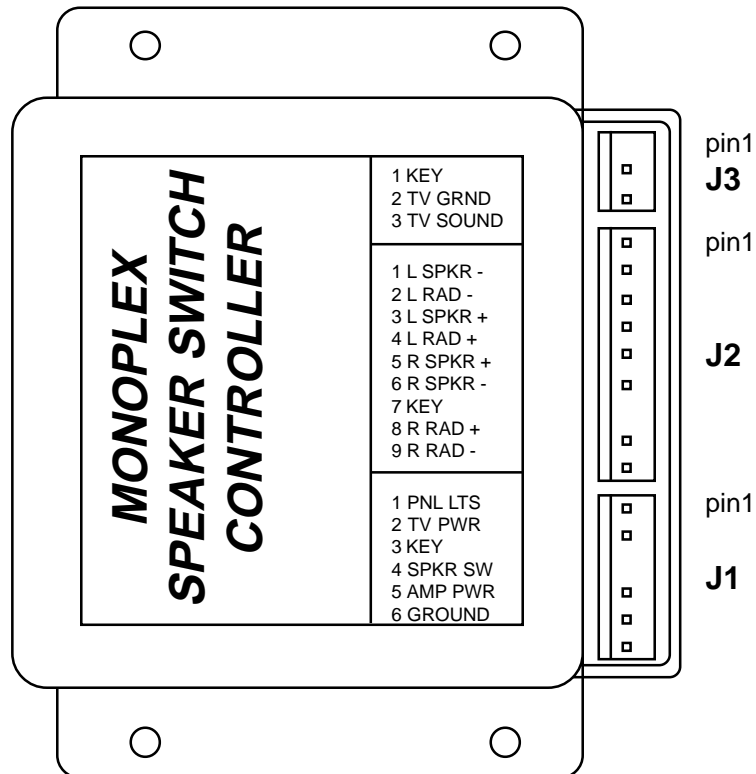


# MONOPLEX SPEAKER SWITCH

## SERVICE MANUAL



Intellitec Part No. 00-00571-000

Note: The MONOPLEX SPEAKER SWITCH is a centralized audio switching center. Power from both the ignition and battery is fed into the module. The power of the battery is available at this box. Inadvertent shorts at this box could result in damage and/or injury. All servicing of this box should be done only by a qualified Service Technician.

Tools required: Low current Test Light, Accurate Voltmeter (digital read-out preferred)

**INTELLITEC**

131 EISENHOWER LANE NORTH  
LOMBARD, ILLINOIS 60148  
630-268-0010 / 1-800-251-2408

# *MONOPLEX SPEAKER SWITCH*

## **PRODUCT DESCRIPTION**

The MONOPLEX Speaker Switch is intended to be used in conversion vehicles to switch the rear speakers from a radio to the TV. This allows the TV sound to be brought out through the rear speakers. The module is designed to work with an audio amplifier that has a control input that turns the amplifier on or off.

When the ignition is turned on, the radio will always be connected to the amplifier and the amplifier will be turned on. Whether the television is on or off will affect the operation. If the TV is off, the first press of the switch will turn the amplifier off, muting the sound to the rear speakers. At the next press of the switch, the amplifier is turned on again.

If the television is turned on, the first press of the switch mutes the sound by turning the amplifier off. The next press of the switch will turn the amplifier on and switch the input of the amplifier to the TV, bringing the TV sound out of the rear speakers, amplified. The third press will return radio to the rear speakers. If the sound from the TV is coming from the rear speakers and the TV power is turned off, the module will automatically switch the input back to the radio input.

## **HOW IT WORKS**

The MONOPLEX Speaker Switch provides a semi-automatic means of switching the four inputs of a stereo audio amplifier to allow switching between the four radio inputs and two TV inputs. The actual switching is done with four double pole, double throw relays. These relays are controlled by logic electronics to provide the functions of the unit. When the unit is not powered, the four radio inputs and the respective four amplifier outputs are connected. When the power is first applied, the amplifier power signal is on, or 12 volts. At the first press of the remote switch (This is momentary short to ground.), the amplifier power signal will go off, but the relays will not switch. At the next press the amplifier power signal will go on again. (This output is current limited to approximately 80 milliamps.

If the TV has power applied to it and power is available at J1 - 2, at the first press of the remote switch, the power signal to the amplifier will go off, but the relays will not switch. At the next press of the remote switch, the amplifier power signal will come back on and the relays will switch, causing the TV sound to come from the speakers. At the third press of the switch, the relays switch back and the amplifier signal stays on, bringing the radio sound out of the speakers again. If the TV sound is selected and the TV power is turned off, the module will automatically switch back to radio sound.

