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EA-CT Configuration Tool

Specifications

Dimensions:	1.3"H × 2.2"W × 7.7"L (33mm H × 56mm W × 196mm L)
Communication Range:	30 ft. (9.1 m) 24 ft (7.3m) with dust cover on device
Battery Life (2 AA, batteries not included):	168 hrs (typical usage)
Storage Temperature Range:	-4°F to 140°F (-20°C to 60°C)
Operating Temperature Range:	32°F to 122°F (0°C to 50°C)

Product Description

The EA-CT is a hand-held remote control that is designed to communicate with Eclipse devices via infrared signals. The remote control will give the user the ability to communicate with the panel and other devices through any selected device on the loop. The EA-CT can read device information such as type, loop, address and sensitivity along with write loop, address, branch and service date, and initiate walk test and device test.. The EA-CT features a 16-character liquid crystal display and a 17-button keypad.

EA-CT will communicate. Pressing the SELECT key more than once will alternately select each device within the EA-CT range. A selected device is ready to receive communications from the EA-CT.

Glossary

Address: Loop and address are the two components of a device's identifier in an Eclipse system. Addresses 1 to 254 are valid for detectors and modules.

Target: The target is the address of the device that you would like to communicate with using the EA-CT. The target is not necessarily the device that is selected or a device in the line of sight.

Branch: For loops that use t-taps or star-taps, a branch number can be specified on each device after the tap to indicate which device will be programmed first in a system with auto-addressing. The branch number can be from 1 to 255.

General Instruction

Press the PWR button on the EA-CT. For first time users or devices without a PIN number, the main menu will be displayed. To be able to set your PIN number, refer to the **PIN enable/disable** (7.1) section of this manual. The main menu consists of seven choices for the user. You can select each choice by pressing the up or down keys to highlight your selection and pressing enter or by pressing the number of the selected item.

Deselect: If a user decides not to communicate to a device that has been selected, it may be deselected and another device chosen instead.

NOTE: EA-CT automatically shuts down after four minutes of non-use.

Loop: Loop and address are the two components of a device's identifier in an Eclipse system. With Eclipse, multiple loops may reside on the same pair of wires. Loops can be numbered 1 to 255.

Before communication is enabled, the device must be "selected" by the EA-CT. To select a device, aim the EA-CT at the device and press the SELECT key. In situations where there is more than one device in close proximity, the desired device may not be initially selected. Simply press the SELECT key again and that device will be deselected and another device within the EA-CT field of view will be selected. To deselect a device, aim the EA-CT at the device and press the DESELECT key. A device can be selected or deselected at any time.

Master Key: If a user misplaces their PIN number, the EA-CT can generate a code or master key that will allow technical support to provide a temporary PIN number for access.

PIN number: The EA-CT is equipped with a personal identification number that, when enabled, prevents unauthorized use of the device.

When a device is selected by the EA-CT, the LED on the device will change to a blinking green pattern. This will help the user ensure the correct Eclipse device is selected. The only exception is the mini monitor module. This unit's LED will temporarily turn off because it does not have a bi-color LED.

Select: Since the EA-CT can conceivably have more than one detector or module within its field of view, only one device can be chosen or "selected" from the group. The select key is used to choose the device to which the

Main Menu

1. WRITE LOOP/ADR

Set Address Screen

2. READ LOOP/ADDR

Loop and Address Read

Screens

3. READ Device

Acquire Screen

4. WRITE Service

Set Service Date

Screen

5. TEST MODES

Test Mode Options

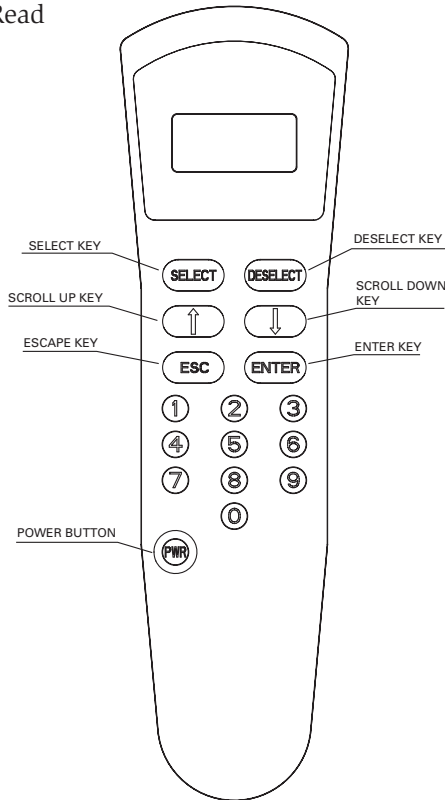
6. CHOOSE TARGET

Choose Target

Loop/Address

7. TOOL OPTIONS

Tool Options Menu



NOTE: There must be a clear line of sight between the EA-CT and the device it is communicating with.

