<table>
<thead>
<tr>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 □ System □ Design □ &amp; □ Installation</td>
</tr>
<tr>
<td>2.0 □ Commissioning</td>
</tr>
<tr>
<td>3.0 □ Panel □ Controls □ and □ Indicators</td>
</tr>
<tr>
<td>4.0 □ Panel □ Operation</td>
</tr>
<tr>
<td>5.0 □ Public □ access □ level □ functions</td>
</tr>
<tr>
<td>6.0 □ Restricted □ access □ level □ functions</td>
</tr>
</tbody>
</table>

- Introduction
  - System Design Guidelines
  - Equipment Compatibility
  - System Overview
  - Fixing Details
  - Installation guidelines
  - Inputs/Outputs
  - External connections
  - DataBus Wiring Detail
  - Specification
  - Maintenance
  - Commissioning Mode
  - Touch Screen Display
  - Public Access Level 1
  - Fault information
  - Disablement information
  - Mute Buzzer
  - Devices on test information
  - Global reset
  - Set date & Time
  - View Recent tests
  - Test Panel LED's
  - View Log
  - Enable/Disable
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.0 System Design &amp; Installation</strong></td>
<td>5</td>
</tr>
<tr>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td>System Design Guidelines</td>
<td>6</td>
</tr>
<tr>
<td>Equipment Compatibility</td>
<td>7</td>
</tr>
<tr>
<td>System Overview</td>
<td>8</td>
</tr>
<tr>
<td>Fixing Details</td>
<td>13</td>
</tr>
<tr>
<td>Installation guidelines</td>
<td>14</td>
</tr>
<tr>
<td>Inputs/Outputs</td>
<td>15</td>
</tr>
<tr>
<td>External connections</td>
<td>16</td>
</tr>
<tr>
<td>DataBus Wiring Details</td>
<td>17</td>
</tr>
<tr>
<td>Specification</td>
<td>18</td>
</tr>
<tr>
<td>Maintenance</td>
<td>19</td>
</tr>
<tr>
<td><strong>2.0 Commissioning</strong></td>
<td>20</td>
</tr>
<tr>
<td>Commissioning Mode</td>
<td>21</td>
</tr>
<tr>
<td><strong>3.0 Panel Controls and Indicators</strong></td>
<td>23</td>
</tr>
<tr>
<td>Touch Screen Display</td>
<td>24</td>
</tr>
<tr>
<td><strong>4.0 Panel Operation</strong></td>
<td>25</td>
</tr>
<tr>
<td>Public Access Level 1</td>
<td>26</td>
</tr>
<tr>
<td><strong>5.0 Public access level functions</strong></td>
<td>27</td>
</tr>
<tr>
<td>Fault Information</td>
<td>28</td>
</tr>
<tr>
<td>Disablement Information</td>
<td>30</td>
</tr>
<tr>
<td>Mute Buzzer</td>
<td>31</td>
</tr>
<tr>
<td>Devices on test information</td>
<td>32</td>
</tr>
<tr>
<td><strong>6.0 Restricted access level functions</strong></td>
<td>33</td>
</tr>
<tr>
<td>Global reset</td>
<td>35</td>
</tr>
<tr>
<td>Set date &amp; Time</td>
<td>35</td>
</tr>
<tr>
<td>View Recent tests</td>
<td>35</td>
</tr>
<tr>
<td>Test Panel LED's</td>
<td>35</td>
</tr>
<tr>
<td>View Log</td>
<td>36</td>
</tr>
<tr>
<td>Enable / Disable</td>
<td>37</td>
</tr>
<tr>
<td>Contents</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td><strong>7.0 Skilled Engineer functions</strong></td>
<td>39</td>
</tr>
<tr>
<td>Initial menu</td>
<td>41</td>
</tr>
<tr>
<td>Commission</td>
<td>42</td>
</tr>
<tr>
<td>Site data</td>
<td>43</td>
</tr>
<tr>
<td>Network settings</td>
<td>45</td>
</tr>
<tr>
<td>Group allocation</td>
<td>46</td>
</tr>
<tr>
<td>Configure</td>
<td>47</td>
</tr>
<tr>
<td>Buzzer mode</td>
<td>48</td>
</tr>
<tr>
<td>Configure address text</td>
<td>49</td>
</tr>
<tr>
<td>Configure Current value</td>
<td>50</td>
</tr>
<tr>
<td>Edit panel text</td>
<td>51</td>
</tr>
<tr>
<td>Add / delete address</td>
<td>52</td>
</tr>
<tr>
<td>Configure scheduled tests</td>
<td>53</td>
</tr>
<tr>
<td><strong>Test</strong></td>
<td></td>
</tr>
<tr>
<td>Add/Delete Tests</td>
<td>54</td>
</tr>
<tr>
<td>Test group</td>
<td>55</td>
</tr>
<tr>
<td>Test address</td>
<td>56</td>
</tr>
<tr>
<td><strong>Analogue value</strong></td>
<td></td>
</tr>
<tr>
<td>View analogue value</td>
<td>57</td>
</tr>
<tr>
<td><strong>Section 8.0 Appendix</strong></td>
<td></td>
</tr>
<tr>
<td>Passwords</td>
<td>59</td>
</tr>
</tbody>
</table>
Section 1

