



A WORLD OF A/V SOLUTIONS



DISTRIBUTION AMPLIFIERS

IN3216R
VIDEO DISTRIBUTION AMPLIFIER 1-IN, 6-OUT



IN3216R

OPERATION MANUAL



Installation and Safety Instructions

For Models without a Power Switch:

The socket outlet shall be installed near the equipment and shall be accessible.

For all Models:

No serviceable parts inside the unit. Refer service to a qualified technician.

For Models with Internal or External Fuses:

For continued protection against fire hazard, replace only with same type and rating of fuse.



Instructions d'installation et de sécurité

Pour les modèles sans interrupteur de courant:

La prise de courant d'alimentation sera installé près de l'équipement et sera accessible.

Pour tout les modèles:

Pas de composants à entretenir à l'intérieur. Confiez toute réparation à un technicien qualifié.

Pour les modèles équipés de fusibles internes ou externes:

Afin d'éviter tout danger d'incendie, ne remplacer qu'avec le même type et la même valeur de fusible.



Installations- und Sicherheitshinweise

Für Geräte ohne Netzschalter:

Die Netzsteckdose soll in der Nähe des Gerätes installiert und frei zugänglich sein.

Für alle Geräte:

Keine Wartung innerhalb des Gerätes notwendig. Reparaturen nur durch einen Fachmann!

Für Geräte mit interner oder externer Sicherung:

Für dauernden Schutz gegen Feuergefahr darf die Sicherung nur gegen eine andere gleichen Typs und gleicher Nennleistung ausgetauscht werden.



Instalacion E Instrucciones de Seguridad

Modelos Sin Interruptor:

La conexión debe ser instalada cerca del equipo y debe ser accesible.

Para Todos Los Modelos:

Dentro de la unidad, no hay partes para reparar. Llame un tecnico calificado.

Modelos con Fusibles Internos o Externos:

Para prevenir un incendio, reemplace solo con el mismo tipo de fusible.

CE COMPLIANCE

All products exported to Europe by Inline, Inc. after January 1, 1997 have been tested and found to comply with EU Council Directive 89/336/EEC. These devices conform to the following standards:

EN50081-1 (1991), EN55022 (1987)
EN50082-1 (1992 and 1994), EN60950-92

Shielded interconnect cables must be employed with this equipment to ensure compliance with the pertinent Electromagnetic Interference (EMI) and Electromagnetic Compatibility (EMC) standards governing this device.



FCC COMPLIANCE

This device has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide against harmful interference when equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at their own expense.

Product Overview

DESCRIPTION

The **IN3216R** is a high-performance video distribution amplifier offering 180 MHz bandwidth performance. The unit is commonly used to amplify and split the signal from one video source out to several monitors, projectors, VCRs and / or other output devices.

Six Buffered Outputs - The **IN3216R** is a one-in six-out video distribution amplifier that can simultaneously drive up to six output devices.

Composite Video Signal Compatibility - While the **IN3216R** is most often used with NTSC, PAL or SECAM composite video signals, it offers extremely wide bandpass characteristics, making it compatible with high-resolution monochrome signals (such as the video signals used for specialized medical imaging equipment) at virtually any resolution and refresh rate.

Loop Output - The **IN3216R** loop output connector provides a passive loop-through signal, allowing the user to utilize additional amplifiers to create a larger DA system or to drive a local monitor. In order to use the loop output, the input termination jumper (internal) must be set to High Z (unterminated).

The **IN3216R** offers high performance, rugged metal construction and flexible video capabilities, making it suitable for a wide variety of applications including audiovisual installations, medical imaging, military simulation, industrial video and tradeshow video systems. The unit features an **internal power supply** that is pre-set at the factory for 120 VAC or 230 VAC operation. Two units can be rack mounted side-by-side in a 1U rack space using the optional **IN9080** Rack Shelf. A single unit can be rack mounted using the **IN9080** Rack Shelf and an **IN9088** Blank Panel.

