HDMI Over IP Installation Manual-PRO DSX
172 Subnet and with Wireless AP + IR

Revision: 1.1
Date : 8-29-18

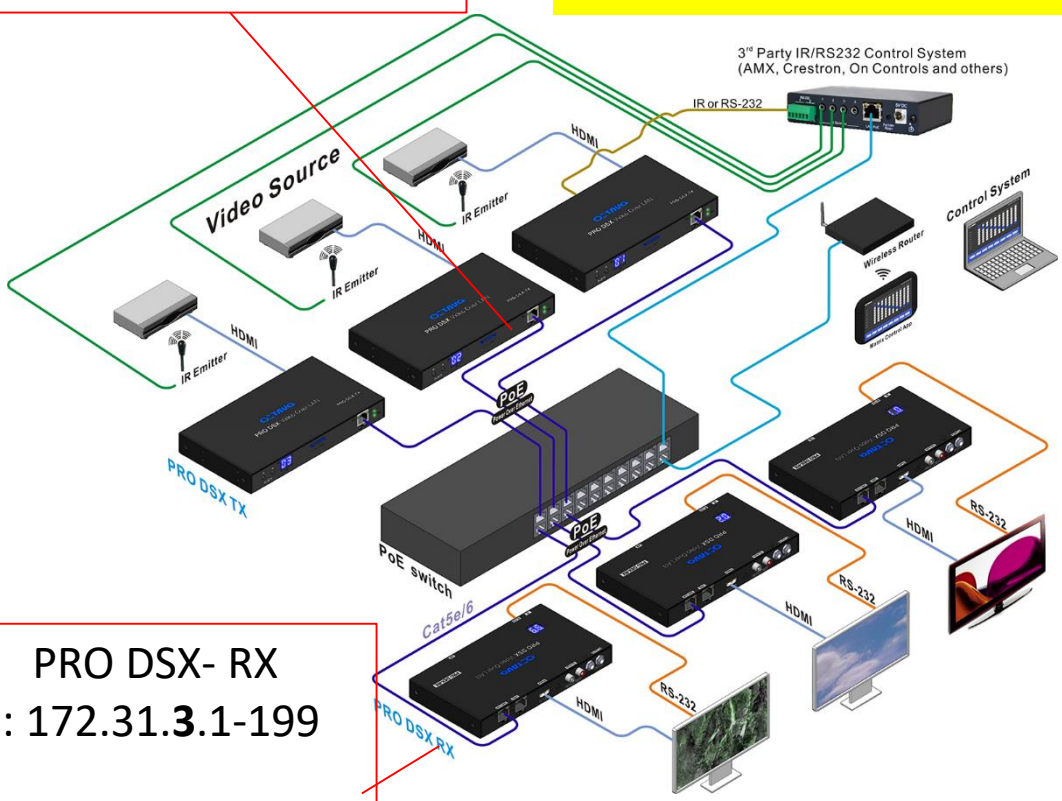
Network Setup

The Octava PRO DSX HDMI Video over IP solution is a scalable multiscreen 4K video connectivity platform. Designed to be scalable so you can build virtually any sized NxM HDMI Video Matrix, or Video Wall. The PRO DSX is runs on standard 1 Gigabit and LAN cables that is easy to install and maintain while delivery stunning 4K picture quality.

The Static IP Addresses range of the PRO DSX system is in the 172.31 subnet depending on preference.

- Other static IP address can be set by WEB Interface
- Contact us for info.

