

# XFM-50-SDA-1/SDA-2

## HD/SD analog 1/2 Channel Distribution Amplifier

### Description

SDA-1/SDA-2 is a distribution amplifier module, available in a single or dual channel configuration, both with configurable outputs for SD and HD analog video signals.

Bi-Level and Tri-Level sync signals are also supported.

### Supported Signals

The SDA-1/SDA-2 module supports the following signals:

- SD analog
- HD analog
- Bi-level sync (Blackburst)
- Tri-level sync

Differential input signals with AC and DC coupling with or without clamping are supported.

### Failover Switch

A SDA-2 module supports to be setup as a failover switch. If the selected input signal fails, it automatically selects the other input as source.

Also the Test Signal Generator can be used as failover source.

### Processing and Control

Cable equalization compensates for up to 300m of cable length. Equalization and Gain are controlled via CDesk software.

Detection of input signals with format monitoring is supported.

The module is monitored via SNMP or CDesk software.

### Output Setup

Two different backplanes are available for SDA-1/SDA-2 modules: A backplane carrying BNC connectors and a backplane carrying HD-BNC<sup>1</sup> connectors.

Single channel version (SDA-1):

	Inputs	Outputs
Standard BNC	1	11
HD-BNC <sup>1</sup>	1	17

Dual channel version (SDA-2):

	Inputs	Examples for Output Configuration
Standard BNC	2 x 1	2 x 5, 1 x 3 + 1 x 7
HD-BNC <sup>1</sup>	2 x 1	2 x 8, 1 x 5 + 1 x 11, 1 x 2 + 1 x 14

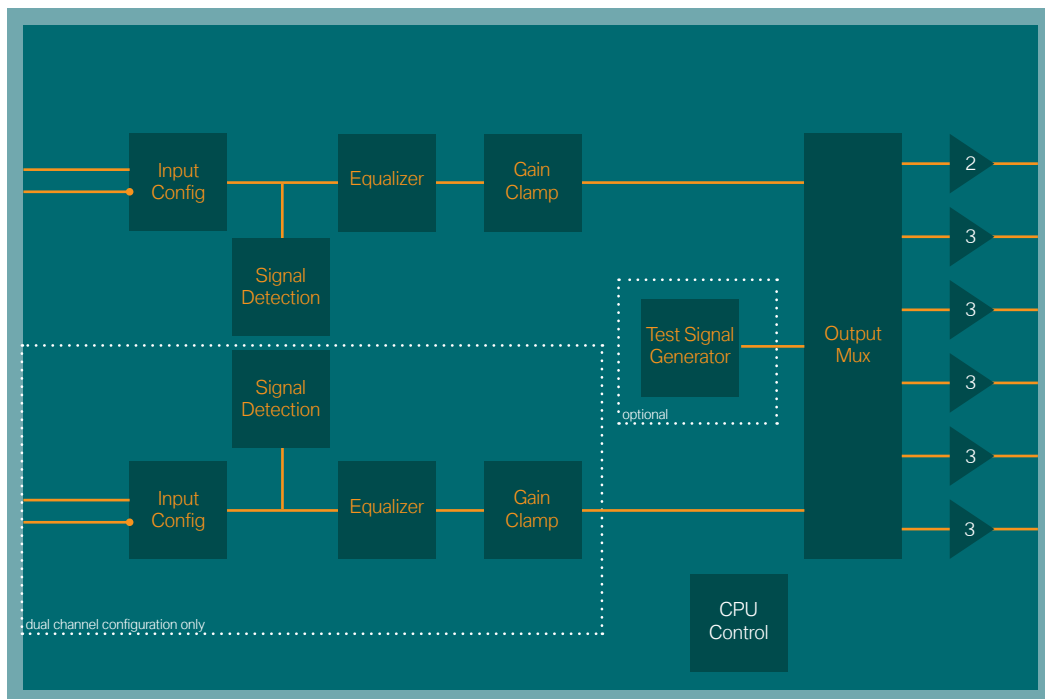
Outputs are organized in groups (see block diagram). Each group is assigned to an input or the internal test signal generator.

All modules are configured via CDesk remote control software, local or LAN panel. The configuration is stored on the modules for standalone operation.

### Test signal generator

An internal test signal generator with standard patterns like Color Bars is provided. This eases wire tests, especially in complex infrastructures.

## Functional Blockdiagram



## Input

<b>No. of Inputs</b>	single channel version: 1 BNC or 1 HD-BNC <sup>1</sup> dual channel version: 2 BNC or 2 HD-BNC <sup>1</sup>
<b>Signal</b>	2.5 Vpp max. SD or HD analog video Bi-Level or Tri-Level sync
<b>Coupling</b>	AC or DC, clamping selectable
<b>Impedance</b>	75 Ohm
<b>Common mode rejection</b>	>70 dB to 10 kHz
<b>Return loss</b>	>32 dB up to 40 MHz
<b>Format detection</b>	available via CDesk

## Output

<b>No. of Outputs</b>	single channel version: 11 BNC or 17 HD-BNC <sup>1</sup> dual channel version: 10 BNC or 16 HD-BNC <sup>1</sup>
<b>Signal</b>	2.5 Vpp max. SD or HD analog video Bi-Level or Tri-Level sync
<b>Impedance</b>	75 Ohm
<b>Return loss</b>	>37 dB up to 40 MHz
<b>Frequency Response</b>	±0.1 dB up to 30 MHz -3 dB at 73 MHz
<b>Differential gain</b>	<0.4%
<b>Differential phase</b>	<0.4°

## Settings

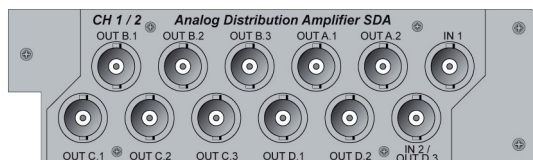
<b>Gain</b>	±3 dB
<b>Equalizer</b>	0 - 300m cable length, Belden 8281
<b>Coupling</b>	AC or DC
<b>Clamp</b>	on / off
<b>Output configuration</b>	
<b>Test signal</b>	on / off
<b>Configuration memory</b>	8 global settings

## Power Requirements

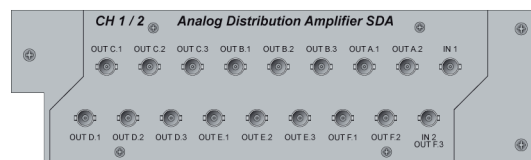
Single channel version	3.5 Watts
Dual channel version	4.5 Watts

## Physical

Temperature	0°C - 35°C (operation) -20°C - 75°C (storage)
Humidity	10% - 90% non condensing



Backplane with Standard BNC connectors



Backplane with HD-BNC<sup>1</sup> connectors

<sup>1</sup> HD-BNC connectors as Amphenol part No. 034-1017-300 or similar



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