Installation

1. Connect the video signal from the source to the **IN3216R** INPUT 1 connector.
2. Connect the output(s) labeled OUTPUT 1, OUTPUT 2, OUTPUT 3, etc. to the display device(s), VCRs or other video output equipment.
3. In the factory default setting, the input is terminated and the LOOP OUT connector should not have anything connected to it. If you want to use the LOOP OUT to send the signal to additional amplifiers or to connect to a local monitor, the input termination must be set to High Z (unterminated). See **Loop Output Connector** on page 2 for more information on setting the input termination jumper. Please note that any devices connected to the LOOP OUT connector should have a short cable to avoid possible ghosting or reflections.
4. Apply power to the unit using the **IN9230** IEC to Edison Power Cord (U.S. only).

Operation

LOOP OUTPUT CONNECTOR

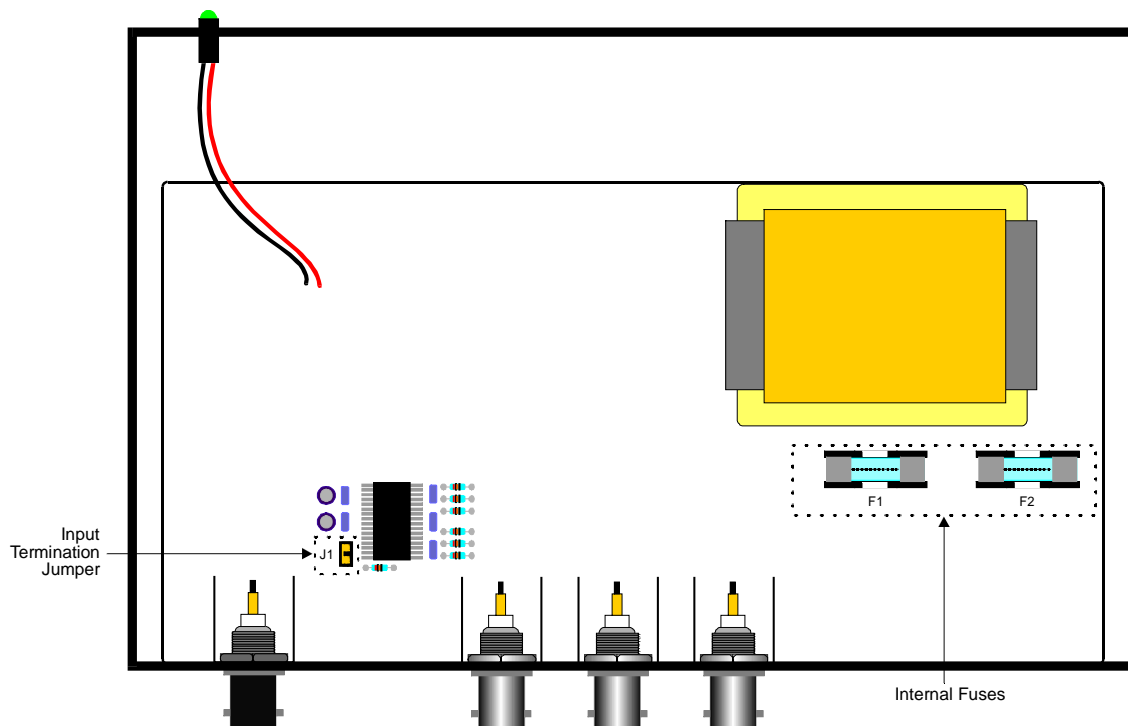
The loop output connector provides a passive loop-through signal. This can be looped through to additional amplifiers to create a larger DA system or to drive a local monitor. In order to use the loop output, the input termination jumper (internal) must be set to High Z (unterminated). The location of the input termination jumper is indicated in the diagram at the bottom of the page.