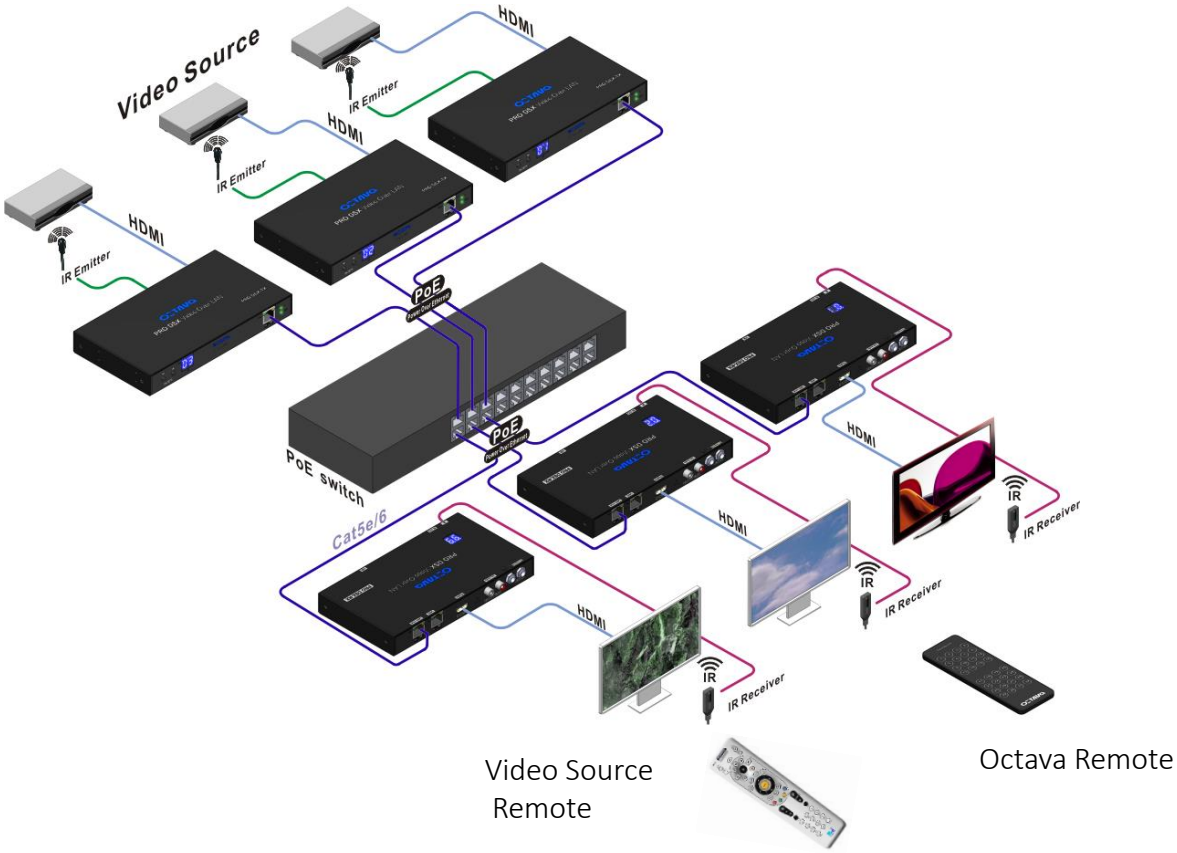
PRO DSX- TX
IP : 172.31.**2**.1-199



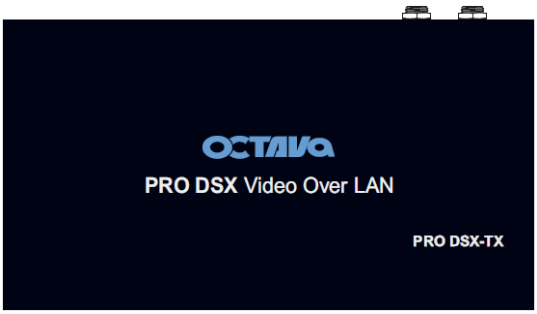
PRO DSX- RX
IP : 172.31.**3**.1-199

IR System Diagram

The PRO DSX includes wideband IR in and out ports and can be used for:
1. changing the Zone receiver (PRO DSX- RX) source selection.
2. controlling each video source
An example is shown below.



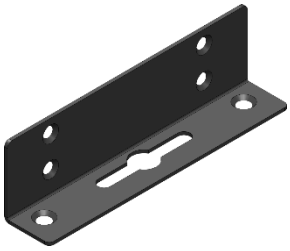
Parts and Accessories: Included Parts



PRO DSX –TX Transmitter

PRO DSX –RX Receiver

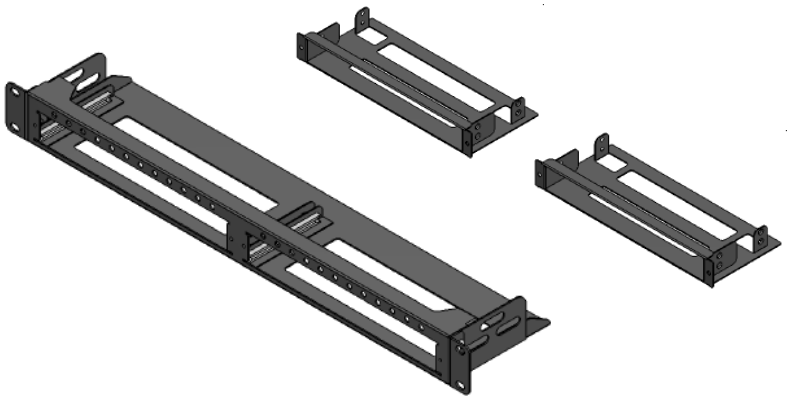
Phoenix Connector (3 position) for RS-232



Mounting Bracket

Model	Description	QTY
PRO DSX- TX		
	Pro HD over LAN Video Encoder Transmitter	1
	Phoenix Connector (3 position)	1
	Mounting Bracket	2
PRO DSX- RX		
	Pro HD over LAN Video Decoder Receiver	1
	Phoenix Connector (3 position)	1
	Mounting Bracket	2

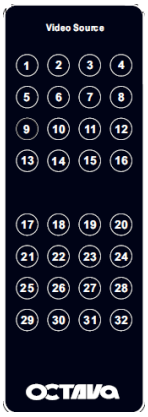
Parts and Accessories: Optional Accessories



