1x4 or 1x8, 3G/HD/SD/ASI Distribution Amplifier

The DA-H6802+/DA-HR6802+ distribution amplifiers (DAs) are built for use with the 6800+™ modular processing platform and provide one channel of 3G/HD/SDI/ASI video distribution with cable equalizing and reclocking (reclocking on DA-HR6802+ only).

The DA-H6802+D/DL and DA-HR6802+D/DL are single-channel DAs with eight outputs (1×8). The DA-H6802+/DA-HR6802+ DAs feature high-quality video performance, low cost, and remote indication of signal presence and alarms.

The DA-H6802+D/DL and DA-HR6802+D/DL DAs provide 10 channels of 1×8 3G/HD/SDI/ASI distribution in a 2RU 6800+™ frame with low power consumption and non-inverting ASI compatibility on all outputs.

The +S configuration of this product refers to the single-slot back module, which allows the DA to function as a single-channel 1×4 DA.

The +DL configuration for this product refers to the looping input back module, which is a double-slot back module (1×8 with looping input) and is ideal for cascading DA applications.

Features

- Inexpensive DA with equalizing and reclocking (DA-HR6802+ only)
- Single 1×8 with dual back panel or single 1×4 with single back panel
- Automatic cable equalization on inputs
- Automatic or forced rate detection
- Reclocking with automatic or forced bypass at 270 Mb/s, 1.485 Gb/s and 2.97 Gb/s (DA-HR6802+ only)
- Identical polarity for ASI compatibility
- Feedback status reports input signals present and locked
- Card-edge control by jumpers with LED feedback
- Remote control with status and alarm
- 10 channels of 1×8 distribution (+D, +DL) or 20 channels of 1×4 (+S) in a 2RU 6800+ frame

Specifications

Specifications and designs are subject to change without notice	
Signal type	3 Gb/s HD, SD, ASI
Connector	BNC (IEC 169-8)
Impedance	75 ohms
Return Loss	>15 dB to 1485 MHz >10 dB to 2.97 Gb/s
CABLE EQUALIZATION:	
270 Mb/s	>984 ft (350 m) Belden 1694 or equivalent

CABLE EQUALIZATION:

1.485 Gb/s	>492 ft (140 m) Belden 1694 or equivalent
2.97 Gb/s	>230 ft (70 m) Belden 1694 or equivalent
Number of Outputs	8 (1×8) or 4 (1×4)
Signal Type	3 Gb/s HD, SD, ASI
Connector	BNC (IEC 169-8)
Impedance	75 ohms
Return Loss	>15 dB to 1485 MHz >10 dB to 2.97 Gb/s
Signal Amplitude	800 mV ±10%
DC Offset	0 V ±0.5 V

RISE AND FALL TIME:

270 Mb/s	400 to 700 ps (20 to 80% amplitude)
1.485 Gb/s	<270 ps (20 to 80% amplitude)
2.97 Gb/s	<135 ps (20 to 80% amplitude)
Overshoot	<10% of amplitude
Jitter	<0.2 UI pk-pk
Power Consumption	<6.0 W

PROPAGATION DELAY

DA-HR6802+	~4 ns (for reference only)

TEMPERATURE

Operating Temperature	32° to 122° F (0° to 50° C)
Performance Temperature	50° to 104° F (10° to 40° C)

START-UP TIME

DA-H6802+/DA-HR6802+	Approximately 3 sec

Ordering Information

DA-H6802+S	1×4 DA, 3G/HD/SD/ASI non-reclocking, 1 slot
DA-H6802+D	1×8 DA, 3G/HD/SD/ASI non-reclocking, 2 slots
DA-H6802+DL	1×8 DA, with looping input, 3G/HD/SD/ASI non-reclocking, 2 slots
DA-HR6802+S	1×4 DA, 3G/HD/SD/ASI with reclocking, 1 slot
DA-HR6802+D	1×8 DA, 3G/HD/SD/ASI with reclocking, 2 slots
DA-HR6802+DL	1×8 DA, with looping input, 3G/HD/SD/ASI with reclocking, 2 slots

Images/Diagrams