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# MONOPLEX SPEAKER SWITCH

## PLUGS - PINS & FUNCTIONS

### J1 - 6 pin

<u>Pin</u>	<u>Function</u>
1	Power Input
2	TV Power Input
3	Key
4	Speaker Switch
5	Amplifier Power
6	Ground

### J3 - 3 pin

<u>Pin</u>	<u>Function</u>
1	Key
2	TV Ground
3	TV Sound

### J2 - 9 pin

<u>Pin</u>	<u>Function</u>
1	Left Speaker -
2	Left Radio -
3	Left Speaker +
4	Left Radio +
5	Right Speaker +
6	Right Speaker -
7	Key
8	Right Radio +
9	Right Radio -

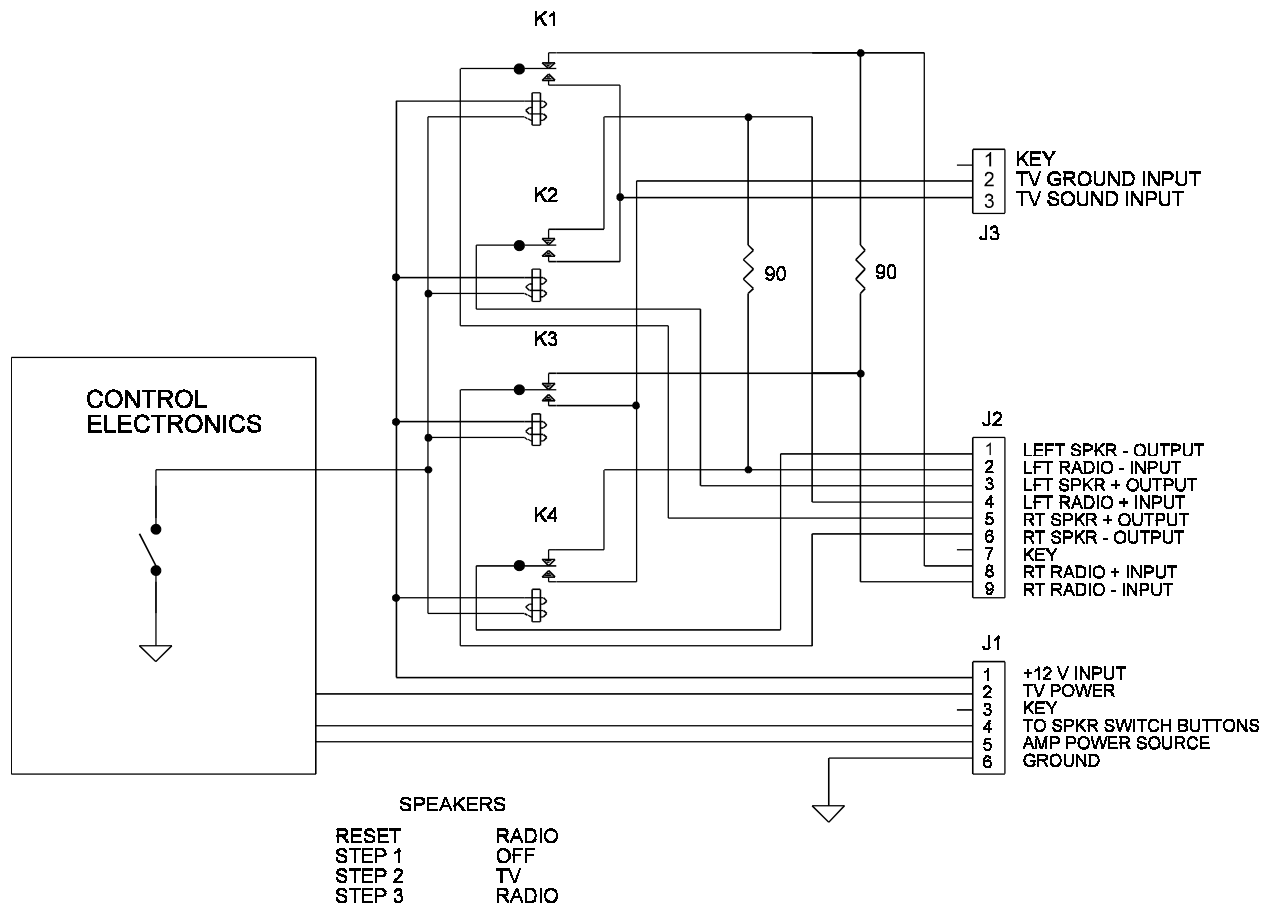
## TROUBLE SHOOTING

<u>Problem</u>	<u>Possible Cause/Solution</u>
No radio sound from rear speakers.	<p>Check for +12 volts coming to J1 - 1. If missing, check fuse F10 on Master.</p> <p>Check for power at amplifier. If missing, check fuse supplying amplifier.</p> <p>Check for radio fader settings. Set to middle of range.</p> <p>Check power signal at J1- 5. Should be +12 volts. If not, check for shorted wire.</p>
TV sound won't come from speakers.	<p>Check for +12 volts on J1 - 2. If missing, check wiring.</p> <p>TV sound not coming into J3. Check for sound signal at J3.</p>
Won't switch functions.	<p>Check voltage on Speaker Switch, J1 - 4. Should be +12 volts, no button pressed, 0 volts with a button pressed.</p>
One channel not working.	<p>Unplug J2. Check for continuity between corresponding inputs and outputs. If open, replace module.</p>

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# MONOPLEX SPEAKER SWITCH



**Intellitec**  
**ELECTRONIC SPEAKER**  
**SWITCH MODULE**  
**EQUIVALENT CIRCUIT**  
**PART NO. 00-00348-000**

**INTELLITEC**

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