

# **TECH NOTE**

#### **VIEW® Pro PRODUCTS SUPPORTED:**

VIEW® Pro Encoders E110, E120 VIEW® Pro Decoders D110, D210

CLEARONE DOCUMENT NTS-0046-001 (REVISION 1.0) September 2016

RTSP/UDP STREAM SET UP ON VIEW® PRO ENCODERS, DECODERS, & 3RD PARTY UNITS

#### **OVERVIEW**

Increase flexiblity by sending/receiving H.264 RTSP/UDP streams to/from 3rd-party devices. These VIEW Pro Encoder and Decoder features enable sending streams to 3rd-party decoders and receiving from devices such as VLC, streaming servers, or IP cameras. These streams can then be used in zones and combined using the optional VIEW Pro Composition/Video Wall License.



- VIEW Pro Encoders (E110 and E120): Sending Unicast RTSP/UDP Streams
  - » This is included by default.
  - » This is to send a stream to only one destination (3rd party) device.
  - » No need to purchase the software license.
- VIEW Pro Encoders (E110 and E120): Sending Multicast RTSP/UDP Streams
  - » This is not included by default.
  - » One-time software license is required.
  - » This is to send a stream to multiple destination (3rd party) devices.

- VIEW Pro Decoders (D110, D210): Receiving RTSP/UDP Streams
  - » This is not included by default.
  - » One-time software license is required.
  - » This is to receive a stream from 3rd party device.
- VIEW Pro Decoder D310 does not support RTSP/UDP stream feature.
- A 3rd party device may not support either RTSP or UDP streams. Check their specification sheet to create a corresponding stream accordingly. For example, some 3rd device may not support RTSP stream but it may support UDP. So, in that case, you have to create UDP stream in VIEW Pro Encoder to send stream to that 3rd party device.

### **CREATING RTSP UNICAST STREAM FROM AN ENCODER E120/E110**

A RTSP unicast stream is used to send one stream from VIEW Pro Encoder to one specific 3rd party device that supports an RTSP stream and H.264 codec.

OLE	Service and Street of Stre	and the second se		
Cle	earOne . VIE	W <sup>®</sup> CONSOLE <sup>®</sup>		
		Low Point		
		Save Project	<ul> <li>Wizard</li> </ul>	F Tools
+ ^	dd Devices	Search Q	E120-1	
i 🛍 F	Remove		Information Sou	Irces General Purpose I/O (GPIO) Advance Editor
·	Device Name	Actions	1700 0	
	-	Send Config	Audio Source	HDMI 2
	E120-1 192.168.7.122	Contra Contra	0.1	
Numb	per of Devices: 1		Gain	UdB
			Driver File	No Control 👻
			Enable Audio	
			Stream 1	
			Stream Name	E120-1 Audio Stream 1
			Audio Source	Palanced
			Audio Source	Datanceu
			Gain	0dB 👻
			Enable Audio	
			Stream 2	
			Stream Name	E120-1 Audio Stream 2
			Audio Source	UnBalanced

- 1. In an opened CONSOLE project, Click on the chosen encoder in the device list. (E120 used as an example.)
- 2. Click on the 'Sources' tab and uncheck all default streams.
- 3. Click 'Apply'.

	Cle	earOne 。 VIEW	/* CONSOLE	•							
				🛓 Save Proj	ject 🝷	7	Wizard	🗲 Tools 🕶 🔤	🕽 English 🗸	Settings -	🛛 Help 🗸
<b>D</b> evices	+ A	udd Devices	Search	Q	E120-	<b>1</b> tion S	ources (	General Purpose	1/0 (GPIO)	Advance Editor	
B	s	Device Name	Actions		Ad	d New St	ream	Edit Stream Pre	esets		
Project		E120-1 192.168.7.122	Send Config	•	Device	Stream	s	Audio	Video	Actions	
Devices	Numb	er of Devices: 1				Only	Name	Preset	Preset	Actions	

- 4. Next, click the 'Advance Editor' tab.
- 5. Click 'Add New Stream' to open the 'Advance Stream Editor' window.

