SEEKIRK

Series A1000 and B1000

Remote or Local Annunciators

for installation in, on or near monitored equipment

Benefits

- Easy to install, use and service
- · Exceptional reliability and economy
- · Virtually false-alarm free
- "Group" remote alarming (up to 12 points) with an inexpensive two-wire cable run
- Long service life in the toughest environments

Features

- Many models available to meet specific requirements
- Flexible operation 12 monitoring points with individual alarm control for each
- · Compact; rear, flush or 19" rack mounting
- Optional feed-through rear terminal barriers
- Optional "Plug In" Modules B1000 Series

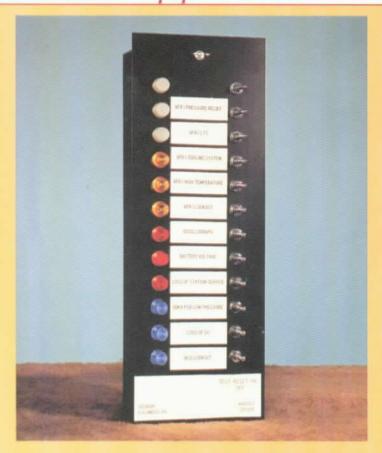
Applications

Series A1000 and B1000 annunciators are designed for use with many different types of equipment. Models in this Series are very reliable, inexpensive, compact 12-point annunciators. Self-contained in NEMA 1 enclosures, the units can be externally mounted and used in adverse environments. Their compact size also permits flush mounting or rear mounting within equipment enclosures or control consoles. These features make the units ideal for monitoring all types of transformers, rotating machinery, production line equipment and security systems. In general, any equipment with sensors that indicate status by the opening or closing of sets of contacts, can be monitored.

The small size and low cost of A1000 and B1000 Series annunciators make them ideal for applications in remote, unattended areas. In addition to those features each annunciating point provides individual alarm control. This permits a versatile selection of alarm arrangements. For example, when used in a distant, unattended area, all alarm contacts can be connected in parallel to a single pair of wires going to an annunciator or alarm horn in an attended area. When used in an attended area, single points or groups of points may be used to control different kinds of alarms, e.g. major and minor alarm horns, flashing lights, etc., as shown in the simplified diagram.

General Description Electrical

The A1000 and B1000 Series annuciators are completely wired and tested before shipment. They contain twelve point modules which are connected via cable harnesses to the input and output terminal strips. The units are designed to operate reliably within a range of -25% to +15% of the rated power supply voltage.



Power consumption is a low 3 watts per point in the alarm or test state; no power is consumed in the normal state. Point modules have a nominal response time of two milliseconds, to eliminate false alarms due to transients.

Mechanical

Series A1000 and B1000 annunciators are compact units designed for rear or flush mounting in any position. Enclosures are made of 16-gauge steel formed and welded. They are primed and painted inside and out with semi-gloss black enamel. The front panel is hinged at the bottom and has a cam-lock fastener at the top.

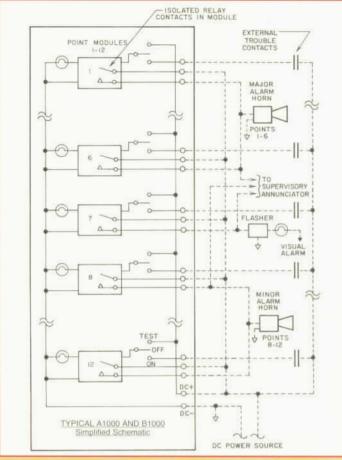
Legend plates for each point are a durable laminate on which legends are engraved in contrasting letters. You may engrave the legend plates, or we will engrave for a nominal charge.

Legend plates are held securely in place by semi-permanent pressure-sensitive adhesive. Plates may be removed and reapplied several times and still adhere securely.

Lamps are long-life miniature switchboard type with a slide base. They are covered with lens caps, and may be replaced from the front of the panel without the need of special tools. The terminal strips are barrier type with plated No. 8 binding screws. Three strips are provided for external wiring connections; all terminals are clearly marked for accurate identification. Conduit knockouts for external wiring are provided at the top and bottom of the enclosure.

