

# SEEKIRK

## Series E1000

*Remote or Local Annunciators  
for installation in, on or near monitoring equipment*

### Benefits

- Economical – ideally suited for transformer, switchgear, breaker, or relay panel applications for monitoring of equipment.
- Exceptional reliability and economy.
- Virtually false-alarm free
- Long service life...20 years or more

### Features

- Many models available for very specific applications.
- May be provided with either Incandescent Lamps or long life LEDs.
- Monitors up to (12) alarms and provides individual output control contacts for each point of operation..
- Optional feed-through rear terminals barriers which facilitates wiring.
- Plug in “point relays”
- Both “DC” and “AC” voltage models are available.

### Applications

Series E1000 annunciators are designed for applications which require rugged, failsafe monitoring protection, with an absolute minimum of false alarms due to electrical noise or other disturbances. They are ideally suited for monitoring of all types of transformers, switchgear, or breaker alarms. Any equipment with sensors that indicate status by the opening or closing of sets of contacts, can be monitored.

Remote E1000 Models provide one or two sets of output relay contacts per point which can be individually used for connection to an RTU or they can be grouped for critical and noncritical alarming, or common alarming for a single output to a supervisory annunciator. This minimizes the cost of long cable runs. When an alarm occurs the “locked on” point in alarm can be determined by going to the remote E1000.

### Individual Control Switches

- ON = Setting for normal operation
- RESET/OFF = Causes lamp and auxiliary relay to “reset” to normal after an alarm condition occurs (see “Follow” and “Lock-on” Operation).
- TEST = Full-circuit test of all points.

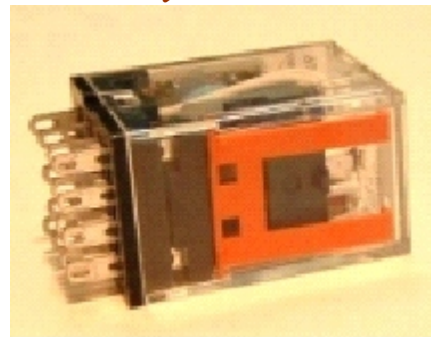


### “Follow” and “Lock-on” Operation

The E1000 lamp (or LED) and individual per point relay will normally “lock on” until the control switch is placed to the RESET/OFF.

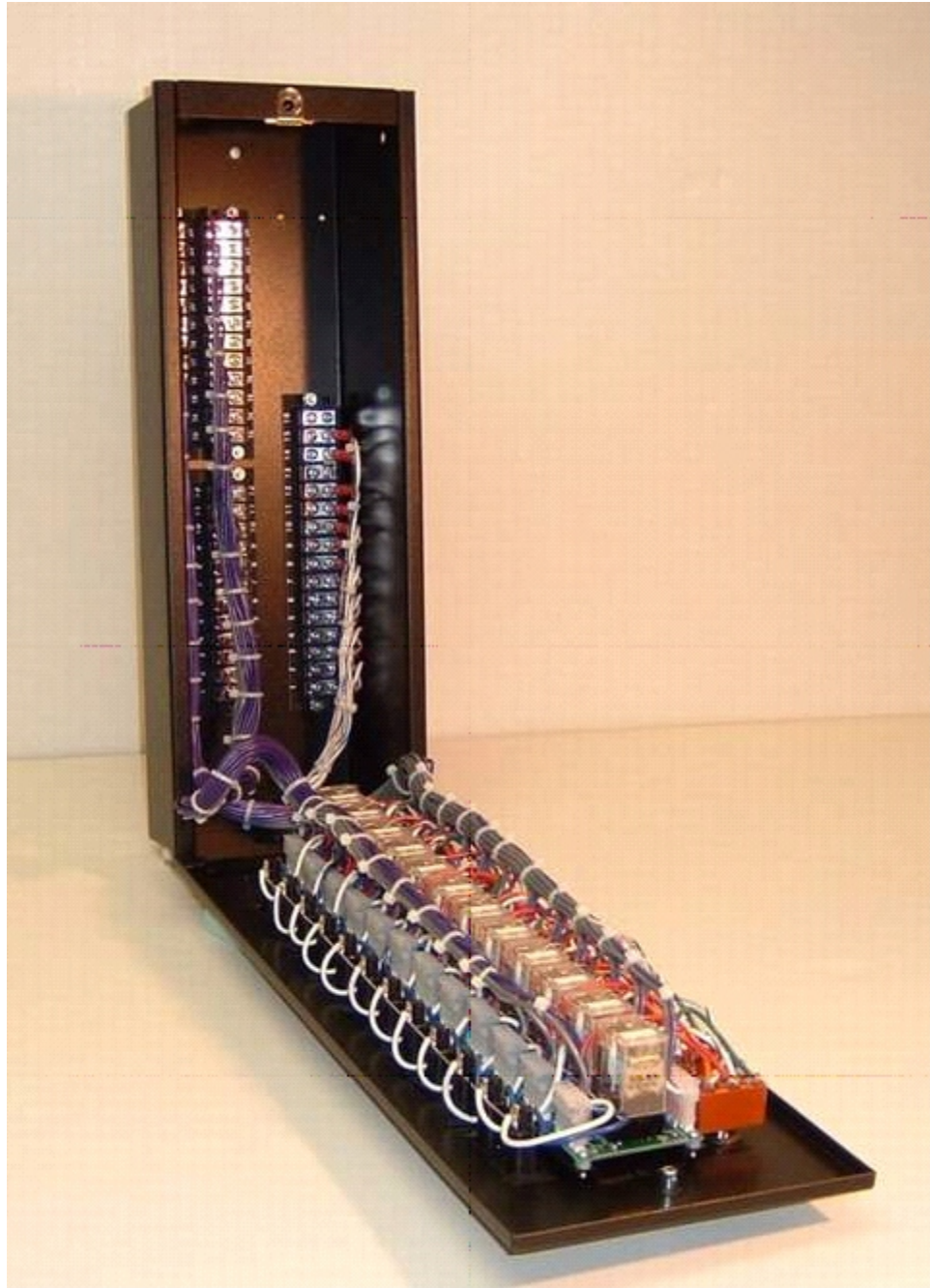
By clipping (opening) the green wire of each point relay, the associated lamp (or LED) will “follow” the normal or alarm condition of the user’s field contact. Each of the (12) point relays can be individually set up for either type of operation.

