

## CONTROLS

### Photoelectric Amplifiers T31/T32 Series

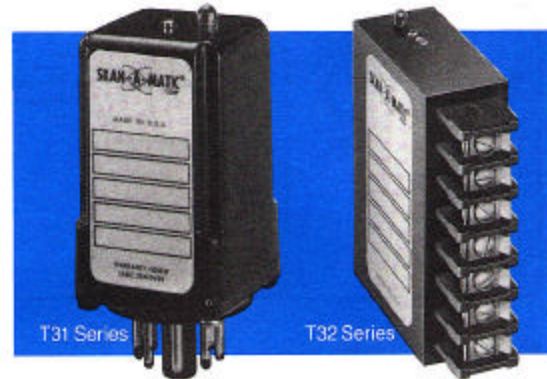
#### Features:

- Open collector output
- Plug-in or screw mount with terminal strip
- Output indicator LED
- 15 turn sensitivity adjustment
- May be wired LIGHT or DARK energize
- 5 VDC or 8–28 VDC models input

#### Description:

The T31/T32 Series photoelectric controls are designed to amplify the photodetector signal from one reflective skanner or thru-beam pair, and to drive an output transistor to switch a load. These controls do not supply power for the lamp or LED portion of the photoelectric device.

Power input to the amplifier can be 5 VDC or 8–28 VDC, to be specified by the catalog part number. The output is an open collec-



tor capable of driving loads up to 250 millamps and switching 28 VDC maximum. A Schmitt Trigger designed into the unit provides positive switching action.

The T31 Series unit is a plug-in module for socket mounting while the T32 Series is a screw mounted unit with terminal strip. A red LED output indicator is provided on both models and both have an internal 15 turn potentiometer to adjust the sensitivity.

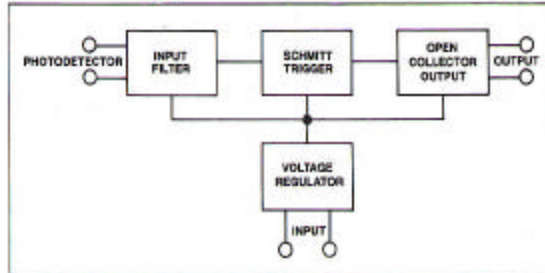
#### Specifications: (at 25°C)

<b>POWER INPUT</b>	5 ± 10% or 8–28 VDC, 28 mA. Voltage specified by proper part number.
<b>SENSOR VOLTAGE</b>	5 VDC 1 mA max. supplied by unit
<b>OUTPUT</b>	Open collector to switch up to 28 VDC at 250 mA max. An external diode should be used when switching inductive loads.
<b>SENSITIVITY ADJUSTMENT</b>	15 turn External pot may be used.

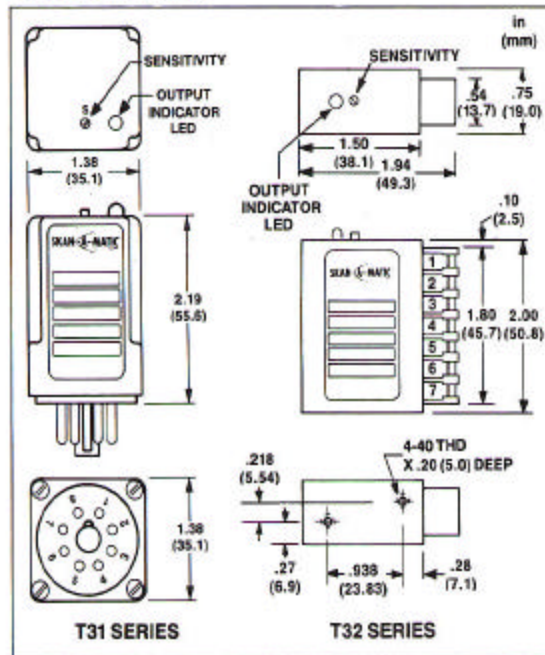
<b>RESPONSE TIME</b>	See Standard Amplifier under Response Time Chart in <i>Technical Information</i>
<b>TEMPERATURE</b>	Operating: 0° to 50°C Storage: -40° to 70°C
<b>ENCLOSURE</b>	T31 Series: 8 pin plug-in module, .687" pin circle dia.; black molded plastic case. Socket not included. T32 Series: Screw mounted module with 7 screw terminals.

## T31/T32 Series

### Block Diagram:



### Dimensions:



### Compatibility With Sensors:

The T31/T32 Series controls are designed to be used with most Skan-A-Matic reflective skanners and thru-beam combinations. Lamp and LED power, however, must be provided from a separate power source. For proper connection of LED light sources, calculate resistor values using formula under Wiring section of *Technical Information*.

### Model Selection Guide:

Part #	Input Voltage	Enclosure
T31101	5VDC	8 Pin Plug
T31102	8-28 VDC	8 Pin Plug
T32001	5VDC	Screw Terminal
T32002	8-28VDC	Screw Terminal

### Accessories:

#### RELAYS

The T31/T32 Series control may be used to drive an external relay or solid state relay. The following are available:

**R02003** Solid State Relay rated 2.0 amps at 20-140VAC. Life is 10 million operations at rated load.

**R00030** DPDT Relay rated 5 amps at 115VAC or 28 VDC resistive load. Life is 100,000 operations at rated load.

**R00031** DPDT Relay rated 10 amps at 115VAC or 28VDC resistive load. Life is 25,000 operations at rated load.

All are 8 pin, plug-in modules. Sockets are not included.

#### SOCKET

Available — see *Accessories & Options*, pg 127.

### Wiring Diagram:

