

# ATTENTION 24i USERS!

- **Connecting unbalanced -10 dB inputs**
- **Volume control for the analog main outs**

## CONNECTING -10 dB INPUTS

The 24i has balanced +4 inputs. However, these inputs also support unbalanced -10 dB inputs from devices such as synthesizers, samplers, drum machines, etc.

### Adding 6 or 12 dB boost via software

The 24i driver has the ability to add 6 or 12 dB of gain to any input on the 24i (or any other interface connected to the PCI-324 card). To boost an input in this manner:

- 1 Launch the Cue Mix Console software (placed on your hard drive by the 24i software installer).
- 2 Use the horizontal scroll bar in the mixer to scroll to the desired input strip(s) as shown below in Figure 1.  
  
☞ If you have multiple MOTU audio interfaces connected to your PCI-324 card, the mixer shows the inputs of all connected interfaces. Inputs for each interface are identified by their labels across the top of the mixer.
- 3 For each input, choose the desired level of boost from the pop-up menu provided in each strip as shown in Figure 1.

### Dynamic range for boosted input signals

The inputs on the 24i provide a dynamic range of 111 dB for a balanced signal. When you boost an unbalanced input signal via the software as just described, the dynamic range is still close to 100 dB — well above the dynamic range of most devices with unbalanced -10 dB output.

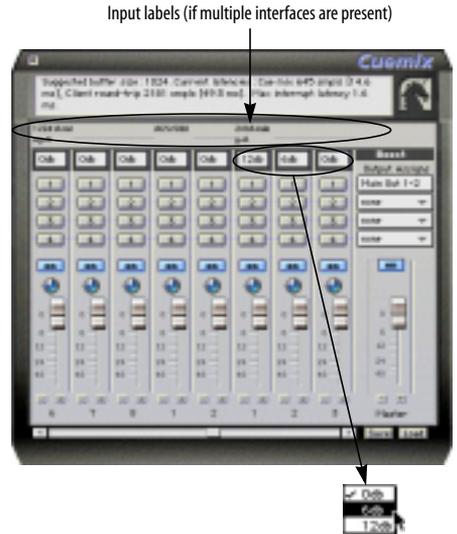


Figure 1: Boosting input level by 6 or 12 dB. This can be done for any inputs on the 24i, as well as the inputs of any other MOTU interfaces connected to your PCI-324 card.

### A few things that are not affected by software input boost

Boosting the input as just described has no effect on direct input/output routing through the PCI-324 card (by choosing inputs from the *Input Source* menus in the 324 Console window). Also it has no effect on the level meters on the front panel of the 24i; instead, the level meters continue to display the original strength of the input signal.

### VOLUME CONTROL FOR THE 24i's MAIN ANALOG OUTS

From the factory, the main analog outputs of the 24i ship with a fixed output level that matches the 24i's digital S/PDIF outputs. There is, however, a jumper inside the 24i that allows you to change the front panel

headphone volume knob circuit so that it also controls the volume of the 24i's main analog outputs. This lets you control the volume of the 24i's main analog outputs directly from the front panel volume knob.

To make this simple modification to your 24i, follow this procedure:

**1** Obtain a standard phillips head screwdriver.

**2** Switch off and unplug the 24i.

☞ Failure to do so may result in serious shock or injury.

**3** Remove the screws found on the left-hand and right-hand sides of the 24i's metal chassis.

**4** Carefully lift the cover off the 24i, pulling it towards the rear of the unit as you lift to avoid damaging any of the connectors on the rear of the circuit board.

**5** Locate the volume knob jumper as shown below in Figure 2.

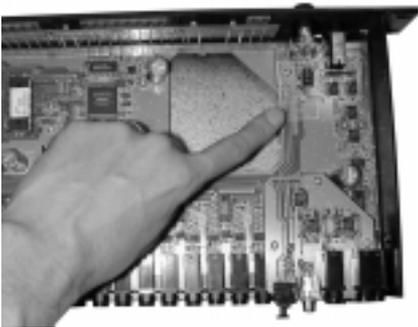


Figure 2: The volume knob jumper is located near the headphone knob.

**6** Position the 24i so that you can read the jumper instructions printed on the circuit board as shown in Figure 3. The rear panel of the 24i should be facing you; the front panel should be facing away.

**7** Before touching the jumper, touch the metal face-plate of the 24i to discharge any static electricity that may have built up since you last handled the unit.

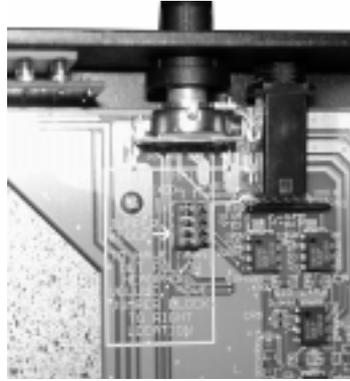


Figure 3: The volume knob jumper.

**8** As directed by the instructions on the circuit board, move the jumper to the right so that it straddles the center and right-hand columns of pins.

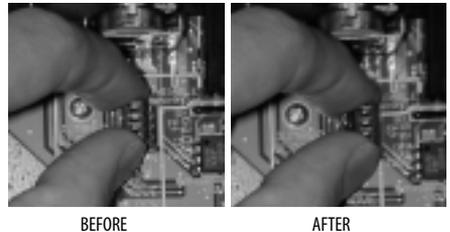


Figure 4: Moving the jumper to the right.

**9** Place the cover back on the 24i, paying careful attention to the connectors on the rear panel to make sure that they fit through each hole.

☞ Make sure that none of the connectors are jammed against the metal cover; they should extend comfortably through their respective holes.

**10** Before you reattach the screws, test the volume knob by running some audio through the main outs.