Global Distribution Portal

DESCRIPTION:

The Global Distribution Portal (GDP-2009) is a utility interconnect panel that facilitates two way interface between a central audio system and/or studio and various external audio devices. The GDP provides convenient access to system audio inputs and outputs, and allows connection to both professional and consumer digital and analog equipment at appropriate signal levels. Analog audio outputs are provided at +4dBu and -50dBu (balanced) and -10 dBv (unbalanced). The GDP can accept analog inputs at +4dBu (balanced) or -10 dBv (unbalanced). Digital I/O can be via either the AES/EBU or S/PDIF standard. XLR, TRS, Mini TRS, and RCA jacks are provided for interface. The GDP is powered by an external AC power transformer, included.

INSTALLATION:

The GDP can be mounted in a rectangular cutout in studio cabinetry. The cutout should be 10.75" W x 4.0" H. (A Rack Mounting Kit is optionally available, for mounting the GDP in a 3RU rack opening.) Audio and power connections to the GDP are via three "euroblock" connectors on the PC board, labeled "To Studio", "From Studio" and "AES,PWR". Wire the mating plugs according to the information below. Note that the pins are numbered left-to-right, with the screws facing up.

TO STUDIO: This connector sends analog audio from the GDP to the studio, e.g., to a balanced Line input on a console.

All analog wiring to/from the GDP should be balanced, lo-z, at professional +4 dBu levels.

PIN 1	LEFT +
PIN 2	LEFT –
PIN 3	GROUND
PIN 4	RIGHT +
PIN 5	RIGHT –
PIN 6	GROUND

1 2 3 4 5 6

Pins are numbered left-to-right, with screws facing UP.

FROM STUDIO: This connector sends analog audio from the studio (e.g., a DA output) to the GDP output connectors. Pin assignments are identical to those shown above.

AES, PWR: This connector is for the AES digital input and output, and also the power input to the GDP:

PIN 1	AES + OUTPUT	AES digital audio output of GDP to studio, e.g., the AES input of a digital console
PIN 2	AES – OUTPUT	
PIN 3	AES+ INPUT	Studio AES output (e.g., output of digital D.A.) to GDP digital output connectors
PIN 4	AES – INPUT	
PIN 5	POWER INPUT	12V AC input to GDP (This is also a ground connection to GDP internal circuitry.)
PIN 6	POWER INPUT	12V AC input to GDP