System Installation and Design
Installation planning Guide

Systems must be designed in accordance with the current edition of the Eascheck installation planning guide, a copy of this guide should have been provided during the tender phase of the project, further copies are freely available on request.

You should not proceed with an Eascheck installation unless you are familiar with this document.

Loop length / configuration.
The maximum permitted data cable length should be determined by calculation. The calculations required are given in the Eascheck installation planning guide section 2.

A loop configuration is recommended but the system will operate when configured as a loop, a radial circuit and a combined configuration of a loop and a number of spur radials. Particular attention should be paid to section 2 within the Eascheck installation planning guide as this will provide the installer with all the information required to effect an installation that complies with requirements of the system.

Loop loading = total number of addresses

The total number of addresses per loop is 250. When designing systems it is recommended that allowance is made for future expansion, and therefore an initial limit of 200 devices per loop is recommended.

Short circuit isolation

With any of the above configurations, a single short circuit will completely disable communication between the panel and the interfaces unless additional short circuit isolators are used. This will not affect the operation of the emergency luminaires but it will prevent automatic testing and monitoring until the short circuit fault is cleared.

It is recommended that short circuit isolator be installed every 15 to 20 devices to ensure minimum disruption and easier fault finding. For more information on the use of short circuit isolators please refer to the Eascheck installation planning guide, section 3.0.
**Equipment Compatibility**

**Additional Instructions for electromagnetic compatibility**

When used as intended this product complies with EMC Directive (89/336/EEC) and the UK EMC regulations 1992 (SI 2372/1992) by meeting the limits set by the standards BS 5406 (Pts 2&3) 1988, EN50130-4 Immunity and EN 61000-6-3 emission requirements.

The following installation guidelines must be followed.

1. External cables must be connected using the cable entries or knockouts provided.
2. When routing external cables inside the product they must be
   a) Kept as short as possible
   b) Routed close to the housing
   c) Kept as far as possible from the electronics

Any modifications other than those stated in this manual, or any other use of this product may cause interference and it is the responsibility of the user to comply with the EMC and Low Voltage Directives.
Addressable Interfaces

Introduction

There are 5 types of Addressable Interface that may be installed on the slave loop.

SVAEL INTERFACE
MCO INTERFACE
EC140 INTERFACE
EC141 INTERFACE
XPI/XPS INTERFACE

All addressable interfaces can be programmed via loop connections with the standard hand held programmer. The address will then be permanently stored in the addressable Interface memory. The slave control panel will automatically distinguish between the Interface types during auto learn mode and list the type and quantity it has found installed on the loop.

During normal conditions the slave control panel will monitor continuously the system wiring, the maintain lamp (non maintain lamp monitored only in test condition ), and the XPI/XPS status ( i.e. Charger Fail, Low volt disconnect and High/Low volt alarm). During a test the slave control panel will switch the MCO, EC140, EC141 & XPI/XPS Interface relays off simulating a mains failure at the central battery system & sub-circuits (with devices installed). The control panel then monitors the status of the central battery and luminaries.

Note  If a fault occurs in the loop wiring or at the control panel during a test the Interfaces will fall safe.

I. SVAEL Slave Interface  EC125

A SVAEL interface can fitted inside a slave luminaire in the system. The Interface monitors the AC Input current of the slave fitting and when addressed will report back to the control panel with the analogue current value. Each Interface is supplied with a jumper link which is used to select the required current range 0 to 250mA (no link) 250 to 800mA (link fitted ).

