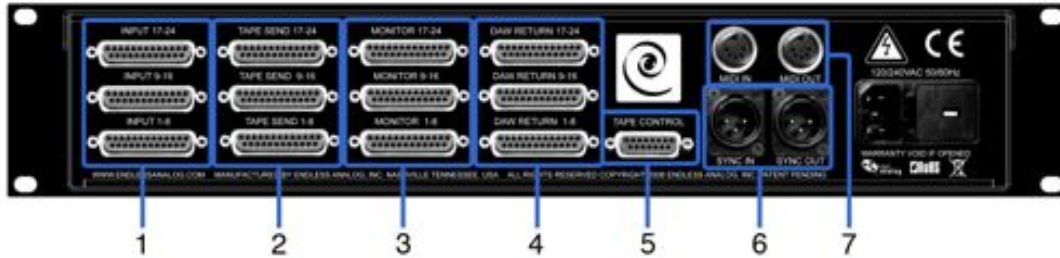# CLASP HARDWARE SETUP


BACK PANEL

1 - Input – Line level inputs connect to MIC pre outputs or console bus outputs

2 - Tape Send – Line level tape send outputs connect to analog tape machine inputs

3 - Monitor – Line level monitor outputs connect to console input monitoring channels

4 - DAW Return – Connect to Line Level DAW D/A outputs

5 - Tape Control – Connect using provided control cable to analog tape machine parallel remote connection

6 - Midi In – Connect to available MIDI output port on hardware MIDI interface

Midi Out – Connect to available MIDI input port on hardware MIDI interface

7 - SYNC In – Choose available channel on analog tape machine and connect to this channel.

SYNC Out – Connect to balanced audio output of same analog recorder channel used with SYNC IN

To ensure longevity and proper operation, mount the CLASP in a well-ventilated location.

D-Sub pin-out wired in accordance with TASCAM specification. Pin 2 is wired HOT.
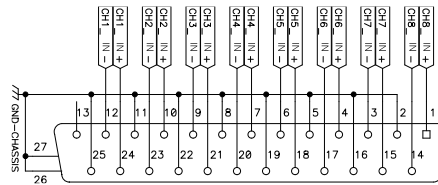
To properly connect CLASP to unbalanced inputs it is necessary to lift the cold side of the differential output and not tie to ground. Failure to do this will cause damage to the active electronics inside the CLASP hardware and will void your warranty. For more information please contact Endless Analog technical support.

SYNC In/Out only need to be connected to the tape machine during the Synchronization Process and are disconnected from audio In/Out during normal operation.

CONNECTING AUDIO

The **CLASP** handles audio in discrete paths. Audio passing through the **CLASP** must travel along the same channel from INPUT to MONITOR output. The audio that is fed into INPUT 1 is passed out of the **CLASP** via TAPE SEND 1. Ensure that audio is fed along channel 1 of your TAPE MACHINE and subsequently out off your TAPE MACHINE into the first input of the DAW interface. The audio exiting the DAW interface will route into DAW RETURN 1 of the **CLASP**. Depending on the mode and current operation, the MONITOR output of the CLASP will pass either the audio signal from the DAW RETURN or the audio signal from the INPUT.
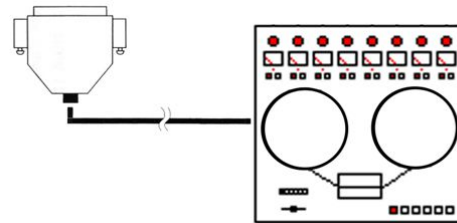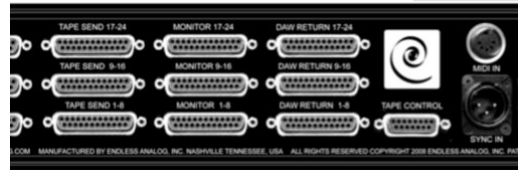
INPUT Connection

