

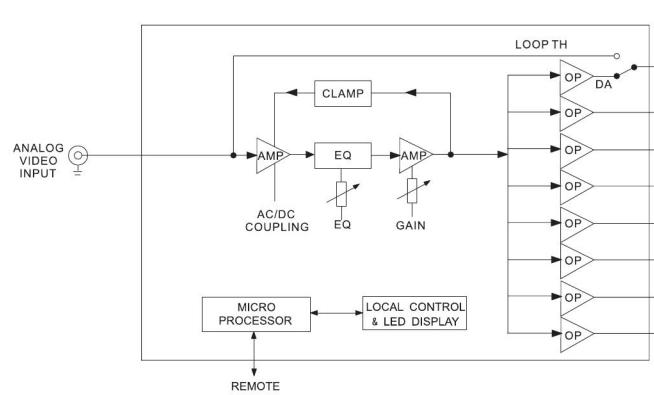
# VDA-1003

## 1x8 Analog Video Distribution Amplifier with Equalizing and Clamping

The VDA-1003 is a 1x8 analog video distribution amplifier (DA) with cable equalizing and clamping. It is used in i-MOD platform. The module provides a single channel DA with 8 analog video outputs for 1 analog video input. The first output supports power-off protection. Thus signal can be output continuously when module is removed or power is off. Cable equalizing can be customized up to 1000 ft (300 m). 2-line hard clamping/7-line soft clamping is available.

The VDA-1003 can be controlled locally by means of an intuitive card-edge interface or remotely using i-MOD platform control software IM-MASTER.

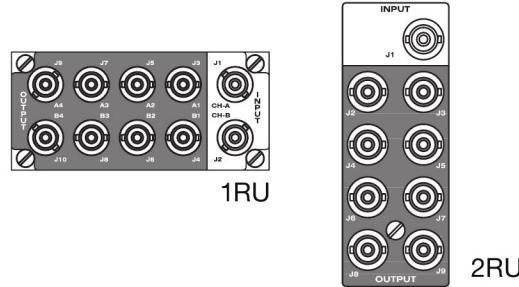
### BLOCK DIAGRAM



### FEATURES

- 1 analog video input
- 8 analog video outputs
- Supports CVBS, YUV, sync signal and subcarrier in NTSC, PAL and SECAM
- Gain ranges from -6 dB to +6 dB, high-frequency response adjustable
- Bandwidth up to 30 MHz
- Equalizing up to 1000 ft (300 m)
- Hard and soft clamping available
- The first output is power-off protected
- Non-volatile memory
- Hot-swappable
- IM-MASTER control supported

### BACK MODULES



### SPECIFICATIONS

Specifications are subject to change without notice.

#### INPUT

Signal Format.....	CVBS
Connector.....	BNC (x1)
Impedance.....	75 Ω
Return Loss.....	>40 dB @ 5.5 MHz
Common Mode Rejection Ratio.....	>60 dB @ 10 kHz
Cable EQ Range.....	0 ~ 1000 ft (300 m)
Clamping Precision.....	<±25 mV
Clamping Time Constant.....	2 lines hard clamping mode 7 lines soft clamping mode

#### OUTPUT

Signal Format.....	CVBS
Connector.....	BNC (x8)
Impedance.....	75 Ω
Return Loss.....	>40 dB @ 5.5 MHz

#### PERFORMANCE

Gain Range.....	-6 dB ~ +6 dB adjustable
Gain Stability.....	<0.02 dB/10
Frequency Response.....	±0.1 dB @ 8 MHz
Differential Gain.....	≤0.15%
Differential Phase.....	≤0.15°
Chr/Lum Delay Diff.....	<5 ns
S/N Ratio.....	>75 dB @ 6 MHz
Hum.....	<1 mVp-p
H Tilt.....	< 0.25 %
V Tilt.....	< 0.25 %

#### ELECTRICAL

Power.....	2 W
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#### ENVIRONMENTAL

Operating Temperature.....	32° ~ 104° F (0° ~ 40° C)
Relative Humidity.....	10% ~ 90%