	Advance Stream Editor					×	🛛 🛛 Help 🕶
Update Devices	Stream Name	RTSP		<b>&gt;</b>			
Project		Ва	sic I	Features			
	Audio Device	HDMI Audio Input 1	•	Gain	0dB	-	
Devices	Video Device	HDMI Input 1	•	Slave Service Name			
	Audio Preset File	RTSP Audio	•	Height	1080		
Features	Video Preset File	RTSP Lan Mode	•	Width	1920		
Report	Driver File	No Control	•	Channels Count	2	•	
	Source Type	CD Player	•	Max Allowed Latency (Ms)	1000	•	
Discovered	Audio Only	Off		Enable RTSP Stream	On		
Devices	Framerate Slave	On		Enable UDP Stream		Off	
	Resolution Slave	On		UDP Unicast Address			

- 6. Add the Stream Name (Do Not Use Spaces or special characters).
- 7. Set the Audio and Video Device options for the input source that you want to use as the RTSP stream.
- 8. Set the Audio and Video Preset options for the stream. It is recommended to use the default RTSP presets as these are lower-bandwidth options which work best for network streaming applications.
- 9. Click 'Apply' to save the RTSP stream.



10. Lastly, click 'Send Configuration' file and check all of the devices.

Open Me	edia			?	
🗀 File	📀 Disc	network	Capture Device		
Network	Protocol				
Please e	enter a netwo	rk URL:			
rtsp://	192.168.7.12	2:554/RTSP_stre	am		•
http:/ rtp:/ mms rtsp: http:	://www.exam //@:1234 ://mms.exam ://server.exan ://www.yourt	ple.com/stream.a ples.com/stream.a nple.org:8080/tes ube.com/watch?\	avi asx st.sdp v=gg64x		

Open a 3rd party streaming app on a PC on the same network (subnet) - Here, VLC is used as an example of video streaming software on a 3rd party destination device. It can be any software that supports H.264 stream through RTSP/UDP.

Next, in VLC, select Media, then Open Network Stream.

In the box labeled Please Enter Network URL, enter:

rtsp://<encoder\_IP\_Addr>:554/<AdvancedStreamName>\_stream (Note: the :554 in the url is the port number that ViewPro devices use by default for RTSP.)

So for the newly-created stream, enter:

rtsp://192.168.7.122:554/RTSP\_stream

### **CREATING A MULTICAST RTSP STREAM FROM AN ENCODER E120/E110**

An RTSP multicast stream is used to send one stream from VIEW Pro Encoder to multiple destination devices that support RTSP stream and H.264 codec.

In order to access this multicast stream from the ViewPro Encoder, the destination device uses the IP address of the Encoder to access this stream.

ŝ					
Update Devices	Stream Name	RTSP			e internet
Project		Basic	Features		
	Audio Device	HDMI Audio Input 1	Gain	0dB 👻	
Devices	Video Device	HDMI Input 1	Slave Service Name		
	Audio Preset File	RTSP Audio 🝷	Height	1080	Delete
Features	Video Preset File	RTSP Lan Mode 🔹	Width	1920	
Report	Driver File	No Control -	Channels Count	2	
	Source Type	CD Player -	Max Allowed Latency (Ms)	1000	
Discovered	Audio Only	Off	Enable RTSP Stream	On	
Devices	Framerate Slave	On	Enable UDP Stream	Off	
	Resolution Slave	On	UDP Unicast Address	0.0.0	
	Multicast Re-Transmission	Off	UDP Unicast Port	0	
	Max UDP Packet Size	8192 -			
		Premiur	n Features		
	Multicast UDP Support	Off	udp://239.16.1.1:1234		
	Legacy Audio Support	Off	Multicast RTSP Support	On	
				Apply Cancel	Cancel

- 1. Follow the steps to the get to the Advance Editor in the Encoder from above.
- 2. Add the Stream Name (Do not use spaces or special characters).
- 3. Click 'Enable RTSP Stream' to On.
- 4. Enable 'Multicast RTSP Support'.
- 5. Click 'Apply'.
- 6. Next, click 'Send Configuration' file and check all of the devices as discussed above.

