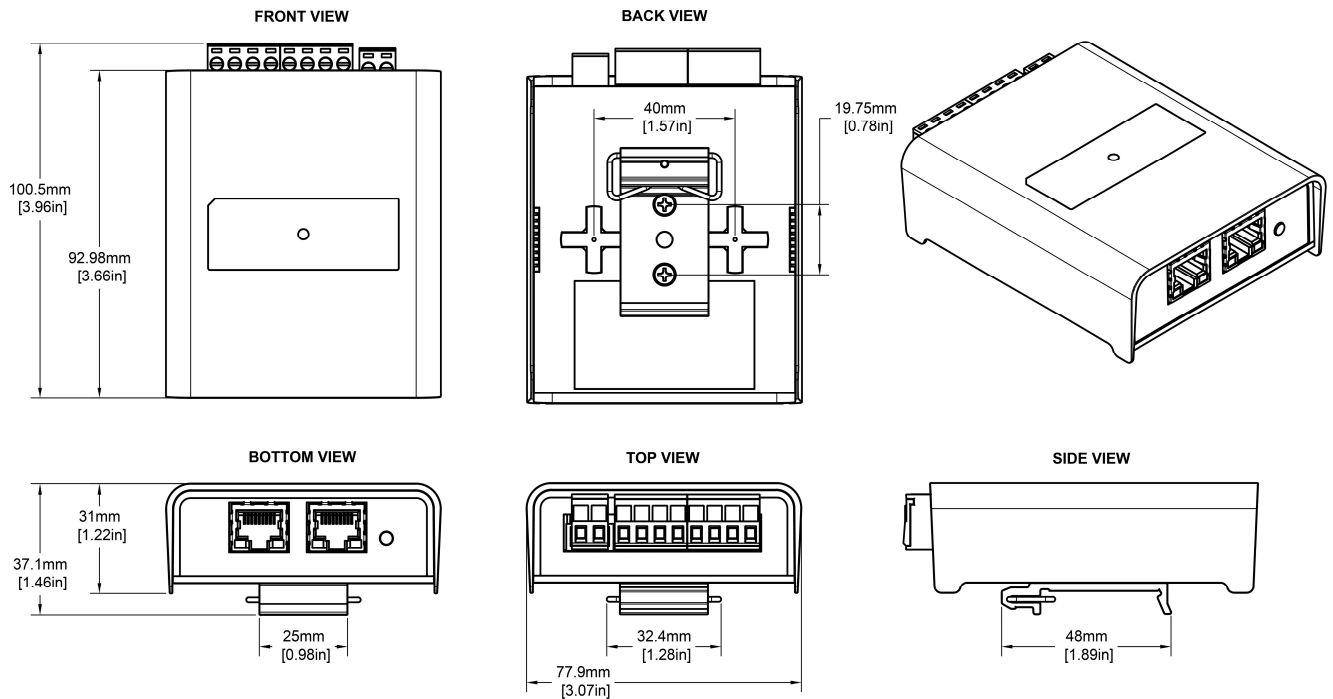


- The OCTO is convection cooled, ensure it receives sufficient airflow so heat can be dissipated.
- Do not cover the OCTO with insulating material of any kind.
- Do not operate the OCTO if the ambient temperature exceeds 50° C (122° F).
- Do not cover or enclose the OCTO without a suitable and proven method of dissipating heat.
- Do not install the OCTO in damp or wet environments.
- Do not modify the OCTO hardware in any way.



- Do not install the OCTO if you see any signs of damage.
- Do not handle the OCTO in an energized state.
- Do not crush or clamp the OCTO during installation.
- Do not sign off a system without ensuring all cabling to the OCTO and accessories has been appropriately restrained, secured and is not under tension from the way it has been installed.

## Physical dimensions

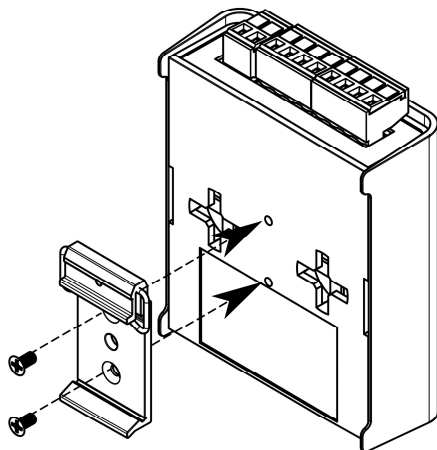


**Note:** The OCTO is 4 DIN modules wide.

## Mounting options

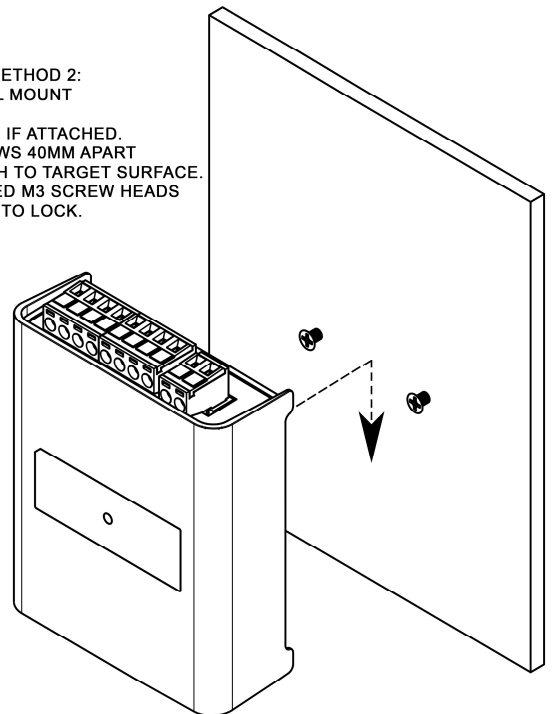
### MOUNTING METHOD 1: DIN RAIL MOUNT

ATTACH DIN RAIL CLIP WITH  
TWO M3X8 COUNTERSUNK  
PH2 PHILLIPS DRIVE SCREWS  
ATTACH UNIT TO A SUITABLE TS35 DIN RAIL.



