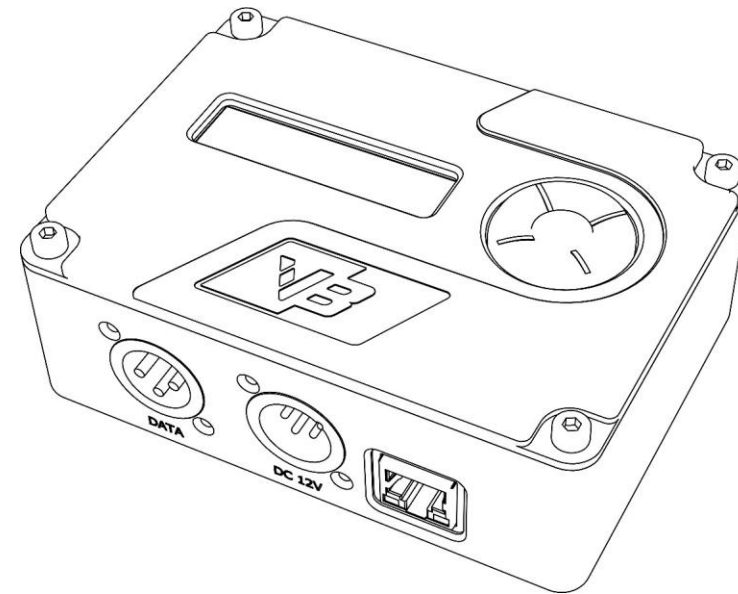




Videosys
Broadcast

MultiZone Quick Set up notes

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- Standalone IDU Web GUI
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- Example 2



Videosys Broadcast Ltd
Foss House
Wallage Lane
Rowfant
West Sussex
RH10 4NF
Tel: +44 1293 541200
www.videosys.tv

For more information, please refer to the user manuals

Background

What is MultiZone?

MultiZone is part of a Videosys solution that allows your existing camera control solution to cover a much larger area than would be possible with a single transmit location; ideal for venues where control is required in multiple discrete zones.

How Does MultiZone work?

MultiZone is a technology that operates on the camera control receiver. An operator enters a list of frequencies that will be in use across the venue into the camera control receiver. So long as the camera control receiver is receiving good valid data it will stay locked to its currently selected frequency. As soon as it determines that the quality of the signal isn't sufficient for operation it will cycle through its frequency list, until it finds good valid data again.

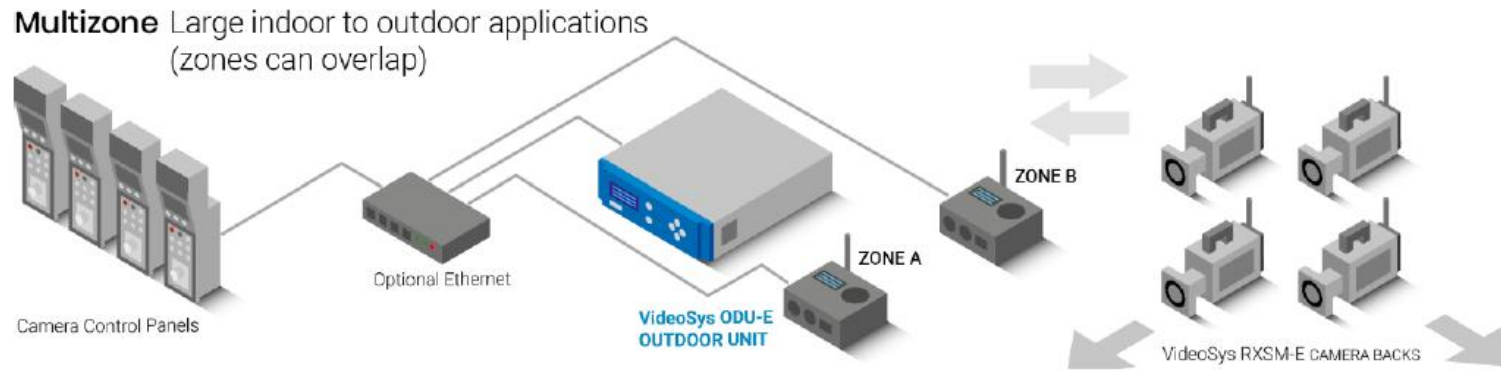
Data quality is determined by a number of factors that the user can adjust, although the default values should be good for most use cases. The factors that are used to determine data quality are Packet Error Rate (PER) and Time since last good packet (Timeout) additionally the user can set the Search Delay, which is the time for which these conditions need to occur before action is taken.