Operation General

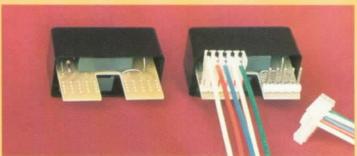
A1000 and B1000 Series annunciators can monitor twelve sets of external contacts. Each annunciating point includes a lamp for visual identification, and relay(s) for external alarm control. Different models have different sequences and various relay options.



Point Modules

The point modules are wired-in (A1000) or plug-in (B1000) packages of the latest design. One or two alarm control relays are contained within each point module. When the external trouble contacts close, the point module enables it annunciating lamp to turn on and its relay(s) to operate.

Relays in the point modules may be normally open, normally closed, or combinations of both. The relays may be used to control any combination of local visual, local audible, remote visual, and remote audible alarms, as well as points on control room annunciators.



A1000 Wired In Module

B1000 Plug-In Module Shown w/Connector

Control Switch

The A1000 and B1000 Series annunciators contain twelve individual control switches, one for each monitoring point. Each is a three-position switch which controls the following functions:

- ON The control switch must be placed in the ON position for normal operations. In this position, the point module is in the alert-ready state.
- RESET/OFF Generally, the control switch is placed in the RESET position in order to clear the point module and ready it for the next trouble input. Some models use the RESET function to return the relay contact to normal without turning off the annunciating lamp. This allows a potentially annoying alarm to be turned off after it has performed its altering function.
- **TEST** Each point is tested individually by moving the switch to the TEST position. This position gives a complete check of the entire point module circuit. If an alarm occurs while the switch is in the TEST position, the lamp will remain on when the switch is returned ON.

Sequences

All models in the A1000 and B1000 Series are pre-wired to provide a "lock-on" operating sequence. The wiring for each point can be easily changed in the field to provide a "follow-the-contact" sequence. These sequences are described as follows:

- "Lock On" the lamp lights when the trouble contact operates. The lamp will stay on until the trouble is cleared and the annunciating point is RESET.
- "Follow-The-Contact" the lamp lights when the trouble contact operates, and will turn off when the trouble contact returns to its normal state.

Any of the twelve points can be set up with either sequence. They may be mixed in any order in the annunciator.

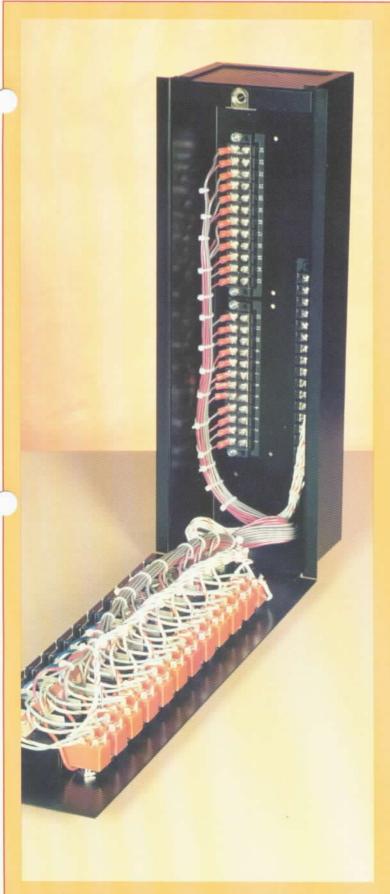
All 1000 and B1000 Series annunciators are factory wired for the "lock on" sequence. To change this to "follow-the-contact," simply disconnect the green wire from the point module, at its terminal point.

Installation and Maintenance

Series A1000 and B1000 annunciators are designed for rear or flush mounting near the equipment to be monitored. For wall mounting, drill holes on appropriate centers and mount with screws or bolts. For flush mounting, panel cutout dimensions are given in the annunciator manual. The annunciator is secured in the panel with four J-bolts which are supplied.

Conduit knockouts are provided at the top and bottom for external wiring to integral terminal barriers. Optional feedthrough rear mounted terminal barriers are available and need to be specified as "feed-through" at the time of order. If feedthrough terminals are provided, the unit can only be flush mounted.