Note  non-maintained fittings can only be monitored during test.

For Installation and wiring details see full instructions provided with SVAEL Interface kit.
II. MCO Interface

In situations where the emergency supply and the maintained supply may be out of phase or large inductive loads require switching a MCO (Mains Change Over) unit may be fitted to the system. The MCO Interface is fitted with a relay to control the MCO unit. When addressed this MCO Interface will respond to commands from the panel, switching the relay either on or off. Therefore a mains failure can be simulated on a sub-circuit remotely.

For installation and wiring details see full instructions provided with MCO interface kit.

III. EC140 Interface

The EC140 Interface is a combined MCO and sub circuit monitoring device. When addresses the Interface will respond to panel commands to switch between normal and emergency AC supplies. The EC140 also monitors the unswitched supply so that in the event of a loss of local power, the EC140 switches over to connect the emergency luminaires to the emergency supply. In doing so it also displays a sub circuit fault on the Easichck panel.

Note  This Interface can only switch up to 3 Amps of load.

For installation and wiring details see full instructions provided with EC140 Interface kit.
IV. EC141 Interface

The EC141 Interface is a combined MCO, sub circuit monitoring device and has the ability to monitor the emergency luminaire operation. When addressed the EC141 the interface will respond to panel commands to switch between normal and emergency AC supplies, monitor the unswitched supply to switch supplies in an emergency condition and report sub circuit faults. In addition to this it will monitor the emergency luminaire status as per the EC125.

Note This Interface can switch up to 3 Amps of load but can only monitor loads up to 800mA.

V. XPI / XPS Interface

A XPI/XPS Interface will be fitted into each XPI/XPS unit in the system. This Interface will continually monitor the XPI/XPS status (Charge Fail, Low volt disconnect and the High/Low volt alarm). It also provides 2 relays one for switching the XPI/XPS into test mode and one to provide inhibit output. When addressed the interface will report back to the control panel the XPI/XPS status and execute any commands i.e. test mode or inhibit and switch on or off the relevant relay.

For installation and wiring details see full instructions provided with EC141 Interface kit.
Programming the EASICHECK™ Addressable Interfaces.

The Interfaces listed above all must be programmed in order for the EASICHECK™ Panel to recognise it as part of the system. This is done with an EASICHECK™ hand held programming unit. The programming unit has two spring loaded connections which are to be held briefly on to the Addressable Interface 'TELE/LOOP' connections (any two of the four connections). See Diagram;

Switch on the programming unit by pressing the top right button marked On/Off. After a few seconds the programming unit display will show the next address number due to be programmed. Hold the spring terminal against the Addressable Interface and press Program. The programmer will show 'Pro' to register address acceptance and then the address number will increment by one ready for the next Interface. The Interface is now ready to be fitted. Repeat this until all of the interfaces have been programmed.

Note: If you are unsure as to which address the Addressable Interface has been programmed for, then with the programmer switched off, hold the spring terminals against the Addressable Interface and switch on the programmer. After a short delay the programmer display will flash the number of the Addressable Interface address and then return to the next address number to be programmed.
System Overview

Simple user interface

The main element of the user interface with is a large (120mm x 90mm visible area) touch screen display, which provides comprehensive user information and also acts as a multifunctional keypad.

The use of the touch screen display enables a wide range of user and engineering facilities to be incorporated into the panel whilst still offering simple operation.

The Panel touch screen display automatically reconfigures to suit the selected function, for example, if the “edit address text” menu option is selected, the touch screen is automatically formatted as a full QWERTY keyboard to enable fast and simple text entry.

User configuration and maintenance facilities

The Panel has comprehensive facilities for on site system configuration, whereby the user can add or remove devices or change device text directly via the panel, without the need for a service engineer to visit site. For Initial configuration or major system changes special PC configuration software is available enabling Cooper Lighting and Safety personnel to do this more efficiently than can be achieved using the system screen. Existing configurations can be uploaded to the PC so that changes can be made to the existing system rather than having to revert to the original data files.

Multiple test groups

The Panel has the ability to support up to 16 different test groups, each test group can be programmed to carry out testing at a different date and time, this is for convenience on the required function test. Please note that to comply with the standards all groups/emergency luminaires must be tested simultaneously for the yearly full duration test to ensure the batteries are test for the full rated duration with the full emergency load connected.
Fixing details

Read all the installation instructions before commencing with the installation. The installation of this panel must be carried out by a suitably qualified / trained person. The installation must comply with relevant wiring regulations.