Because this system cannot scan for a new frequency and continue to receive on its original frequency there will be a small time interval for which camera control will stop working, typically this is less than 2s. Exact transition times will change with the search parameters and the quality of RF signal where the overlap occurs. The longer the frequency list the longer it will likely take for the unit to cycle through and test each frequency to find a valid frequency.



Background

"Multi Zone" a system to allow multiple ODU transmitters to be used in overlapping areas on multiple frequencies.



The diagram shows such a set up where two ODUs are used in two different zones. A further very powerful feature of the Videosys camera control system is the camera receiver units are capable of auto-switching their receive frequencies as the camera move from one zone to another.

To turn this on in the CCRXSM-E go to "Main Menu" > "System Function" > "Advanced Radio Mode" > "Enabled".

This will add features in the Radio Menu. "Main Menu" > "Radio Function" > "Multi Zone Menu".
"Multi Zone Menu" > "Multi Zone AF List" - This is where you can add different frequencies

You can have 1 RXSM-E read up to 8 ODU-E's so 8 zones.



Requirements

MultiZone use requires that multiple data transmitters are transmitting the same camera control data on multiple frequencies.

Where IDU-Es are used it is preferable to use IP multicast.

Set the ODU Data IP address in the IDU to a valid multicast group address which is a value in the range 224.0.0.0 to 239.255.255.255. Enter the multicast menu in the ODU-E and enter the same multicast group address.

Do this for both ODU-Es. Make sure that both ODU-Es are set to different frequencies and within your frequency list.

ODU-E Default multicast group address is 224.000.001.001

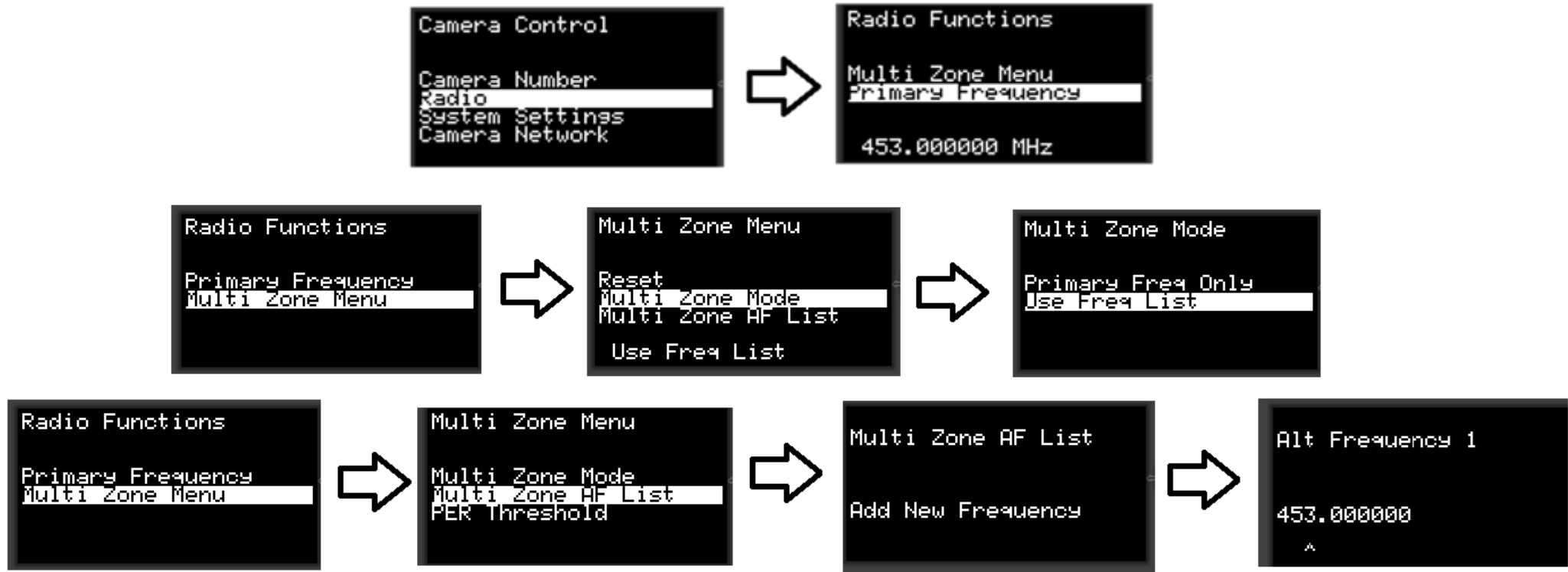
This can be achieved on the legacy black ODU units. Using multiple ODUs with RS485 data effectively “Y corded” from the IDU and the data being split off in parallel. In this “Y-corded” mode the settings can’t be adjusted from the IDU as it will cause a data collision and/or set both units to the same frequency.

