RENESAS Stream it! Web Radio Quick Start Guide

The Stream it! kit will now be configured to run the Oryx Web Radio demo.

1. Please configure the hardware as described in the set-up page in the GUI and then press the "Oryx Web Radio" button as indicated:

Compare	100.0%	0.000s
Erase	66.6%	0.899s
Program	0.0%	[
Verify	0.0%	j
Erasing range 0x18100000 - 0x1813FFFF (1 sector, 256 KB)		

- 2. The Demo application will now be loaded into the SPI flash on the Stream it! board.
- 3. Open a suitable Windows serial communication application: TeraTerm (please see the installer software\Setup_teraterm-4.86.exe on the CD).
- 4. When the Stream it! board powers up it will enumerate as a new serial port, "RSK USB Port". Please check the exact com port in the Windows device manager as below. In this case COM3.
 - a. Note: If this is the first time you are using Renesas RSK USB port, you will need to select the driver from the CD (\RSK USB Port driver) when asked.
- 5. Configure the Windows serial communication application for the com port as above at 115200 baud as below.
- 6. Press the reset button on the board to restart the application. The Stream it! board will send a sign on message to the serial port and attempt a DHCP connection to the Ethernet network.
- 7. The Stream it! kit will attempt to make a DHCP connection to the network for up to 15 seconds. If the DHCP connection completes correctly, an IPv4 IP address will be reported (see below). Please make a note of this address. In this case, 172.29.43.169 but this will be different in your configuration.
- 8. If the DHCP connection fails, a fixed IP address will need to be established. Please check the "Fixed IP Appendix" below.
- 9. Open your Web browser and enter the IP address
 - a. For DHCP see step 7 or 192.168.0.161 for fixed IP (step 15).
- 10. The Web Radio server should now be displayed.



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Port:	СОМЗ - ОК				
Baud rate:	115200 -				
<u>D</u> ata:	8 bit - Cancel				
P <u>a</u> rity:	none •				
<u>S</u> top:	1 bit • Help				
Elow control:	none •				
Transmit delay 0 msec/ <u>c</u> har 0 msec/line					

RENESAS Stream it!

Web Radio Quick Start Guide

11. Select an Internet Radio channel from ice-sov.musicradio.com, for example for Capital London, enter "ice-sov.musicradio.com/CapitalMP3" in the field indicated below or define the IP address of the stream IP (mandatory for fixed IP configuration).

CycloneTCP	v	Veb Radio
	Icecast Settings	
URL:	ice-sovmusicradio.com/CapitalMP3	
Icecast Server Port:	80	
	LAN Settings	
MAC Address:	00-AB-CD-EF-00-A1	
Host Name:	WebRadio	
DHCP Client:	on	
Pv4 Address:	192.168.0.161	
Subnet Mask:	255 255 255 0	
Default Gateway:	192.168.0.254	
Primary DNS:	8888	
Secondary DNS:	884.4	

12. Note:

You may need to enter your company proxy settings at the bottom of the page. These are company specific and will need to be checked it your IT admin.

		Proxy Settings
Proxy:	On	
Proxy Server Name:	192.168.0.1	
Proxy Server Port:	8080	

13. If you wish to listen to a local network stream please define the stream IP details by setting the streaming PC IP address in the URL entry (in the example the streaming machine was at 192.168.0.7). Type 192.168.0.7/stream.mp3 in the URL entry and 8000 for the Icecast Port Server.

← → C 1921680.161 GycloneTCP		
		Icecast Settings
URL:	192.168.0.7/stream.mp3	
Icecast Server Port	8000	
		LAN Settings
MAC Address:	00-AB-CD-EF-00-A1	
Host Name:	WebRadio	

- 14. Finally, save the configuration, and restart the Stream it!
- 15. You should now be able to connect a set of headphones to CN8 (Audio out) and enjoy web radio. You may need to alter the speaker volume by adjusting the potentiometer on the side of the board.

RENESAS Stream it! Web Radio Quick Start Guide

Fixed IP Appendix

If your network does not support DHCP you will need to follow the procedure below:

16. Fixed IP procedure

- a. Disconnect your PC from the network
- b. Make a direct Ethernet connection between your PC and the Stream it! board
- c. Power up the Stream it! board and wait 15 seconds. A fixed IP address will be allocated as follows
 - i. IPv4 Address = 192.168.0.161
 - ii. Subnet Mask = 255.255.255.0
 - iii. Default Gateway = 192.168.0.254
 - iv. DNS Server 1 = 8.8.8.8
 - v. DNS Server 2 = 8.8.4.4of 192.168.0.161
 - vi. For setting your PC see "Fixed IP appendix" in STREAMT IT Video QSG pdf file.

Local streaming Appendix

Use this to start streaming into a local network and/or when no web access is available.

- 17. Unzip the CD file software\icecast_server.zip onto your PC hard disk.
- 18. Start the Icecast server by double clicking on Icecast2win.exe (located in icecast server\Icecast2 Win32 directory).
- 19. Click on "Start Server" button.
- 20. Authorize the access (if your firewall asks for it)
- 21. Double click on ezstream.bat (located in icecast_server\Ezstream directory).
- 22. You can add mp3 music in the FreeMp3Files directory and modify the file playlist.m3u in directory Ezstream to add your music to the list.
- 23. The radio should now be streaming. You can test it by entering http://127.0.0.1:8000/stream.mp3 in your web browser of the streaming machine.
- 24. Return to step 9 above



If you wish to restore to default settings after changing the configuration, please push the reset button while the user button is pressed and then release both buttons.