Open Me	edia			? ×
Eile	 ⊡isc	network	Capture Device	
Network	k Protocol			
Please	enter a netwo	rk URL:		
rtsp://	/192.168.7.12	2/RTSP_stream		-
http rtp:/ mms rtsp: http	://www.exam //@:1234 ://mms.exam; ://server.exan ://www.yourt	ple.com/stream.a ples.com/stream.a nple.org:8080/tes ube.com/watch?v	vi asx st.sdp v=gg64x	

Now open up 3rd party streaming app on a PC on the same network (subnet) - In this case, VLC. (Or other media player of choice):

Next, in VLC, select Media, then Open Network Stream.

In the box labeled Please Enter Network URL, this time enter:

rtsp://<encoder\_IP\_Addr>/<AdvancedStreamName>\_stream

The example stream is:

rtsp://192.168.7.122/RTSP\_stream

(Note: Do not designate a port in the RTSP url. This designates the stream as Multicast, as opposed to the previous unicast stream.)

### **CREATING UDP UNICAST STREAM FOR AN ENCODER E120/E110**

A UDP unicast stream is used to send one stream from VIEW Pro Encoder to one specific 3rd party device that supports a UDP stream and H.264 codec.

Project		Basic I	Features		
	Audio Device	HDMI Audio Input 1 👻	Gain	0dB	•
Devices	Video Device	HDMI Input 1	Slave Service Name		
	Audio Preset File	RTSP Audio 💌	Height	1080	Delete
Features	Video Preset File	RTSP Lan Mode 🔹	Width	1920	-
Report	Driver File	No Control -	Channels Count	2	- 1
	Source Type	CD Player •	Max Allowed Latency (Ms)	1000	- 1
Discovered	Audio Only	Off	Enable RTSP Stream	Off	_
Devices	Framerate Slave	On	Enable UDP Stream	On	
	Resolution Slave	On	UDP Unicast Address	192.168.7.108	
	Multicast Re-Transmission	Off	UDP Unicast Port	1234	
	Max UDP Packet Size	8192 💌			

- 1. Follow the steps to the get to the Advance Editor in the Encoder from above.
- 2. Add the Stream Name (Do not use spaces or special characters).
- 3. Click 'Enable UDP Stream' to On.
- 4. The UDP Unicast Address and Port boxes are open for editing.
- The Unicast address is the IP of the specific device on the network that will receive the UDP stream from this Encoder.
- 5. Enter the UDP Unicast address and Port information into the appropriate fileds.
- 6. Click 'Apply'.
- 7. Next, click 'Send Configuration' file and check all of the devices as discussed above.

<u>±</u>	Open Media
	Ele ODisc Network Capture Device
	Network Protocol
	Please enter a network URL:
	udp://@:1234
	http://www.example.com/stream.avi rtp://@:1234 mms://mms.examples.com/stream.asx rtsp://server.example.org:8080/test.sdp http://www.yourtube.com/watch?v=gg64x

Back to VLC (or another 3rd party media player app), Open Network Stream box. We enter the following:

udp://@:<port>

So, for the previous example, enter:

udp://@:1234 or udp://@192.168.7.108:1234

Where @ is a placeholder for LOCALHOST. As long as the IP of the destination machine matches the address entered in the Advanced Stream Configuration box, the stream will play.

### **CREATING UDP MULTICAST STREAM FOR AN ENCODER E120/E110**

A UDP multicast stream is used to send one stream from VIEW Pro Encoder to multiple destination devices that support UDP streams and H.264 codec.

