

IN3546R Operation Manual



6 Input 1 Output Stereo Audio Switcher





Installation and Safety Instructions

For Models without a Power Switch:

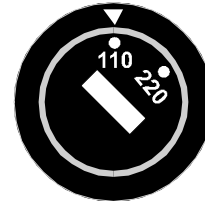
The socket outlet shall be installed near the equipment and shall be accessible.

For Models with 110 / 220V Power Selector:

Caution: Before applying power to this unit, the voltage selector must be set to the appropriate setting to match local A/C line voltage. Improper setting of the voltage selector may cause damage to the unit and create a potential fire hazard.

The voltage selector is a round switch located next to the A/C power input connector which looks like this:

Using a straight slot screwdriver or small coin, rotate the selector to the correct position so that the arrow lines up with 110 or 220 as appropriate for local power line voltage as indicated in the chart below:



| Local A/C Voltage | Voltage Selector Setting |
|-------------------|--------------------------|
| 110 ~ 120 VAC | 110 |
| 220 ~ 240 VAC | 220 |

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.

For IN2001 / IN3234 / IN3236 / IN3502 / IN3504 / IN3506 / IN3562 / IN3564 / IN3566 / IN3572 / IN3574 / IN3576:

Caution: Double pole / neutral fusing.

For all Models with Integral Lithium Battery:

Caution: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.



Instructions d'installation et de sécurité

Pour les modèles sans interrupteur de courant:

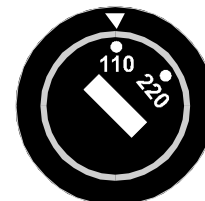
La prise de courant d'alimentation sera installé près de l'équipement et sera accessible.

Pour les modèles avec un sélecteur d'alimentation 110V/220V:

Attention: Avant de connecter l'appareil au circuit d'alimentation, le sélecteur de courant doit être positionné sur la sélection appropriée correspondant au voltage du circuit de courant alternatif local. Une mauvaise sélection peut engendrer des dommages à l'appareil et créer un danger d'incendie.

Le sélecteur d'alimentation est un commutateur rond positionné près du connecteur d'alimentation. Il se représente comme suit:

A l'aide d'un tourne-vis plat ou d'une pièce de monnaie, le sélecteur peut être tourné dans la position adéquate en veillant que la flèche corresponde avec 110 ou 220, en fonction de la valeur du circuit de courant local. (Voir tableau ci-dessous)



| Circuit local AC | Position Sélecteur |
|------------------|--------------------|
| 110 ~ 120 VAC | 110 |
| 220 ~ 240 VAC | 220 |

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.

Pour IN2001 / IN3234 / IN3236 / IN3502 / IN3504 / IN3506 / IN3562 / IN3564 / IN3566 / IN3572 / IN3574 / IN3576:

Attention: Double pôle / fusible au neutre.

Pour tout les modèles avec une batterie au lithium interne:

Attention: Danger d'explosion si la batterie est incorrectement remplacée. Ne remplacez la batterie qu'avec le même modèle, ou avec un modèle recommandé par le constructeur. Traitez les batteries usagées selon les instructions du fabricant, ou selon les normes écologiques en vigueur.



Installations und Sicherheitshinweise

Für Geräte ohne Netzschalter:

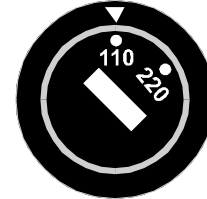
Die Netzsteckdose soll in der Nähe des Gerätes installiert und frei zugänglich sein.

Für Geräte mit 110 / 220V Spannungswähler:

Achtung: Bevor Sie dem Gerät Spannung zuführen, muß der Spannungswähler entsprechend der Spannung des lokalen Wechselspannungsnetzes eingestellt werden. Die falsche Stellung des Spannungswählers kann eine Beschädigung des Gerätes und möglicherweise ein Feuer verursachen.

