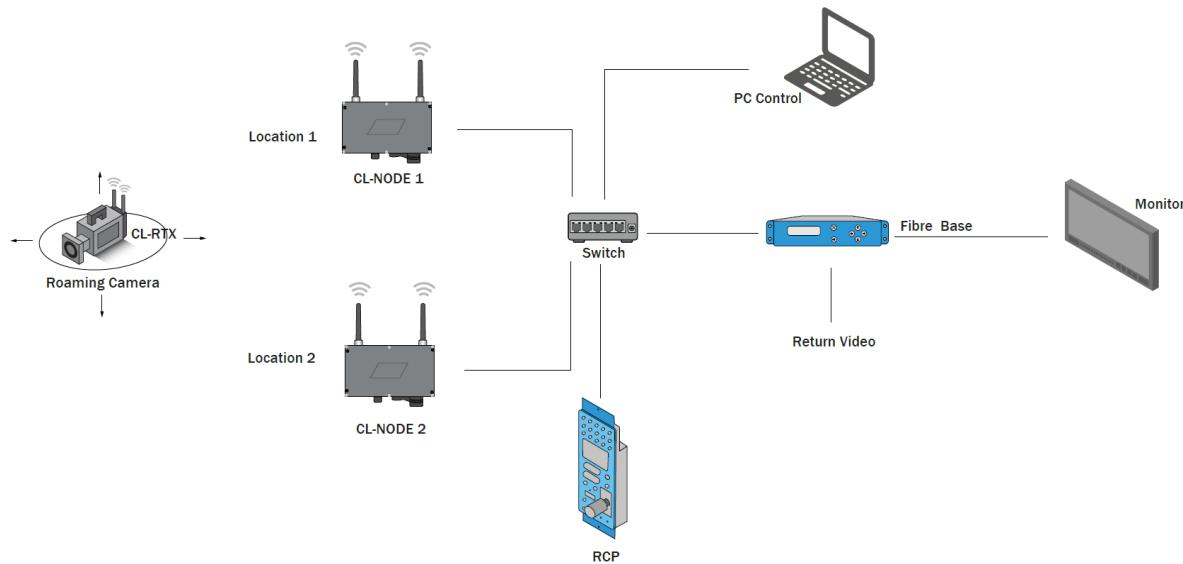




Connected Live

Quick Start Guide

Thank you for your purchase! The kit has been preconfigured as much as possible so that it works out of the box when you receive it. Here is a block diagram of how the units should be connected:



Here is a list of IP addresses that have been preconfigured:

- **CL-Base**
 - Camera Control IP: 192.168.1.230
 - Decoder Source IP: 192.168.1.100
 - Encoder Target IP: 192.168.1.101
- **CL-Node**
 - Radio's IP: 192.168.2.1
- **CL-RTX**
 - Camera Control IP: 192.168.1.250
 - Decoder Source IP: 192.168.1.101
 - Encoder Target IP: 192.168.1.100
 - Radio's IP: 192.168.2.2

For any additional information or help on setting up the system, please contact us on:

- **+44 (0) 1293 541 200**
- **support@videosys.tv**



Here are some other preconfigured parameters, as well as how you can change them:

Radio's default access code

(to access the radios' web interface of the NODE/RTX):

- Username = admin
- Password = admin

You can change the password or create more users via the *Settings > Users* page

Radio's Status Page Overview

The status page of each radio will give you information about the connections to each unit and the data rate through each node. Please see the breakout of the page below.

The screenshot shows the 'Status > Connections' page. The left sidebar (A) has 'Status', 'Settings' (selected), and 'Tools'. The main content area (B) has tabs for 'Connections', 'Interfaces', 'Network', 'System', and 'Activity'. The 'Connections' tab (C) shows '0 wireless clients' and a table with one row: MAC: 8C:1F:64:7F:30:1D, Radio: 2.4 GHz Radio, CameraNetworkID: videosys, Security: WPA2-PSK (CCMP), Uptime: 00:01:00, Signal: -66 dBm. The 'Clients information' section (D) is empty. The top right (E) has a search bar, user count (0), and other management icons.

