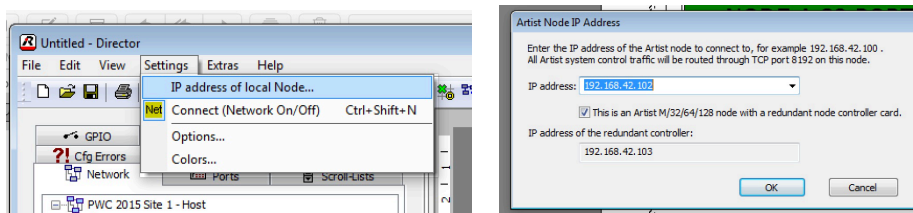


# Test routine for *Riedel* nodes

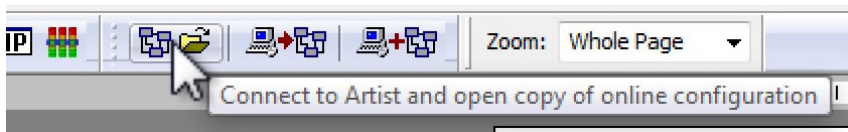
## *Pete Erskine*

---

1. This uses a special program to test called **test config 64 AND 32 node.Art**
2. Connect computer to node. Set computer manual IP to be in same range as node. Usually the IP is listed on the front of the node. If you are not using a switch you may need a crossover cable.
3. Set Director software to Node address. The address is always even.



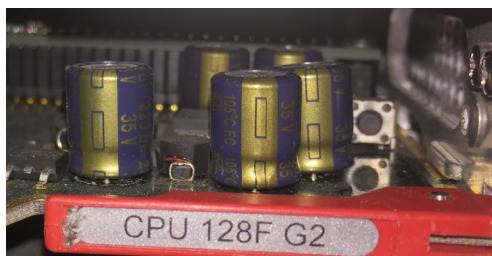
4. Activate network and load file from node.



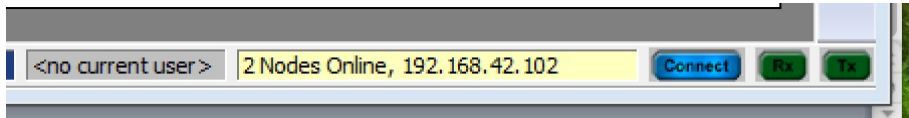
5. If the software won't connect, maybe the IP of the node has been changed. Plug in a panel or use the panel in the rack. Go to **shift page** and hold down the **option** key to see the IP of the Node. Remember to set computer to same range.



6. Go back to step 2 and try again. If the Panel will not show the IP, on the right side of the CPU card, there is an IP reset button (deep inside about an inch). This will set the IP to 192.168.42.100.



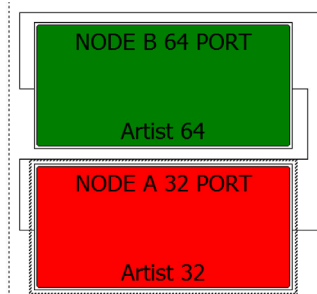
7. When the node is connected you will see, in the lower right corner: This example has 2 nodes connected via fiber.



8. At this point, the program you see is the last one used in this node. Open your test file (**test config 64 AND 32 node.Art**) and send it to the node using the **Save to Artist** button.



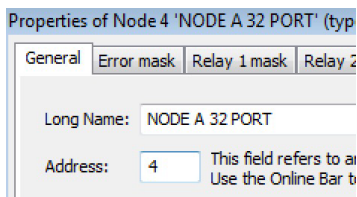
Each node has an address and if the address of the node is not the same as the address of the test program node it will be red. In this example, if we are only testing a 64-port node we are ready to go and you can ignore the red.



To find out the address of the node, on the panel you connected in step 5, above, or the rack panel, in NON-shift mode hold the OPTION key down and the second key will display the address of the node. Here it is 3.



