

DA-DH/DHR6804+D

Low Power Dual 1x4 or Single 1x8 with Built-in ACO,
3G/HD/SD/ASI



The DA-DHR6804+D dual distribution amplifier (DA) provides two channels of 3G/HD/SDI/ASI/SMTPE310 video distribution with cable equalizing and reclocking.

Built for use with the 6800+™ modular core processing platform, the DA-DH6802+D dual DA provides two channels of 3G/HD/SDI/ASI/SMTPE310 video distribution with cable equalizing and is non-reclocking.

The DA-DH6804+D and DA-DHR6804D dual DAs have four outputs for each input (two 1x4) and are user configurable to function as single-channel DAs with eight outputs (1x8).

The DA-DH6804+D and DA-DHR6804+D dual DAs feature broadcast-quality performance that exceeds SMPTE specifications. Software configuration of all parameters and remote indication of signal presence and alarms are standard.

Features

- Low power drop in replacement for the DA-DH/DHR6804+D DA
- Cost-effective DA with equalizing and reclocking (DA-DHR6804+D only)
- Dual 1x4 configurable as 1x8
- Automatic cable equalization on inputs
- Automatic or forced rate detection
- Reclocking with automatic or forced bypass (DA-DHR6804+D only)
- Identical polarity for ASI compatibility on all outputs
- Built-in automatic changeover (ACO) protection between inputs
- Feedback status reports input signals present and locked
- Card-edge control with LED feedback
- Remote control with status and alarm
- 20 channels of 1x4 or 10 channels of 1x8 distribution in a 2RU 6800+ frame
- Automatically power saving if no input signal is applied or if there is no termination on the output

Details

The DA-DH6804+D and DA-DHR6804+D DAs provide 20 channels of 1x4 or 10 channels of 1x8 3G/HD/SDI/ASI/SMTPE310 distribution in a 2RU 6800+ frame with low power consumption and non-inverting ASI compatibility on all outputs.

The DA-DH6804+D and DA-DHR6804+D protect your signal path with a unique automatic changeover (ACO) feature. With the built-in ACO, an automatic failover can be set to switch the primary input to the secondary with the loss of signal on the primary input. The user can select which input is designated as primary and which is designated as secondary. This further leverages your investment and allows a backup to live or sync feeds directly on this DA.

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	>1312 ft (400 m) Belden 1694 or equivalent
1.485 Gb/s	>656 ft (200 m) Belden 1694 or equivalent
2.97 Gb/s	>410 ft (125 m) Belden 1694 or equivalent
Number of Outputs	8
Signal Type	3G/HD/SD-SDI, 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 $\pm$ 10%
DC Offset	0 V $\pm$ 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	3G-SDI $\leq$ 0.3UI HD/SD-SDI, ASI $\leq$ 0.2UI
Power Consumption	<3.8 W <1.5 W sleeping