A: Main navigation column

B: Secondary navigation bar

C: List of connected Cameras to a NODE (by default used in CL-NODE units)

D: List of connected Nodes to a CAMERA (by default used in CL-RTX units)

E: Device management tools (from left to right):

Settings search bar > Connected Cameras (if this is a NODE) > Events Log > Device Actions (reboot, recall settings, software updates) > Sign-out

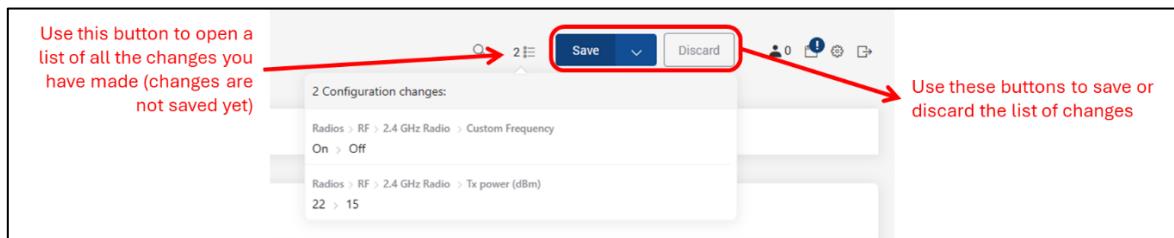
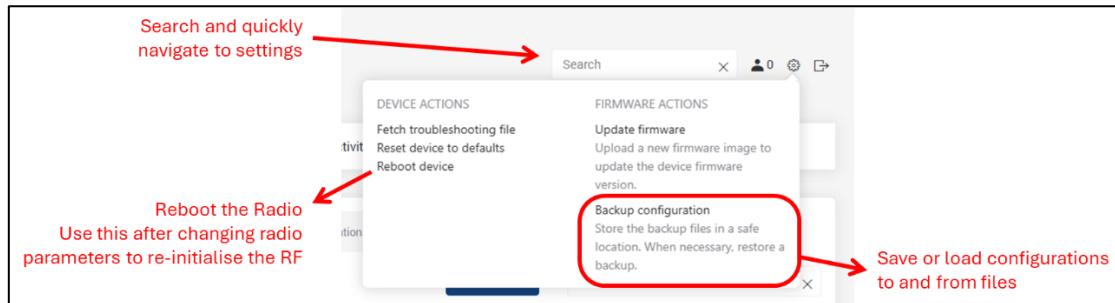
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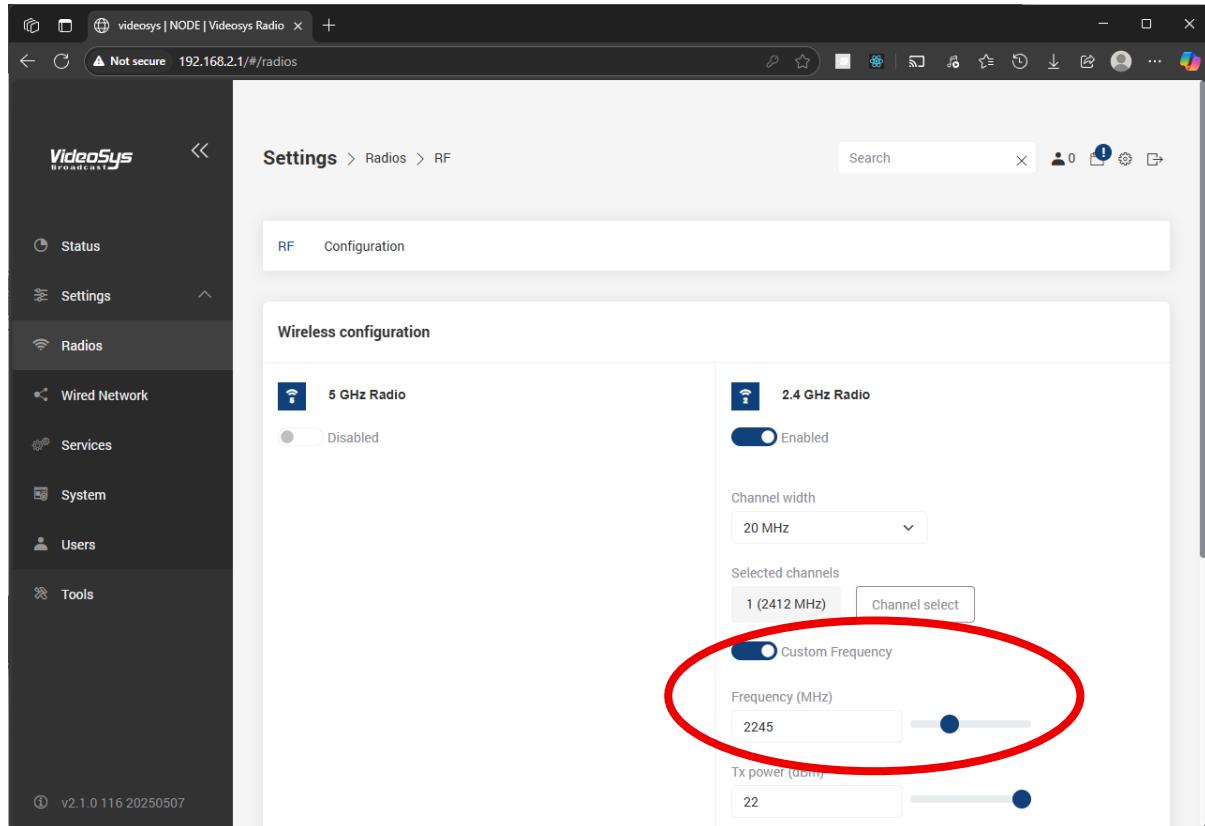