PRO DSX TX 1 RU Mounting kit

PRO DSX IR Emitter Cable

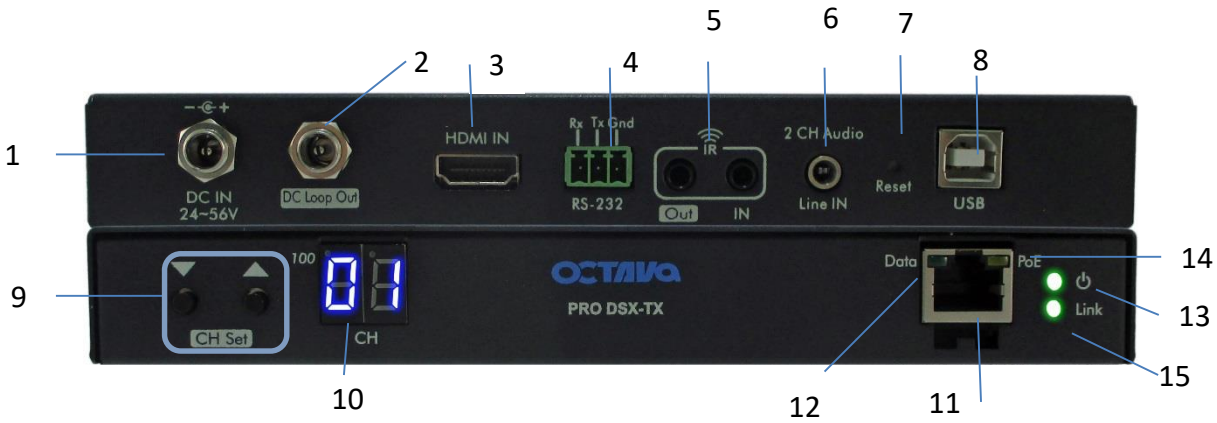
PRO DSX IR Receiver Cable



PRO DSX Remote Control

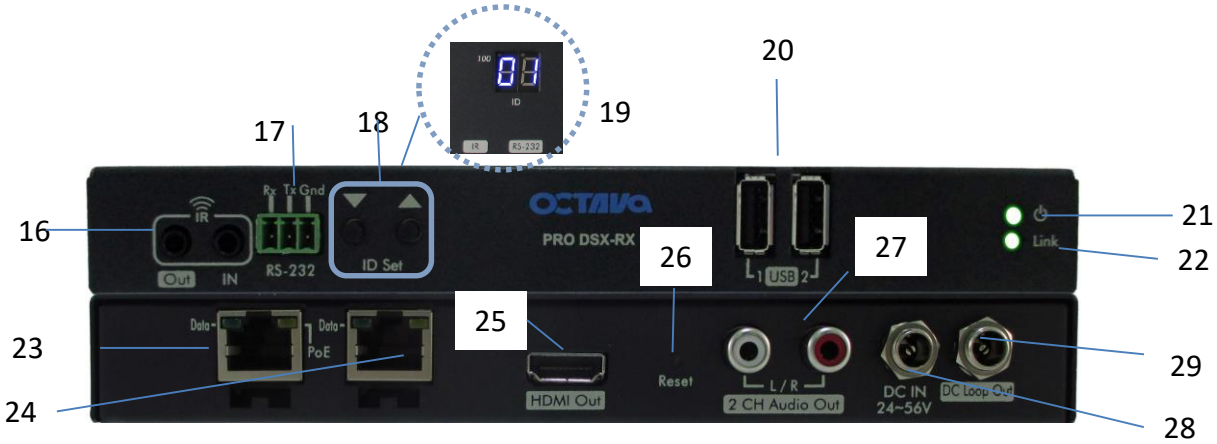
PRO DSX DC Power Supply 48V, 0.5 Amps

I/O Descriptions: TX



	Port	Description
1	DC-IN	Local DC Power Supply Input . Optional, as Pro DSX-TX can be powered over PoE.
2	DC Loop Out	DC Power Loop Out . For powering additional PRO DSX-TX units. (Maximum = 4 PRO DSX-TX).
3	HDMI IN	HDMI Source Input
4	RS-232 Port	Serial Port. Supports up to 115200 bps. Type = Phoenix 3 port connect
5	IR Out and IN	Infrared Cable Out , Infrared Cable IN Wide Band 20-60KHz using supplied Octava IR cables.
6	2CH Audio Line In	3.5 mm 2 Ch. audio inject. Overrides HDM input audio
7	Reset	Hardware Reset of PRO DSX –TX unit
8	USB	USB 2.0 Port
9	CH SET Button	Set the PRO DSX Source ID (1-199)
10	CH ID LED	PRO DSX TX CH ID Indicator LED
11	RJ-45 out /PoE IN	RJ-45 Port
12	Data LED	Data ok
13	Power LED	ON = PRO DSX-TX is powered
14	PoE LED	ON = PRO DSX-TX is by PoE
15	Link LED	ON = Video Link Blink =Video Link not established to any PRO DSX -RX

I/O Descriptions: RX



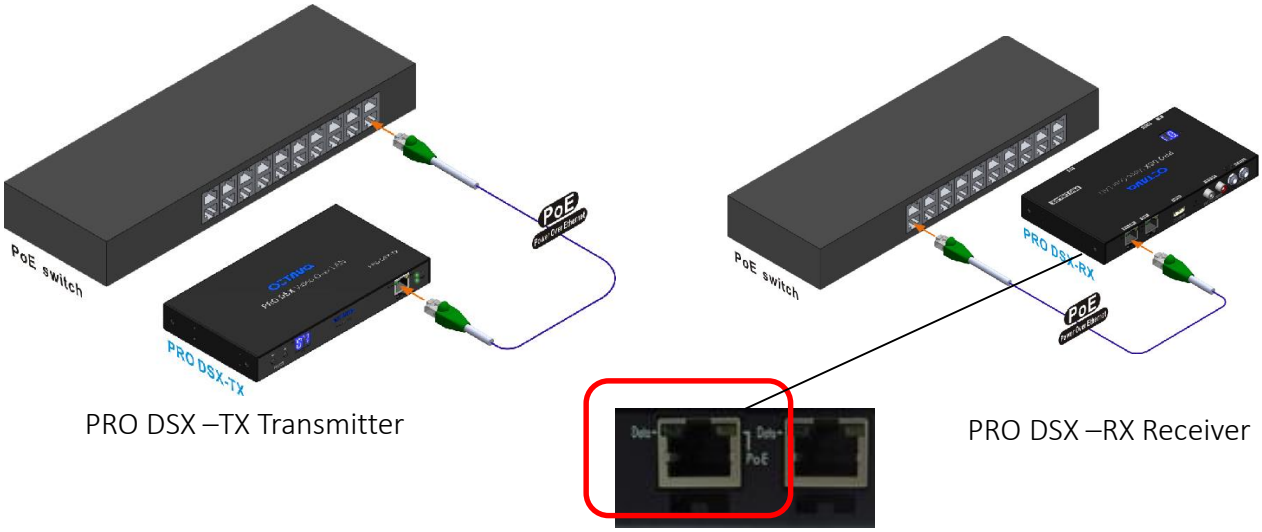
	Port	Description
16	IR Out and IN	Infrared Cable Out , Infrared Cable IN Wide Band 20-60KHz using supplied Octava IR cables.
17	RS-232 Port	Serial Port. Supports up to 115200 bps. Type = Phoenix 3 port connect
18	RX ID Button	Set the PRO DSX RX ID (1-199)
19	RX ID LED	PRO DSX RX ID Indicator LED
20	USB	USB 2.0 Port
21	Power LED	ON = PRO DSX-TX is powered
22	Link LED	ON = Video Link Blink =Video Link not established to any PRO DSX -TX
23	RJ-45 out /PoE IN	RJ-45 Port
24	RJ-45 LOOP Out	RJ-45 Port loop out port for cascading additional PRO DSX-RX . (No PoE out)
25	HDMI Out	HDMI Out to Display
26	Reset	Hardware Reset of PRO DSX –TX unit
27	2CH Audio Out	2ch Audio Line Out
28	DC-IN	Local DC Power Supply Input . Optional, as Pro DSX-TX can be powered over PoE.
29	DC Loop Out	DC Power Loop Out . For powering additional PRO DSX-RX units. (Maximum = 4 PRO DSX-RX).