							Delete
ures	Video Preset File	RTSP Lan Mode	•	Width	1920		
II Nort	Driver File	No Control	•	Channels Count	2	•	
	Source Type	CD Player	•	Max Allowed Latency (Ms)	1000	•	
vered	Audio Only	Off		Enable RTSP Stream		Off	
ices	Framerate Slave	On		Enable UDP Stream		Off	
	Resolution Slave	On		UDP Unicast Address			
	Multicast Re-Transmission	Off		UDP Unicast Port			
	Max UDP Packet Size	8192	•				
		Pr	emium	n Features			
	Multicast UDP Support	On		udp://239.16.1.1:1234			

- 1. Follow the steps to the get to the Advance Editor in the Encoder from above.
- 2. Add the Stream Name (Do not use spaces or special characters).
- 3. Click 'Multicast UDP Support' to On.
- 4. The Unicast UDP options selected previously now are unchecked and unavailable for editing.
- 5. The UDP Multicast URL becomes editable in the 'Premium Features' boxes section. Enter a valid multicast address and port here.

In this example, the multicast address and port would be:

239.16.1.1:1234

ViewConsole has available settings to modify the RTSP/UDP Multicast Address pool. The default range is:

239.16.1.1 to 239.16.100.255

Consult the ViewConsole documentation for information on changing this range.

- 6. Click 'Apply'
- 7. Next, click 'Send Configuration' file and check all of the devices as discussed above.

<u></u> 0	pen Media
	Eile ODisc Metwork Capture Device
l c	Network Protocol
	Please enter a network URL:
	udp://@239.16.1.1:1234
	http://www.example.com/stream.avi rtp://@:1234 mms://mms.examples.com/stream.asx rtsp://server.example.org:8080/test.sdp http://www.yourtube.com/watch?v=gg64x

Back to VLC (or another 3rd party media player app), Open Network Stream box. Enter the following:

udp://@<UDP Multicast IP>:<UDP Multicast Port>

or

udp://@239.16.1.1:1234

## SUPPORTING RTSP/RTP/UDP STREAMS ON DECODERS (D110/D210)

VIEW Pro Decoders D110 & D210 have additional licenses available to receive RTSP/UDP streams from 3rd party devices that support H.264.

Examples for 3rd	part	/ streaming	devices	are:	VLC.	Streaming	servers.	IP	cameras.	etc.
					,	0	,		,	

	OLE	a Constitution of the Cons	
≡	ClearOne . VIEW	/* CONSOLE*	÷ i i i i i i i i i i i i i i i i i i i
		± Save Pr	roject 🔹 🎽 Wizard 🌾 Tools 🗸   🥥 English 🗸   🕸 Settings 👻   🚱 Help 🗸
C Update Devices	+ Add Devices	Search Q	D110-1 Information Display Output RTSP/Overlay Display Control Infrared (IR)
B	S Device Name	Actions	eneral Purpose I/O (GPIO)
Project	E120-1	Send Config 👻	Decoder Settings
Device:	<b>D110-1</b> 192.168.7.114	Send Config -	Display Output Room/Zone D110-1 -
Features	Number of Devices: 2		Name

### D110 DECODER EXAMPLE:

- 1. In ViewConsole software, select destination Decoder from the project list.
- 2. Click the 'Display Outputs' tab.

3	S	Device Name	Actions	General Purpose I/O (GPIO)
oject	0	E120-1 192.168.7.122	Send Config 👻	Stop Bits 1
vices		<b>D110-1</b> 192.168.7.114	Send Config 👻	Audio Output
port	Numbe	er of Devices: 2		UnBalanced . Link Unbalanced Audio with Video
overed vices				RTSP/Raw UDP Stream Hosting RTSP Stream Name

- 3. Scroll down to RTSP/Raw UDP Stream Hosting section .
- 4. Add a RTSP Stream Name.