1. WRITE LOOP/ADDRESS

This option is for assigning an Eclipse device to a certain loop and address. When this option is chosen by pressing ENTER, the following screen is displayed:

```
LOOP?000
ADDR?000
```

The user may then enter the specific address and loop designation desired for that device. The maximum address and loop numbers that can be used are 254. After an address is entered, point the EA-CT to the device whose address you wish to set. Press the SELECT key to select that device. When the ENTER key is pressed, the device will start a communication. If there is a problem with the communication a trouble screen will be displayed:

```
NO COMM.
RETRY?
```

To retry, press the ENTER key again and the EA-CT will attempt to re-connect to the device. If the address is accepted, the following screen will be displayed:

```
OK NEW
Addr. SET
```

At this point if the user wishes to increase the address number, the up arrow should be pressed, and the following screen will appear with the address incremented:

```
LOOP?000
ADDR?000
```

If at this point the user selects another unit using the SELECT button, by pressing ENTER the incremented address and the same loop will be recorded on the new unit.

The same functionality is available by using the down arrow.

2. READ LOOP/ADDR

Pressing ENTER at this menu option will give the user the ability to read a selected Eclipse device to see what its current address and loop designation is. When this choice is made, the screen will prompt the user to point to the device that is to be read. Point to the device that you want to read and press the ENTER key. If the communication is successful, the screen will display something similar to the following example:

```
LOOP?147
ADDR?123
```

If there is a problem with the communication, trouble screen is received:

```
NO COMM.
RETRY?
```

To retry, press the enter key again and the EA-CT will attempt to communicate again to the device.

3. READ DEVICE

This menu option will indicate, for a selected device, its type, address, loop, and branch marker. When ENTER is pressed on this option, the first screen that comes up, is similar to:

```
LOOP?147
ADDR?123
```

If that is not the correct loop or address, the user can press ESC to go back to the Address Set Screen to make the change. If that is the correct setting and the selected device is a device with isolators, the down arrow key is pressed to show the branch setting similar to the example:

```
Branch
#128
```

If that is not the correct branch number, the user can go to the Branch Setting screen to make the appropriate changes.

SET Branch

To set a branch marker on a selected device, press the enter key on this option, and after the select branch screen is displayed the following screen will come up:

**Branch #
?XXX**

Enter the branch number that is desired. Point the EA-CT at the device that is to receive the branch marker. Press enter and, after a moment, the EA-CT will display:

**Branch #
SET**

If there is a problem with the communication the following trouble screen is displayed:

**No Comm.
Retry?**

To retry, press the enter key again and the EA-CT will attempt to communicate again to the device.

If this is the correct setting, the down arrow key will be pressed again. The next screen that comes up will depend on what the device type.

If the selected device does not carry isolators the following screen will appear right after the loop and address is shown. If the device is a heat detector the following display will appear:

**HEAT
DETECTOR**

If the device is a heat detector, the user can press the down key again to find out whether the device is set at a rate-of-rise or a fixed temperature setting.

If the detector is configured to be a rate-of-rise detector, the following screen will appear:

**ALARMS:
RoFRISE**

If the detector is configured at a fixed heat temperature setting and is on the US menu setting, the following screen will appear:

**S1:XXX °F
S2:XXX °F**

If the detector is configured at a fixed heat temperature setting and is on the Non-US menu setting, the following screen will appear:

**S1:XXX °C
S2:XXX °C**

If the device is a photo-heat detector, the following screen will appear:

**PHO-HEAT
DETECTOR**

If the down arrow is pressed again, a screen similar to this one will show whether the device is configured to Acclimate.

**AHIS: 0.5
ALOS: 4.0**

This screen shows the sensitivity level of the photo-heat detector. The AHIS is the upper limit of the Acclimate sensitivity range in percent per foot. The ALOS indicates the lower limit of the Acclimate sensitivity range in percent per foot. Detector sensitivity cannot be changed using the EA-CT. Please refer to the control panel installation manual to change the levels of sensitivity on the detector. If the down arrow is pressed again a screen similar to this one will appear:

**SENS. FE
LEVEL: 2.4**

The “FE” appears only if the detector has a flame enhancement feature and that feature is currently enabled. The second line indicates what the detector’s exact sensitivity is at that moment.

