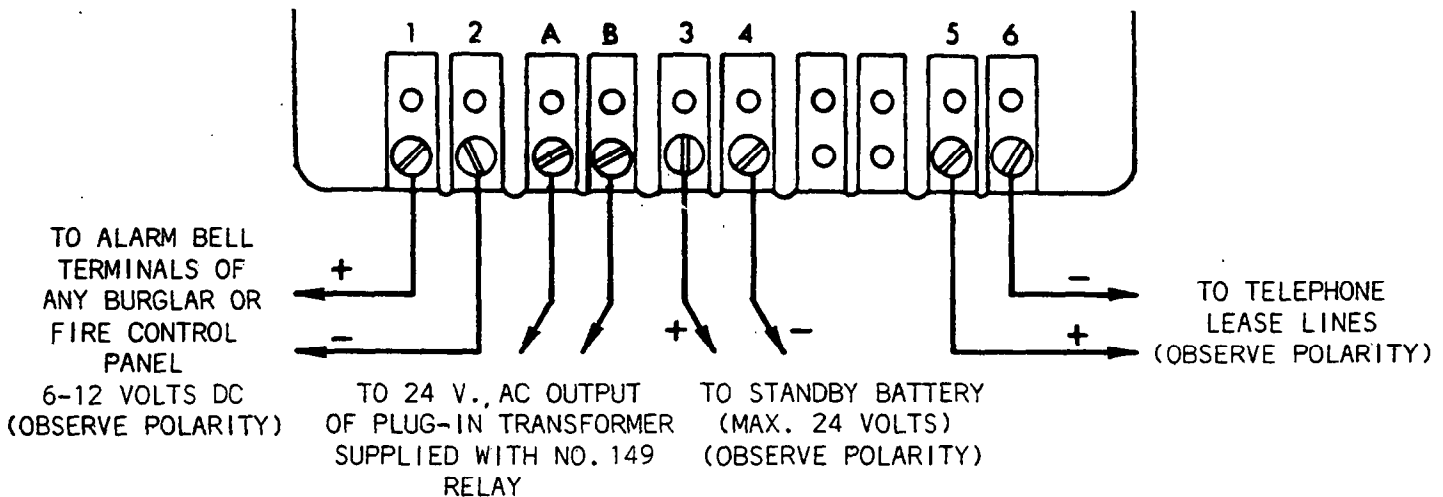
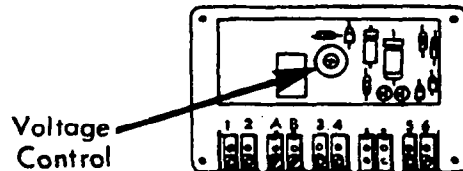


# No.149 REVERSING RELAY WITH POWER SUPPLY



This #149 is pre-set to deliver 4 milliamps to the Modularm 130. In most cases, further adjustment is not required.



IF FURTHER ADJUSTMENT IS REQUIRED, PROCEED AS FOLLOWS:

1. With the numbers of the terminals facing you, remove the plastic dust cover. Using a screwdriver, turn the voltage control in the center of the panel counter-clockwise, as far as it will go.
2. Connect the telephone line wires to terminals 5 and 6, being sure to observe polarity.
3. Connect terminals A & B to the 24 volt transformer and plug the transformer into an outlet that is not turned off at night. The current on the telephone lines at this point will be about 3 milliamperes.
4. Slowly turn the voltage control clockwise until the proper current flows through the telephone line. A Milliammeter can be used in series with one phone line to measure 4 milliamperes of current output. When the voltage adjusting control is properly set, the meter on the No. 130 Modularm plug-in unit at headquarters will read in the green area. If the meter in the No. 130 Modularm reads in the red area reverse the telephone line leads.
5. For your standby power, add sufficient batteries in series with terminals 3 and 4 so that 4 milliamperes still flows over the telephone lines when the AC power is removed. Be sure to observe polarity. See NOTE below.
6. Connect terminals 1 and 2 to the bell terminals of any burglar or fire alarm control. Be sure to observe polarity.

**NOTE:** To aid you in choosing the value of a standby battery, see "CHOOSING A STANDBY BATTERY" found on page 21 of this section.

# TROUBLESHOOTING No. 149

TROUBLE: 1. WHEN USING NO. 149 IN MODULARM OR MINI-MODULARM APPLICATIONS, THE CENTRAL STATION DOES NOT RECEIVE SIGNALING VOLTAGE FROM THE PANEL.

## PROBABLE CAUSE

## REMEDY

A. Incorrect wiring hookup.

A. Be sure wiring conforms to Installation Instructions (leased telephone lines must be attached to terminals 5(+) and 6(-) of panel. Terminals 1(+) and 2(-) go to bell terminals of alarm control (observe polarity). Terminals A and B go to 24V. AC transformer. Terminals 3 and 4 go to standby batteries (choose a sufficient number to enable 4 ma. to flow through phone lines). See "CHOOSING A STANDBY BATTERY", page 21 of this section.

B. Dirty or corroded relay contacts on reversing relay (located just above terminal A and B on the relay panel).

B. Return unit to Ademco for servicing.

TROUBLE: 2. ON ALARM, NO SUCH INDICATION IS RECEIVED AT THE CENTRAL STATION MODULARM OR MINI-MODULARM.

## PROBABLE CAUSE

## REMEDY

A. Dirty or corroded reversing relay contacts (located just above terminals A and B on panel).

A. Return unit to Ademco for repair.

B. Open coil of reversing relay or defective relay circuitry.

B. Return unit to Ademco for servicing.

TROUBLE: 3. A TROUBLE INDICATION IS SHOWN ON THE MODULARM UNIT AT THE CENTRAL MONITORING STATION.

## PROBABLE CAUSE

## REMEDY

A. Telephone line trouble possibly caused by a break in the lines.

A. Trouble must be repaired. Consult the telephone company.

B. Defective power supply or weak batteries not supplying enough current to register with modularm circuitry.

B. Be sure power supply output is delivering proper voltage. Measure output voltage across terminals 5 and 6 and across corresponding terminals on telephone junction block. Be sure it falls within specifications. Insert a milliammeter in series with telephone line and look to measure 4 ma. of current (see Diagram in the "No. 89-24 ADJUSTMENT PROCEDURE", page 21 of this section. If this value is not met, see "IF FURTHER ADJUSTMENT IS REQUIRED" in the instructions.