### MOUNTING METHOD 2: WALL/PANEL MOUNT

REMOVE DIN CLIP IF ATTACHED.  
SPACE 2X M3 SCREWS 40MM APART  
HORIZONTALLY AND ATTACH TO TARGET SURFACE.  
MOUNT UNIT TO EXPOSED M3 SCREW HEADS  
SLIDE DOWN TO LOCK.

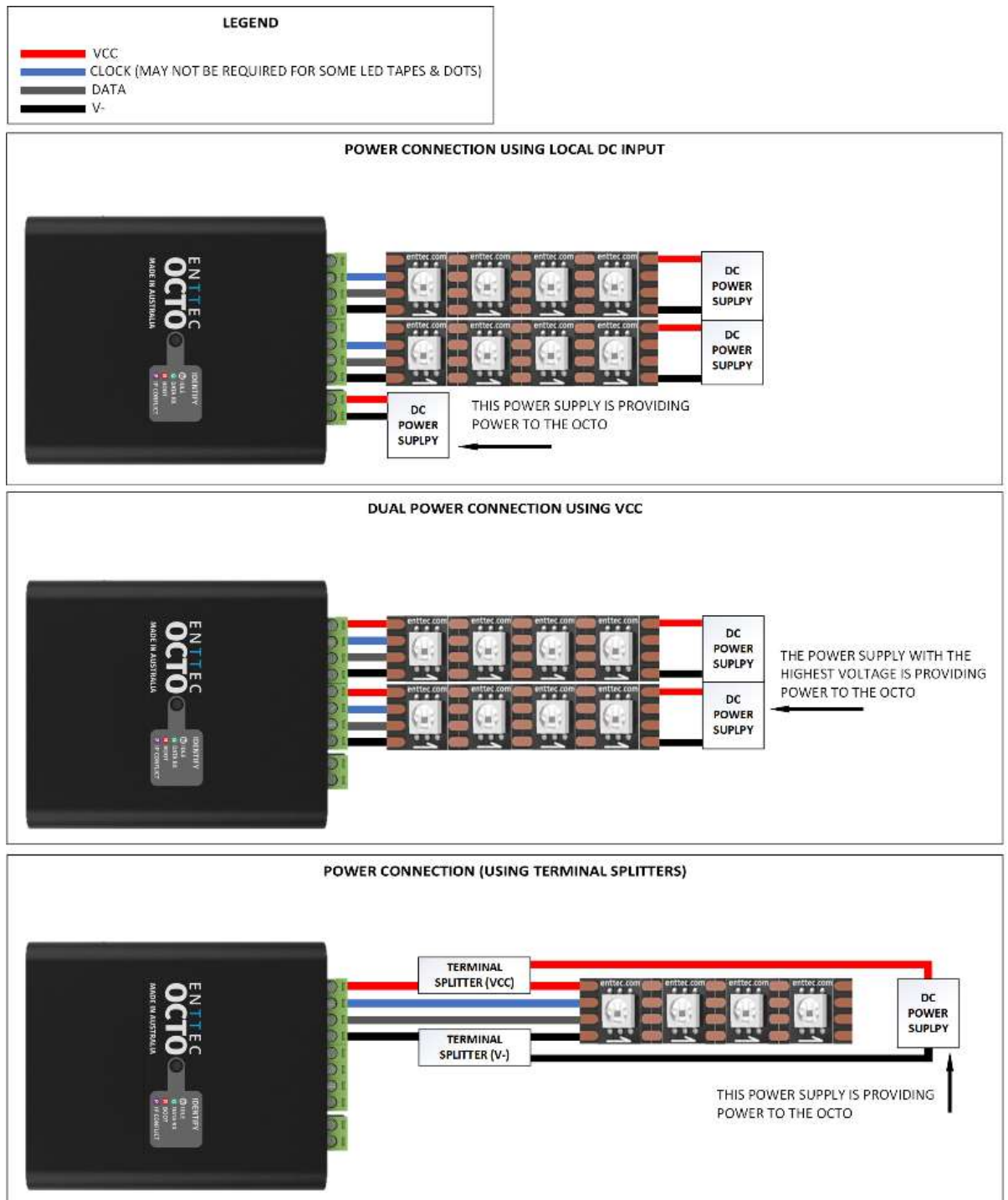


**Note:** The surface mount tabs have been designed to hold the weight of the OCTO only, excess force by caused by cable strain can cause damage.