Custom Frequency = 2245 MHz

To change this you need to open the radio's web interface (both on the CL-Node and the CL-RTX units) and navigate to:

Settings > Radios (from the side panel) > RF (from the top navigation bar) >

> "Custom Frequency" & "Frequency (MHz)" setting for each radio used



As you change the frequency the best channel will automatically be selected.

If you want to use licence-free channels, switch off the custom frequency option and select one or more channels via the "Channel select" button.

Ensure that the correct operating country is selected under: *Settings > System > Country* so that the available channels are filtered based on availability in the specified location.

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Radio Configuration

Each radio can be configured in either a **Fixed Node** or **Camera Node** mode:

Fixed Node mode:

This is usually applied on a CL-NODE unit. The device acts as an access point, creating and advertising the wireless camera network (with a unique ID and password defined by the user) and accepts connections from multiple camera nodes. Here is a typical configuration for a Node using the 2.4GHz radio:

Settings > Radios > Configuration

RF Configuration

Select network: Fixed Node (videosys) + Add network

Fixed Node (videosys) configuration Remove

General

Mode: Fixed Node

Radio Camera Network ID: videosys

Hide Radio Camera Network: Radio Camera is discoverable

Network zone: Local Network

Enable on radio: 5 GHz Radio (off), 2.4 GHz Radio (on)

Automatic Modulation Mode (applies to both Radios): Enabled

Security

Mode: WPA2 personal

Passphrase: passphrase

Fast BSS: off

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Camera Node mode:

This is usually applied on a CL-RTX unit. The device tries to connect to a single Fixed Node with the unique ID and password provided by the user. Here is a typical configuration for an RTX:

A screenshot of the Videosys Broadcast Settings interface. The left sidebar shows 'Settings' selected. The main area is titled 'RF Configuration' under 'Camera Node configuration'. It shows 'Mode' set to 'Camera Node', 'Enable on radio' for both '5 GHz Radio' and '2.4 GHz Radio' (both are on), and 'Automatic Modulation Mode' (Enabled). Below this are sections for '5 GHz Radio' and '2.4 GHz Radio' with fields for 'Radio Camera Network ID' (set to 'videosys'), 'Security mode' (set to 'WPA2 personal + WPA3 personal'), 'Passphrase' (set to 'passphrase'), and 'Network zone' (set to 'Local Network').

Settings > Radios > Configuration

RF Configuration

Select network: Camera Node + Add network

Camera Node configuration Remove

General

Mode: Camera Node

Enable on radio: 5 GHz Radio (on), 2.4 GHz Radio (on)

Automatic Modulation Mode (applies to both Radios): Enabled

5 GHz Radio: Radio Camera Network ID (videosys), Scan, Lock Fixed Node MAC (off), Security mode (WPA2 personal + WPA3 personal), Passphrase (passphrase), Network zone (Local Network), VLAN (off)

2.4 GHz Radio: Radio Camera Network ID (videosys), Scan, Lock Fixed Node MAC (off), Security mode (WPA2 personal + WPA3 personal), Passphrase (passphrase), Network zone (Local Network), VLAN (off)

A screenshot of the Videosys Broadcast Settings interface, similar to the one above but with expanded sections for the '5 GHz Radio' and '2.4 GHz Radio' configurations. The 'Automatic Modulation Mode' is still enabled. The '5 GHz Radio' section shows 'Radio Camera Network ID' as 'videosys', 'Security mode' as 'WPA2 personal + WPA3 personal', 'Passphrase' as 'passphrase', and 'Network zone' as 'Local Network'. The '2.4 GHz Radio' section is identical. Both sections include a note about WPA2/WPA3 mixed mode and the option to lock the fixed node MAC.