Set one ODU unit frequency at a time before adding them both to the system.



Setting the Camera Control Frequency in CCRXSM-E

Multi Zone Frequency AF List, is being used.



Network Settings

• Main IP Address	<input type="text" value="172.30.0.170"/>
• Main Net Mask	<input type="text" value="255.255.255.0"/>
• Main Gateway	<input type="text" value="172.30.0.1"/>
• Main VLAN	<input type="text" value="0"/>
• Cascade Master IP	<input type="text" value="0.0.0.0"/>
• MSU IP Address	<input type="text" value="0.0.0.0"/>
• CNS Net Mask	<input type="text" value="255.255.255.0"/>
• CNS Gateway	<input type="text" value="192.168.1.254"/>
• CNS VLAN	<input type="text" value="0"/>
• ODU-E Config IP	<input type="text" value="172.30.0.175"/>
• ODU-F Data IP	<input type="text" value="224.0.1.0"/>

Channel Settings

• Chan 1 IP Address	<input type="text" value="172.30.0.171"/>	• Chan 1 Camera Num.	<input type="text" value="5"/>
• Chan 2 IP Address	<input type="text" value="172.30.0.172"/>	• Chan 2 Camera Num.	<input type="text" value="6"/>
• Chan 3 IP Address	<input type="text" value="0.0.0.0"/>	• Chan 3 Camera Num.	<input type="text" value="0"/>
• Chan 4 IP Address	<input type="text" value="0.0.0.0"/>	• Chan 4 Camera Num.	<input type="text" value="0"/>
• Chan 1 TSL Address	<input type="text" value="0"/>	• Chan 1 TSL Text	<input type="text" value="Camera 5"/>
• Chan 2 TSL Address	<input type="text" value="0"/>	• Chan 2 TSL Text	<input type="text" value="Camera 6"/>
• Chan 3 TSL Address	<input type="text" value="0"/>	• Chan 3 TSL Text	<input type="text" value=""/>
• Chan 4 TSL Address	<input type="text" value="0"/>	• Chan 4 TSL Text	<input type="text" value=""/>

Panasonic Settings

• Chan 1 Cam Port	<input type="text" value="45000"/>	• Chan 1 ROP Port	<input type="text" value="0"/>
• Chan 2 Cam Port	<input type="text" value="45000"/>	• Chan 2 ROP Port	<input type="text" value="0"/>
• Chan 3 Cam Port	<input type="text" value="45000"/>	• Chan 3 ROP Port	<input type="text" value="0"/>
• Chan 4 Cam Port	<input type="text" value="45000"/>	• Chan 4 ROP Port	<input type="text" value="0"/>

IDU IP Set-Up

The IDU is then passing the data to the ODU-E using Multicast Group IP address.