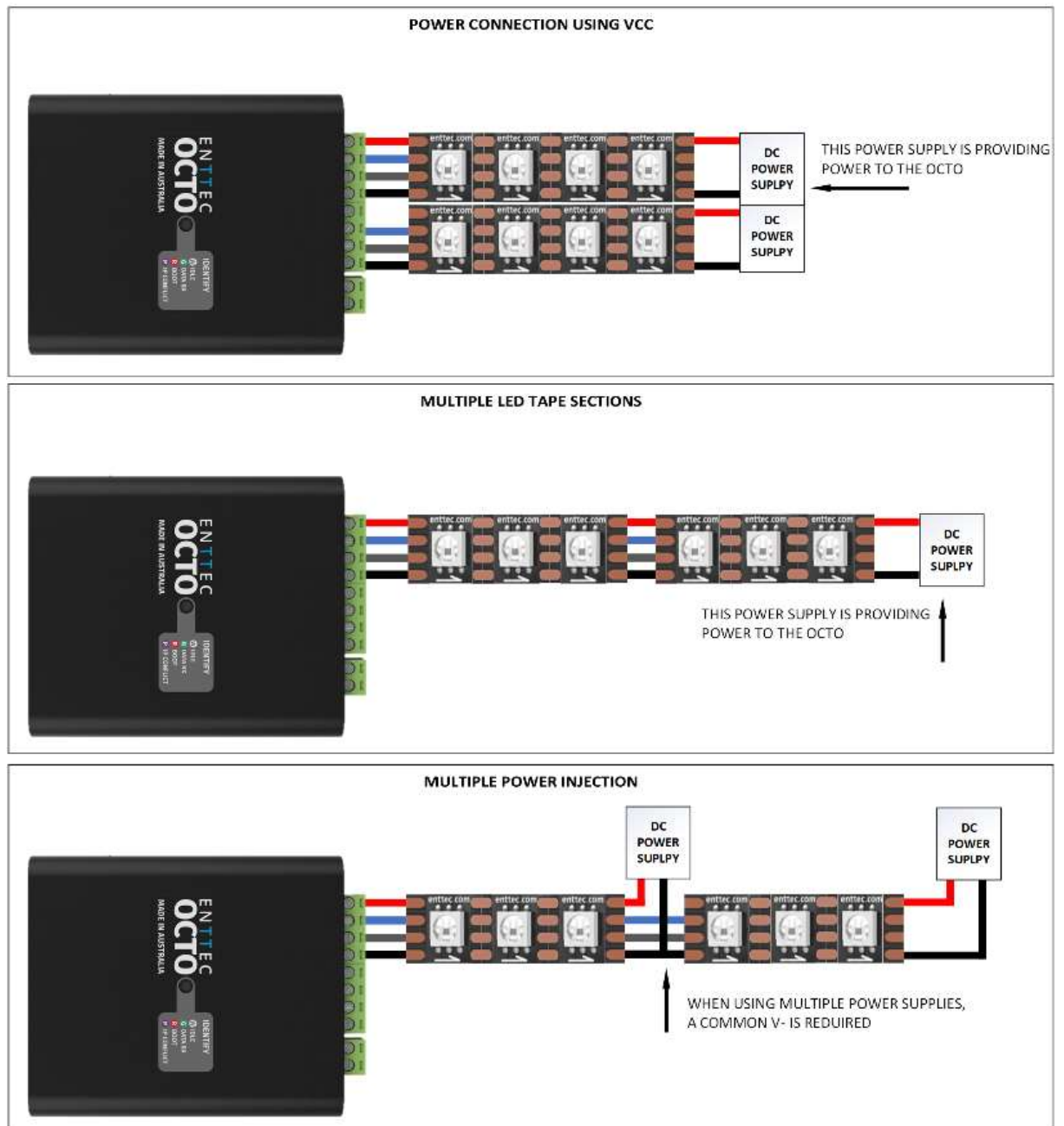
## Wiring diagrams



- Locate the OCTO and PSU as close as possible to the first pixel in your chain to reduce the impact of voltage drop.
- To reduce the likelihood of voltage or Electro Magnetic Interference (EMI) being induced on the control signal lines, where possible, run control cabling away from mains electricity or devices that produce high EMI, (i.e., air conditioning units). ENTTEC recommends a maximum data cable distance of 3 meters. The lower the cable distance, the lower the impact of voltage drop.
- To ensure a reliable connection, ENTTEC recommends the use of cable ferrules for all stranded cables connected to the OCTO's screw terminals.







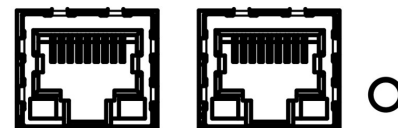
## Functional features

- The OCTO supports the following input protocols:
  - Art-Net
  - Streaming ACN (sACN)
  - KiNET
  - ESP
- The OCTO is compatible with synchronous and asynchronous pixel protocols. For the latest list please refer to: [www.enttec.com/support/supported-led-pixel-protocols/](http://www.enttec.com/support/supported-led-pixel-protocols/).
- RGB, RGBW and White Pixel Order support
- User-friendly interface to create and execute live effects on the fly
- Save effects to play from power up.
- Maximum output refresh rate is 46 frames per second.



## Hardware features

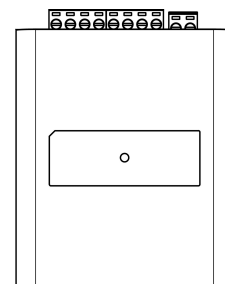
- Electrically insulated ABS plastic housing.
- Forward facing LED status indicator.
- Identify / Reset button.
- Pluggable terminal blocks.
- Link & Activity LED indicator built into each RJ45 port.
- Easily extendable network – daisy chain up to 8 units if the output is in direct mode to ensure sync between pixels. If using in Standalone mode, a maximum of 50 devices can be linked per chain.
- Surface mount or TS35 DIN mount (using provided DIN Clip accessory).
- Flexible wiring configuration.
- 35mm DIN rail accessory (**included in packaging**).



