

## **Line Input Selector (LIS)**

### **SUPPLEMENTARY INSTRUCTIONS to the DLC**

Thank you for purchasing the new Audio Alchemy Line Input Selector (LIS). In order to get full benefit of the system's available features, please read the following instructions before installation and operation as there are several options you should be aware of prior to plugging everything in. A little forethought now will save time reconnecting things later.

#### **Initial Configuration**

In order for the DLC/LIS combination to work correctly, your DLC must recognize the LIS. This requires that the microcontroller in the DLC be changed for the new one we've enclosed with the LIS. To do this, remove power and disconnect all inputs from your DLC. Then install the enclosed newly programmed Code Revision 2.6 microcontroller chip in your DLC by referring to the enclosed drawing and following these directions:

1. Expose the internal circuit board by removing the 5 Phillips screws from the rear panel which secure the cover to the base assembly. Pull the cover back, away from the faceplate, to remove it.
2. Next, place the DLC with the faceplate towards you, and locate the original microcontroller U3 (it looks like the new one).
3. Grasp the ends of U3 and pull up firmly to remove it from the socket. You may need to use a small screwdriver to gently pry up on it's ends.
4. Looking at now-exposed socket, you will see a notch at the right end.
5. Carefully remove the new microcontroller chip from its static-protective bag and note that one corner has a dot molded into it. Grasp the ends of the chip, trying to not touch any of it's pins, and remove it from the protective foam.
6. Align the end of the chip with the dot with the end of the socket that has the notch. Make absolutely sure all the pins line up with all the socket openings before pressing down on the chip. If the legs of the chip don't align with the socket you can bend the legs by pressing them against the surface of a table while holding the ends of the chip. Now carefully, but firmly, press down on the chip. Inspect your installation to be sure all pins are inserted.
7. The DLC's memory now has to be cleared so it can accept the new programming. Referring to the drawing, locate the two jumper pins labeled J5. Push the enclosed shorting plug over these pins.
8. Attach the DC power cord to the DLC (see the note about a possible spark in the beginning of the next section) and then plug the AC cord into AC Mains. Count to 5, you will notice the display indicating "CR 2.6", then "96 96". Remove the plug from the wall.
9. Remove the DC power cord and the shorting plug from J5.
10. Check all of your work described above before replacing the cover and screws. When replacing the cover, you will need to be sure all of the protrusions from the jacks don't hang-up on the inside of the cover. Push the cover on until you encounter the jacks. "Jiggle" each of the jacks to assure that they pass through their corresponding hole, then slide the cover on the rest of the way.

11. Replace the 5 Phillips screws at the rear panel of the DLC.

### **Connections and Initial Operation**

Return your DLC and its power supply to their original positions, and locate the remote power supply for the LIS in a convenient location as well. For both units, do not plug it into AC Mains yet. First, insert the power mini-plug firmly into the DC Power jack on the rear of each unit. Be sure it is plugged in all the way in so the body of the plug is touching the surface of the jack. In doing so, you may see a small spark. Do not be alarmed! This is simply the residual power stored in the power supply capacitors being discharged briefly by the ground terminal of the plug as it touches the jack. No harm will occur.

Attach the enclosed 5-pin mini-DIN cable between DLC's output port and LIS's input port. They go in with the flat surface of the connector facing up. Next, add a pair of short interconnect cables from DLC's input 4 to LIS's "Line Outputs". Attach the "Tape Outputs" of the LIS to the analog input of your tape/DAT/CD recorder. Read the "Operation" instructions, below, to determine which additional sources you may want to attach to line inputs 1 through 4 of the LIS, as opposed to the DLC. For example, one of our DAC's to improve your CD player, or a phono preamplifier such as our VAC-in-the-BOX can be attached to one of these inputs to provide the use of a turntable.

Lastly, with your power amplifier(s) OFF, reattach your DLC to your amplifier. You can now connect the DLC and LIS power supply's to AC Mains.

### **Programming Mode Changes**

Several aspects of your DLC's programming mode have been changed with the new software.

First, to enter programming mode you no longer must power down the DLC. Simply place the RW-1 slide switch in its center position and then sequentially depress and release the "Balance Left", "Balance Right", "Volume Up" and "Volume Down" buttons while pointing the remote control at the DLC. The display will then briefly show the word "PROG" and then flash "CLR?" asking if you wish to clear the existing programming. Put the RW-1 slide switch in the forward position. If this is the first time you have used the LIS you should press "MUTE" to accept and move to the next step. If you are going through a reprogramming of your existing system and don't wish to change all of your existing settings, say no to the clear question by pressing "SELECT" only. By the way, the key sequence "Balance Left", "Balance Right", "Volume Up" and "Volume Down" to put the DLC into programming mode should be done smoothly and quickly; try not to hold any key depressed for too long. If it does not respond on your first attempt to enter this mode you can repeat the key sequence until it does. Please don't forget to go back to the slide switch forward position once you're in programming mode.

As in your original DLC, you will now be prompted to indicate your preference to display volume in "dB" or the arbitrary "00-99" scale. As they alternately flash, press "MUTE" when your choice is displayed, then "SELECT" to move on. You will now be prompted with a

flashing "LIS?" asking if you have an LIS connected. Press "MUTE", to accept and the system will then move on to allow you to program the minimum and maximum volume settings for each input, now totaling seven. Follow the procedure from the DLC instructions, including locking out any input by setting the minimum and maximum volumes equal.

All further programming procedures are identical to DLC.

### Operation

With the RW-1 slide switch in the forward position, your DLC/LIS combination now operates like a seven input preamplifier. The "SELECT" switch will toggle the DLC from input 1, to 2, to 3, to 4. The next press of the "SELECT" key activates input 1 of the LIS, then 2, to 3, to 4, then back to DLC input 1. Any selected input is fed to your amplifier. Your recorder, however, gets something different. Those sources plugged into the LIS inputs 1 through 4 are fed, buffered and not volume adjusted, to the tape outputs. Thus, you will need to prioritize your inputs into those you feel you may wish to record, and those you won't. Those you do should be plugged into the LIS, all others into the DLC.

This arrangement works well if you always want to listen to the same source as you are taping. If you don't, you can override the LIS from operating in tandem with the DLC by placing the RW-1 slide switch in the center position again. Now the "SELECT" key will change only the LIS's inputs, altering what you send to your Tape output. To prevent any DLC keystroke from effecting the LIS, press the "VOLUME UP" button while you have the switch in the middle position. To confirm this change, the LIS "LINK" light will change from "LINE" to "TAPE", indicating that you have overridden the control linkage.

For example, let's say you want to listen to DLC input 2 while taping input 3 of the LIS. Move the slide switch to the middle and "SELECT" LIS input 3, and press the "VOLUME UP" key to remove the DLC/LIS link (illuminating the "TAPE" light), then place the RW-1 slide switch in the forward position and "SELECT" DLC input 2. You can continue to operate Volume, Balance and Mute of the DLC, none of which will effect the recording taking place through the LIS. You can even "SELECT" a different DLC input to listen to, since the RW-1 now controls only the DLC in the slide switch forward position. To "reconnect" the DLC and LIS, place the slide switch in the middle position and press the "VOLUME DOWN" key, thus re-establishing the link between the DLC and LIS; the "LINK" light will change back to "LINE".

*Remember to place the RW-1 slide switch in the forward position when you wish to run the combined DLC/LIS, and in the middle position to enter programming mode or to operate LIS separate from the DLC.*

Your LIS is now ready to provide you with years of superior performance. *Enjoy!*

