VS-R265 / VS-R264

Guide to point-to-point streaming (unicast) between different networks



<Precautions> It is necessary to secure a stable bandwidth to establish a stable streaming between bases in different networks. Please consult with a network contractor in case construction is needed.

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Required equipment

【Encoder side】VS-R265 (or VS-R264)1 setPC (for setup)1 setRouter1 setCamera(s) or other visual equipment

1 set

[Decoder side] VS-R265 (or VS-R264) 1 set PC (for setup) 1 set Router 1 set Video monitor 1 set

Note: AC adapters and other accessories are omitted from this list.

Connection: Connect as shown in the picture below.



Connection

1 Obtaining the global IP address (public IP address) of the decoder's network

Connect the computer and the decoder on the same network and search "what is my IP" on Google (*1). Write down the network's global IP address.

e.g. 60.###.###.88 (*2)

- * 1 : The global IP address may differ depending on whether the decoder is connected or not. Also, the global IP address will be reassigned and may change if the router settings are changed and then rebooted.
- * 2 : "###" represent whole numbers between $1 \sim 255$

② Setting the port number transferred by the decoder's network

The user can freely set the port number using even numbers between 1024 - 49150. Write down the port number once decided.

In this guide, the port number will be 6400.

1. Encoder side setup (1) PC setup

Since the VS-R265's factory default private IP address is 192.168.1.100, this guide will use this initial value to set the computer's private address.

IP address	: 192.168.1.19 (*1)
Sub-net mask	: 255.255.255.0
Default gateway	: 192.168.1.1 (*2: router's IP address)

*1: The IP addresses above are just examples. They can be set arbitrarily as long as they have the same network address.

Both PC and VS-R265 can be set to "Automatic (DHCP)".

*2: In case of Windows, the IP address settings can be changed from

Control Panel > All Control Panel Items > Network Connections

① Use the TASCAM DISCOVERY application to recognize the VS-R265 on the computer.

② Press the Open button on the right to open the Streaming Dashboard on a browser.

Note: TASCAM DISCOVERY can be downloaded from the TASCAM website.



[TASCAM DISCOVERY start screen]

1. Encoder side setup (2) VS-R265 setup #2

- ③ Select "Device Settings" on the top right of the Streaming Dashboard screen.
- 4 Select the Network tab on the left, change "Address Assignment" to "Manual (Static)", and set the private IP address. In this case 192.168.1.21 (e.g.)

Note: the private IP address will be automatically set if "Address Assignment" is set to "Automatic (DHCP)".

[Streaming	g Dashboard s	creen]			Sei	ect	Device S	ettings	
TASCAM						VS-	R265_00022E8	29003 192.168	3.1. 21
				Encoder Cor	ntrol Decoder Co	ontrol	Device Settin	igs Advanc	æd
Encoders									
Device Name	Analog Overload 💡	Input Resolution	Streaming	Recording	Audio Settings	Enco	der Settings	Output Settin	igs

Select "Device Settings"

[Device Settings > Network screen]



(5) Select the General tab on the left, set the Encoder to ON, and save settings.

[Device Settings > General screen]



(6) Select Encoder Control on the top center. Turning ON the Encoder will display the VS-R265 on the screen.

⑦ Press the Configure button below"Output Settings" and open the OutputSettings screen.

[Encoder Control screen]

TASCAM						VS-R265_00022E82	9003 192.168.1.21
			End	coder Control	Decoder Contro	Device Setting	s Advanced
Encoders							
Device Name	Analog 💡 Overload	Input Resolution	Streaming	Recording	Audio Settings	Encoder Settings	Output Settings
VS-R265_00022E829003 (Curre	٠	×	0	×	Configure	Configure	Configure

Press the Configure button

[Output Settings画面]

Output Settings		×
RTMP	RTMP Output Off The Copy URL ?	
HLS		
Multicast	Generic RTMP V	
Unicast 1	rtmp:// VIRL	
Unicast 2		
RTSP		
File Recording		
FTP Upload		
	OK Cancel App	ly

8 The settings are as shown on the screen.

Unicast Output1

Protocol

- : On : Select "rtp://" to increase reliability or "udp://" to decrease waiting time.
- IP address : Global IP address of the decoder side. In this case, 60.###.###.88

Port : in this case 6400

Output Settings Set Unicast Output1 to On RTMP Specify the port number of Unicast Output 1 On Copy URL the decoder router. HLS 60.###.###.88 6400 Multicast Select rtp:// Set the global IP address Unicast 1 of the decoder side. or udp:// Unicast 2 RTSP File Recording FTP Upload Cancel Apply

[Output Settings Unicast1 screen]

1. Confirming the settings



2. Decoder side setup(1) PC setup

Since the VS-R265's factory default private IP address is 192.168.1.100, this guide will use this initial value to set the computer's private address.