Basic Installation : Powering

The PRO DSX can be PoE powered directly over the CATx LAN cables

PoE Powered:

Use **PoE Source conforming** to **IEEE 802.3af or IEEE 802.3at**



PRO DSX –TX Transmitter

PRO DSX –RX Receiver

Connect to PoE port

ID and IP Setup :

Each PRO DSX – TX and RX unit need to be set to a unique ID and IP address. For ease of installation, the ID and IP address can be set using the front panel push buttons.

Subnet 172.31 indicator

+100 Indicator

RX ID indicator

RX ID Set Buttons

Subnet 172.31 indicator

+100 Indicator

TX CH ID Set Buttons

TX CH ID indicator

A table showing the LED Indicators will help clarify

NOTE: The factory default RX ID is set to “199” . Resetting device to factory default will also initialize the RX ID to “199”

RX ID LED Indicator 172.31.x.x subnet

Each RX includes a LED ID indicator to easily identify the RX.
The RX ID represents RX ID and the last octet of the RX IP address.
PRO DSX_RX will have ID in the range : 01-199
PRO DSX_RX will have IP address in the range : 172.31.3.xxx.

RX LED Indicators indicating device has been set to 172.31.x.x subnet is below

RX ID	RX ID LED	RX IP Address
RX001	01	172.31.3.1
RX002	02	172.31.3.2
RX099	99	172.31.3.99
RX100	00	172.31.3.100
RX101	01	172.31.3.101
RX199	99	172.31.3.199

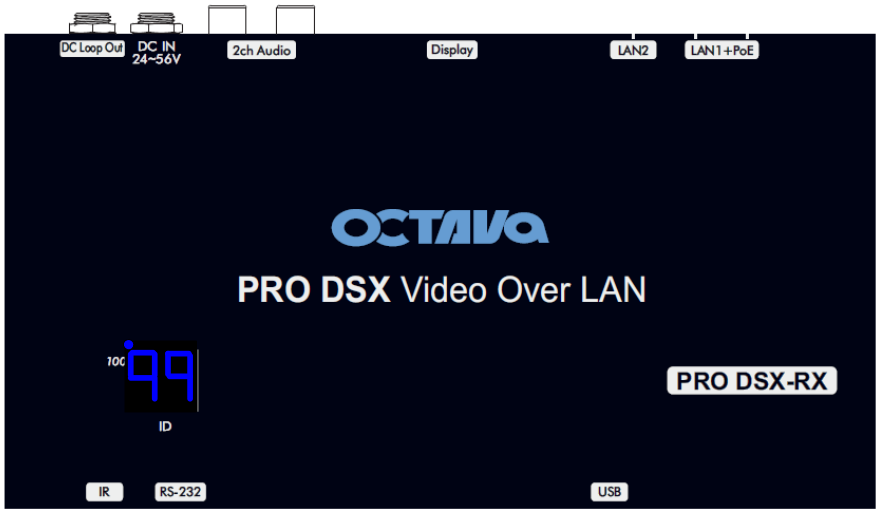
TX ID LED Indicator 172.31.x.x subnet

Each TX includes a LED ID indicator to easily identify the TX.
The TX ID represents the CH ID and last octet of the TX IP address.

PRO DSX-TX will have **IP address in the range : 172.31.2.xxx.**

TX CH ID	TX CH ID LED	TX IP Address
TX CH 01	01	172.31.2.1
TX CH 02	02	172.31.2.2
TX CH 99	99	172.31.2.99
TX CH 100	00	172.31.2.100
TX CH 101	01	172.31.2.101
TX CH 199	99	172.31.2.199

ID and IP Setup : RX ID and IP

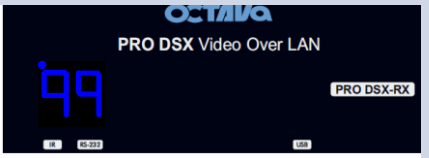
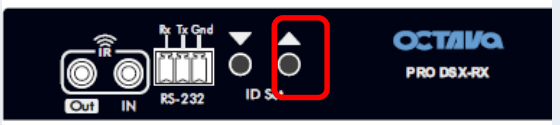
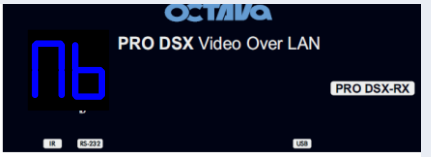
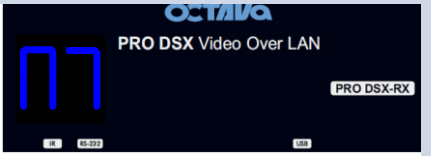
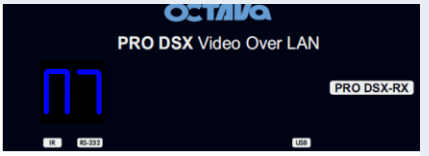


NOTE: The factory default is RX ID = 199 and IP = 169.254.3.199
Resetting the RX will reset RX ID = 199 and IP = 169.254.3.199