TEMPERATURE

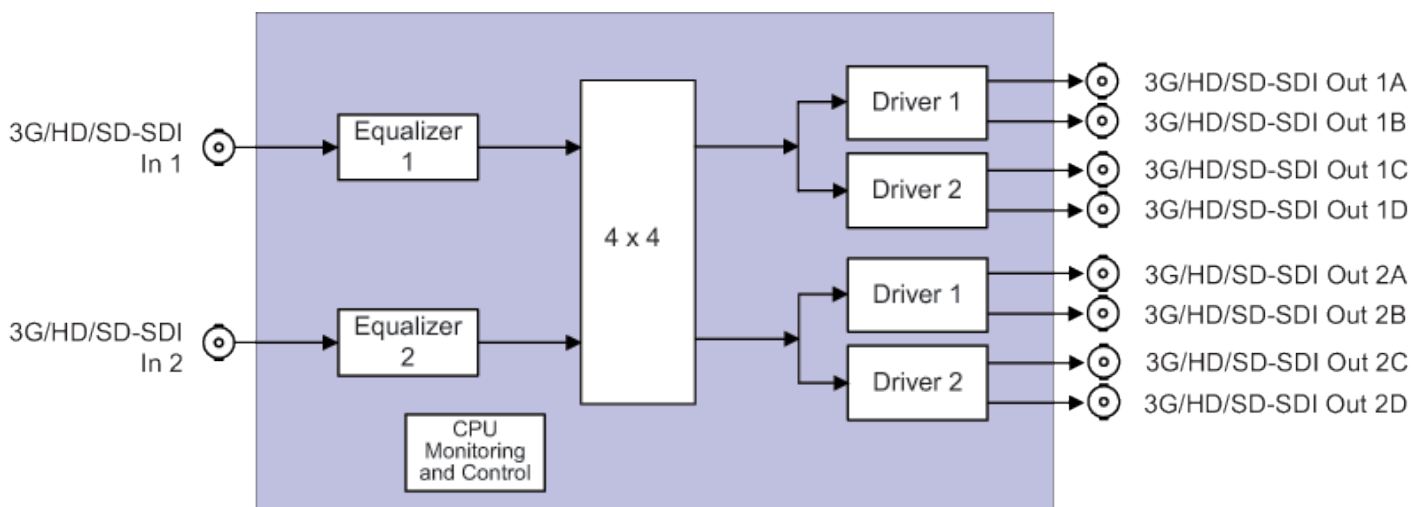
Operating Temperature	32° to 122° F (0° to 50° C)
Performance Temperature	41° to 104° F (5° to 40° C)
Start-Up time	Approximately 3 sec

Ordering Information

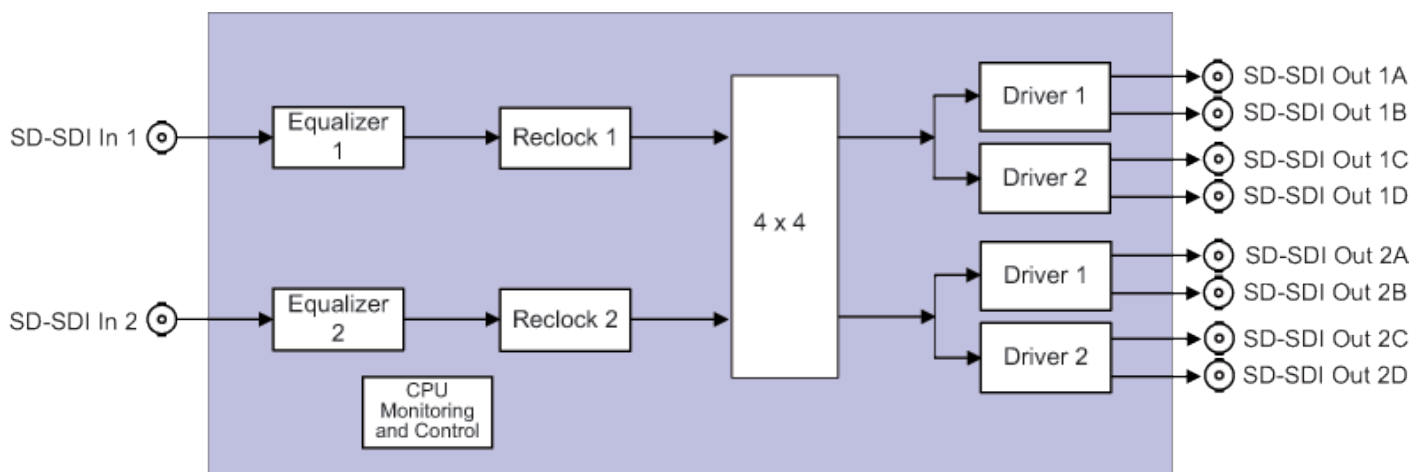
DA-DH6804+D	Low Power Dual 1x4 DA or single 1x8 with secondary back-up input and built-in ACO, 3G/HD/SD/ASI non-reclocking, 2 slots
DA-DHR6804+D	Low Power Dual 1x4 DA or single 1x8 with secondary back-up input and built-in ACO, 3G/HD/SD/ASI with reclocking, 2 slots



DA-DH6804+D Block Diagram



DA-DHR6804+D Block Diagram



Back Module

