

z-16.16 Digital Detangler Manual

The z-16.16 digital detangler is a digital audio router, patchbay, and distribution amplifier, all in one package. Furthermore, if you have purchased a version of the z-16.16 with any combination of AES/EBU, S/PDIF, and optical inputs and outputs, it can act as a format converter, as well.

The first step in using the z-16.16 is to connect all of your digital audio equipment to it. The unit's rear panel is shown in Figure 1. The top row of connectors is labeled "digital sources (from)" and the bottom row is labeled "digital destinations (to)." This makes it clear that outputs from digital sources (i.e., DAT machine outputs, CD outputs, etc.) connect to the top row of connectors and that inputs to digital sources (i.e., D/A converter inputs, DAT machine inputs, etc.), connect to the bottom row of connectors.

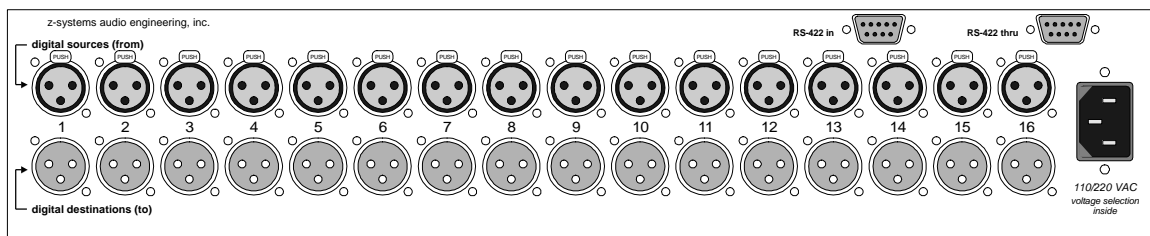


Figure 1 -- Rear view of z-16.16 (shown configured with AES/EBU only)

Once your various devices are connected to the z-16.16, you now have the power to dynamically change the pattern of "who's talking to who" at the touch

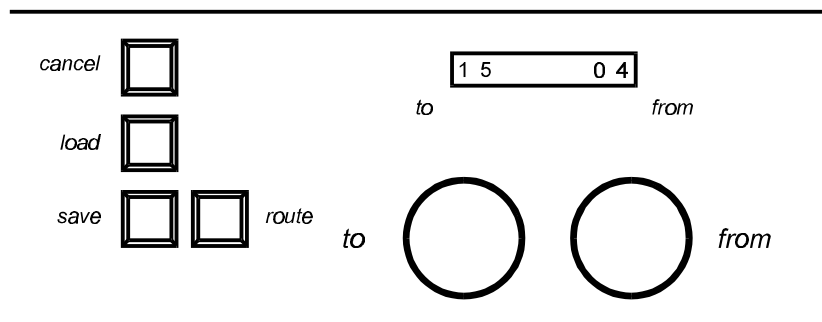


Figure 2 -- Normal mode of operation

of a few controls. Figure 2 shows the state of the z-16.16 in the normal mode of operation. The 8 character LED display shows the number of the destinations on the left and the sources on the right. The two knobs below the display are used to change the current patch. It is important to point out that only a single

source can be routed to a given destination. It is because of this that when changing the configuration, the user should rotate the to knob first and then change the from knob setting. In other words, suppose you wish to change the configuration so that destination 6 is being fed by source 1. The first step is to turn the to knob until the left hand side of the display reads "06." Then turn the from knob until the desired source is showing on the right hand side of the display, in this example it would read "01." The next step is to hit the route button. You will notice at this point that the LED display shows the word "Routing" for a brief moment. This is to let you know that your changes have been sent to the connection matrix.

In general, the procedure for connecting a source to a destination is as follows. First rotate the to knob until the desired destination is shown on the left hand side of the display. Then rotate the from knob to show the desired source on the right hand side of the display. Finally, hit the route button to make the connection. You may make as many changes as you want before hitting the route button.

The z-16.16 is also capable of being controlled through an RS-422 link to either the z-rrc hardware remote controller or PC or Mac software. To connect the z-16.16 detangler to any of these devices, attach the provided cable to the "RS-422 in" port on the rear of the unit. If more than one router are to be controlled in this manner, the user can daisy chain the control signals from one router to the next using the "RS-422 thru" port. The z-rrc hardware remote can control up to 4 different routers using ID numbers of 1 through 4 while the PC and Mac software can handle up to 16 routers. To change the ID of your z-16.16 detangler, press both the load and save buttons simultaneously. The LED will display "ID = 01." Rotate the Left knob until the ID number you wish to change the router to is displayed and then press the cancel button. Figure 3 shows the pin-out diagram for the "RS-422 in" and "RS-422 thru" ports.