Der Spannungswähler ist ein runder Schalter in der Nähe der Netzeingangsbuchse mit folgendem Aussehen:

Drehen Sie den Wähler mit einem normalen Schraubenzieher oder einer kleinen Münze so, daß der Pfeil auf die 110 oder 220 zeigt, entsprechend der Spannung Ihres lokalen Netzes wie hier angezeigt:



| Lokale Netzwechselspannung | Stellung des Spannungswählers |
|----------------------------|-------------------------------|
| 110 ~ 120 V | 110 |
| 220 ~ 240 V | 220 |

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 ausgewechselt werden.

Für IN2001 / IN3234 / IN3236 / IN3502 / IN3504 / IN3506 / IN3562 / IN3564 / IN3566 / IN3572 / IN3574 / IN3576:

Achtung: Allpolige Absicherung

Für alle Geräte mit eingebauter Lithium Batterie:

Achtung: Explosionsgefahr bei falschem Batterieeinsatz. Batterie nur ersetzen durch den gleichen oder entsprechenden Typ wie vom Hersteller empfohlen. Entsorgung verbrauchter Batterien nur nach den Anweisungen des Herstellers.



Instalacion E Instrucciones de Seguridad

Modelos Sin Interruptor:

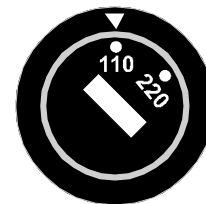
La conexión debe ser instalada cerca del equipo y debe ser accesible.

Modelos con Selector de Voltaje de 110/220V:

Precaución: Antes de operar esta unidad, el selector de voltaje debe instalarse de forma que corresponda a la línea de voltaje local. Instalación inadecuada del selector de voltaje puede causar daño a la unidad y originar un incendio.

El selector de voltaje es un cambio vía redondo localizado cerca de la conexión eléctrica, como se ve en el dibujo:

Use un destornillador común o una moneda pequeña, mueva el selector a la posición correcta, de forma que las flechas indiquen 110 o 220 de acuerdo con el voltaje local, como está indicado a continuación.



| Voltaje Local A/C | Selector de Voltaje |
|-------------------|---------------------|
| 110 ~ 120 VAC | 110 |
| 220 ~ 240 VAC | 220 |

Para Todos Los Modelos:

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

Modelos con Fusibles Internos o Externos:

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

Modelos IN2001 / IN3234 / IN3236 / IN3502 / IN3504 / IN3506 / IN3562 / IN3564 / IN3566 / IN3572 / IN3574 / IN3576:

Precaución: Double Polo / Fusible Neutral.

Modelos con Batería de Lithium Interna:

Precaución: Peligro de explosión si la batería es reemplazada incorrectamente. Reemplace solamente con la misma clase de batería, o una equivalente recomendada por el fabricante. Deseche las baterías usadas de acuerdo con las instrucciones del fabricante.

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.

DESCRIPTION

The **IN3546R** is a 6 input / 1 output stereo audio switcher designed to work in tandem with the **INLINE IN3500 / IN3600 Series** switchers. When input channels are selected on the RGB switcher, the **IN3546R** will automatically switch to the corresponding stereo audio input, adding audio-follow-video capabilities to the RGB switcher. The **IN3546R** receives both power and switching commands from the attached **IN3500 Series** RGB switcher via a custom 15 pin control cable which is provided with each unit. While the **IN3546R** was designed to work in conjunction with an **IN3500 / IN3600 Series** RGB video switcher, it may also be used as a free standing stereo audio switcher if the appropriate power and contact closure signals are applied to the 15 pin control port (see **Using the IN3546R in Stand-Alone Configuration**).

Audio signals are routed passively through the **IN3546R** and the unit will accept any audio signal input level. All input and output connectors are terminated with RCA female jacks. Separate left and right attenuation potentiometers are provided for each input channel, allowing individual adjustment of output voltage over a range from 100% to 5% of input voltage.