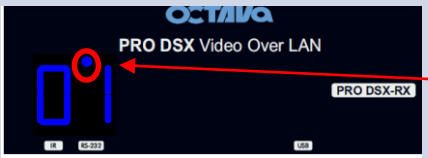
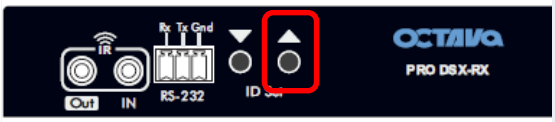
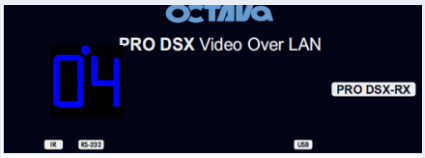
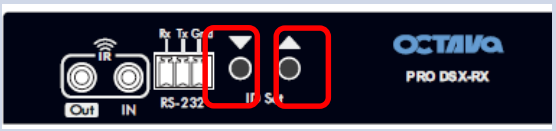
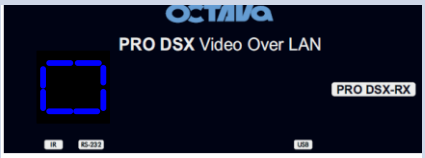
ID and IP Setup : RX ID and IP

The PRO DSX-RX ID can be manually setup per procedure shown below

Example 2: Setting PRO DSX –RX to **ID = 4 and IP = 172.231.3.4**

1	Connect PRO DSX –RX and verify it is powered up. 
2	PRESS HOLD the △ button for ~ 5 seconds until the LED display indicates “N6”   .
3	Press ▽ to change to N7 (172.31.3.xx subnet mode)  
4	PRESS HOLD ▽ + △ button for ~ 5 seconds until LED blinks “N7”. 

ID and IP Setup : RX ID and IP

5	Release the ▽ △ button. LED will blink   Note the 172 subnet LED indicator is ON
6	Press △ button to increment from 01 to the desired RX ID.  
7	PRESS HOLD both the ▽ + △ button for ~ 5 seconds until LED blinks. Release the buttons and LED will "cycle"  
8	RX will reboot and indicate the RX ID when complete  Note the 172 subnet LED indicator is ON
9	The above example has programmed the RX to **RX ID = 4 and IP = 172.31.3.4**

ID and IP Setup : TX ID and IP

NOTE: The factory default is TX CH ID = 199 and IP = 169.254.2.199
Resetting the TX will reset TX CH ID = 199 and IP = 169.254.2.199

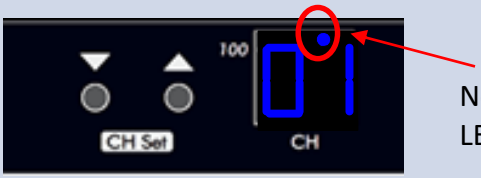
ID and IP Setup : TX ID and IP SETUP

The PRO DSX-TX CH can be manually setup per procedure shown below

Example 4: Setting PRO DSX –TX to **ID = 05 and IP = 172.31.2.5**

1	Connect PRO DSX –TX and verify it is powered up 
2	PRESS HOLD the △ button for ~ 5 seconds until the LED display indicates “N6” (172.31.2.x subnet mode). 
3	Press ▽ to change to N7 (172.31.2.xx subnet mode) 
4	PRESS HOLD ▽ + △ button for ~ 5 seconds until LED blinks “N7”. 

ID and IP Setup : TX ID and IP SETUP

5	Release the ▽ △ button. LED will blink   Note the 172 subnet LED indicator is ON
6	Press △ button to increment from 01 to the desired TX CH ID. 
7	PRESS HOLD both the ▽ + △ button for ~ 5 seconds until LED blinks. Release the buttons and LED will "cycle" 
8	TX will reboot and indicate the TX CH ID when complete  Note the 172 subnet LED indicator is ON
9	The above example has programmed the TX to **TX CH ID = 05 and IP = 172.31.2.5**

Basic Installation : Connecting TX and RX

Connect the PRO DSX-TX and RX to a recommended Ethernet Switch per the following procedures:

	PRO DSX- RX Installation
1	Connect a PRO DSX –RX to Ethernet switch and set the RX ID = 01 Refer to : *"RX ID and IP "*
2	Connect the HDMI output to Display 1 of your system
3	Connect a PRO DSX–RX to Ethernet switch and set the RX ID = 02
4	Connect the HDMI output to Display 2 of your system
	Continue for all PRO DSX-RX needed in your system installation
	PRO DSX- TX Installation
5	Connect a PRO DSX –TX to Ethernet switch and set the TX CH ID = 01 Refer to : *"TX ID and IP SETUP "*
6	Connect the HDMI in to Video source 1 of your system
7	Connect a PRO DSX –TX to Ethernet switch and set the TX CH ID = 02
8	Connect the HDMI in to Video source 2 of your system
	Continue for all PRO DSX-TX needed in your system installation

Basic Installation : RX Check List

Note the RX ID , IP address and the connected Display for future reference.

RX ID	RX IP	Display Name
RX 01		
RX 02		
RX 03		
RX 04		
RX 05		
RX 06		
RX 07		
RX 08		
RX 09		
RX 10		
RX 11		
RX 12		
RX 13		
RX 14		
RX 15		
RX 16		
RX 17		
RX 18		
RX 19		
RX 20		