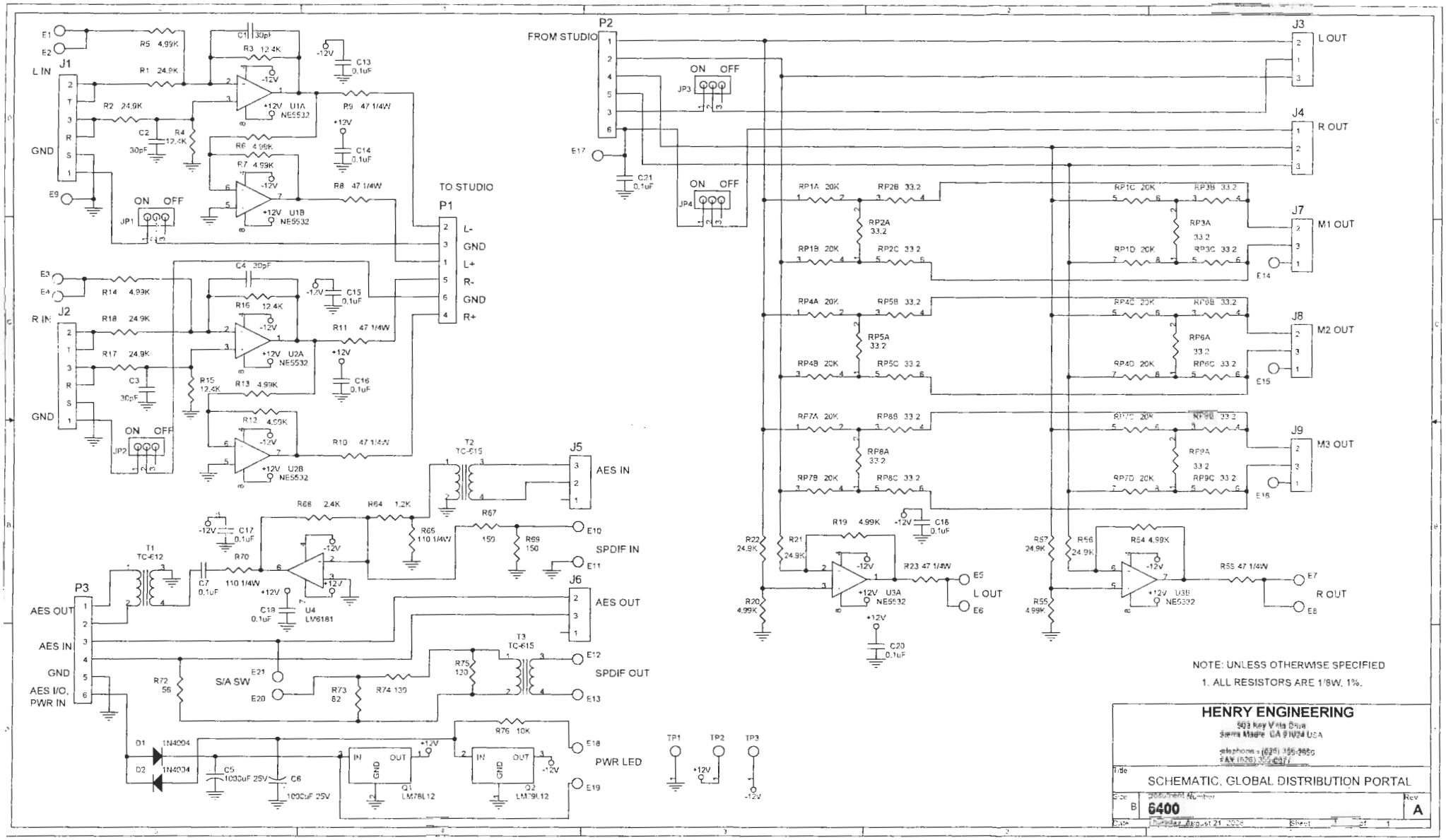
GROUNDING: Grounds of analog I/O connectors can be connected at both ends. Four "jumper pins" (JP1-JP4) allow the studio equipment grounds to be connected-thru to the XLR Pin1 ground terminals. JP1 (L) and JP2 (R) connect the GDP input connector grounds to the grounds of studio input equipment. JP3 (L) and JP4 (R) connect the studio output grounds to the ground pins of the GDP output connectors. The AES input and output connections are transformer isolated; no ground connection is required. (The GDP metal panel is connected to Pin 6 of the "From Studio" connector.)

OPERATION:
For balanced Line analog inputs/outputs, use the "combo" jacks for inputs (TRS or XLR) and the male XLR output jacks. For unbalanced Line analog inputs/outputs, use the "RCA" phono jacks or 3.5mm TRS jacks. All line-level I/O is stereo, with exception of Mic Outputs. For balanced Mic-level outputs, use the Mic Output jacks. Each male XLR jack has a Ground Lift switch, which can be used to disconnect (lift) Pin 1 of the XLR from the studio ground.

To feed a digital audio signal into the GDP, use either the AES input (XLR) or the S/PDIF input (RCA). Do not use both input jacks at the same time. GDP digital outputs are available on either the AES output (XLR) or S/PDIF output (RCA). The Digital Output Select switch selects which output is active. Do not use both outputs at the same time.

The digital Utility connectors (A thru F) can be used for pass-thru connections to USB, IEEE1394, and RJ45 connectors. Note that the USB connectors are reversible, and can be installed with either type of USB connector facing outwards, and that any of these connectors may be field replaced with a USB, IEEE1394, and/or RJ-45 connector, providing an assortment of configurations.

890 Carter Road #150 – 160, Winter Garden, FL 34787 Tel: 407-656-3719 Fax: 407-656-5474 www.Balsys.com


L IN
R IN
GND
AES OUT
AES IN
AES I/O, PWR IN
FROM STUDIO
TO STUDIO
L OUT
R OUT
M1 OUT
M2 OUT
M3 OUT
AES IN
AES OUT
SPDIF IN
SPDIF OUT
PWR LED
L OUT
R OUT
S/A SW
ON OFF
NOTE: UNLESS OTHERWISE SPECIFIED
1. ALL RESISTORS ARE 1/8W, 1%.
HENRY ENGINEERING
SCHEMATIC, GLOBAL DISTRIBUTION PORTAL
6400
A