## LED status indicator

The LED status indicator can be used to determine the OCTO's current state. Each state is as follows:

LED Color	OCTO Status
White (static)	Idle
Green over White	Direct mode data receiving
Black over White	Standalone mode
Red over Green	Multiple merge sources
Purple (static)	IP conflict
Red	Device in boot / error



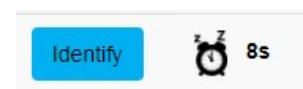
## Identify / Reset button

As the name suggests, this button can be used to either:

- Identify pixels connected to a specific OCTO without the need to provide control data.  
*When the button is pressed in standard operation, all 8 output universes are set to output the highest value (255) for 10 seconds before resuming their previous state. This is a good test to ensure all outputs are connected and working as intended.*

**Node:**

*The timer will not restart when pressed consecutively.*



- Reset the OCTO (Refer to the [Reset OCTO](#) section).

## Default IP

Out of the box, the OCTO is factory configured to use DHCP. You can plug it into your existing router, and it's good to go.

If the OCTO cannot obtain an IP address using DHCP, or the router is slow to assign an IP address to the OCTO, it falls back to its default static IP Address.

### Note:

The IP address can easily be by converting the last 6 characters in the MAC address:

**10.(X).(Y).(Z)**

Where X, Y & Z are the last three octets bytes of the MAC address in decimal.

### Example:

If the MAC address is **00:50:C2:FF:FF:55** the last 6 characters are **FF**, **FF** and **55**.

- **FF** converted from hexadecimal to decimal is: **255**
- **FF** converted from hexadecimal to decimal is: **255**
- **55** converted from hexadecimal to decimal is: **85**

### So:

The OCTO's with MAC address **00:50:C2:FF:FF:55** has a default static IP is: **10.255.255.85**

The built-in web interface of the OCTO can be accessed using the IP address via any modern web browser. The web-interface allows the settings of the unit to be changed.

## Finding an OCTO's IP address using ENTTEC NMU

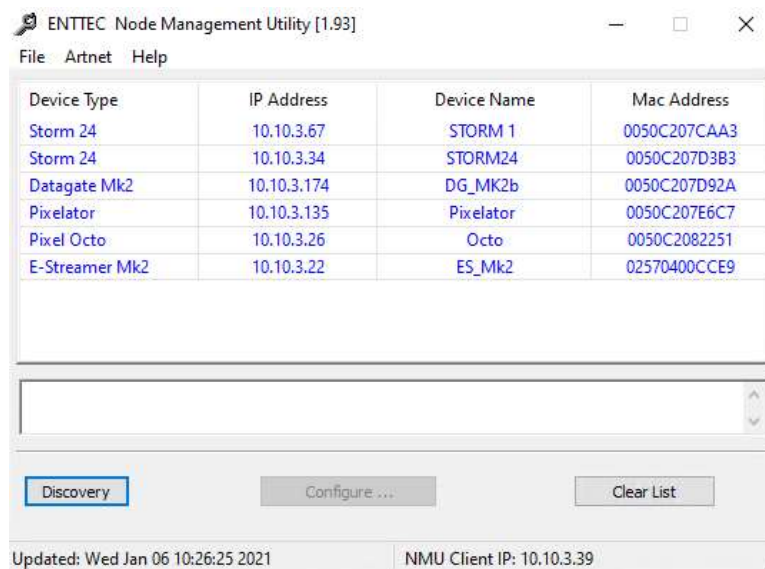
ENTTEC provides a free App (available for Windows and Mac) called NMU (Node Management Utility) that finds the OCTO and display its IP address.

### Note:

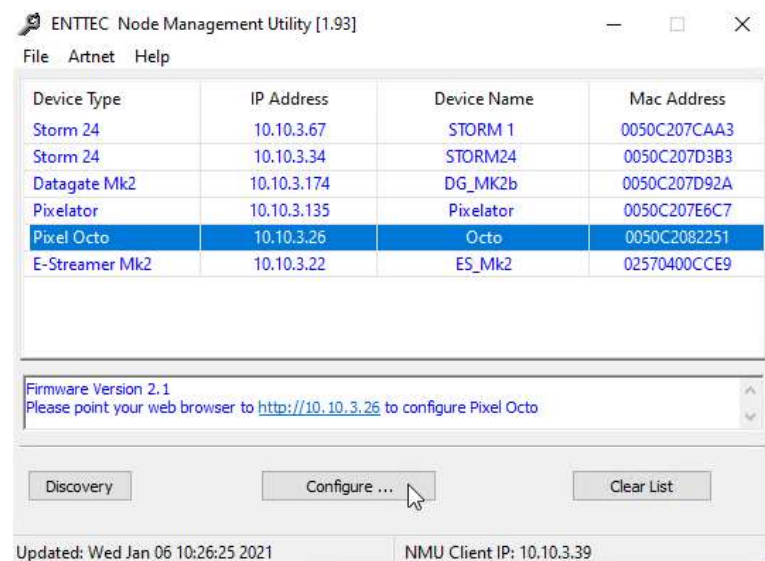
The OCTO is only supported by **NMU V1.93** and above.

To discover a device using ENTTEC NMU follow the steps below:

1. Download NMU from [www.enttec.com](http://www.enttec.com).
2. OCTO should be connected physically by an Ethernet cable to the same physical network or router as the computer that is running NMU.
3. Open NMU. If prompted to select a network interface, select the correct one to which the OCTO is connected to.
4. Press the **Discovery** button and wait till NMU finds all supported ENTTEC devices.



