Z/IP <--> iPort

Products:

- 2001-00305 **ZEPHYR iPORT (FANLESS)**
- 2001-00286 **Z/IP ONE**

The iPort should be set to MPEG2 AAC encode and decode (if this isn't an option, it may just be "AAC"). The Z1 should be set to "MP2-AAC (Xstream)" - this setting is on the Setup->Audio codec menu, or the Codec Settings webpage. Z1 always uses 48kHz sample rate, if that's an option on the iPort (IIRC - I.

To receive from a Z1

Set up the iPort's receive port numbers. Default for RTP is 9150, but this can be most anything. iPort by default increments that for each of the next 7 streams. On the Z1, press Conn. Enter the IP:PORT combo on the "Name or IP" line. Remove the Group name just in case. Change the call type to "RTP push." Then, activate the Call button, and the iPort should start decoding the stream.

This is from memory, so if it doesn't decode right away, start troubleshooting by making sure that the received packets are incrementing, and work from there.

To send to a Z1

Set the Z1's RTP listen port under Setup->ZIP Server->Listen Port. The default, 0, uses a random port when communicating with the Z/IP server, but keeps 9150 open for RTP. Put a custom port in there to make the Z1 stop using a random value.

On the iPort's xmit stream setup, put the Z1's IP and port in, and activate the stream. I've only done this once, so I can't walk you through it. Again, the Z1 should just lock and start decoding. If not, start troubleshooting the same way, by making sure that the receive frame information is incrementing.

GPIO

The Z1 should be sending 8 GPI and 8 GPO embedded in the audio stream, with the same framing used in the Xstream. The iPort should be able to recognize this and transmit it as well, though I don't know if there's an option required to enable this anywhere.

The meaning of the GPIO is entirely configurable on the Z1. By default, I believe both in and out are set to End-to-End. You can test the GPIO on the Z1 without making a loopback jig or having to wire a switch. On the Z1, set all outputs to End-to-End. On the frontpanel menu (and the webpage, but you have to refresh that for status), the output bit state is shown next to the function on the menu. That will test the

receive from the iPort. To test the send, change a few of the Z1's parallel input bit functions to "Transmit 1" - this will set the bit in transmission regardless of the state of the physical (or LW) gpio bit.

-Jason W

ACT Connections

ACT (Agile Connection Technology) is not planned for iPort at this time.

If the user's IP connections are robust, then ACT may not be needed, and simple RTP Push connections between iPort and Z/IP ONEs would be fine. Cost savings by using an iPort at the central point rather than paired Z/IP ONEs may not be all that much, anyway, compared to the benefits of paired Z/IP ONEs.

Take a listen to what this Z/IP ONE user does for reliable STL over the Public Internet..
http://radioworld.com/article/joy-fm-enjoys-the-sound-of-the-z-ip/214740

You can also hear more about the setup on this podcast...
http://thisweekinradiotech.com/twirt-home/2012/9/21/twirt-137-dave-anderson.html

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