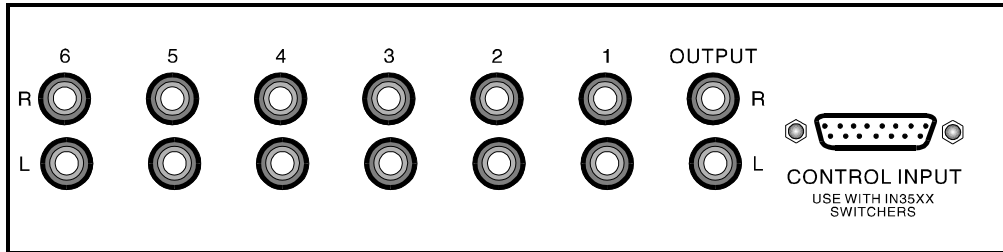
COMPATIBILITY

The **IN3546R** will work with the following **INLINE** models:

IN3504 / IN3506
IN3526 / IN3526vi
IN3554 / IN3556
IN3564 / IN3566
IN3574 / IN3576
IN3606
IN3654 / IN3656
IN3666

The **IN3546R** may also be used with auto-switcher models **IN3584** and **IN3586** if tally outputs are added to these models (factory installed option available through **INLINE** at time of order).

INSTALLATION



The **IN3546R** rear panel connections are shown in the diagram above.

1. Connect the audio signals from each source to the INPUT connectors (labeled 1 - 6) as required.
2. Connect the **IN3546R** OUTPUT to the input of the next device in the audio system (mixer or amplifier).
3. Finally, connect the **IN9112** or **IN9133** 15 pin control cable between the control port on the **IN3546R** and the **IN3500 / IN3600 Series** RGB switcher contact closure port. This provides power to the **IN3546R** and a control link, triggered by the RGB switcher's tally outputs. The **IN3546R** will power up along with the **IN3500 / IN3600** series switcher to which it is linked.

Consult the **IN3500 / IN3600** Series manuals for more information about their tally output functions.

USING THE IN3546R IN STAND-ALONE CONFIGURATION

Some applications may require the **IN3546R** to be used as a stand-alone stereo audio switcher. Since the **IN3546R** normally receives power and switching commands from the attached RGB switcher, the following procedure must be followed in order to use the **IN3546R** in a stand-alone configuration.

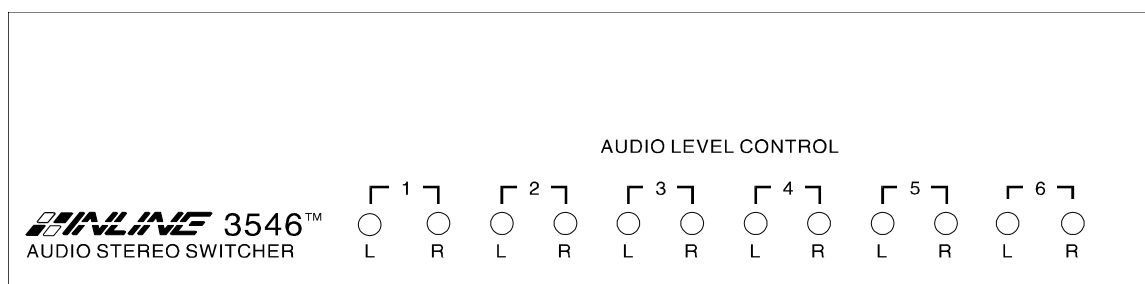
1. **The IN3546R must be special ordered for stand alone operation.** INLINE will make factory modifications to allow for stand alone operation, which includes the addition of jumper J8. When J8 is closed the unit is set for 9V or 12V power input on pin 8. The unit cannot be used in conjunction with an **IN3500 / IN3600 Series** switcher when J8 is closed or damage may occur.
2. **Power** - The installer must construct a special power/control cable according to the pin out information on page 5. The installer must also provide a 9 volt 300 mA (min.) power source to power the unit. The power from the 9V supply is applied to pin #8 on the IN3546R control port. The unit contains an internal 9V to 5V power transformer. **Do not apply any voltage to pin #9.**

Switching - In order to select different channels, a control device must be wired to provide latching contact closure between the ground pin (#7) and the appropriate channel selection pins. *Example:* In order to select input #2, provide a latching contact closure between pin #14 and pin #7.

