

# OC-12

## SYSTEMS INTERFACE DEVICE: Optical Coupler Module



The Banner model OC-12 is an optical coupler module used to interface the outputs of amplifiers and amplified scanners to other logic systems such as computers, programmable logic controllers (PLCs), solid-state totalizers, preset counters, speed controls, and any other devices which must be *isolated from ground*. The OC-12 allows interfacing between systems operating at different DC voltage levels (e.g. - a 24V dc sensor to a 5V dc logic circuit).

The OC-12's output is a phototransistor capable of sinking up to 50mA dc at applied voltages of up to 30V dc. **The OC-12 may NOT be used to switch AC.** Response time is less than 100 microseconds, and life is infinite. On-state saturation voltage is less than 1V dc, and off-state leakage current is less than 10 microamps.

The OC-12's input is compatible with the NPN or PNP transistor outputs of all Banner amplified DC photoelectric sensors, including the MULTI-BEAM, MAXI-BEAM, VALU-BEAM, MINI-BEAM, and ECONO-BEAM families. It may also be connected to the logic level outputs of Banner MAXI-AMP CL3, CM3, and CR3 Series modules and to the outputs of Banner "M" and "B" series amplifiers and MICRO-AMP family amplifiers and logic modules.

The OC-12 has a standard octal plug base, and is wired using a standard octal relay socket (Banner model OS-8). The OC-12 may also be used in place of the electromechanical relay on the model MRB control chassis.

### Specifications

**INPUT:** 10-30V dc. Connects directly to the PNP or NPN transistor output of all Banner self-contained (amplified) DC photoelectric sensors (MULTI-BEAM, MAXI-BEAM, VALU-BEAM, MINI-BEAM, and ECONO-BEAM families); CM3, CL3, CR3, "M", and "B" series amplifiers; and MICRO-AMP amplifiers and logic modules.

**OUTPUT:** ground-isolated optically-coupled NPN current sinking phototransistor, 50mA maximum at 30V dc maximum.

**RESPONSE TIME:** less than 100 microseconds (0.1 milliseconds).

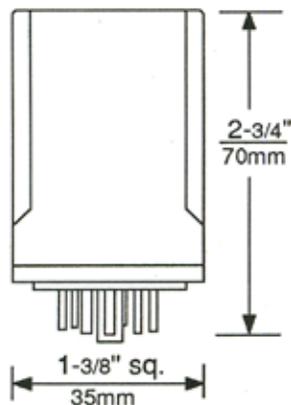
**ON-STATE SATURATION VOLTAGE:** less than 1V dc. Photodarlington output.

**OFF-STATE LEAKAGE CURRENT:** less than 10 microamps.

**OPERATING TEMPERATURE:** 0 to 50 degrees C (32 to 122 degrees F).

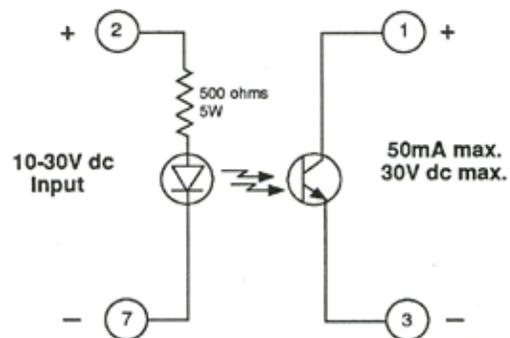
**CONSTRUCTION:** standard black plastic octal-plug relay housing.

#### DIMENSION DRAWING



Printed in USA

#### FUNCTIONAL SCHEMATIC



P/N 03444H8A

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