A. The name is what will designate the streams in VVM software for this source.

5. Choose stream type: RTSP or UDP streams can be selected.

A. RTP can be manually added by modifying the URL prefix.

6. Add Stream URL - The stream url is the one that was created on a 3rd party device:

(EXAMPLE: rtsp://wowzaec2demo.streamlock.net/vod/mp4:BigBuckBunny\_115k.mov)

Some 3rd party sites/devices may require authentication to view the stream(s) on the device. An example of this would be:

rtsp://<username>:<password>@<DeviceIP>:554

or

rtsp://testuser:mypassword@192.168.0.100:554

#### PROTOCOLS AND SAMPLE URLS

RTSP rtsp://<IP of Source machine>:<port>/<streamname>

- UDP udp://<IP of Decoder>:<port>
- RTP rtp://<Multicast IP>:<port>

#### EXAMPLES:

NAME	URL		
MyRTSP	rtsp://192.168.1.10:8554/Test	tRTSP	(Sample RTSP Stream from IP listed)
SalesUDP	udp://192.168.7.114:8554/	(Samp	le UDP Unicast to Decoder)
RTPDirector	rtp://239.37.16.16:6688/	(Sa	mple Multicast RTSP stream)

After streams have been added and configurations updated, use VIEW Virtual Matrix (VVM) Software to select the new source with <NAME> to the decoder and it should appear on the display.



# STREAMING TO AND FROM VIEW PRO DEVICES WITH ANDROID/iOS

#### STREAMING TO AN ANDROID MOBILE DEVICE FROM AN ENCODER E120/E110

#### **RTSP**:

The RTSP Encoder stream will be set up exactly the same as on page 2 titled, **Creating RTSP Unicast stream from** an Encoder E120/E110.

	Advance Stream Editor			×	🛛 🛛 Help 👻
<b>C</b> Update	Stream Name				
Devices	Stream Name	RISP			r .
Project		Basic	Features		
	Audio Device	HDMI Audio Input 1	Gain	0dB 👻	
Devices	Video Device	HDMI Input 1	Slave Service Name		
	Audio Preset File	RTSP Audio 🔹	Height	1080	
Features	Video Preset File	RTSP Lan Mode 🔹	Width	1920	
Report	Driver File	No Control 🝷	Channels Count	2	
	Source Type	CD Player -	Max Allowed Latency (Ms)	1000	
Discovered	Audio Only	Off	Enable RTSP Stream	On	
Devices	Framerate Slave	On	Enable UDP Stream	Off	
	Resolution Slave	On	UDP Unicast Address		
	Multicast Re-Transmission	mo	UDP Unicast Port		
	Max UDP Packet Size	8192 •			
		Premiur	m Features		
	Multicast UDP Support	Off	udp://239.16.1.1:1234		
	Legacy Audio Support	no	Multicast RTSP Support	no	
				Apply Cancel	Cancel

Open up a 3rd party streaming app on Android device that's on the same network (subnet) - (In this case, VLC) and then tap the menu button (3 horizontal bars).

Mê	× ? 🕯	10:02 A	١M
=		Q,	
Enter network address: e.g. http://,mmx// or rtsp://			
			~
		0.00	
Unknown Artist		0.00	
	Ų	~	*

Next, tap 'Stream' to launch the 'Open Network Stream' screen.



In the space provided, enter:

rtsp://<encoder\_IP\_Addr>:554/<AdvancedStreamName>\_stream

So for the created stream, enter:

rtsp://192.168.7.122:554/RTSP\_stream



For multicast RTSP, the encoder stream will be setup exactly like page 5: Creating a Multicast RTSP Stream on an Encoder E110/E120.

The URL format for the Android streaming software will be:

rtsp://<encoder IP Addr>/<AdvancedStreamName> stream

The example stream is:

rtsp://192.168.7.122/RTSP\_stream

No port number is required for Multicast RTSP streams from ViewPro encoders.

### UDP:

The UDP Encoder stream will be set up exactly the same as on page 7 titled, **CREATING UDP UNICAST STREAM** FOR AN ENCODER E120/E110