5. Once found, select your device then press 'configure' to access the web-interface.



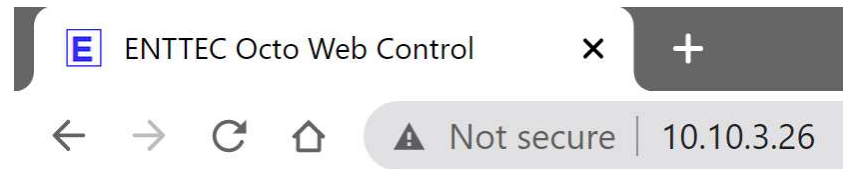
## Web configuration

The OCTO can be configured and controlled through a web browser, running on a computer system, located on the same Local Area Network (LAN).

**Note:**

A Chromium based browser is recommended for accessing the OCTO web interface.

Either click on the underlined URL displayed in NMU or type the IP address (as detected by NMU e.g.: 10.10.3.26) into your web browser to access the web interface.



The top menu allows all the OCTO web pages to be accessed.



Menu option is highlighted blue to indicate which page the user is on.

The web interface shows the word Direct or Standalone depending on the mode the device is in, as displayed in the images below:



## Home

The Home tab displays the following information:

- DHCP status – whether enabled
- IP address
- Netmask
- Gateway
- Mac Address
- Link Speed
- Device Name
- Firmware version on device
- Serial number of the device
- Internal temperature of the processor
- System uptime
- Input protocol set on device
- Output LED protocol set on device

### Octo - Home

Network Information ⓘ	
DHCP:	<b>Enabled</b>
IP Address:	<b>10.10.3.26</b>
NetMask:	<b>255.255.255.0</b>
Gateway:	<b>10.10.3.254</b>
Mac Address:	<b>00:50:c2:08:22:51</b>
Link Speed:	<b>100 Mbps</b>

System Information ⓘ	
Node Name:	<b>Octo</b>
Firmware Version:	<b>ENTTEC Octo Firmware V2.1</b>
Serial No:	<b>c2082251</b>
Internal Temperature:	<b>35.4 °C</b>
System uptime:	<b>19 mins, 48 secs</b>
Input Protocol:	<b>Art-Net</b>
Output Protocol:	<b>APA-102</b>
Personality:	<b>Direct</b>

## Settings

### Octo - Settings

**Network Information** ⓘ

**Node Name:**

**DHCP:**  Use DHCP

**Static IP Address:**  .  .  .

**Static NetMask:**  .  .  .

**Gateway IP:**  .  .  .

**Output Settings** ⓘ

**Led Protocol (Output):**

**Pixel Order:** Output1:  Output2:  [Color Order](#)

**Mapped Pixels:** Output1:  Max Output2:  Max [Number of pixels to drive](#)

**Save & Update** ⓘ

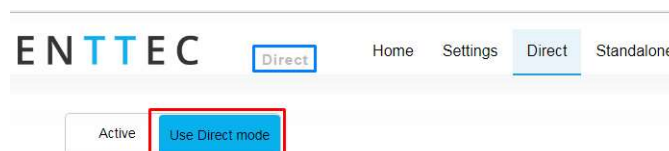
**Save:**  **Factory Default:**  **Device Reboot:**

The Settings page allows a user to do the following:

- Change a device name for identification
- Enable/disable DHCP
- Specify static network settings
- Set the output LED Protocol
- Set the number of mapped pixels
- Configure how colors are mapped to pixels through the **Pixel Order** function.
- Reset to factory defaults
- Reboot the device

## Direct

Direct mode can be activated by clicking on the 'Use Direct mode' button on the Direct page as shown in the image below.



When activated, the word Direct will be displayed next to the ENTTEC logo as shown in the screengrab above:

## DMX protocols

### KiNET

Supported commands:

- Discover device
- Discover ports on device
- Change device name
- Change device IP
- Portout commands
- DMX out commands
- KGet Command
  - KGet Subnet Mask
  - KGet Gateway
  - KGet port universe (port 1 and 2)
  - KSet commands
  - KSet Subnet Mask
  - KSet Gateway
  - KSet port universe (port 1 and 2)
  - KSet device to boot

### Art-Net

Supports Art-NET 1/2/3. Each output port can be assigned a start universe in the range 0 to 32764.

### sACN

Outputs can be assigned a start universe in the range 1-63996 (when universe/output = 4).

#### Note

The OCTO supports a maximum of 1 multicast universe with sACN sync. (i.e., all universes set to the same value)

### ESP

Outputs can be assigned a start universe in the range 0-252 (when universe/output = 4). More details of the ESP protocol can be found at [www.enttec.com](http://www.enttec.com)

## Universes/Outputs

The OCTO converts up to four universes of DMX over Ethernet to pixel data per output.

Both outputs can be specified to use the same universes, e.g., both outputs use universe 1,2,3 and 4.

Each output can also be specified to use its own individual group of universes, e.g., output 1 uses universes 100,101,102 and 103 however output 2 uses 1,2,3 and 4.

Only the first universe can be specified; the remaining universes, second, third and fourth are automatically assigned subsequent universes to the first one.



**Example:**

If the first universe is assigned 9, the second, third and fourth universes will be automatically assigned 10, 11 and 12 as shown in the image below.

## Group pixels

This setting allows multiple pixels to be controlled as one 'virtual pixel'. This reduces the overall amount of input channels required to control pixel strip or dots.

