Overview

RGBHV (BNC) DAD (Distribution Amplifier Driver) Modules have either one input and four outputs for a 1:4 distribution or one input and six outputs for a 1:6 distribution of RGBHV analog signals. The single RGBHV input is distributed to four or six outputs over standard cable runs of up to 250 ft. (76.2 m) with no additional equipment required. Each output can be independently adjusted for gain and peaking to ensure the proper amount of compensation is provided for each cable run. This guide contains complete information for this product.
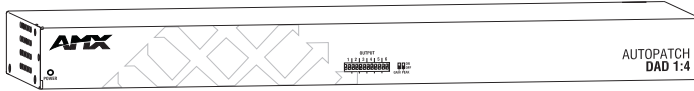

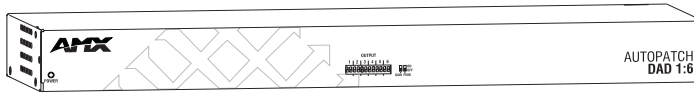**FIG. 1** RGBHV (BNC) DAD 1:4 model FG1052-13

FIG. 2 RGBHV (BNC) DAD 1:6 model FG1052-16

Product Specifications

General Specifications

General Specifications	
Approvals	Pending

AC Power
    Consumption (max.)
    Consumption (typical)
	100 to 240 VAC single phase, 50-60 Hz
	120 VAC, 650 mA
	120 VAC, 100 mA

Operational Temperature	32° to 110° F (0° to 43° C)
Humidity	0 to 90% non-condensing
Dimensions	5.15 in. (13.08 cm) depth 17.40 in. (44.20 cm) width without rack ears 19.00 in. (48.26 cm) width with rack ears 1.72 in. (4.37 cm) 1 RU height without feet Weight: Approx. 4.5 lbs. (2 kg)
Connector Type	BNC

RGBHV Signal Specifications

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Frequency Response		±3 dB, 450 MHz or better
Signal to Noise Ratio	Vin = 0.7 V, 100% IRE	>65 dB

Level
    Input (max.)
    Output (max.)
		±1.75 V
		±1.75 V

Impedance
    Input
    Output
		75 ohms
		75 ohms

Return Loss		-45 dB @ 5 MHz

Sync Level
    Input (max.)
    Output (max.)
		0 V to +5 V
		0 V to +5 V

Sync Impedance
    Input
    Output
		510 ohms
		50 ohms

Gain & Peaking* Specifications

Gain & Peaking* Specifications	

Gain
    OFF
    ON
	
	Unity
	+0.85 dB

Peaking
    OFF
    ON
	
	No peaking
	8 dB @ 150 MHz
	8 dB @ 300 MHz

Cable Length (max.)	250 ft. (76.2 m)

* Gain and peaking are independent switches that allow the user to turn on or off the gain and peaking.

Installation

Mounting Options

Desktop – Attach the rubber feet (included) to the bottom of the module.

Rack Mounting

To rack mount a module:

1. Remove one screw from each side of the module as shown in FIG. 3. Do not reuse screw for rack ear.
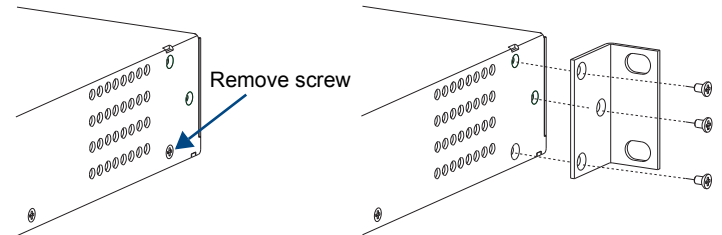2. Attach rack ears as shown in FIG. 3 (screws provided).

Remove screw

FIG. 3 Remove screw and attach rack ears

3. Place the module in a standard EIA 19 in. (48.26 cm) rack and secure it to the rack with screws.
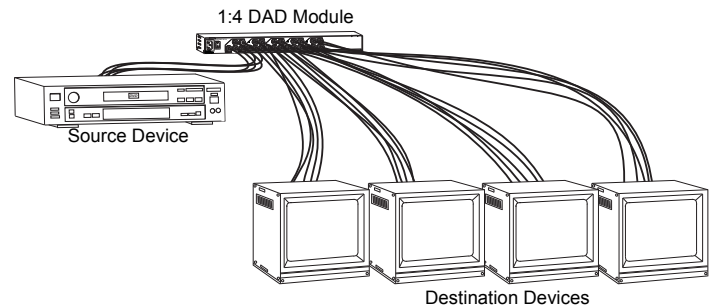
Typical Setup

FIG. 4 Typical system setup using 1:4 DAD

Attaching Cables

To attach connectors:

1. Fasten the BNC connectors from the source and destination devices onto the BNC connectors on the module (FIG. 5).
2. Attach the power cord into the power receptacle on the module and into an external AC power source.
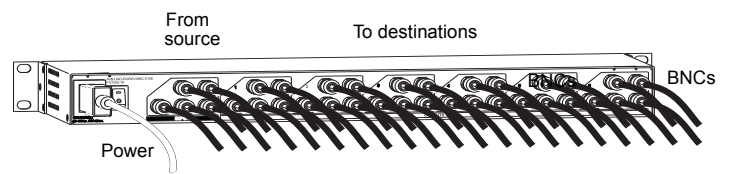

FIG. 5 Attach input and output connectors (1:6 model shown)

3. Press the "**I**" side of the power switch.
4. Apply power to the source and destination devices.

Note: *The power indicator LED is on the module's front.*

Front Panel DIP Switches

Each DIP switch pair controls the output gain and peak of the same-numbered output signal. The default setting is both switches "Off" (down, FIG. 6), which represents unity gain and no peaking. The gain and peak adjustments can compensate for long cable runs. To increase brightness of a destination's video, set the gain DIP switch to "On". To sharpen a destination's video, set the peak DIP switch to "On".

To adjust DIP switches:

1. Using a small screwdriver or paper clip, flip the toggles on the DIP switches up.

   See table below for settings.
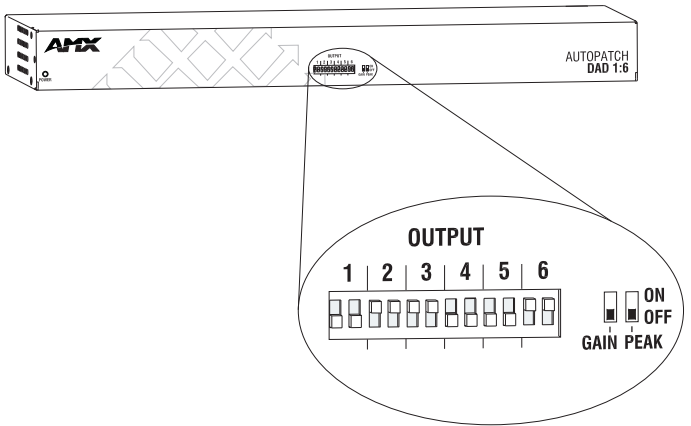
Example:
Outputs 1, 4 & 5 are set to OFF / unity
Outputs 2, 3, & 6 are set to ON for gain & peaking

FIG. 6 Adjust DIP switches for gain and peaking

Flip either or both switches "ON" depending on the length of the cable run.

DIP Switch Settings			
	OFF (default)	**ON**	**Result**
Gain	Unity gain	+0.85 dB	Brightens image
Peaking	No peaking	8 dB @ 150 MHz 8 dB @ 300 MHz	Sharpens image