### The Point Relay



## *Point Relays*

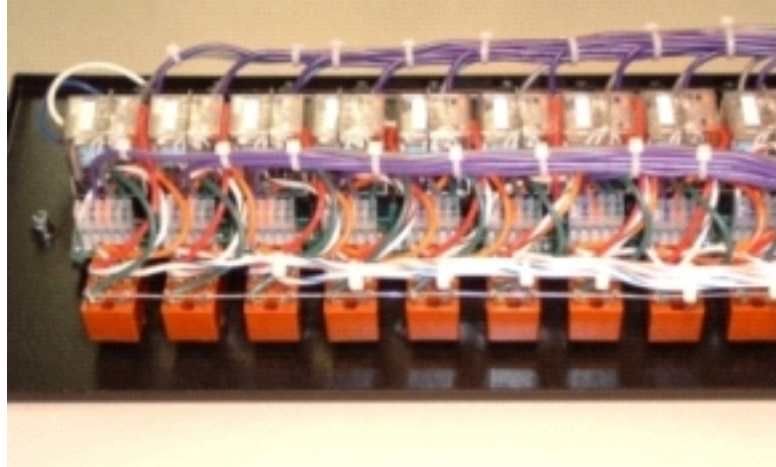
The point relay is a plugin relay (pictured previous page) and are each provided with 4PDT contacts each. This relay is internally wired and connected differently for each Model of the E1000. It is these internal connections which will determine the operating sequence for each Model. There are four (4) relays which are plugged into a Point Board Assembly and there are three (3) Point Board Assemblies utilized within each E1000 Series annunciator, thus, providing (12) points of operation. Both the relay and the point board are easily replaceable in the field. See the E1000 Series Instruction manual and the associated drawing for each model for complete details.



*Door Open view of E1000 Series Annunciator*

## *Special Models*

Seekirk provides many different models with many different sequences. If special features such as Loss of DC relays or special operating sequences are required, the standard Model number will be followed by an “S” (for special) followed by a number which denotes a specific special Model. ie: E1002-S2, 125VDC. Consult factory for details.



