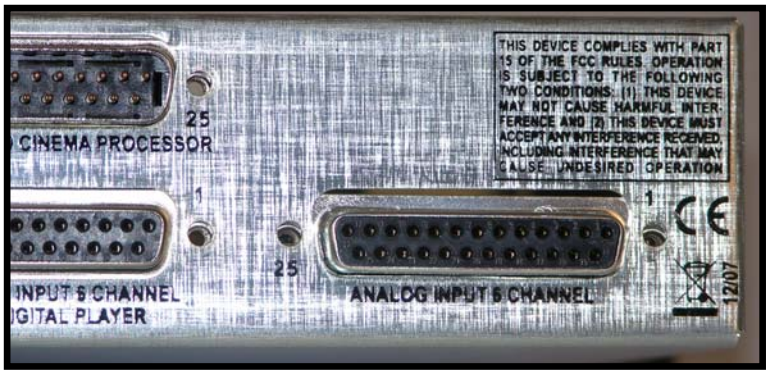
ECI-60 Balanced to unbalanced equipment

This bulletin only applies when connecting a balanced ECI-60 to unbalanced equipment.

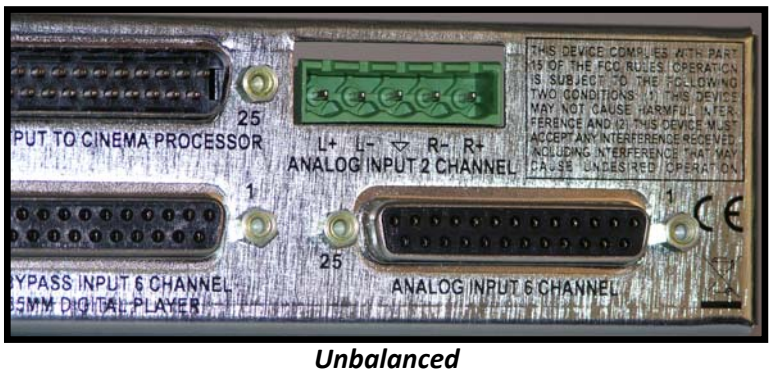
The balanced version of the ECI-60 will be missing the green Phoenix connecter associated with the 2ch. Analog input (As pictured in figure 1)

In order to properly interface the ECI-60 with an unbalanced processor input, the following methods must be employed through the use a custom made cable or available breakout boards***.

1. All of the (-) audio signals on the analog output of the ECI-60 must be tied (shorted) together to create an unbalanced output. (Refer to figure 2 for pin configuration)
2. Connect all (-) audio signals from the ECI-60 to the 6 Ch. Input Signal Ground on the Processor.
3. Connect each of the (+) audio signals from the ECI-60 output to the appropriate (+) audio inputs associated with the channels for; L,C,R,SW,Surr….
4. If connecting to a DTS-6AD refer to figure 3 for the correct pin configuration (requires custom cable).



Balanced



Unbalanced

Figure 1. (Analog input pictures of chassis Balanced Vs. Unbalanced)

Analog Output (25 pin D sub Male)(Balanced or Unbalanced Line)
Note: In Unbalanced mode the negative signal MUST be connected to ground.

Pin Number	Function	Pin Number	Function
1	Left –	14	Left +
2	Right Surr. +	15	Left Surr. +
3	Right Surr. –	16	
4	Left Surr. –	17	Right +
5		18	
6	Right –	19	Chassis Gnd
7		20	Center +
8	Center –	21	
9	Gnd	22	Gnd
10	Gnd	23	Gnd
11	Gnd	24	Subwoofer +
12	Subwoofer –	25	Pass Through
13	Gnd		

Figure 2. (ECI-60 Analog output Table)

ECI-60 to DTS-6AD
Cable pin configuration.

Due to possible hum and noise,
the pin configuration for a cable from an
ECI-60 to a DTS-6AD should be as follows.

ECI-60	DTS-6AD
1	1
2	2
3	4
4	3
6	5
8	7
12	11
13	13
14	14
15	15
17	17
20	20
24	24

Pin numbers that differ are
highlighted in yellow.

Figure3. DTS-6AD pinout table

*** Available Adaptors.

Breakout boards are available to adapt the ECI-60 to the following processors using a DB-25 straight through cable to connect to the audio processor.

Processor	**USL Break out Board Part Number**
USL (JS-200)	DLB-10
DOBLY (CP-65 & CP-55)	IDI-56

If your processor is not listed above then you will need to follow the instructions listed in steps 1 through 3.

Warning, breakout boards provided by other manufacturers may not ground all (-) audio signals on the ECI-60 producing hum in the audio system. Use USL breakout when applicable.