**Example:**

When 'group pixel' is set to 10 on an OCTO connected to a length of RGB pixel strip, by patching a single RGB pixel within your control software and sending the values to the OCTO, the first 10 LED's would respond to it.

**Note:**

The maximum number of physical LED pixels that can be connected to each OCTO is 680 (RGB) or 512 (RGBW). When grouping pixels, the number of control channels required is reduced, **this function does not increase the number of physical LED's each OCTO can control.**

## DMX start address

Selects DMX channel number, which controls the first pixel. When the universes/output is more than one, the DMX start address only applies to the first universe.

However, where it applies, a start address offset may result in the split of a pixel. e.g., R channel in first universe and GB channels in the seconds universe for a RGB LED.

For ease of pixel mapping, ENTTEC recommend offsetting the DMX start address to a number divisible by the number of channels per pixel. i.e.:

- Increments of 3 for RGB (i.e., 1,4,7, 10)
- Increments of 4 for RGBW (i.e., 1,5,9,13)
- Increments of 6 for RGB-16 bit (i.e., 1,7,13,19)
- Increments of 8 for RGBW-16 bits (i.e., 1,9,17,25)

## Standalone

Standalone is to be used to create a looping effect that can be played back from the point the OCTO is powered on. – This can also be of use to test the OCTO's output without the need to send eDMX data.

Standalone can be activated by clicking on the 'Use Standalone mode' button as shown below:



When activated, the word **Standalone** will be displayed next to the ENTTEC logo.

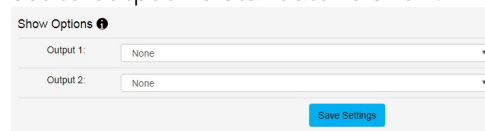
### Note

When operating in Standalone mode:

- 16Bit protocols are not supported
- RGBW tapes are supported but white cannot be controlled.

## Show options – Activating a standalone effect

The OCTO allows the control of standalone effects on both outputs. This is controlled by the Show Options section. Both can be set to output no standalone show:



The outputs can play the same standalone show concurrently:



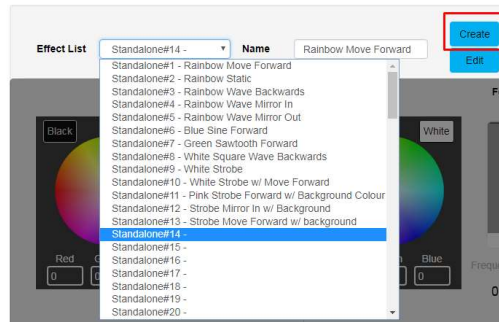
Or each can be set to output a different show:



## Creating a standalone effect

A standalone show can only be created when Standalone mode is activated. Follow the steps below to create a standalone (effect):

1. Select the next available standalone slot and click on the **Create** button



2. Select an output to preview the standalone show on by using the check boxes

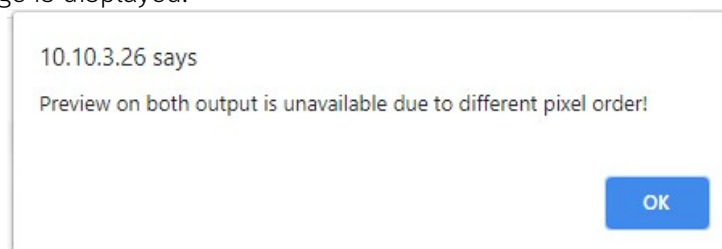


3. If the effect previewed is to be preserved, Type in a name and click on Save Effect button

### Preview standalone effects

OCTO allows the preview of the standalone. Select the output to preview the standalone as shown in the previous image.

If two different colour orders e.g.: RGB on output 1 and WWA in output 2 are assigned you can only preview the effect on one output at a time. If you attempt to preview both outputs the following message is displayed.



### Standalone effects name

Up to 65 characters can be used for a standalone name. All characters are supported except comma (,). The OCTO does not allow a standalone to be saved with an existing name on the list.

## Standalone layers explained

When creating a standalone the light output should be visualized as two layers:

- Background (controls shown in red)
- Foreground (controls shown in blue)



The OCTO has colour wheel support for both RGB WWA (warm white, cool white and Amber) pixel tape

### Background

By only enabling the background layer the pixel tape/dots will respond like a standard RGB tape. The background can be:

- Set to a constant color.
- Dimmed
- Made to strobe

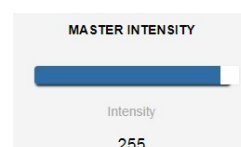
The controllers affect the entire length up to the maximum possible pixels (e.g., 680 3-channel pixels).

### Foreground

This layer creates effects that overlay on the background colour. The foreground can be:

- Set to a constant color.
- Dimmed
- Made to strobe
- Set to create patterns

### Master intensity



Master intensity controls the overall brightness of the output (both for foreground and background). Where:

- 0 – no LEDs ON
- 255 – LEDs on are at full brightness

### Background/ foreground strobe frequency

Controls the time between LED(s) on and off time:

- 0 – LEDs switch on and off at slowest speed
- 255 – LEDs switch on and off at fastest speed

## Background/ foreground strobe duration

Controls the time that the LEDs are on:

DMX fader value	On time
0	Always on
1	Smallest duration
255	Longest duration

## Wave function

The foreground layer can be controlled to form patterns of the following wave functions:

- Sine wave
- Log wave
- Square wave
- Sawtooth wave
- Rainbow Sine Wave
- Rainbow Log Wave
- Rainbow Square Wave
- Rainbow Sawtooth

## Wave direction

The wave pattern can be set to travel. Wave direction setting determines which way the pattern will travel. The wave can be set to move:

- Forward
- Backward
- Mirror out – pattern travelling out of center.
- Mirror in – pattern travelling into center.