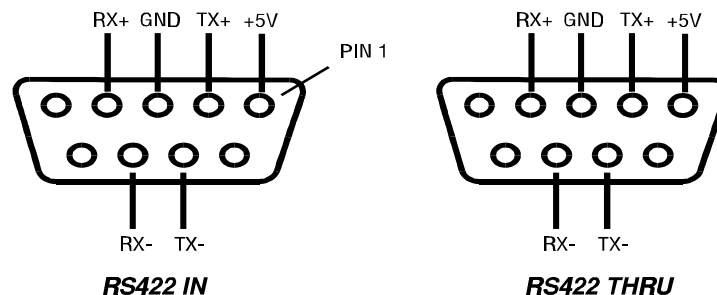


Figure 3 -- Pin-out diagram

Saving and loading presets

A very useful feature of the z-16.16 is its ability to save and load preset configurations. To save a configuration once it has been set up, first hit the

save button. The z-16.16 in save mode is shown in Figure 3. Simply rotate the left knob to bring up the desired "patch" number (you have up to 50 storage locations) and then hit the save button again to finish the operation. To abort the save operation, just hit the cancel button. Hitting either save or cancel will return you to the normal mode of operation.

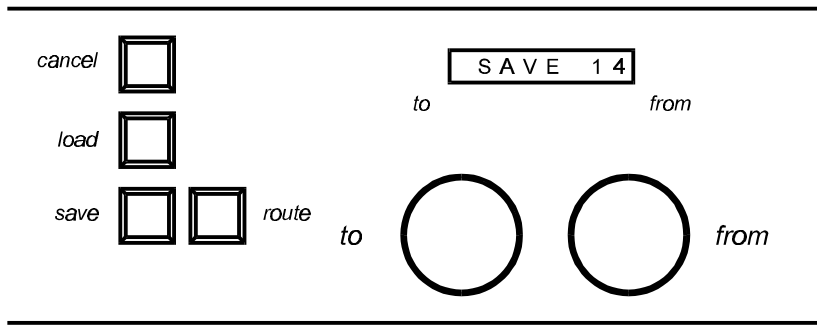


Figure 4 -- Save preset mode

To load a previously-saved configuration, first hit the load button. The z-16.16 in load mode is shown in Figure 4. Simply rotate the left knob to bring up the desired "patch" number and then hit the load button again to finish the operation. To abort the load operation, just hit the cancel button. Hitting either load or cancel will return you to the normal mode of operation. Notice that when you complete the load operation that the settings are not sent to the connection matrix. You must hit the route button to make the loaded preset take effect. Note: When you hit the route button, the current configuration is written to an internal store location automatically. When the z-16.16 is powered down and then turned back on again, this configuration is automatically loaded and sent to the connection matrix.

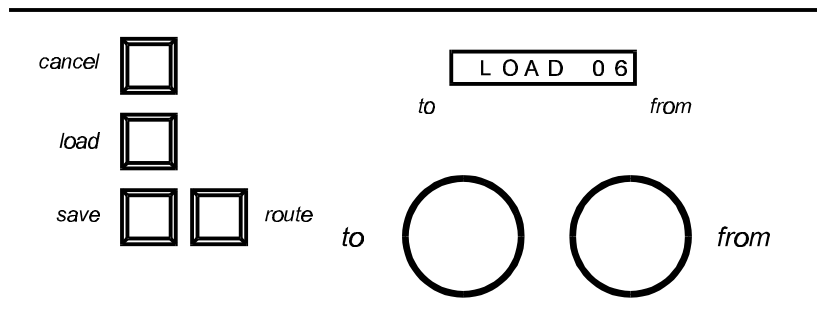


Figure 5 -- Load preset mode

Specifications

- Channels: 16 stereo pairs in, 16 stereo pairs out
- Input/output: 110- Ω transformer-isolated AES/EBU digital, 75- Ω transformer-isolated coaxial, TORX/TOTX 176 plastic fiber, depending on configuration
- Presets: 50
- AC Power: 110/220V 50/60 Hz AC operation
- Fuse: 800 mA slo-blo for 110V/220V operation
- Size: 2RU (3.5 in. high x 19 in. wide at the faceplate) x 17.5 in. (chassis width) x 9.25 in. (chassis depth)
- Weight: 10.75 lbs.