Right click>properties on the red node and set the Node Address to 3. It was 4.



9. Now when you say OK the Node will be green. Send the file to the node again.

## Testing analog ports.

10. Connect a DCP-1016 or DCP-1116 desktop panel to port 1. When connected to the 32-port frame this panel has all the buttons needed for the analog 4 wire ports and the C3 beltpack ports. Testing the 64 port frame uses the port 1 to test 4 wire and port 2 to test C3 / C44 beltpacks. **Double click the master Volume control to set all audio levels to standard.**
11. On the back of the Desktop panel insert AUDIO OUT DB9 pin and AUDIO IN DB9 pin adapters. To begin the 4 wire tests.
12. Take 2 Q-Boxes with split I/O. Turn on the tone and the speaker on both and connect them together such that you hear one box on the other and vice versa. Set output level to +4 and adjust the listen volume controls to a comfortable standard level.
13. Plug the first Q-Box into the I/O cables (either on A or B)
14. Take the second Q-Box and, using 2 short cables plug it into the first 4-wire port.
15. You should hear the tone come from the box connected to the Desktop panel and see on the panel an indication of incoming audio. The 2 red LED on the right shows incoming audio. The Yellow LED is the level for listening set to standard by the master double clicks.



16. Listen for the standard level you set in 13, above. The best way to test is to have a meter on the output of the panel and on the output of the 4-wire, rather than by ear.
17. Press the panel button and the test is reversed, sending the tone from the Q-Box at the panel to the 4-wire output.. You should hear or see on the meter the tone coming out of the 4-wire. Move the Q-Box to the next port and repeat from 16 above. Ports for bays 5 and 6 are on the main page and Bays 7 and 8 on the shift page of the DCP panel.

## Testing C3 and C44 ports.

18. You are finished with the Q=Boxes and meters now. For the 64-port node shift the panel to port 2. On the 32-port frame no changes.
19. Plug a headset or GN mic into the panel
20. Plug a C3 beltpack with headset into the first port of the C44 power supply.
21. On the panel each button is channel A or Channel B of the beltpack. I when testing the first port you will see audio indication on 31 for CH A and 32 for CH B. push the 31 and 32 buttons to hear the mic on the panel from the C3 headset.



22. Continue with the next port. On a 32-port frame there are only 4 C44 ports in Bay 3. In a 64 there are 4 ports in Bay 3 and 4 in Bay 4.

## Testing Panel ports

23. Using the DCP panel. Plug it into each of the 15 front panel connections. Each time the panel should power up showing the port it is connected to:
24. Double click the master volume
25. Listen to yourself in a headset by pressing the upper left button or the Sidetone button.
26. Go to next port.

## Testing the backup CPU

27. Open the door to the Artist frame. On the right lower side are the 2 CPUs. The bottom one is the even IP and the second one up is +1. Your main CPU will have a steady Green LED on the left or a quickly flashing Green LED if it is the main AND the system RING clock master. The backup CPU will have a slowly flashing Green LED, about once every 3 seconds.



28. Pull out the main CPU. The BU should take over and when you re-insert the CPU it will be NOW be the backup. Remove the new Main CPU and it will switch back. Leave the system with the bottom CPU as the master.

## Testing the fiber connections.

29. On the CPU shown above, to the right of the Green LEDs are 2 fiber OK Yellow LEDs. Each CPU has an UPSTREAM fiber TX/RX pair and a DOWNSTREAM TX/RX fiber pair. The first yellow indicates that UPSTREAM is OK and the second DOWNSTREAM is OK.
30. Normally with no fiber connected to another node you should have a fiber jumping between the 2 CPUs so you will see an upstream on one and a downstream on the other.
31. Plug a fiber from one frame to the other and a second the reverse direction. All 4 Yellow LEDs should be lit if it is working.

## Testing the Rack UPS.

32. Unplug the main rack power and start a timer. The UPS should easily last 5 minutes.