## Wave amplitude

This setting determines the brightness of each pixel in a period of the wave.

DMX fader value	Brightness of pixels per wave period
0	Vary between 50% and full
255	Vary between off and full on.

## Wavelength

This setting determines the number of pixels in one period of the wave.

DMX fader value	Wavelength
0-1	2 pixels
2-255	Fader Value

## Wave speed

This setting controls the speed at which the wave pattern travels across tape.

DMX fader value	Speed
0	Minimum speed
255	Maximum speed

## Offset

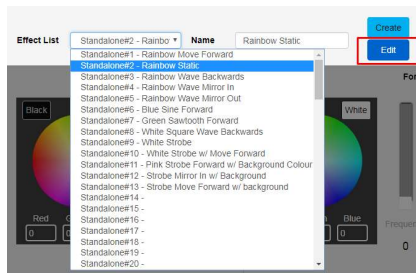
Offset allows the pattern on a port to be delayed.

## Editing a standalone effect

The OCTO allows the editing of any saved standalone effect.

Follow the steps below to edit a standalone:

1. Select the standalone to be edited and click on the Edit button.



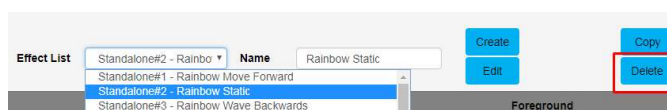
2. Select an output to preview the standalone on by using the check boxes.



4. Edit the standalone
5. If the standalone previewed is to be preserved, click on Save Effect button

## Deleting a standalone effect

Select the standalone to be deleted and press on the Delete button.



The standalone selected for each output will continue to play unless it is deleted; in this case, the standalone directly above will be enabled at the output, which had the deleted show. If there is no standalone above, no standalone will be output.

If a slot without a standalone is deleted the following message is displayed:

10.10.3.26 says

Please select a preset!



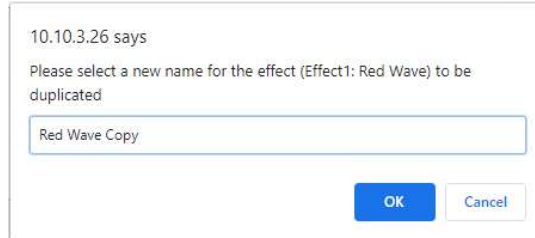
## Copying a standalone show

The OCTO allows the copying of any saved standalone effect. Follow the steps below to copy a standalone effect:

1. Select the effect to be copied and click on Copy button



2. Provide a new name for the copied standalone effect



**Note:**

The OCTO does not permit shows to be saved with the same name.

## Importing and exporting a standalone list

The OCTO allows the import and export of all the standalone shows on the device.

**Note:**

The export file will include a list of all the standalone shows

Please click on Export Effect button to export the standalone shows



Please click on Import Effect button to import the standalone shows





# Network stats

The Network page shows statistics for the DMX protocol enabled.

## Art-Net

The information provided is:

- Poll packets received
- Data packets received
- Sync packets received
- Last IP poll packets were received from
- Last port data received from

Network Protocol: Art-Net ⓘ	
Poll Packets Received:	0
Data Packets Received:	0
Sync Packets Received:	0
Last IP:	0.0.0.0
Last Port:	0

[Refresh](#)

## ESP

The information provided is:

- Poll packets received
- Data packets received
- Last IP poll packets were received from
- Last port data received from

Network Protocol: ESP ⓘ	
Poll Packets Received:	150
Data Packets Received:	708
Last IP:	10.10.3.3
Last Port:	6454

[Refresh](#)

## sACN

The information provided is:

- Data and sync packets received
- Last IP packets were received from
- Last port data received from

Network Protocol: sACN ⓘ	
Data Packets Received:	106
Sync Packets Received:	86
Last IP:	10.10.0.39
Last Port:	5568

[Refresh](#)

## KiNET

The information provided is:

- Total packets received
- Discover supply packets received
- Discover ports packets received
- DMXOUT packets
- KGet packets
- KSet packets
- PORTOUT Packets
- Set device name packet received
- Set device IP packet received
- Set universe packets received
- Last IP received from
- Last port data received from

Network Protocol: KiNET ⓘ	
Total packets received:	2701
Discover Supply packets received:	2
Discover Ports packets received:	2
DMXOUT packets received:	0
KTYPE_GET packets received:	0
KTYPE_SET packets received:	0
PORTOUT packets received:	2685
PORTOUT Sync packets received:	10
Set ID packets received:	1
Set IP Address packets received:	1
Set Universe packets received:	0
Last IP:	10.10.0.127
Last Port:	65379

[Refresh](#)

## Updating firmware

It is strongly recommended that the OCTO is updated with the latest firmware, available on the ENTTEC website. This firmware can be loaded to the driver through its web interface by carrying out the following steps:

1. Browse and select the correct firmware version on your PC

**Firmware Update**

Upload New Firmware: [Browse](#)  [Update Firmware](#)

Update progress: Please do not interrupt while the firmware is being updated. Unit will restart once firmware update is complete.