Maintenance is minimal and should include periodic testing of the modules and lamps, using the TEST function for each point. Replacement of modules is simple and fast. The A1000 point modules will require re-soldering for replacement, whereas the B1000 point modules can simply be un-plugged and a new module re-inserted into place.



A1000 Series Interior — The upper "fixed" section (either flush-or rear-mounted) contains barrier terminal strips for all user connections - field contacts, auxiliary relays and input power. The lower "front panel" section, hinged at the bottom for complete access, contains switches, lamps and point modules.

General Specifications

(Subject to change without notice)

Mechanical

Size, HXWXD 17-3/8 x 5-1/4 x 4 (44 x 13 x 10 cm). Weight

12 pounds, approximate shipping weight.

(5.5 kg)

Finish Semi-gloss black, baked enamel. Conduit access Knock-outs top and bottom for

1" conduit fitting.

Enclosure 16-gauge steel

Electrical

Number of points 12 (fully equipped)

Relay contacts 15 VA resistive, 1.5 amps max., 350 V dc

breakdown, isolated from internal wiring.

Input voltage choices 12 V dc nominal (10.8 V to 14.2 V dc).

24 V dc nominal (10 to 27 V dc). 48 V dc nominal (35 to 56 V dc). 125 V dc nominal (90 to 140 V dc). 250 V dc nominal (220 to 260 V dc).

Input power Less than 3 watts per point in alert state.

Maximum of 32 watts with all control

switches in TEST position.

Lamps Miniature slide-base, telephone type,

5000 hours MTBF

Input termination One 16-point barrier-type terminal block.

#8 screws

Output termination Two 12-point barrier-type terminal blocks,

Response time Two milliseconds, any annunciating point..

Temperature range 0° F to 140° F (-18°C to + 60°C)

How To Order

For each annunciator ordered:

- Specify Model number. See next page for selections. A1000 Series have wired-in modules; B1000 Series have plug-in modules.
- Specify supply voltage: 12Vdc, 24Vdc, 48Vdc, or 125Vdc. For 117VAC, 220VAC or 250VDC, an optional external power supply will be required. Consult factory for details.
- If required, specify "feed-through" rear terminals.
- Specify engraving if Seekirk is to supply.
- Specify spare parts (Point Modules; Lamps).
- Indicate desired number of instruction manuals. (One is included with each unit ordered.)
- Amber lens caps will be supplied, unless otherwise specified. Standard colors available are amber, red, blue, green and white.

Special Models

Special models are available to meet specific needs. Consult the factory for further information.

Models and Selection

There are currently 40 standard models available in the A1000 and B1000 Series. Select the model for your requirement by"

- 1. Annunciating Sequence desired, and
- 2. Configuration of the isolated auxiliary relay(s) desired.

Sequences

The annunciating sequences available are defined by four groups of two basic model numbers, A1001 or B1001, A1002 or B1002, A1002R/O, and A1003 or B1003. They are described as follows; also refer to Sequence Chart.

Models A1001 and B1001 are designed to provide assurance that an alarm will not be lost. With the control switch in the ON Position, the lamp and the auxiliary output contacts will "lock on." In the RESET/OFF position they will "follow the contact" (i.e., the input field contacts). A sequence change can be obtained by disconnecting the green wire at the point module. This will cause the lamp and aux, relay contacts to "follow the contact" with the control switch in the ON or RESET/OFF position.

Models A1002 and B1002 are designed to provide the ability to deactivate an alarm point. With the control switch in the ON position the lamp and the aux. contact will "lock on". In the RESET/OFF position neither will operate. A sequence change can be performed by disconnecting the green point module wire at the point module. This will cause the lamp and the relay to "follow the contact".

Model A1002R/O and B1002R/O are identical to Models A1002 and B1002 except that the lamp and aux. relay operate independently. With the control switch in the ON position the

lamp and the relay will "lock on". In the RESET/OFF position the lamp will "follow the contact" and the aux, relay will be de-energized.

A sequence change can be performed by disconnecting the green point module wire. With the control switch in the ON position both the lamp and the aux. relay will "follow the contact". For the RESET/OFF position sequence is unchanged; only the lamp will "follow the contact" and the relay will be de-activated.