The electronic components within the panel are Static Sensitive. Do not touch the electronics directly.

Mounting the Backbox

The Panel can be surface mounted or recessed. To surface mount; drill three holes and fix the backbox to the wall using suitable screw fixings.

Installing Cabling

Once the backbox is mounted the next stage is to install the power and loop cables and fit the glands.
The panel should be installed in a clean, dry, reasonably well-ventilated place, and not in direct sunlight. Temperatures in excess of +35°C and below -10°C may cause problems, if in doubt consult Technical Support. The panel should be located away from any potential hazard, in a position where it is readily accessible to authorised staff.

Mount the panel to the wall using the drill template provided. Do not drill through the panel to the wall as dust will contaminate the circuitry.

**Installation Guide**

- Never carry out insulation tests on cables connected to electronic equipment.
- **DO NOT OVER TIGHTEN TERMINAL CONNECTOR SCREWS.**
- Always use the correct type of cables as defined in the current Easlcheck Installation planning guide.
- Always adhere to volt drop limitation when sizing cables.
- Always observe polarity throughout. Non colour coded conductors should be permanently identified.
- Please ensure that as installed drawings are kept and available for inspection clearly showing the emergency luminaires and associated system devices locations and addresses. On multiple panel sites a prefix detailing the panel address of which the device will be connected.
Programmable input

A programmable input is provided, the programmable input operates by means of an external VOLT FREE SIGNAL. On no account should any voltage be applied to these terminals.

There are two options programmed as standard:

**EMERGENCY MODE:** Whenever the Programmable input terminals are shorted together, the panel will instruct all luminaires and devices to enter emergency mode with this option selected.

**REST MODE:** Whenever the Programmable input terminals are shorted together, the panel will disable communication with the connected devices with this option selected. This will prevent any faults being displayed and any automatic tests taking place whilst in the disabled condition. However, this will not prevent the emergency lighting from operating in a genuine loss of local or site power.

Volt Free Contacts

A single set of volt free changeover contacts is provided, these enable a simple means of basic interfacing with external equipment by providing a volt free signal in the event of a fault being detected.

24V Auxiliary output

A 24V output is provided to drive suitable external equipment such as network booster devices, this output is rated at a maximum of 300mA. The output is not monitored and is not battery backed so will cease to operate if the mains supply to the Easicheck panel is removed.
External Connections

Mains Supply

The mains supply should be installed in accordance with the current edition of the IEE wiring regulations. Connection to the mains supply must be via an Isolating device (e.g. an Isolating fuse) reserved solely for the Easichk system.

Networking

Up to Sixty three Panels can be networked together to operate as a single networked system. To achieve this each panel must be fitted with a network card (Optional Extra).

When operating as a networked system all status and fault event information is displayed at every panel, resetting of panels can also be carried out from any panel on a networked system if panels are suitably configured.

Networked panels are connected using a radial topology as illustrated.

The recommended network cable for the network connection is detailed in the current installation planning guide along with recommendations for maximum cable lengths etc.
The mains supply should be installed in accordance with the current edition of the IEE wiring regulations. Connection to the mains supply must be via an isolating device (e.g., an isolating fuse) reserved solely for the Easicheck system.

Networking:
Up to sixty-three panels can be networked together to operate as a single networked system. To achieve this, each panel must be fitted with a network card (Optional Extra).

When operating as a networked system, all status and fault event information is displayed at every panel, and resetting of panels can also be carried out from any panel on a networked system if panels are suitably configured.

Networked panels are connected using a radial topology as illustrated.

The recommended network cable for the network connection is detailed in the current installation planning guide along with recommendations for maximum cable lengths, etc.

For clarity, mains wiring and supply monitoring cables are not shown. Please refer to the luminaire wiring diagram for details.