Basic Installation : TX Check List

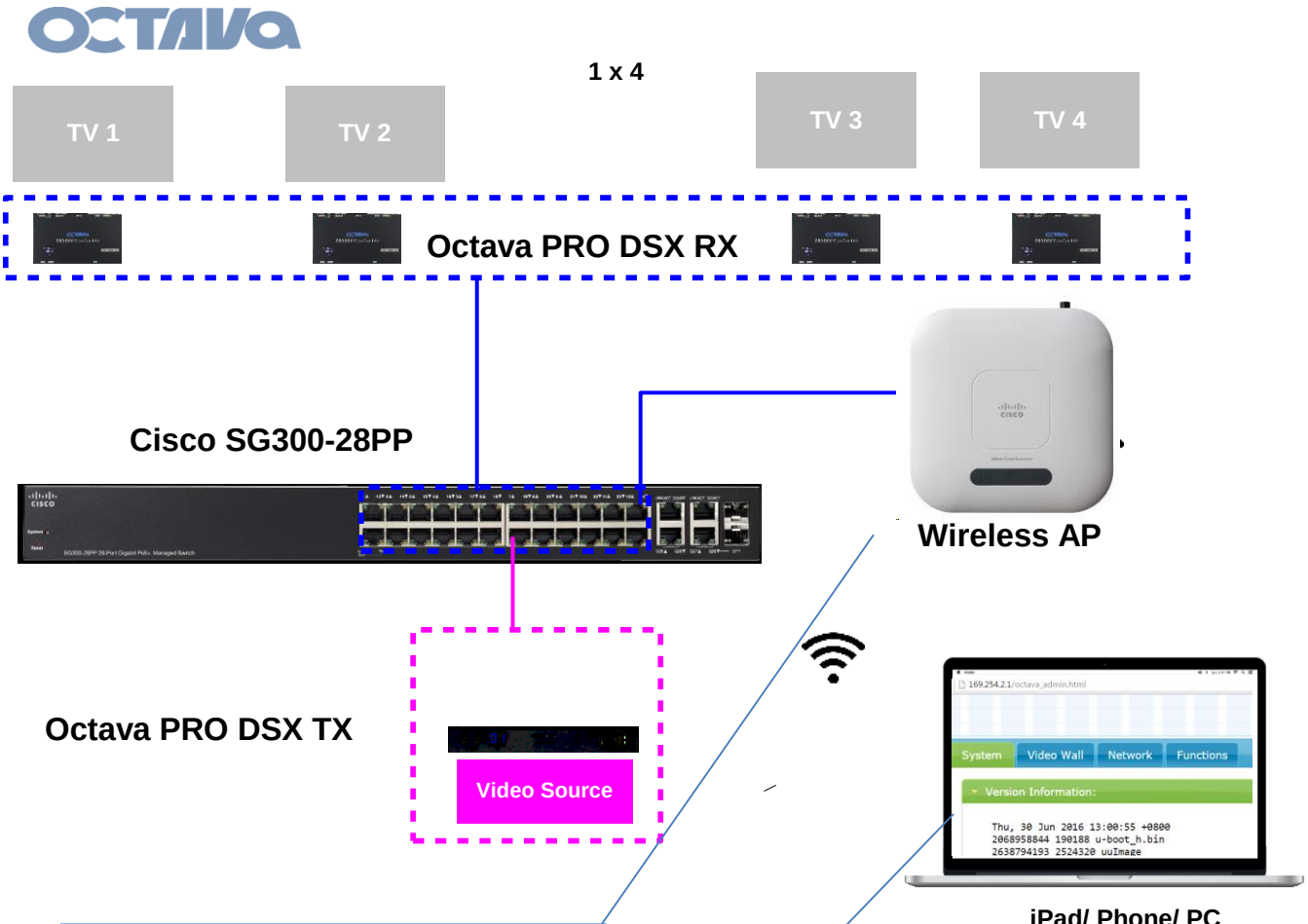
Note the TX CH ID , IP address and the connected Display for future reference.

TX CH ID	TX IP	Video Source Name
TX 01		
TX 02		
TX 03		
TX 04		
TX 05		
TX 06		
TX 07		
TX 08		
TX 09		
TX 10		
TX 11		
TX 12		
TX 13		
TX 14		
TX 15		
TX 16		

WEB Interface Access

The PRO DSX- TX and RX has various features that can be enabled and modified by directing accessing the TX or RX web interface by entering the TX or RX IP address in a browser.

Connect All devices to PoE Ports.



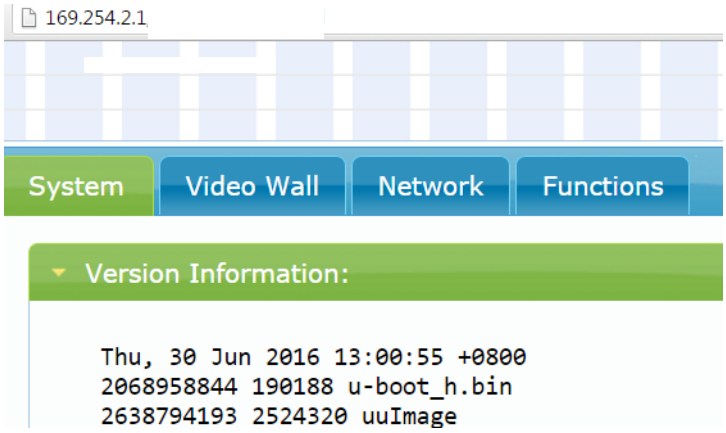
Set your Wireless AP
IP : 172.31.1.245
Subnet Mask: 255.255.0.0
Gateway/Router: 172.31.1.1

Set your network to
IP : 172.31.1.xx
Subnet Mask: 255.255.0.0
Gateway/Router: 172.31.1.245

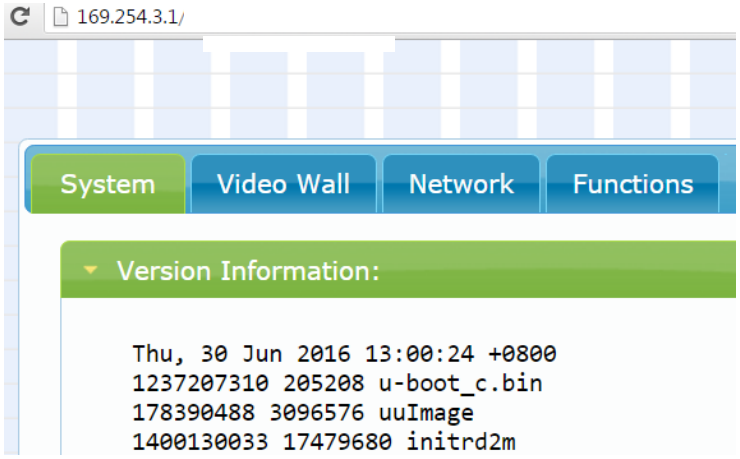
WEB Interface Access

The PRO DSX- TX and RX has various features that can be enabled and modified by directing accessing the TX or RX web interface by entering the TX or RX IP address in a browser.