Model A1003 and B1003 have two sequences available, Both sequences utilize lamp memory; that is, the alerted lamp will always "lock on" until the alarm has cleared and the monitoring point is RESET.

With the green point module wire connected, the aux. output relay contacts will also "lock on". Note; Not applicable to Models A1003A, B1003A, A1003B, B1003B, A1003C or B1003C; see Auxiliary Relay Configurations table.

With the green wire disconnected, the aux. relay will "follow the contact". It will clear when the field contact returns to normal.

Regardless of the sequence utilized, if the control switch is in the RESET/OFF position the point module will not respond to an alarm.

Auxiliary Relay Configurations

The auxiliary relay(s) configuration to be supplied are determined by a suffix letter added to the basic model number, as shown in the Auxiliary Relay Configurations table. Note that if no suffix letter is added, only one N.O. aux. relay will be supplied. Except for special models, all 12 point modules will have the same relay configuration, and are designed for use with normally-open field contacts.

Sequence Chart, All Models

FIELD	A1001 or B1001, A,B,C,D				A1002 or B1002, A,B,C,D				A1002 R/O or B1002R/O, A,B,C,D				A1003 or B1003,A,B,C,D†			
	FOLLOW		LOCK ON		FOLLOW		LOCK ON		FOLLOW		LOCK ON		FOLLOW		LOCK ON	
STATUS	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	Е	ON	E
RET TO NORM	OFF	D	OFF	E	OFF	D	OFF	E	OFF	D	OFF	E	OFF	D	OFF	E
RESET 1*	ON	E	ON	E	OFF	D	OFF	D	ON	D	ON	D	ON	D	ON	E
RESET 2*	-	-	OFF	D	-	- 80	OFF	D	OFF	D	OFF	D	OFF	D	OFF	D

NOTES: 1. Relay status is either "D" (De-energized) or "E" (Energized)

*2.Reset1 = reset after alarm, but before alarm status clears.

Reset2 = reset after alarm status clears.

†3. A1003A, B1003A, A1003B, B1003B, A1003C, and B1003C are not available with Lock On Sequence

Auxiliary Relay Configurations All Point Modules

BASIC MODELS	A SUFFIXT	B SUFFIXT	C SUFFIXT	D SUFFIX
A1001 and B1001 A1002 and B1002 A1002R/O and B1002R/O A1003 and B1003	A1001A and B1001A A1002A and B1002A A1002R/O-A and B1002R/O-A A1003A* and B1003A*	A1001B and B1001B A1002B and B1002B A1002R/O-B and B1002R/O-B A1003B* and B1003B*	A1001C and B1001C A1002C and B1002C A1002R/O-C and B1002R/O-C A1003C* and B1003C*	A1001D and B1001D A1002D and B1002D A1002R/O-D and B1002R/O-D A1003D and B1003D
0	000	0	000	
	4			

Note: All contacts shown de-energized.

*Operates only in "Follow the contact" sequence (control switch "ON"), †Dual contact sets are independent relays which operates simultaneously

SEEKIRK

Telephone: 614-278-9200

Seekirk, Inc. 2420 Scioto-Harper Road Columbus, Ohio 43204 Fax: 614-278-9257 Represented By:

SEEKIRK

Series C1000

Four-Point Remote or Local Annunciators for installation in, on or near monitored equipment

Benefits

- Economical ideally sized for smaller equipment
- Versatile 20 models for sequence and relay selections; custom versions available
- Exceptional reliability; false-alarm free
- · Long service life and ultra-low maintenance

Features

- Models available with all standard annunciating sequences featured for Al000 Models
- · Rugged, compact; four-point capacity
- Flush or rear mount
- Front access with single cam-lock fastener; top and bottom conduit knockouts

Applications

Series C1000 annunciators are designed for use with equipment having only four or less points that are to be monitored. This permits economy by not having to buy an oversized stock annunciator with 10 or 12 points.

They are also designed for applications requiring rugged, failsafe monitoring protection, with an absolute minimum of false alarms due to electrical noise or other disturbances.

Remote C1000 models may have the relay contacts of the four modules connected in parallel for a single two-wire 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 C1000.