### MAXIMUM NUMBER OF DEVICES IN LOOP = 250

(INCLUDING RADIAL CIRCUITS)

### TO OTHER NETWORKED PANELS (MAXIMUM 63)

CABLE TYPE: 2Core 1.5mmSqr un-screened twisted pair Type BELDEN 8471 alternatively LSZH type cable Belcom cables type 4001P1644 (16AWG)

### LUMINAIRE DATA LOOP WIRING DETAIL

### PANEL DATA LOOP WIRING DETAIL

FOR CLARITY: MAINS WIRING AND SUPPLY MONITORING CABLES ARE NOT SHOWN. PLEASE REFER TO LUMINAIRE WIRING DIAGRAM FOR DETAILS.
**Maintenance**

Easicheck carries out fully automatic testing of all connected luminaires in accordance with the programmed test schedule(s).

Any faults detected during automatic testing or any system operation abnormalities will be displayed on the panel (by a combination of the touch screen display and the system status LED's.

The panel should be regularly inspected and appropriate corrective actions taken as necessary.

It is important to note that emergency luminaires contain components with a finite life and that it is quite normal for the system to detect faulty luminaires from time to time.

Remedial work should be implemented as quickly as possible to ensure that the emergency lighting system is maintained in full working order.

The maintenance schedule should be in accordance with local legislation and also in accordance with the risk assessment for the premises, the following is suggested as a minimum.

**Check**

- Only the green "POWER ON" indicator shows.
- Inspect for any fault indication.
- Notify any faults to a system supervisor.
- Check the display and the system LED's to identify whether any maintenance work is required, action as appropriate.
- Check for correct operation of all panel indicators (see lamp test menu on page 32).

**Daily Inspection**

- Update the test record book, record details of date, any faults found and any remedial work taken.
- Alert responsible person as to any outstanding remedial work in order that appropriate action may be taken.
- Check all previous log book entries and verify that remedial action has been taken.
- Carry out the weekly test. Use the menu to verify correct panel indicator functionality.

As monthly test and quarterly test above, the panel is normally programmed to automatically carry out a full rated discharge on an annual basis. It is simple to check when the tests are due by viewing the test schedule via the engineer menu.

When cleaning the panel, use a moist cloth. Do not use solvents or harsh abrasives.

**Quarterly**

- Test Verification
  - Easicheck has a comprehensive log facility, all tests are recorded in this log, it is therefore simple to demonstrate that tests have taken place by viewing the log, or viewing the recent tests via the level 2 initial options (see page 31).

**Annual Test**

- Test Verification
  - Easicheck has a comprehensive log facility, all tests are recorded in this log, it is therefore simple to demonstrate that tests have taken place by viewing the log, or viewing the recent tests via the level 2 initial options (see page 31).

---

**Specification**

### Power Supply

- **Mains**: 230V AC +10% -15% 50Hz
- **Nominal Current**: 75mA
- **Maximum Current**: 750mA
- **Input Fuse R1**: NTC SG39 Imax 4Amp

### Batteries

- **Number of Batteries**: 2
- **Manufacturer**: YUASA NP7-12
- **Capacity**: 7Ah
- **Battery Fuse**: 6.3A Anti Surge (F4)
- **Maximum Battery Current**: 3.5Amps
- **Maximum Battery Charge Current**: 1.0Amps
- **Charging characteristics**: Constant voltage (temperature compensated)
- **Deep Discharge protection**: 20.6 volts

### Inputs

- **Device Loop**: 1(pair)
- **Network Loop**: 1(pair)
- **Volt free Input**: 1(pair) Programmable input

### Outputs

- **24V Auxiliary output**: 24V Output to drive auxiliary devices max 300mA

### Mechanical Specification

- **Weight Including Batteries**: 18Kg
- **Weight Excluding Batteries**: 9Kg
- **Dimension's (standard Batteries)**: 365(W) x 375(H) x 80(D) mm’s
- **Backbox material**: Mild Steel powder coated
- **Facia Material**: PC/ABS
- **Flamability rating**: UL94 V0
- **No. of Knockout**: 51
- **Knockout Diameter**: 20mm

---

**PLEASE NOTE:** DO NOT OVERTIGHTEN OR USE EXCESSIVE FORCE WHEN TIGHTENING SCREWS ON TERMINAL BLOCKS AS THIS WILL CAUSE IRREPARABLE DAMAGE TO COMPONENTS.

**CAUTION**

RISK OF EXPLOSIONS IF BATTERY IS REPLACED BY INCORRECT TYPE. DISPOSE OF BATTERIES ACCORDING TO INSTRUCTIONS AND WITHIN LOCAL GOVERNMENTAL/ENVIRONMENTAL GUIDELINES AND REGULATIONS.
Easichek carries out fully automatic testing of all connected luminaires in accordance with the programmed test schedule(s). Any faults detected during automatic testing or any system operation abnormalities will be displayed on the panel (by a combination of the touch screen display and the system status LED’s).

