



HENRY ENGINEERING
503 Key Vista Drive
Sierra Madre, CA 91024
Tel: 626.355.3656
Fax: 626.355.0077

DESCRIPTION

U.S.D.A. is a distribution amplifier that has the unique ability to combine as well as "split" audio signals for distribution. The unit has two inputs (one stereo pair) and four outputs (two stereo pairs). U.S.D.A. can be used as a 1 X 4 or 2 X 4 DA and can combine a stereo input to a mono output(s) without degrading the separation of the stereo source signal. All inputs are 20K bridging balanced; each output can drive a 600 ohm load to +25 dbm. An output level adjustment is provided for each output channel. Overall gain is adjustable from -6 to +20 db. Nominal input levels between -20 and +8 dBm are recommended. All U.S.D.A. circuitry is active and direct-coupled.

INSTALLATION

Connect input signals to the USDA inputs, labeled "1" and "2". For unbalanced inputs, install a jumper between the "-" input and GND. Single (mono) inputs may be fed to all output channels by connecting both "1" and "2" inputs in parallel.

Connect output loads to USDA outputs, labeled "1" through "4". For unbalanced loads, connect to the "+" and GND terminals only. Do not connect the "-" terminal to ground.

OPERATION

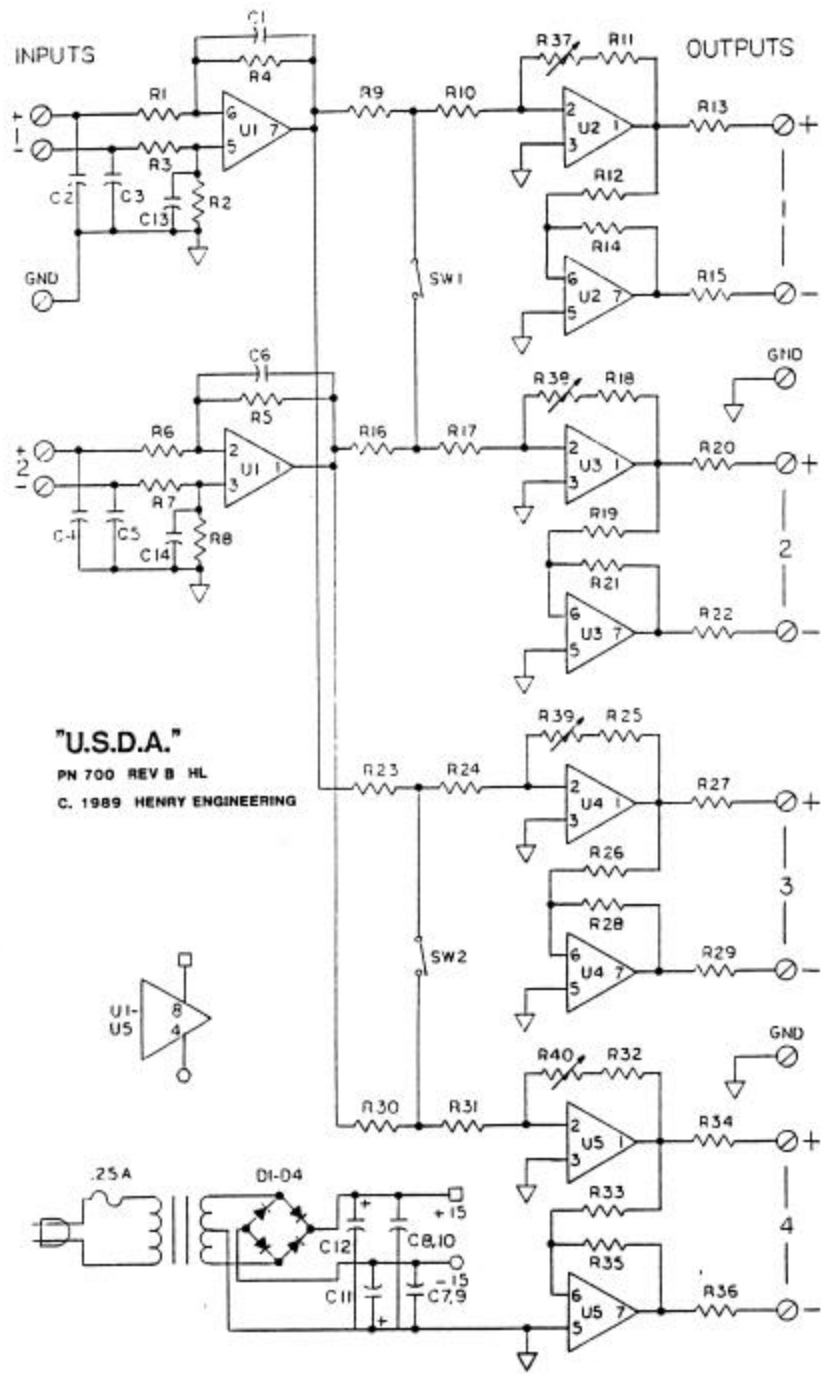
The signal fed to input "1" will appear at outputs "1" and "3". The signal fed to input "2" will appear at outputs "2" and "4". Hence, outputs "1" and "2" are a stereo pair, as are "3" and "4".