Automatic Modulation Mode (applies to both Radios): Enabled

5 GHz Radio: Radio Camera Network ID (videosys), Scan, Lock Fixed Node MAC (off), Security mode (WPA2 personal + WPA3 personal), Passphrase (passphrase), Network zone (Local Network), VLAN (off)

2.4 GHz Radio: Radio Camera Network ID (videosys), Scan, Lock Fixed Node MAC (off), Security mode (WPA2 personal + WPA3 personal), Passphrase (passphrase), Network zone (Local Network), VLAN (off)



Radio's IP Address

To change each Radio's IP Address navigate to:

Settings > Wired Network > Zones > Local Network

And change the **IPv4 IP address** setting:

The screenshot shows the 'Local Network configuration' page for a 'Local Network'. The 'General' section is visible, and the 'IPv4' section is highlighted with a red oval. In the 'IPv4' section, the 'Enabled' toggle switch is turned on, and the IP address is set to 192.168.2.2 with a netmask of 255.255.255.0. The 'Secondary IPv4' section is shown as disabled.

Setting	Value
IP address	192.168.2.2
Netmask	255.255.255.0
DHCP server	Disabled



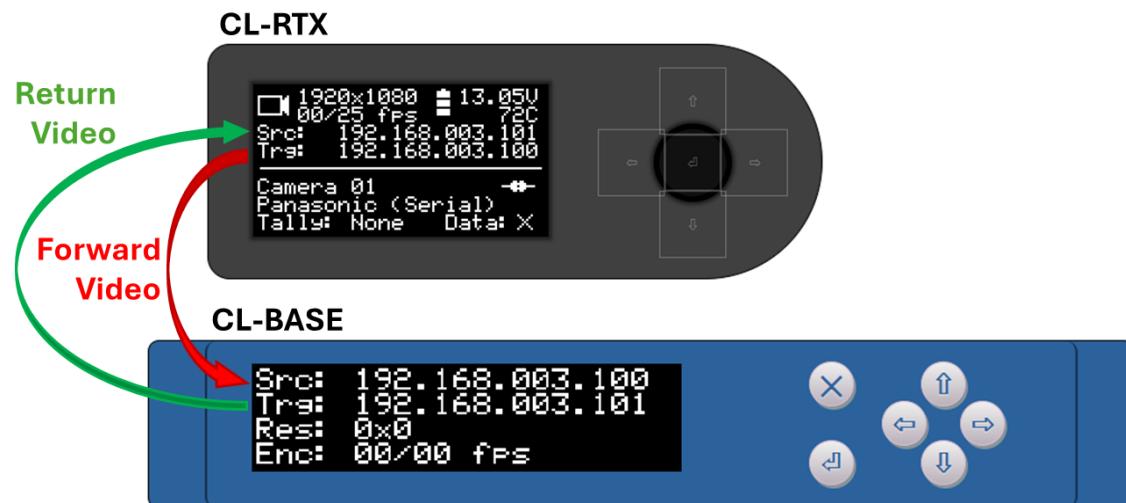
Encoder & Decoder IP Address

Each CL-RTX and CL-BASE unit has an integrated IP encoder and decoder. Each unit has 2 important IP addresses that need to be configured for the video to be streamed successfully:

- **Source IP Address:** This is the decoder's own IP address that is expecting a video stream to decode. This is also the IP address that the encoder's stream will be sent out from.
- **Target IP Address:** This is the target IP of the encoder. The encoded video will be sent to this IP address. If no device on the network has this address, then no packets will be able to leave the encoder and it will stop encoding frames.

Rules of thumb:

- To send video **from a CL-RTX unit to a CL-BASE**, the **CL-RTX Target IP Address** should match the **CL-BASE Source IP Address**.
- To send video **from a CL-BASE unit to a CL-RTX (return video)**, the **CL-BASE Target IP Address** should match the **CL-RTX Source IP Address**.



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Camera Control IP Settings

The camera control network is separate from the stream network and the radio network, which makes the system very versatile for installations that require a high level of segmentation between the different parts of the system.

To change the camera control IP of the CL-BASE navigate to:

Main Menu > Network > System Settings > IP Address

To change the camera control IP of the CL-RTX navigate to:

Main Menu > Controller Network > IP Address

For more camera control settings refer to the following camera control manuals:

- For the CL-RTX side:

https://videosys.tv/files/Videosys_Products/Camera_Control/Guides/VS_RXSM-E_User_Manual_v4.pdf

- For the CL-BASE side:

https://videosys.tv/files/Videosys_Products/Camera_Control/Guides/VS_IDU_User_Manual_v9.2%28V148 onward%29.pdf