Access PRO DSX-TX by entering:
172.31.2.xx



Access PRO DSX-RX by entering:
172.31.3.xx

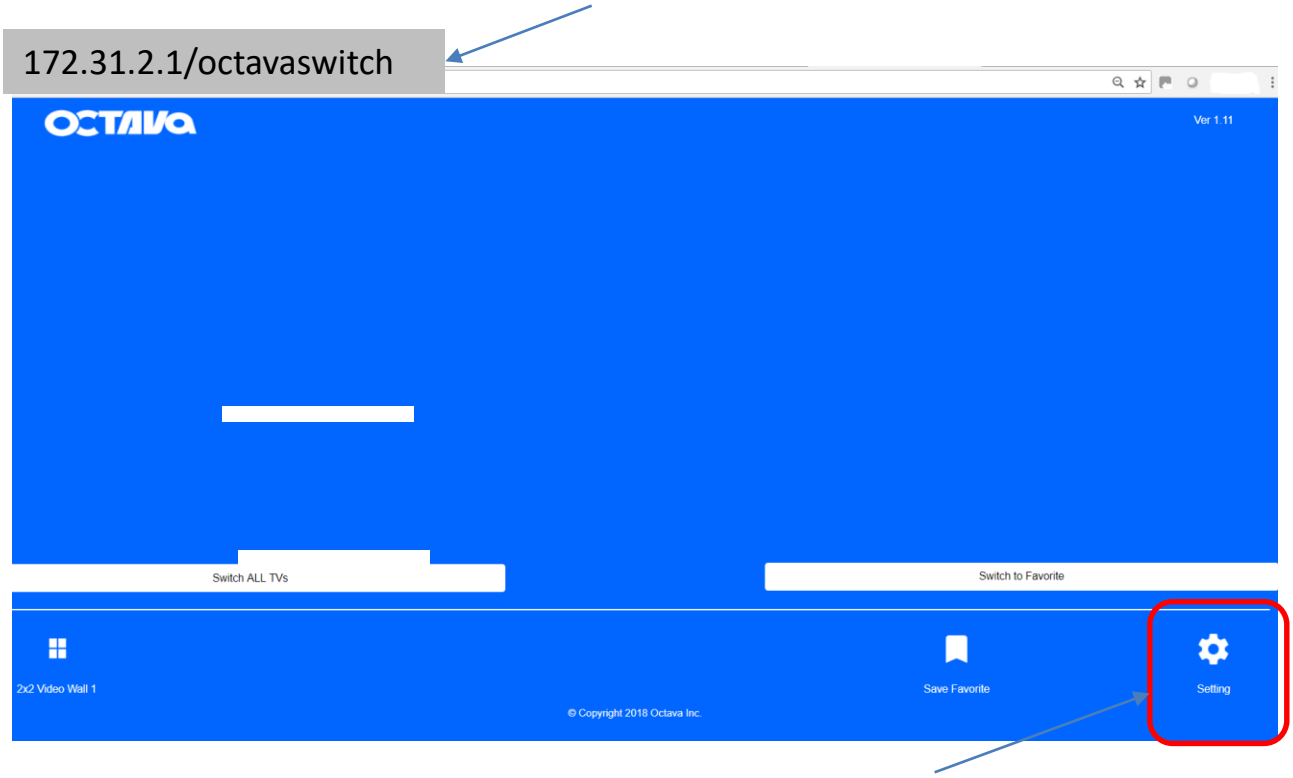


Integrated Octava System Controller

Integrated inside the PRO DSX unit is the Octava System Controller Software. The integrated System Controller enables you to install |customize| operate your video system without additional hardware/gateways or software.

Open a browser (Chrome recommended). Access the Integrated Octava System Controller on the TX 01 by entering:

172.31.2.1/octavaswitch



Select Settings to Setup your System

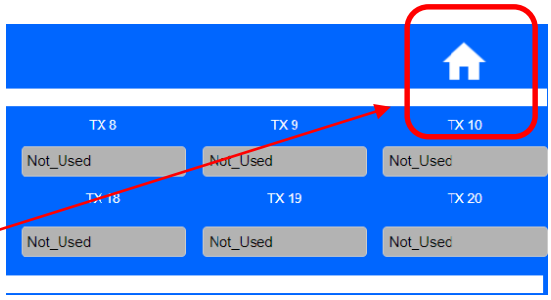
Note: TX and RX Unit must have firmware version 6.4.3 180502 installed.

Enter the Name of your Video Sources Here and Match to the corresponding PRO DSX-TX unit.
Note- Only Enter the sources that you will use. Leave others blank

Enter the Name of your Displays Here and Match to the corresponding PRO DSX-RX unit.
Note- Only Enter the displays that you will use. Leave others blank

Enter the Name of your Video Sources here and match to the corresponding PRO DSX-TX unit.
Note- Only Enter the sources that you will use. Leave others blank

Enter the Name of your Displays here and match to the corresponding PRO DSX-RX unit.
Note- Only Enter the displays that you will use. Leave others blank



