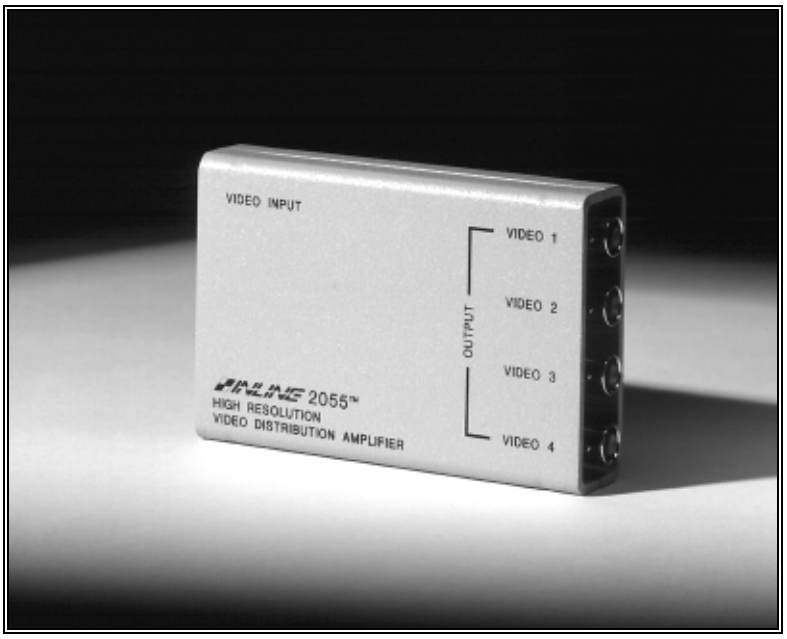
Operation Manual



IN2055 - 1 x 4 Composite Video Distribution Amplifier

IN2056 - Composite Video Line Driver

DESCRIPTION

The **IN2055** and **IN2056** are high performance video amplifiers with gain and peaking controls. The **IN2055** is a 1 in 4 out distribution amplifier, and the **IN2056** is a 1 in 1 out line driver. These units feature a very compact design which allows them to be installed in a very small space and offer 200 MHz bandwidth performance. The gain and peaking controls can be adjusted to compensate for signal loss due to long cable runs, and may be used to drive a signal as far as 1000 ft. Multiple **IN2055** units can be looped together to provide additional outputs.

COMPATIBILITY

The **IN2055 / IN2056** offer extremely wide bandpass characteristics and are compatible with hi-resolution monochrome signals, as well as with low resolution color composite video signals such as NTSC, PAL, or SECAM.

INSTALLATION

1. Connect the video signal from the source to the **IN2055 / IN2056** input.
2. Connect the output(s) to the display device(s) or other equipment.
3. Apply power to the unit (9 V 200 mA DC) using the supplied **IN9202** power adapter.
4. Adjust gain and peaking controls as needed (see **Internal Controls** section for details.)

OPERATION

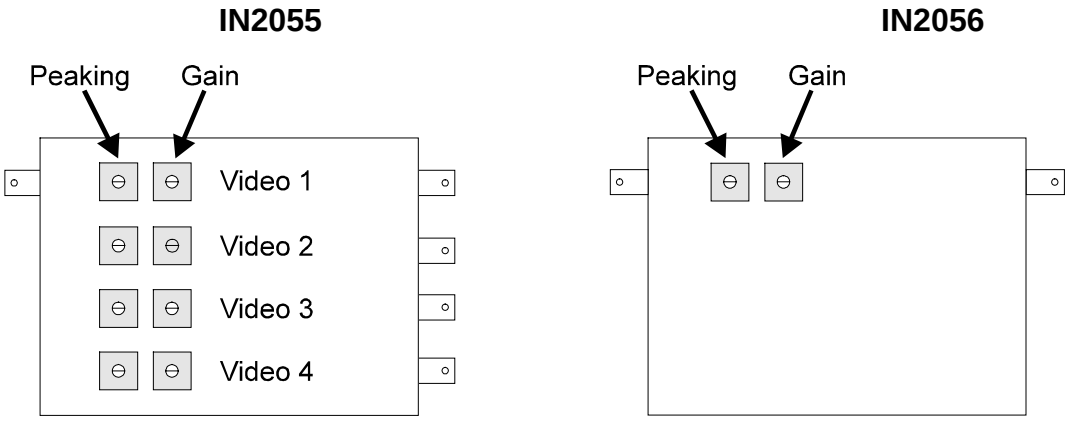
The **IN2055** and **IN2056** are designed to distribute/extend video signals. These units have individual gain and peaking controls for each output which can compensate for cable losses, and can extend a video signal as far as 1000 ft without any degradation of the signal. Actual drive distance depends on the resolution of the signal, and the cable used. Typically, low resolution video signals (15 KHz-30 KHz) can be sent 600-800 ft, and high resolution signals (30 KHz and above) can be sent 200-400 ft.