If the device is not configured to Acclimate the following screen similar to this one will appear:

**S1:XXX
S2:XXX**

This shows the sensitivity level corresponding to the sensitivity broadcasts. Pressing the down arrow again will show how dirty the detector is. This is indicated as the percentage of drift compensation limit used. Please refer to the control panel installation manual for the percentage that requires cleaning.

Pressing the down arrow again will show how dirty the detector is. This screen will also immediately appear after the type of detector is displayed if the detector is not configured to Acclimate. This is indicated as the percentage of drift compensation limit used. Please refer to the control panel installation manual for the percentage that requires cleaning.

If the device is a photo-duct detector, the following screen will appear:

**PHO-DUCT
DETECTOR**

If the down arrow is pressed again, a screen similar to this one will appear:

**S1:XXX
S2:XXX**

This screen shows the levels of sensitivity for the selected device. Pressing the down arrow again will show how dirty the detector is. This is indicated as the percentage of drift compensation limit used. Please refer to the control panel installation manual for the percentage that requires cleaning.

If the device is a photo detector, the following screen will appear:

**PHOTO
DETECTOR**

If the down arrow is pressed again, a screen similar to this one will show up if the device is configured to Acclimate.

**AHIS: 0.5
ALOS: 4.0**

This screen shows the Acclimate sensitivity range of the photo detector. The AHIS is the upper limit of the sensitivity range in percent per foot. The ALOS indicates the lower limit of the sensitivity range in percent per foot. Detector sensitivity cannot be changed using the EA-CT. Please refer to the control panel installation manual to change the levels of sensitivity on the detector.

If the down arrow is pressed again a screen similar to this one will appear:

**SENS
LEVEL: 2.4**

If the device is not configured to Acclimate the following screen similar to this one will appear:

**S1:XXX
S2:XXX**

This shows the sensitivity level corresponding to the sensitivity broadcasts. Pressing the down arrow again will show the how dirty the detector is. This is indicated as the percentage of drift compensation limit used. Please refer to the control panel installation manual for the percentage that requires cleaning.

If the device is an Ion detector, the following screen will appear:

**Ion SE
Detector**

Optionally "SE" will appear if smoldering is enabled

If the down arrow is pressed again, a screen similar to this one will show up if the device is configured to Acclimate:

**AHIS.X.X%
XXmic**

Reporting the Acclimate Hi sensitivity

If the down arrow is pressed again, a screen similar to this one will show up:

**ALoS X.X%
XXmic**

Reporting the Acclimate Low sensitivity

If the down arrow is pressed again, a screen similar to this one will appear:

**Sens X.X%
XXmic**

Showing the current detector's sensitivity

If the device is not configured to Acclimate a screen similar to this one will appear:

**S1: X.X%
XXmic**

If the down arrow is pressed again, a screen similar to this one will appear:

**S2: X.X%
XXmic**

This shows the sensitivity level corresponding to the sensitivity broadcasts. Pressing the down arrow again will show how dirty the detector is. This is indicated as the percentage of drift compensation limit used. Please refer to the control panel installation manual for the percentage that requires cleaning.

If the device is a control module, the following screen will appear:

**CONTROL
MODULE**

If the device is a relay module, the following screen will appear:

**RELAY
MODULE**

If the device is a monitor module, the following screen will appear:

**MONITOR
MODULE**

If the device is mini module, the following screen will appear:

**MINI
MODULE**

If the device is a pull station, the following screen will appear:

**PULL
STATION**

When the down arrow is pressed again on all ECLIPSE devices the screen will show the date when each device was last serviced (if the service data was set during the last service). If the Menu Settings are set to US format the date format will be MM/DD/YY. If the settings are Non-US setting the date will be displayed as DD/MM/YY. When the down arrow is pressed again on all devices, the display will show the date the device was manufactured in weeks of the year followed by the year.

4. WRITE SERVICE

This setting allows a service technician to record when the selected Eclipse device has been serviced. When this choice is made, the EA-CT will request the user to point to the selected device, and if the communication is successful, a screen similar to the following is displayed:

```
Serviced:
10/10/95
```

NOTE: The service date automatically is entered as the current date and cannot be changed to a different day. After setting the service date, the EA-CT will also display whether the device is dirty or faulty. Please refer to the instructions for that specific device on how to perform the cleaning.