Stream Name	UDP		
	Bas	ic Features	
Audio Device	HDMI Audio Input 1	Gain	0dB
Video Device	HDMI Input 1	Slave Service Name	
Audio Preset File	RTSP Audio	- Height	1080
Video Preset File	RTSP Lan Mode	• Width	1920
Driver File	No Control	Channels Count	2
Source Type	CD Player	<ul> <li>Max Allowed Latency (Ms)</li> </ul>	1000
Audio Only	Off	Enable RTSP Stream	Off
Framerate Slave	On	Enable UDP Stream	On
Resolution Slave	On	UDP Unicast Address	192.168.7.108
Aulticast Re-Transmission	Off	UDP Unicast Port	1234
Max UDP Packet Size	8192	•	
	Premi	ium Features	
Multicast UDP Support	Off	udp://239.16.1.1:1234	
Legacy Audio Support	Off	Multicast RTSP Support	Off
			Apply
			Афрія

Open up a 3rd party streaming app on Android device that's on the same network (subnet) - (In this case, VLC) and then tap the menu button (3 horizontal bars).

Mê	💐 🌹 盲 10:02 AM
=	Q :
Enter network address: e.g. http://,mmx.// or rtsp://	
	<b>&gt;</b>
Unknown Artist	0:00
	<b></b>

Next, tap 'Stream' to launch the 'Open Network Stream' screen.



Enter the following:

udp://@:<port>

(Where @ is a placeholder for the local IP address.)

So, the example URL would be:

udp://@:1234



For Multicast UDP streaming, the encoder stream will be set up exactly like page 8, Creating UDP Multicast Stream from an Encoder E120/E110. The URL format for the Android Streaming Software will be:

udp://@<MulticastIP From Encoder setup>:<Port From Encoder Setup>

The example stream is:

udp://@239.16.1.1:1234/

### STREAMING TO AN IOS MOBILE DEVICE FROM AN ENCODER E120/E110

(Currently only RTSP streaming to iOS is available.)

#### RTSP:

The RTSP Encoder stream will be set up exactly the same as on page 2 titled, Creating RTSP Unicast stream from an Encoder E120/E110.

	Advance Stream Editor			×	🛛 🛛 Help 🔻
0					
Devices	Stream Name	RTSP			r.
Project		Basic	Features		
	Audio Device	HDMI Audio Input 1 👻	Gain	0dB 👻	
Devices	Video Device	HDMI Input 1	Slave Service Name		
	Audio Preset File	RTSP Audio 🝷	Height	1080	
Features	Video Preset File	RTSP Lan Mode 🔹	Width	1920	
Report	Driver File	No Control -	Channels Count	2	
	Source Type	CD Player -	Max Allowed Latency (Ms)	1000	
Discovered	Audio Only	Off	Enable RTSP Stream	On	
Devices	Framerate Slave	On	Enable UDP Stream	Off	
	Resolution Slave	On	UDP Unicast Address		
	Multicast Re-Transmission	Off	UDP Unicast Port		
	Max UDP Packet Size	8192 •			
		Premiun	n Features		
	Multicast UDP Support	Off	udp://239.16.1.1:1234		
	Legacy Audio Support	Off	Multicast RTSP Support	Off	
				Apply Cancel	Cancel

Open up a 3rd party streaming app on the iOS device that's on the same network (subnet) - (In this case, the App RTSP Player was used as an example.)

Open the RTSP Player App and tap Plus Sign.

	2:59 PM	\$ 30% BC)
+ Done	RTSP Player	1

In Add Media URL, in the top box, enter an identifying name for the user, and in the bottom box, enter the RTSP URL:

rtsp://<encoder\_IP\_Addr>:554/<AdvancedStreamName>\_stream

So for the example stream, enter:

rtsp://192.168.7.122:554/RTSP stream



Now click Add, then click Done next to the Plus Sign (+) and then select the window with the user-identifiable name to start the stream.

For multicast RTSP, the encoder stream will be setup exactly like page 5: Creating a Multicast RTSP Stream on an Encoder E110/E120. The URL format for the iOS streaming software will be:

rtsp://<encoder\_IP\_Addr>/<AdvancedStreamName>\_stream

The example stream is:

rtsp://192.168.7.122/RTSP stream

No port number is required for Multicast RTSP streams from ViewPro encoders.

### STREAMING FROM ANDROID/iOS

Currently there are no appropriate apps to stream from Android/iOS devices to decoders.