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

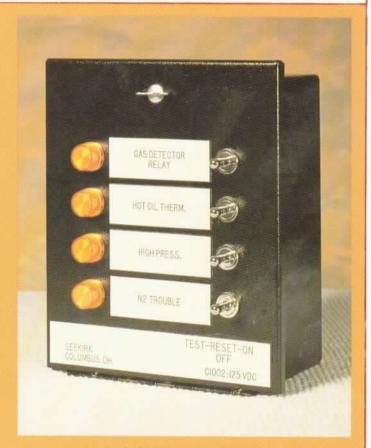
"Follow" and "Lock-on" Operation

The C1000 lamp and relay for each point will normally "lockon" until the control switch is placed to RESET/OFF

By clipping (opening) the green wire of each point module, the associated lamp and relay will "follow" the normal or alarm condition of the user's field contact. Each of the four point modules can be individually set up for either type of operation. (Some Models cannot use "Lock-on" operation; see Sequence Chart.)

Lamp and Relay "Sequences"

Most typically the lamp and relay(s) for each point module operate together; lamp on and relay energized. Other sequences are possible, as shown in the Sequence Chart.



Typical C1000 Annunciator

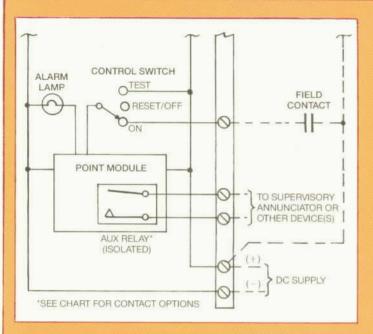
Selecting the Model Number

The basic model number defines the lamp and relay sequence, and a blank or letter suffix defines the relay type(s). Choose the model number (C1001, C1002, C1002R/O or C1003) from the Sequence Chart depending on the sequence you want. Then either use no suffix letter, or letter A, B, C, or D to identify the relay configuration you want — see Relay Chart. NOTE: Except for special orders each unit is shipped with all point modules having all relays the same.

Example: Model C1002 has the lamp relay sequence shown in the Sequence Chart. With no suffix letter added (basic model), the unit will include one set of N.O. relay contacts in each point module. However, Model C1002B has the same sequence but includes one N.O. contact set and one N.C. contact set in each module.

For More Details ...

...on sequences and relays, refer to the Series A1000 brochure. All information is identical; simply change the "A" prefix of the 12-point A1000 Series annunciators to "C" (prefix for four-point C1000 Series)



Typical C1000 Simplified Diagram

General Specifications

Size: 7-7/8" H x 6-3/8" W x 5" D overall; panel opening 7-3/8" H x 5-3/8" W

Mounting: Rear or Panel; J bolts for panel mounting are included Relay Contacts: 15 VA resistive, 1.5 amps max; Isolation 35 V de

Input Voltage: 12, 24, 48, or 125 V dc, as specified

Input Power: Less than 3 VA per point; max 12 watts in TEST mode.

Alarm Response Time: 2 milliseconds

Temperature Range: 0° to 140° F (-18° to 60° C)

Ordering

Provide the following: (1) Model Number with Suffix letter if any. (2) Input voltage; 12, 24, 48 or 125 V dc. (3) Engraving for legend plates if Seekirk is to supply. (4) List spare parts desired; lamps, lamp caps, point modules. (5) Number of *extra* equipment manuals per unit (one supplied with each unit ordered). (6) Caps for lamps will be Amber unless one of the following is requested: Red, Green, Blue or White. (All colors are "standard.")

If you need a non-standard sequence or relay choice, call the factory and we will attempt to meet your special needs.

Sequence Chart

FIELD	C1001, A, B, C, D				C1002, A, B, C, D				C1002R/O, -A, -B, -C, -D				C1003, A, B, C, D		C1003, D†	
CONTACT	FOLLOW		LOCKON		FOLLOW		LOCK ON		FOLLOW		LOCKON		FOLLOW		LOCKON	
STATUS	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	Ε
RET TO NORM	OFF	D	ON	E	OFF	D	ON	E	OFF	D	ON	E	ON	D	ON	Е
RESET1*	ON	E	ON	E	OFF	D	OFF	D	ON	D	ON	D	ON	D	ON	Е
RESET 2*			OFF	D			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 after alarm, but before alarm status clears.