IP address	: 192.168.1.19 (*1)
Sub-net mask	: 255.255.255.0
Default gateway	: 192.168.1.1 (*2: router's IP address)

*1: The IP addresses above are just examples. They can be set arbitrarily as long as they have the same network address.

*2: In case of Windows, the IP address settings can be changed from Control Panel > All Control Panel Items > Network Connections

① Use the TASCAM DISCOVERY application to recognize the VS-R265 on the computer.

② Press the Open button on the right to open the Streaming Dashboard on a browser.



[TASCAM DISCOVERY start screen]

③ Select "Device Settings" on the top right of the Streaming Dashboard screen.

④ Select the Network tab on the left, change "Address Assignment" to "Manual (Static)", and set the private IP address.

In this case 192.168.1.11 (e.g.)

[Streaming Dashboard screen]					Se	elect	"Device Se	ettings"
TASCAM. VS-R265_00022E829003 192.168.1.17						03 192.168.1.11		
				Encoder Cont	rol Decoder Co	ontrol	Device Settings	Advanced
Encoders								
Device Name	Analog Overload 💡	Input Resolution	Streaming	Recording	Audio Settings	Enco	der Settings Ou	tput Settings

[Device Settings > Network screen]



(5) Select the General tab on the left, set the Decoder to ON, and save settings.

[Device Settings > General screen]



(6) Select Decoder Control on the top right. Turning ON the Decoder will display the VS-R265 on the screen.

Press the Configure button below
 "Stream Settings" and open the Decoder
 Stream Settings screen.

[Decoder Control screen]

TASCAM			VS-	R265_00022E829003 192.168.1.11
		Encoder Control	Decoder Control	Device Settings Advanced
Decoders				
Device Name	Source	Video Output Resolution St	tatus Quick Control	Audio Settings Stream Settings
VS-R265_00022E829003 (Current D	Other	Passthrough ~	 ✓ Disconnect 	Configure Configure

[Decoder Stream Settings screen]

Press the Configure button

Decode	er Stream Settings		×
	Source Encoder Other Encoder	~	
	Stream Type		
	Unicast	Port	
	rtp://	6400	
		OK Cancel Ap	ply

(8) The settings are as shown on the screen.

Source Encoder	: Other Encoder
Stream Type	: Unicast
Protocol	: rtp:// or udp://

(match with the encoder)

Port : in this case 6400

Source Encoder	
Other Encoder	~
Stream Type	
Unicast	~
Protocol	Port
rtp:// ~	6400

[Decoder Stream Settings screen]

2. Decoder side setup(3) Router setup

Set the router forwarding (opening) port to receive data from external networks.

In case the unit's DHCP server function is enabled, set the VS-R265 IP address to be fixed in order to use this function.

If the IP address is changed dynamically by the DHCP server function, the PC may be unintentionally opened to the WAN side, so be careful when changing settings.

Note: the settings are different on every router.

静的IPマ	スカレード	設定					
トップページ > 詳	細設定 > 静的IPマスカレ ・	ード設定					ヘルフ
高度な設定画面の 設定変更を行うと	[WAN→LAN中継設定]と 、通信・通話が切断され	静的IPマスカレード設定画面の内容 いることがあります。	が競合した場合は、高度な	設定画面の[WAN→LAN中編	*設定]の内容が優先さ	れます。	
対象インタフェー	-スを選択	メインセッション 🗸					
[静的IPマスカレー 設定	ード設定]						
有効/無効	エントリ番号	変換対象プロトコル	変換対象ポート	宛先IPアドレス	宛先ポート	操	作
	1	UDP	6400	192.168.1.11	6400	編集	削除
	2					編集	削除
	3					編集	削除
	4					編集	削除
	5					編集	削除
	6					編集	削除
	7					編集	削除
	8					編集	削除

[Port forwarding setting screen (example)]

2. Confirming all settings



Troubleshooting

• The computer cannot recognize the VS-R265.

 \Rightarrow Make sure the VS-R265's private IP address matches that of the computer's.

⇒ The private IP address may change dynamically if the VS-R265's private IP address is set to DHCP.

Use a USB memory flash, etc. or the TASCAM DISCOVERY application to check the private IP address.

• Cannot receive data from external networks.

 \Rightarrow Check if the port forwarding settings of the router are set correctly.

⇒The global IP address may change if the router settings or the equipment connected to the router is changed. Check the current global IP address and set the encoding output settings.

⇒This may improve by disconnecting and reconnecting the decoder side's VS-R265 via Streaming Dashboard.

• The decoded video is distorted.

 \Rightarrow Changing the VS-R265 settings on the encoder side may improve this.

Go to Encoder Settings > Video Encoding and reduce the data transfer amount (kbps).

⇒The transfer quality may deteriorate depending on the specifications of the network line, the distance between bases, and the load on the network line. Please consult your network operator regarding these measures.