### SUMMARY

VIEW PRO SUPPORTS SENDING AND RECEIVING STANDARD BASED STREAMS TO/FROM 3RD PARTY DEVICES.

1. ENCODER SENDING A UNICAST RTSP STREAM, THE 3RD PARTY DESTINATION DEVICE WOULD NEED THE FOLLOWING URL TO BE USED:

SYNTAX: RTSP://<ENCODER\_IP>:554/<CONSOLE\_STREAM\_NAME>\_STREAM EXAMPLE: RTSP:192.168.55.145:554/SALESPRESENTATION\_STREAM

2. ENCODER SENDING A MULTICAST RTSP STREAM, THE 3RD PARTY DESTINATION DEVICE WOULD NEED THE FOLLOWING URL TO BE USED:

SYNTAX: RTSP://<ENCODER\_IP>/<CONSOLE\_STREAM\_NAME>\_STREAM

EXAMPLE: RTSP://192.168.1.104/BROADCASTRTSP\_STREAM

3. ENCODER SENDING A UNICAST UDP STREAM, THE 3RD PARTY DESTINATION DEVICE WOULD NEED THE FOLLOWING URL TO BE USED:

SYNTAX: UDP://@<BLANK>:<SPECIFIED\_PORT\_FROM\_ENCODER\_UDP\_PORT>/

OR

UDP://@<SPECIFIED\_IP\_FROM\_ENCODER\_UDP\_IP>:<SPECIFIED\_PORT\_FROM\_ENCODER\_UDP\_ PORT>

THE IP SPECIFIED ABOVE MUST BE THE IP OF THE DEVICE RECEIVING THE UNICAST UDP STREAM.

EXAMPLE: UDP://@:1234/

OR

UDP://@192.168.7.110:1234/

4. ENCODER SENDING A MULTICAST UDP STREAM, THE 3RD PARTY DESTINATION DEVICE WOULD NEED THE FOLLOWING URL TO BE USED:

SYNTAX: UDP://@<MULTICAST\_IP\_FROM\_ENCODER\_ADVANCED\_OPTIONS>:<PORT\_FROM\_ENCODER\_ADVANCED\_OPTIONS>/

EXAMPLE: UDP://@239.16.1.1:1234/

5. DECODER RECEIVING A RTSP STREAM FROM 3RD PARTY DEVICE WOULD NEED THE FOLLOWING URL TO BE USED:

SYNTAX: RTSP://<HOST\_IP>:<HOST\_PORT>/<STREAMNAME> EXAMPLE: RTSP://192./168.20.112:554/CONFROOMDVD

6. DECODER RECEIVING A UDP STREAM FROM 3RD PARTY DEVICE WOULD NEED THE FOLLOWING URL TO BE USED:

SYNTAX: UDP://@<DESTINATION\_IP>:<DEST\_PORT> (THE DESTINATION IP IS THE IP ADDRESS OF THE DECODER)

EXAMPLE: UDP://@192.168.7.122:1234/

7. DECODER RECEIVING A RTP STREAM FROM 3RD PARTY DEVICE WOULD NEED THE FOLLOWING URL TO BE USED:

SYNTAX: RTP://<HOST\_IP>:<HOST\_PORT>/<STREAMNAME>

EXAMPLE: RTP://192./168.20.112:554/CONFROOMDVD

#### SALES AND INQUIRIES

#### Headquarters

5225 Wiley Post Way, Suite 500

Salt Lake City, UT 84116

Tel: 801.975.7200 TollFree: 800.945.7730 Fax: 801<u>.303.5711</u>

Tel: +1.801.975.7200 global@clearone.com Tel: 801.975.7200 sales@clearone.com lechoales

Tel: 801.974.3760 techsales@clearone.com

#### TechSupport

Tel: 801.974.3760 tech.support@clearone.com

Other product names may be registered trademarks of their respective owners who do not necessarily endorse ClearOne or ClearOne's products. All rights reserved. Information in this document subject to change without notice. NTS-0046-001 Rev1.0 © 2017 ClearOne.