Reset 2 = reset after alarm status clears.

†3, C1003A, C1003B and C1003C not available with Lock On sequence.

Relay Chart

BASIC MODELS	A SUFFIX	BSUFFIX	CSUFFIX	DSUFFIX
C1001 C1002 C1002R/O C1003	C1001A C1002A C1002R/O-A C1003A*	C1001B C1002B C1002R/O-B C1003B*	C1001C C1002A C1002R/O-C C1003C*	C1001D C1002D C1002R/O-D C1003D
***	7 00 00	***************************************		
	t	+	t	

Note: All contacts shown de-energized.

*Operates only in "follow the field contact" sequence (control switch "ON"), †Dual contact sets are independent relays which operate simultaneously.

SEEKIRK

Seekirk, Inc. 2420 Scioto-Harper Drive Columbus, Ohio 43204 Represented by:

Telephone 614-278-9200 Fax 614-278-9257



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, fails afe 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 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.

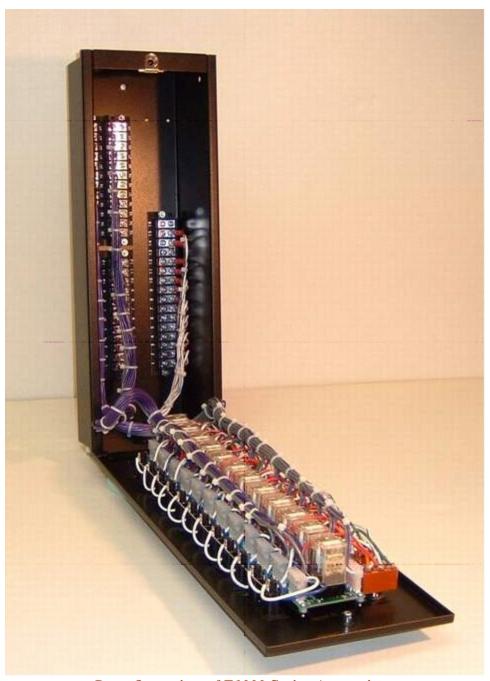
By clipping (opening) the green wire of each point relay, the associated lamp (or LED) will "follow" the normal or alarm condition of the user's field contact. Each of the (12) point relays can be indivdually set up for either type of operation.

The Point Relay



Point Relays

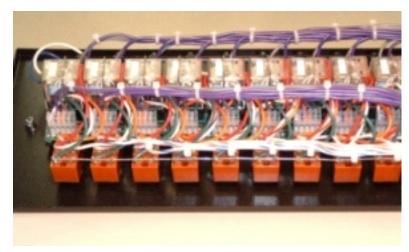
The point relay is a plugin relay (pictured previous page) and are each provided with 4PDT contacts each. This relay is internally wired and connected differently for each Model of the E1000. It is these internal connections which will determine the operating sequence for each Model. There are four (4) 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
		~ **	~~~	***
*		~~~	~~~	

Sequence Chart

FIELD CONTACT STATUS		E10	001		E1002				E1002R/0				E1003			
	FOLLOW		LOCK ON		FOLLDW		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	DN	E	ON	E	ON	Ε	ON	Ε	ON	E	ON	E
RET TO NORM	OFF	D	ON	E	OFF	D	an	E	OFF	D	ON	E	ON	D	ON	Ε
RESET 1*	ON	E	ON	E	DN	E	GN	E	ON	E	ON	3	ON	Ε	ON	E
RESET 2*	-	-	OFF	D	-	-	OFF	D	-	-	OFF	D	OFF	D	OFF	D

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 utput 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 wth Suffix letter if any. Also if "rear" mounted feedthrough terminals are desired add "w/feedthru TB's" as part of the Model Number. Finally is 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 are 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.

Seekirk, Inc 2420 Scioto Harper Road Columbus, Ohio 43204 USA Phone: 614-278-9200 Fax: 614-278-9257

Email: seekirk@seekirk.com