5. TEST MODES

```
5.1 TEST
ALARM
```

This option will cause a device to self-test. Point to the selected device that requires testing and press enter. When the communication is complete, a screen similar to this will be displayed:

```
OK ALARM
TEST SET
```

If there is a problem with the communication the following trouble screen is displayed:

```
NO COMM.
RETRY?
```

To retry, press the ENTER key again and the EA-CT will attempt to communicate again to the device.

```
5.2 EXIT
ALARM
```

Pressing enter on this choice will end the test on the given device. Point to the selected device whose alarm is to be cleared. If the communication is successful and the test is ended the following screen will appear:

```
OK Alarm
Test CLR
```

After this screen is shown, EA-CT automatically returns to the beginning of the exit alarm test option. If there is a problem with the communication a trouble screen is received:

```
NO COMM.
RETRY?
```

To retry, press the enter key again and the control will attempt to connect again to the device.

6. Choose Target

This option is for communicating with devices that cannot be seen in the line of sight of the EA-CT such as those mounted above the ceiling or below the floor. When this option is selected, the following screen is displayed:

```
LOOP?000
ADDR?000
```

Enter the specific address of the device with which communication is desired and press the enter key. The user will then proceed to the main menu.

7. TOOL OPTIONS

The user can scroll through the different choices of the options menu by using the arrow keys.

```
7.1 PIN
EN./DIS.
```

This option enables or disables the PIN number function. When ENTER is pressed the following screen appears:

```
Enable
*Disable
```

The asterisk points to the setting currently selected. Use either of the arrow keys to move the asterisk to the desired option and press ENTER. If the asterisk moves to the Enable line, then the PIN number is enabled.

NOTE: If the wrong PIN number is entered upon power-up, the EA-CT will automatically shut off.

```
7.2 PIN
CHANGE
```

This option is used to enter or change the PIN number. When this is selected the following screen comes up:

```
?PIN#
XXXX
```

The user types the desired PIN number and presses the enter key. The new PIN number is activated.

NOTE: Any PIN number entered here supersedes any previous PIN number that was being used.

Master Key Protection

The EA-CT also provides a security feature for the user in the event that a PIN number is entered and then forgotten, preventing access to the device. When the PIN screen is displayed upon power-up, press the ESC key on the keypad. A screen similar to this one will be displayed:

```
Master
Key: 5698
```

(Note: 5698 is just an example)

Make note of the number that is displayed and contact System Sensor technical support (800-sensor2). Tell the representative the Master Key number on the display and they will be able to provide access to the device via a temporary PIN number.

NOTE: The Master Key number on the display is different every time, so the user must always look at the number before calling System Sensor.

**7.3 LCD
INTENS.**

This option adjust the viewing of the screen. Select this option and use the arrows to change the intensity of LCD screen.

**7.4 CHK.
BATTERY**

Adjusts the viewing of the screen. Select this option and use the arrows to change the intensity of LCD screen.

**7.5 CHK.
BATTERY**

This option checks the status of the battery. The more asterisks the screen shows, the more life a battery has. When the screen is showing only one asterisk, the battery should be replaced. A low battery message is displayed once the battery is too low to provide enough power to operate the EA-CT.

**7.6 MENU
Modes**

This option allows changes to the date code of the EA-CT to either month-day-year format or the day-month-year format. When this option is selected the following screen will be displayed:

**SET MENU
STYLES: US
EU**

Use the arrow keys to select the requested choice and press the enter key. The date codes will automatically be displayed in the requested format.

Three-Year Limited Warranty

System Sensor warrants its enclosed product to be free from defects in materials and workmanship under normal use and service for a period of three years from date of manufacture. System Sensor makes no other express warranty for the enclosed product. No agent, representative, dealer, or employee of the Company has the authority to increase or alter the obligations or limitations of this Warranty. The Company's obligation of this Warranty shall be limited to the replacement of any part of the product which is found to be defective in materials or workmanship under normal use and service during the three year period commencing with the date of manufacture. After phoning System Sensor's toll free number 800-SENSOR2 (736-7672) for a Return Authorization number, send defective units postage prepaid to: System Sensor, Returns

Department, RA # _____, 3825 Ohio Avenue, St. Charles, IL 60174. Please include a note describing the malfunction and suspected cause of failure. The Company shall not be obligated to replace units which are found to be defective because of damage, unreasonable use, modifications, or alterations occurring after the date of manufacture. In no case shall the Company be liable for any consequential or incidental damages for breach of this or any other Warranty, expressed or implied whatsoever, even if the loss or damage is caused by the Company's negligence or fault. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.