The gain controls can be used to compensate for video signal voltage losses. Peaking may be used to re-boost high frequency components which have been attenuated by long cable runs. The peaking control employs an equalization circuit, introducing an adjustable high frequency peak centered at 100 MHz. Please note that this high frequency equalization is optimized for high frequency signals and will have very little effect on lower frequency signals such as composite NTSC.

INTERNAL CONTROLS

The **IN2055** and **IN2056** have internal gain and peaking controls which can be accessed using the following procedure:

1. Remove the screw from the bottom of the unit.
2. Slide the top cover off.
3. Identify gain and peaking controls and gently adjust as needed.
4. Replace top cover and tighten the bottom screw.



Gain Control
The internal gain control is used to increase/decrease the contrast of an image by adjusting the amplitude of the video signal. The control has a range of 0.9 to 2.5 (factory setting is 1.1). Gently turn the control clockwise to increase the video gain, and counter-clockwise to decrease the gain.

Peaking Control
The internal peaking control is used to increase/decrease image sharpness and detail by boosting high frequencies. The peaking is centered at 100 MHz, and can boost the signal by as much as 3 dB. Gently turn the control clockwise to increase peaking, and counter-clockwise to decrease the peaking.

SPECIFICATIONS

Input

Connector:	BNC female
Signal:	Analog video
Input Impedance:	75 ohms
Voltage:	0.7 to 1.2 V p-p
Horizontal Frequency Range:	15 to 200 KHz

Outputs

Connectors:	**IN2055:** 4 BNC female **IN2056:** 1 BNC female
Signal:	Analog video
Output Impedance:	75 ohms
Gain:	0.9 to 2.5
Peaking:	0 to +3 dB @ 100 MHz
Bandwidth:	200 MHz @ -3 dB
Rise and Fall Times:	2.2 nSec

Power

Voltage:	9V DC
Maximum consumption:	200 mA
Power Supply:	**IN9202**

Dimensions

Size:	1" x 4.3" x 2.8"
Weight:	1 lb.

PARTS INCLUDED

IN2055 or IN2056
IN9202 9v 200 mA DC Power Supply
Gain / Peaking Adjustment Tool
Operation Manual

TROUBLESHOOTING

Problem: ***There is no image on the output of the IN2055/2056.***
Suggestions:
- Make sure the power supply is plugged in and that the input and output cables are connected properly.
- Bypass the **IN2055/2056** by connecting the input and output cables with a BNC barrel connector to ensure there is a video signal present.

Problem: ***The output image is too dark.***
Suggestion:
- First make sure the display device contrast and brightness controls are set properly. Then increase the appropriate **IN2055/2056** gain control until the desired image is achieved.

Problem: ***The output image is too bright or the picture blooms.***
Suggestion: ● First make sure the display device contrast and brightness controls are set properly. Then decrease the appropriate **IN2055/2056** output gain control until the desired image is achieved.

Problem: ***The output image is not sharp enough. Vertical lines are very thin.***
Suggestions: ● Make sure you are using the appropriate video cable for your signal type. When dealing with high resolution video signals, a high quality coaxial cable must be used for long distance cable runs (50 ft. or more).
● Increase the peaking control of the **IN2055/2056** to compensate for high frequency losses.

WARRANTY

- Inline warrants the equipment it manufactures to be free from defects in materials and workmanship.

- If equipment fails because of such defects and INLINE is notified within two (2) years from the date of shipment, INLINE will, at its option, repair or replace the equipment at its plant, provided that the equipment has not been subjected to mechanical, electrical, or other abuse or modifications.

- Equipment that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for ninety (90) days from the day of re-shipment to the Buyer.

- **This warranty is in lieu of all other warranties expressed or implied, including without limitation, any implied warranty or merchantibility or fitness for any particular purpose, all of which are expressly disclaimed.**

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