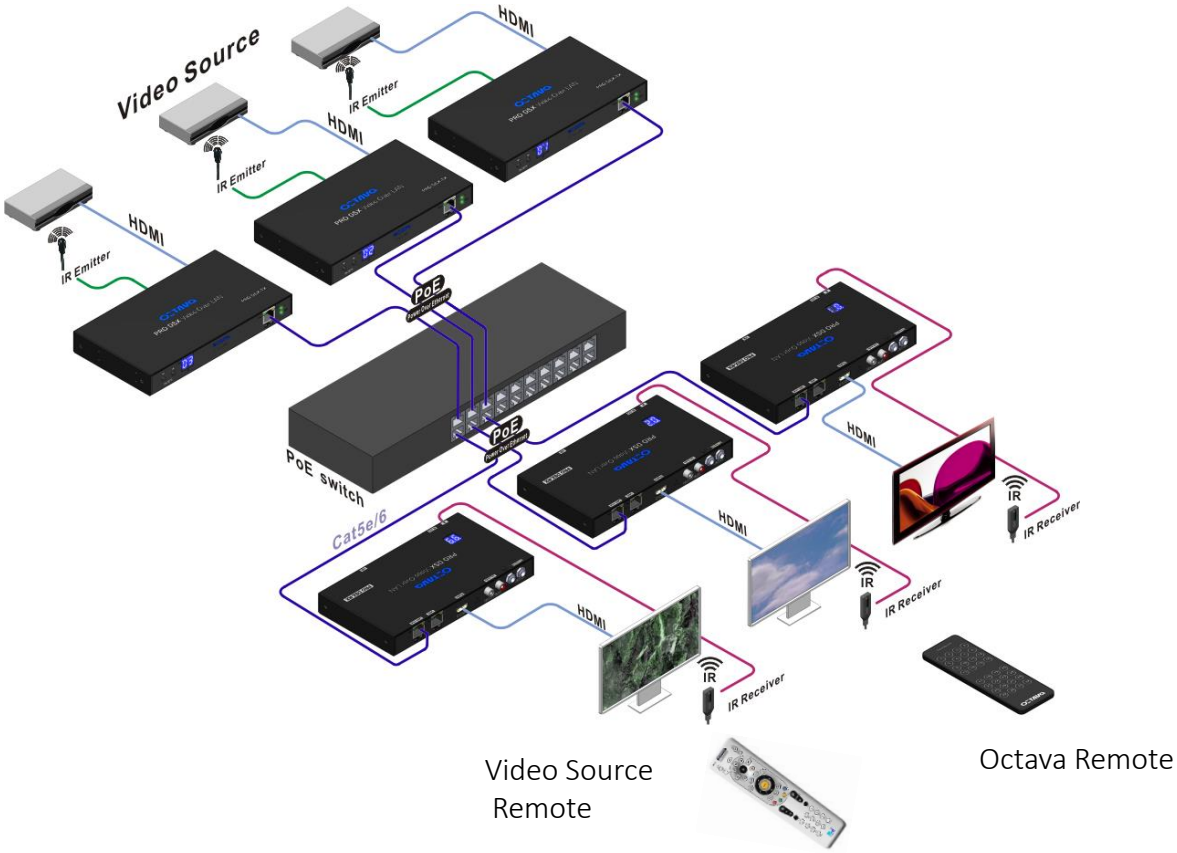
Press the HOME icon when complete

Your System Interface will be created.

IR: IR System Setup

Remote Control

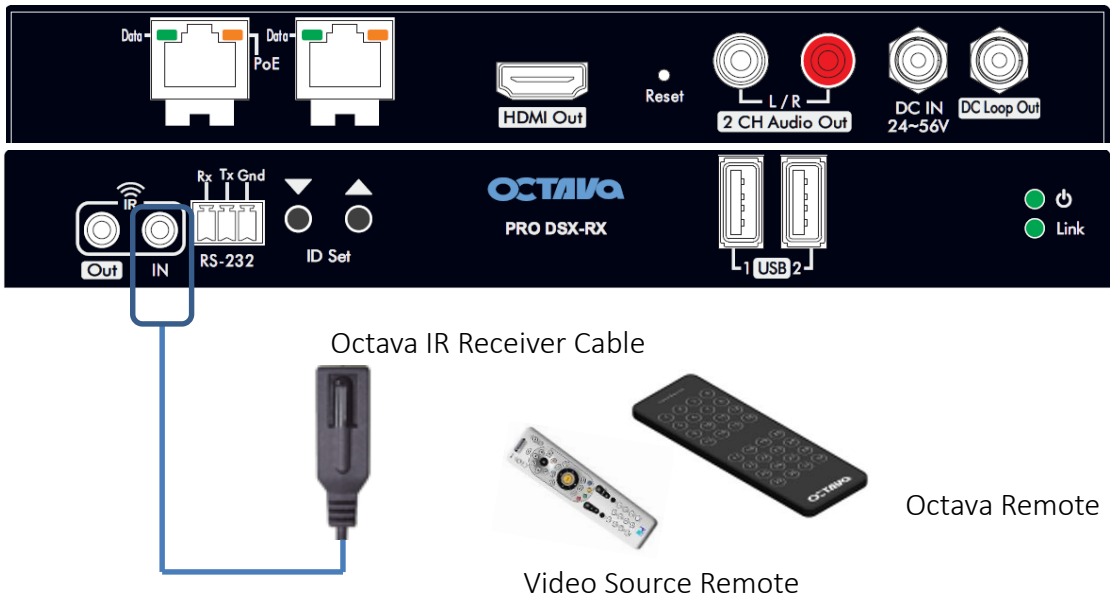
The PRO DSX includes wideband IR in and out ports and can be used for:
1. changing the Zone receiver (PRO DSX- RX) source selection.
2. controlling each video source
An example is shown below.



IR: IR emitter and receiver cable connections

Connect the IR Emitter cable to the IR OUTPUT Port as shown.
Place the IR Emitter over the IR Receiver of the Video Source

Connect the IR Receiver cable to the IR IN Port as shown.
Place the IR Receiver cable so there is line of sight from remote control



Safety Information:

Electrical safety

- Use only the power supplies and the AC power cord that were included with your product.
- Use of other power supplies could damage the product or cause shock, or other hazards
- For Indoor Use only
- Avoid excessive humidity, or temperature extremes
- Do not place the product in any area where it may become wet.
- Unplug the power supplies and the AC power cord before cleaning, or removing any panels for servicing.
- When adding or removing devices to or from the product, disconnect all power cables from the existing product before you add a device.

Operation safety

- Install the product in a well ventilated location. Keep ventilation opening free of obstructions.
- Don't block any ventilation openings on the unit.
- Avoid dust, humidity, and temperature extremes.
- Do not place the product in any area where it may become wet.

Contact Information

Octava Inc.-7078 Peachtree Ind. Blvd
Suite 300
Norcross, Ga. 30071
Tel 770.825.0388

www.octavainc.com

Email: info@octavainc.com