2. Press the Update Firmware button

**Firmware Update**

Upload New Firmware: [Browse](#)  [Update Firmware](#)

Update progress:  5%

Once the firmware update is complete, the device will reboot while the web interface displays the message shown in the image below

System is rebooting... please wait ...

## Reset to factory defaults

Factory resetting the OCTO results in the following:

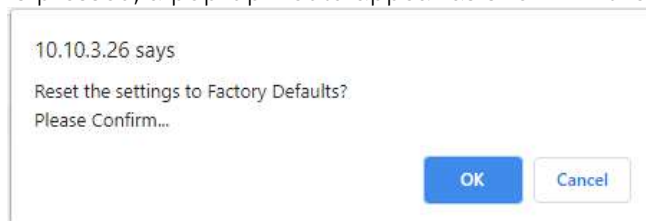
- Resets the device name.
- Enables DHCP.
- Static IP Address reset (IP address = 10.(octet1).(octet2).(octet3) where the three bytes are the last three bytes of the mac address in decimal)
- Resets the gateway IP.
- Netmask is set to 255.0.0.0
- Restores standalone shows to factory default.
- Direct mode is activated
- Input protocol is set to Art-Net.
- LED protocol is set as WS2812B.
- Pixel color is set to RGB.
- Both ports are set to output 4 universes. The start universe for output 1 is set as 0 and output 2 as 4
- Mapped pixels value is set to 680 pixels
- DMX start address is set to 0
- APA-102 global intensity set to maximum.

## Using web interface

The reset to defaults command can be found under the Settings tab of the OCTO.



Once the command is pressed, a pop-up would appear as shown in the image below:



## Using the reset button

The reset button restores the network configuration of the OCTO to factory defaults:

- To reset to factory defaults, the following procedure must be performed:
- Power off the unit
- Press and hold the Reset button.
- While holding the Reset button, power up the unit, and keep holding the button for 3 seconds.
- Release the Reset button once the status led starts blinking red.

## Tips and guidelines

*I'm unable to connect to the OCTO web interface:*

Ensure that the OCTO and your computer are on the same **subnet**  
To troubleshoot:

1. Give your computer a Static IP address (**e.g.: 10.0.0.10**)
2. Change computer Netmask to (**255.0.0.0**)
3. Please connect the OCTO directly using a cat5 cable to your computer
4. Select the correct network on NMU (**10.0.0.10**)
5. If you have multiple networks (WiFi etc.), please try to disable all other networks except the one OCTO is connected to.
6. Once NMU finds the OCTO, you will be able to open the device webpage and configure it.
7. Reset the device if following the above steps did not resolve the issue.

**Is it possible to run pixel tapes and dots using different protocols and voltages at the same time?**

No, only one LED protocol can be selected to drive the output at a given time.

**What is the minimum DC voltage for powering the OCTO?**

The minimum DC voltage the OCTO requires to run is 4v.

## Servicing, inspection & maintenance



- **Servicing, inspection & maintenance should only be carried out by qualified technicians familiar with all safety information within this document.**
- **The OCTO has no user serviceable parts. If your installation has become damaged, parts should be replaced.**



- **Power down the entire system and ensure a method is in place to stop the system from becoming energized during servicing, inspection & maintenance.**

Key areas to examine during inspection:

- Ensure all connectors are mated securely and show no sign of damage or corrosion.
- Ensure all cabling has not obtained physical damage or been crushed.
- Check for dust or dirt build up on the OCTO and schedule cleaning if necessary.
- Dirt or dust buildup can limit the ability for the OCTO to dissipate heat and can lead to damage.

If deemed necessary for an OCTO to be replaced, it should be removed in a reverse order to the installation process within this document.

The replacement OCTO should be installed in accordance with all steps within the installation guide.

To order replacement devices or accessories contact your reseller or message ENTTEC directly.

## Cleaning

Dust and dirt build up can limit the ability for the OCTO to dissipate heat resulting in damage. It's important that the OCTO is cleaned in a schedule fit for the environment it is installed within to ensure maximum product longevity.

Cleaning schedules will vary greatly depending on the operating environment. Generally, the more extreme the environment, the shorter the interval between cleaning.



- **Before cleaning, power down your system and ensure a method is in place to stop the system from becoming energized until cleaning is complete.**



- **Do not use abrasive, corrosive, or solvent-based cleaning products on an OCTO.**
- **Do not spray OCTO's or accessories. The OCTO is an IP20 product.**

To clean an ENTTEC OCTO, use low-pressure compressed air to remove dust, dirt and loose particles. If deemed necessary, wipe the OCTO with a damp microfiber cloth.

A selection of environmental factors that may increase the need for frequent cleaning include:

- Use of stage fog, smoke or atmospheric devices.
- High airflow rates (i.e., in close proximity to air conditioning vents).
- High pollution levels or cigarette smoke.
- Airborne dust (from building work, the natural environment or pyrotechnic effects).

If any of these factors are present, inspect all elements of the system soon after installation to see whether cleaning is necessary, then check again at frequent intervals. This procedure will allow you to determine a reliable cleaning schedule for your installation.

## Package contents

- OCTO
- TS35 DIN Clip & screws
- Read Me card

## Ordering information

Product	SKU
OCTO	71521

Visit [www.enttec.com](http://www.enttec.com) to browse compatible pixel products and control system components. For any sales requests, OEM enquiries or to give product feedback contact our team at [sales@enttec.com](mailto:sales@enttec.com).

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*Due to constant innovation, information within this document is subject to change*