Configuration Guide

Connecting an IDU-E to an ODU-E via cascade

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Requirements

Hardware

You will require a minimum of the following:

- 1x IDU-E and associated power supply
- 1x ODU-E and associated power supply (could be via 12v XLR or PoE enabled network switch)
- Ethernet Cable(s)

A laptop could be useful as it would enable the use of the web setup pages for the IDU-E and ODU-E as well as troubleshoot any network issues.

Licence Options

No special licence options are needed to operate the camera control system in this way.

Getting Started

Connecting to an ODU-E via IP cascade can be helpful for configuring a camera control system is situations where existing networking infrastructure can be used, or situations where running a single cable to your ODU-E providing both power and data could be advantageous.

Introduction

IP cascade has been designed as a means of easily passing Videosys camera control data over an IP path in a simple point to point fashion.

Originally IP cascade was conceived as a means to cascade camera control data from one IDU-E into one or more further IDU-Es and then out to a single ODU over serial. Our ODU-E has been designed to take in this IP cascade data directly. Because of IP cascade's legacy it does not contain the data required to change the ODU-E's frequency from the IDU-E front panel (However the ODU-E front panel can be used as normal, as can the configuration webpage that the ODU-E serves – both allowing the operator to change settings).

Configuration

Initial setup

Both the IDU-E and the ODU-E should be connected to the same Local Area Network. In practice this means making sure that the primary IP address of both the IDU-E and ODU-E fall within ranges permitted by their subnet masks. A fairly typical set up could be:

ODU-E

IP Address: 192.168.1.240
Subnet Mask: 255.255.255.0
Gateway: 192.168.1.254

IDU-E

IP Address: 192.168.1.200
Subnet Mask: 255.255.255.0
Gateway: 192.168.1.254

ODU-E

To use the cascade feature, the ODU-E will need to be configured to operate in either 'Locked IP' or 'Auto Any' input mode. The input mode menu can be found under Main Menu->System->Input mode.

You will need to know the IP address of the ODU-E, this is displayed on its status screen.

IDU-E

Note: If the IDU-E is set to cascade mode (Any valid IP address in the cascade master address field) some software versions will turn the legacy serial data port off, to return to normal function set the cascade master IP to 0.0.0.0

Make sure that the transmitted data type from the IDU-E is Cola V2, this can be set under Main Menu->System->Data Link Version

Set the cascade master address field to the IP address of the ODU-E; Main Menu->Network->Cascade Master IP

Upon setting the address, the IDU will then attempt to connect to the ODU-E and start sending data immediately.

Troubleshooting

Once the IDU-E and ODU-E have been configured, the ODU-E should display the words “Transmitting” on its main status page almost immediately, if it does not then something might have been misconfigured.

Troubleshooting checklist:

- Network parameters configured correctly for the IDU-E.
- Network parameters configured correctly for the ODU-E.
- Both the IDU-E and the ODU-E are configured to operate within the same subnet.
- The existing IP network does not cause issues for the for these parameters - there are no address collisions etc.
- If PoE is used, that it meets the 802.3af specifications and that the cable length from the PoE switch to the ODU-E is not excessive (<100m).
- IDU-E is in Cola V2 Link mode
- IDU-E has its ‘Cascade master IP’ address set to the IP address of the ODU-E
- The ODU-E input selection mode is set to allow IP camera control data input.