*Inside view of door*

## *General Specifications*

- Size: 17-7/8”H x 6-3/8W” x 4”D overall; panel opening 17-1/2”H x 5-1/2”W.
- Mounting: Rear or Flush Panel; J-Bolts for flush panel are included
- Relay Contacts: 1250VA resistive, 5 Amp max.
- Input Voltage: 12VDC, 24VDC, 48VDC, 125VDC or 117VAC as specified. 250VDC available w/Ext. Power supply to operate a 24VDC unit.
- Input Power: Less than 3VA per point; max 40 watts in TEST model.
- Alarm response time: 20 mSec

## *For More Details...*

...on sequences and differences between the basic models, refer to the Series A1000 and B1000 brochure. All information is identical; simply change the “A” or “B” prefix letter of those annunciators to “E”. The basic differences between the “A” and “B” annunciators and the “E” annunciator is the per point components used within each unit. The “A” Series uses wired in point modules per point whereas the “B” Series uses plug in point modules per point. The “E” Series annunciator uses plug in relays that will provide a higher rating on the output contacts than that of either the “A” or “B” Series. Also the “E” Series uses standard off the shelf plug in relays that can be purchased from most local distributors or vendors.

## *Lamp and Relay “Sequences”*

Most typically the lamp (or LED) and point relay operate together; lamp (or LED) on and point relay energized. Many other sequences are possible as shown in the Sequence Chart.

## Relay Chart

BASIC MODELS	A SUFFIX	B SUFFIX	C SUFFIX	D SUFFIX
E1001 E1002 E1002R/O E1003	E1001A E1002A E1002R/O-A E1003A	E1001B E1002B E1002R/O-B E1003B	E1001C E1002C E1002R/O-C E1003C	E1001D E1002D E1002R/O-D E1003D

Note: All contacts shown de-energized.

## Sequence Chart

FIELD CONTACT STATUS	E1001				E1002				E1002R/O				E1003			
	FOLLOW		LOCK ON		FOLLOW		LOCK ON		FOLLOW		LOCK ON		FOLLOW		LOCK ON	
	LAMP	RELAY	LAMP	RELAY	LAMP	RELAY	LAMP	RELAY	LAMP	RELAY	LAMP	RELAY	LAMP	RELAY	LAMP	RELAY
NORMAL	OFF	D	OFF	D	OFF	D	OFF	D	OFF	D	OFF	D	OFF	D	OFF	D
ALARM	ON	E	ON	E	ON	E	ON	E	ON	E	ON	E	ON	E	ON	E
RET TO NORM	OFF	D	ON	E	OFF	D	ON	E	OFF	D	ON	E	ON	D	ON	E
RESET 1*	ON	E	ON	E	ON	E	ON	E	ON	E	ON	E	ON	E	ON	E
RESET 2*	-	-	OFF	D	-	-	OFF	D	-	-	OFF	D	OFF	D	OFF	D

NOTES:  
 1. Relay status is either "D" (De-Energized) or "E" (Energized)  
 \*2. Reset 1 = Reset before alarm clears.  
 Reset 2 = Reset after alarm has cleared.

## Selecting the Model Number

The basic model number defines the lamp (or LED) and point relay sequence and a suffix letter or blank space will define the type of output contact. Choose the model number (E1001, E1002, E1002R/O or E1003) from the Sequence Chart depending upon the desired operation. Then either use no suffix letter or letter A, B, C or D to identify the output contact configuration required – see Sequence and Relay Charts. Example: Model E1003 has the lamp (or LED) relay sequence as shown in the Sequence Chart. With no suffix letter added (basic model), the unit will include one set of N.O. output contacts for each point relay. However, the Model E1003B has the same sequence but includes one each of a N.O. and one each of a N.C. contact set for each point relay.

## Ordering

Provide the following:

1. Model Number with Suffix letter if any. Also if "rear" mounted feedthrough terminals are desired add "w/feedthru TB's" as part of the Model Number. Finally if LED's are desired instead of incandescent lamps add "w/LED's" as part of model number. An example of a unit with both would be: "E1002B, 125VDC w/feedthrough TB's and w/LED's."
2. Input voltage: 12VDC, 48VDC, 24VDC or 125VDC; 117VAC or 250VDC w/External Converter.
3. Engraving for the legend plates if Seekirk is to supply.
4. Listing of spare parts such as extra plug in relays, lamps or LED's
5. Number of extra manuals (one per unit provided as standard)
6. Lens caps colors per point. Amber is standard for lamps. Colors available are Red, Green, Amber, Blue or White. If LED's are specified, the standard is a Red LED behind a White Lens cap.

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