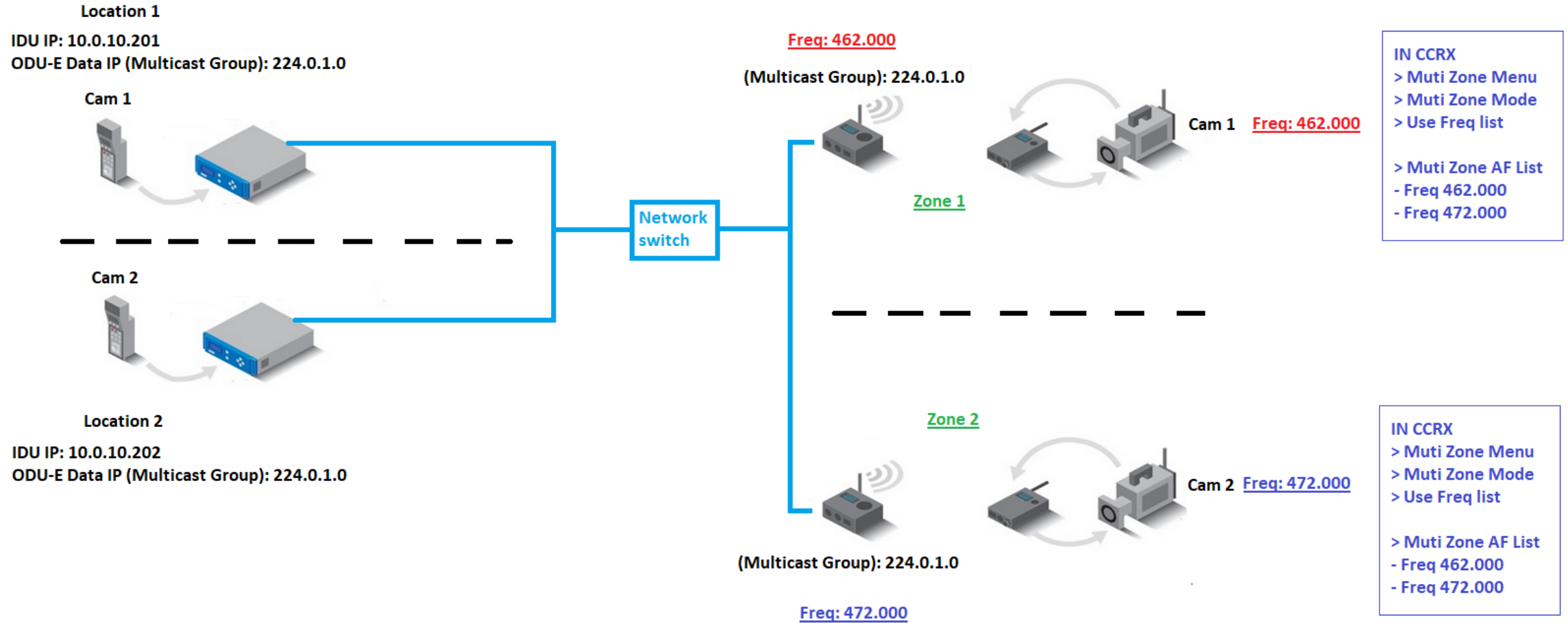
Channel IP address to match on the RCP

RCP 1 for wireless Camera 1

RCP 2 for wireless Camera 2



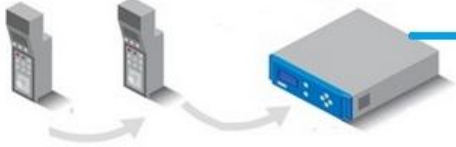
Example 1



Example 2

Location
IDU IP: 10.0.10.201
ODU-E Data IP (Multicast Group): 224.0.1.0

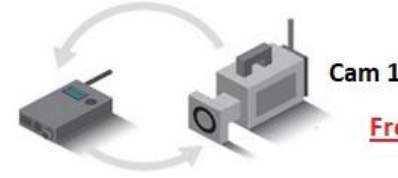
Cam 2 Cam 1



Network switch

Freq: 462.000
(Multicast Group): 224.0.1.0

Zone 1



Freq: 462.000

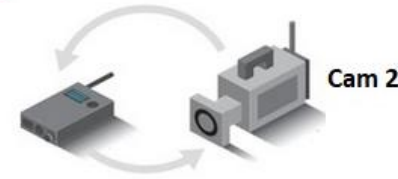
Cam 1



Zone 2

(Multicast Group): 224.0.1.0

Freq: 472.000



Freq: 472.000

Cam 2

- IN CCRX
- > Muti Zone Menu
- > Muti Zone Mode
- > Use Freq list

- > Muti Zone AF List
- Freq 462.000
- Freq 472.000

- IN CCRX
- > Muti Zone Menu
- > Muti Zone Mode
- > Use Freq list

- > Muti Zone AF List
- Freq 462.000
- Freq 472.000