INTERNAL CONTROLS

CAUTION: Adjustment of the IN3216R internal controls must only be carried out by qualified technicians in a static free environment. Care must be taken to avoid static shock to the internal components.

1. Unplug the **IN3216R** from the A/C power source.
2. Remove the four case screws from the sides of the unit.
3. Gently slide the top cover off.
4. Identify the location of the jumpers using the diagram below and adjust as needed.
 - 75 ohm input termination, set J1 to closed
 - High Z input termination, set J1 to open
5. Replace the top cover and tighten the four side screws.

IN3216R INTERNAL J1 JUMPER AND FUSE LOCATIONS



INTERNAL FUSES

The **IN3216R** contains two internal fuses. If power is applied to the unit and the front panel LED is not illuminated, one or both of these fuses may be blown. Open the case as described below and replace any blown fuses with new 200mA / 250V fuses.

Caution: *Changing the internal fuses requires the unit to be opened. In order to avoid possible electric shock and static discharge to the unit, internal adjustments must only be carried out by qualified technicians in a static free environment.*

Fuse Changing Procedure:

1. Remove power from the unit.
2. Remove the four case screws on the sides of the unit.
3. Gently slide the top cover off.
4. Locate the fuses (F1 & F2) and replace with new 200 mA / 250V fuses as required.
5. Replace the top of the case and tighten the four case screws.

Specifications

IN3216R Video Distribution Amplifier	
Input	
Input 1	(1) BNC for composite video signals Termination: 75 ohms or High Z
Signal	Analog Video, 1.5 Vp-p max.
Loop Out / Input 2	(1) BNC Termination: 75 ohms or High Z
Output	
Connectors	(6) BNC female
Impedance	75 ohms
Video Gain	1.0 (Unity Gain)
General	
Bandwidth	180 MHz @ -3dB
Internal Jumpers	(1) Input termination
Power Supply	Internal; Factory set for 120 VAC or 230 VAC
Dimensions	1.65" x 6.8" x 4.8" / 4.2cm x 17.3cm x 12.2cm
Weight	Product Weight: 1.5 lbs. / 0.7 kg. Shipping Weight: 3 lbs. / 1.5 kg.
Regulatory Compliance	
Safety	UL 1950, 3 rd Ed.; CAN/CSA-22.2 No 950, 3 rd Ed.
EMI	FCC class A; CE: EN55022 (1987), EN50081-1 (1991), EN50082-1 (1992 & 1994), EN60950-92

Parts Included

IN9230 - A/C Power Cord - IEC female to Edison male (U.S. only) Operation Manual
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Optional Accessories

IN9080 - Rack Shelf (for mounting two units in a 1U rack space) IN9088 - Rack Shelf Blank Plate (for mounting a single unit in a 1U rack space) IN7200-1 Series - Ultra High-Resolution Single Conductor Video Cables (available in lengths from 3' to 250' pre-terminated with high quality BNC connectors or as bulk cable).

Troubleshooting

The output device connected to the IN3216R has no image.

Solution 1: Make sure the power supply is plugged in and that the input and output cables are connected properly.

Solution 2: If the LED on the front of the **IN3216R** is dark, check the internal fuses (see instructions on page 3).

Solution 2: Bypass the **IN3216R** by connecting the input and output cables with a BNC barrel connector to ensure there is a video signal present.

The output image is too dark.

Solution: Make sure the display device contrast and brightness controls are set properly.

The output image is too bright or the picture blooms.

Solution 1: Make sure the display device contrast and brightness controls are set properly.

Solution 2: The input termination may be set to High Z. Check the termination jumper setting (see page 2).

The output image is not sharp enough. Vertical lines are very thin.

Solution 1: 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). **IN7200-1** series cables are recommended.

The loop output is not working.

Solution: The input termination for input 1 must be set to High Z. Set the internal jumpers as shown on page 2.

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 merchantability or fitness for any particular purpose, all of which are expressly disclaimed.**

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