Connect the INPUT 25-pin D-sub to the Bus output, channel Direct Out, or any other line signal in your studio prepped for recording.
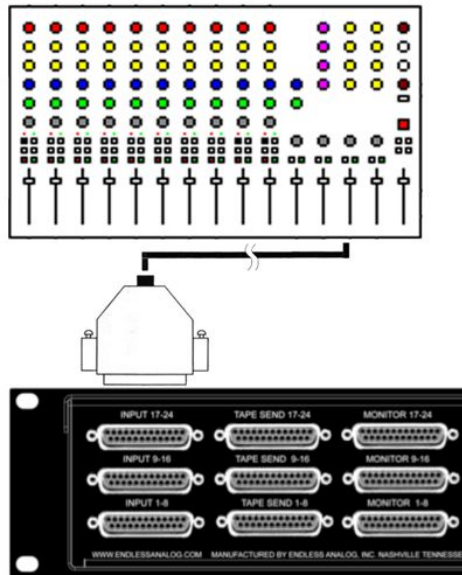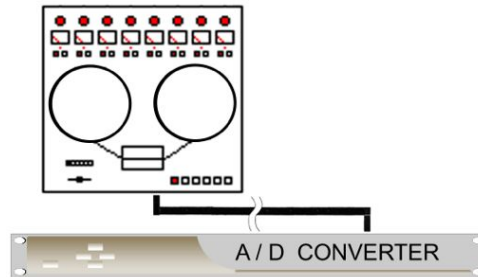

TAPE SEND Connection

Connect the TAPE SEND 25-pin D-sub to your TAPE MACHINE via the shortest cable assembly possible.
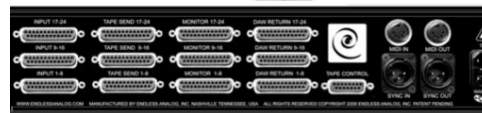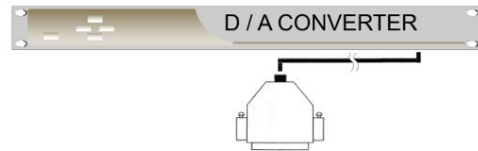

TAPE MACHINE > DAW Connection

Connect the (REPRO) outputs of your TAPE MACHINE to the A/D (Input) converters of your DAW via the shortest cable assembly possible.
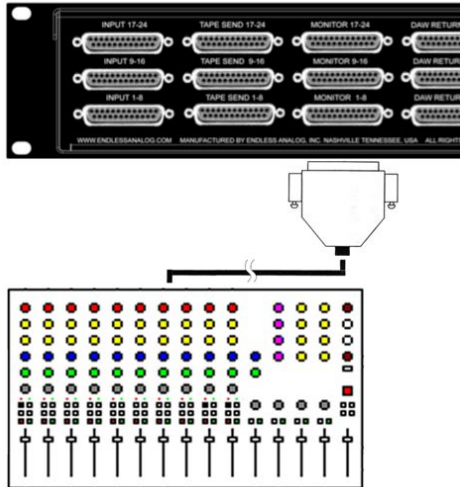

DAW RETURN Connection

Connect the D/A (Output) converters of you DAW to the DAW RETURN 25 pin D-sub

MONITOR Connection

Connect the MONITOR output to the Tape Return, Monitor Input, or Line Input of you audio console.

CONNECTING MIDI

Wire the MIDI interface output to the MIDI input of the **CLASP** and the MIDI interface input to the MIDI output of the **CLASP**.

The **CLASP** must be connected to a supported MIDI interface. Ensure that no software, other than the supported DAW, has access to that port.
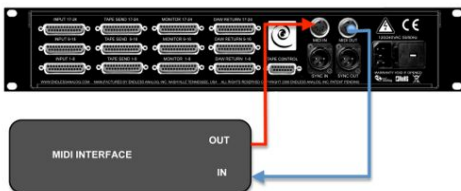
TRANSPORT CONTROL

The **CLASP** commands your tape machine through a custom transport cable. The cable supplied is dependant on the tape machine used with **CLASP**. The cable enables **CLASP** to control basic transport function of your tape machine such as PLAY, STOP, RECORD, and REWIND. This powerful connection, combined with the Optical Sensor, manages all the controls of your tape machine for you.

Connect one end of the transport cable to the back of the hardware unit and the other end to your tape machine. Most likely, you will need to disconnect your current remote transport and utilize this port with the **CLASP** Transport Control cable.

OPTICAL SENSOR

Using the Optical Sensor, **CLASP** detects if the end of tape has been reached before the Remaining Tape Time Counter reads zero. This is helpful just in case you forget to properly reset your machine with **CLASP** during setup.

All analog tape machines except late model Studers require the Optical Sensor.