OPERATION

The **IN3546R** is designed to switch up to 6 stereo audio signals. After hooking up all cables as described in the Installation section, the unit will automatically switch to various input channels, mirroring the channels selected on the attached **IN3500 / IN3600** series RGB switcher. The **IN3546R** will power up when the attached RGB video switcher is switched on. When an input is selected either manually or automatically on the RGB switcher, the tally output will close the contact between the ground pin and the appropriate channel select pin on the **IN3546R** CONTROL port, latching on the corresponding stereo channel (1 - 6) as long as the voltage is applied.

The only controls on the **IN3546R** are the left and right audio attenuation pots for each input. These can be adjusted to vary the output signal voltage for each input as necessary. Please note the **IN3546R** is a passive switcher so these pots are for attenuation only. They work over a range from unity gain (voltage out equals voltage in) at the extreme counter-clockwise position to 5% gain in the extreme clockwise position with one complete rotation from stop to stop.



CAUTION: When adjusting the attenuation pots, use only the small adjustment tool included with the **IN3546R** or a small plastic TV alignment screwdriver, taking care not to apply too much force to the control pots. If a large handled screwdriver is used the pots may receive too much torque, resulting in damage to the controls. This type of damage is not covered by warranty.

ACCESSORIES INCLUDED

IN9112 Control / Power Link Cable - 15 Pin D Male to 15 Pin D Male, 18" long
Adjustment Tool for Audio Level Attenuation Controls

OPTIONAL ACCESSORIES

IN9133 Pass Through Control / Power Link Cable - 15 Pin D Male to Double Headed 15 Pin D Male / Female pass through type connector allows external devices to control **IN3500 / IN3600 Series** switchers through the contact closure port *while* the **IN3546R** is attached. Cable is 18" long.

SPECIFICATIONS

| | | |
|------------------------|--|--|
| Input: | Number of Inputs | 6 Stereo Pairs - Unbalanced |
| | Connectors | RCA female jacks |
| | Signal Level | Line Level |
| Output: | Number of Outputs | 1 Stereo Pair - Unbalanced |
| | Connector | RCA female jack |
| | Signal Level | Output voltage ranges from 100% to 5% of input voltage depending on attenuation pot adjustment |
| | Frequency Response | 20 Hz to 20 KHz ± 3 dB |
| | Signal to Noise Ratio | >60 dB |
| | THD | Less than 0.1% from 20 Hz to 20 KHz, +4 db signal, attenuation pots set to 100% |
| | Isolation | >65 db at 10 KHz |
| | Switching Time | 320 mS |
| Control Port: | 15 Pin D female connector | |
| Power: | Powered by IN3500 / IN3600 Series Switcher: +5 Volts DC Powered by external source: 9 - 12 Volts DC, 200 mA | |
| Dimensions: | 2.2" x 8.5" x 4.6" | |
| Weight: | 1 lb. | |
| Regulatory Compliance: | Safety - UL 1950, 3 rd Ed.; CE: EN60950-92; CAN/CSA-22.2 No. 950 3 rd Ed. EMI / ESD - FCC class A; CE: EN50081-1, EN55022, EN50082-1 | |
| Weight: | 1 lb. | |

CONTROL PORT PIN-OUT INFORMATION

| | | | |
|-------|---------------|--------|-----------------------------------|
| Pin 1 | No Connection | Pin 8 | +9V input (stand alone operation) |
| Pin 2 | No Connection | Pin 9 | +5V (from IN35xx) |
| Pin 3 | No Connection | Pin 10 | Channel #6 |
| Pin 4 | No Connection | Pin 11 | Channel #5 |
| Pin 5 | No Connection | Pin 12 | Channel #4 |
| Pin 6 | No Connection | Pin 13 | Channel #3 |
| Pin 7 | Ground | Pin 14 | Channel #2 |
| | | Pin 15 | Channel #1 |

TROUBLESHOOTING

The **IN3546R** Stereo Audio Switcher is designed to offer problem free operation. There are no internal user adjustable or serviceable parts. If there are operational problems the following items should be checked:

1. Verify all input audio cable connections
2. Verify output cable connections
3. Check the connections on both ends of the **IN9112** or **IN9133** control/power link cable.
3. Verify that the attached RGBS switcher is ON.
4. Check the gain adjustment on the channel, making sure it is not set to minimum.

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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