Each stereo output pair has a STEREO-MONO SWITCH. If the switch is in the "S" position, a stereo input will produce a stereo output. If the switch is in the "M" position, that output will be combined to monaural. The two stereo outputs operate independently; switching one output pair to MONO has no effect on the other pair, and does not degrade the separation of the stereo input signal.

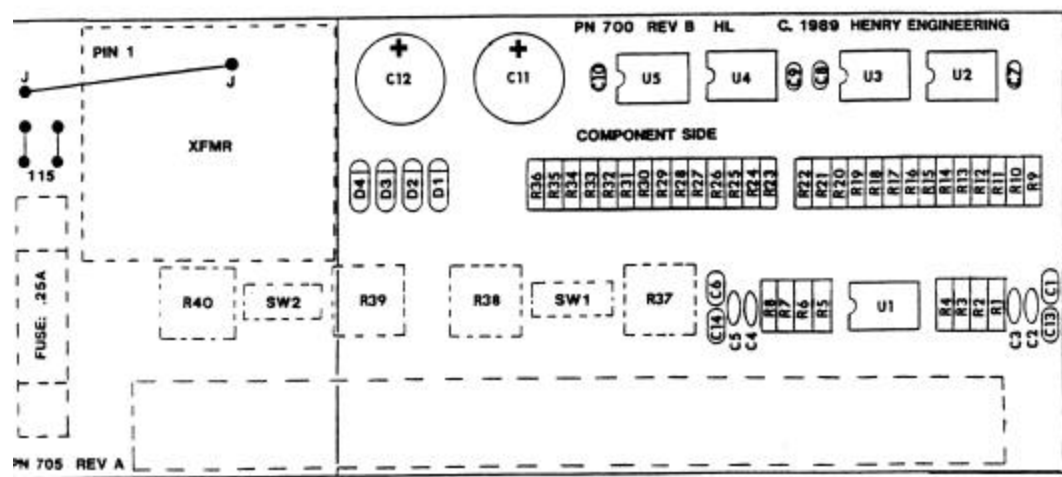
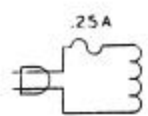
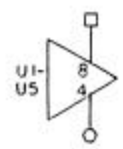
Each output has a gain adjustment for setting output level. A maximum of +8dBm nominal is recommended. Input levels should be between -20 and +8 dBm. For input levels outside of this range, consult the factory.

SPECIFICATIONS

Input impedance:	20K ohms balanced; 10K ohms unbalanced
Input levels:	-20 dBm to +8 dBm nominal
Output source Z:	100 ohms balanced; 50 ohms unbalanced
Output load:	600 ohms or more per output
Gain:	-6 db to +20 db Output level
Output level:	+24 dBm maximum



"U.S.D.A."
 PN 700 REV B HL
 C. 1989 HENRY ENGINEERING



COMPONENTS LIST

R1,3,6,7	10.0K
R13,15,20,22	100K
27,29,34,36	47ohm
R37-R40	100K
All other Rs	4.99K
C1,6,13,14	300pf
C2-C5	.001uf
C7-C10	.1uf
C11, C12	1000uf
D1-D4	1N4004
U1	LF353
U2-U5	NE5532
SW1, SW2	SPDT
FUSE	.25A