The panel should be regularly inspected and appropriate corrective actions taken as necessary. It is important to note that emergency luminaires contain components with a finite life and that it is quite normal for the system to detect faulty luminaires from time to time. Remedial work should be implemented as quickly as possible to ensure that the emergency lighting system is maintained in full working order. The maintenance schedule should be in accordance with local legislation and also in accordance with the risk assessment for the premises, the following is suggested as a minimum.

**Daily Inspection**

Check that only the green “POWER ON” indicator shows. Inspect for any fault indication. Notify any faults to a system supervisor.

**Monthly inspection (minimum)**

Check the display and the system LED’s to identify whether any maintenance work is required, action as appropriate. Check for correct operation of all panel indicators (see lamp test menu on page 32). Update the test record book, record details of date, any faults found and any remedial work taken. Alert responsible person as to any outstanding remedial work in order that appropriate action may be taken.

**Quarterly**

Check all previous log book entries and verify that remedial action has been taken. Carry out the weekly test. Use the test panel LED's menu to verify correct panel indicator functionality.

**Annual Test**

As monthly test and quarterly Test above, the panel is normally programmed to automatically carry out a full rated discharge on an annual basis. It is simple to check when the tests are due by viewing the test schedule via the engineer menu.

**Test Verification**

Easichek has a comprehensive log facility, all tests are recorded in this log, it is therefore simple to demonstrate that tests have taken place by viewing the log, or viewing the recent tests via the level 2 initial options (see page 31).

**Cleaning:**

When cleaning the panel, use a moist cloth. Do not use solvents or harsh abrasives.
Section 2

Commissioning
Commissioning mode

Once all devices have been correctly installed and addressed, the main control panel can be powered up and the system is ready for commissioning.

Once the system has been successfully autolearned, the next process is to configure and program the panel. This ensures that appropriate test schedules are set up, that correct test parameters are set up for each luminaire and that device text is allocated to each Easicheck device.

This can either be done by a Cooper Lighting service engineer using a laptop computer with specialist software, or it can be done manually via the touchscreen. On large systems, a considerable time saving can be achieved by utilising the Cooper Lighting and Safety commissioning service, whereby a laptop computer running purpose designed software is used enabling data to be speedilly entered and the system to be quickly configured as required. In any event a commissioning by a trained Cooper Lighting and Safety engineer is always recommended.

For details of activating autolearn mode, see page 44
Section 3

Panel Controls & Indicators
1. System LED’s
2. Test group LED’s
3. Touch Screen Display

Panel Controls & Indicators

LED
1. Power On Indicates mains supply healthy. Check regularly ensure lit.
2. General fault There is a fault somewhere on the system. Review other indicators and LCD display for further details.
3. Comms Fault One or more luminaires not communicating correctly with control panel. Check display for more details, check external wiring, check for missing / damaged luminaires.
4. Disable One or more luminaires manually removed from test schedule / status monitoring. Ensure responsible person is aware.
5. Emergency Mode Mains supply to external luminaire(s) has been lost. Check display for more details, check external wiring and mains supplies.
6. System Fault There is a system Malfunction. Ensure responsible person is aware. Contact maintenance provider.
7. Luminaire fault The system has detected that luminaire(S) require some form of maintenance. Contact Maintenance provider.
8. Test in Progress Luminaires are being tested. Information only, no action required.
The Touch Screen is a multi-function display consisting 320x240 dots featuring high intensity backlighting. In normal operation, the display indicates as above with the backlighting off. According to the selected menu, the touch screen automatically reconfigures to show a number of different "buttons" select the required button by touching the screen at the relevant position. On multi-page menus select the required page by touching the relevant tab.

To prevent unauthorised actions, a series of passwords are used to control access to various menu levels, to go from level 1 (public access) to a higher level, touch the button in the left hand corner (labelled level 1) and enter the relevant passcode.
Section 4

Panel Operation

The Touch Screen is a multi-function display consisting of 320x240 dots featuring high intensity backlighting. In normal operation, the display indicates as above with the backlighting off. According to the selected menu, the touch screen automatically reconfigures to show a number of different "buttons". Select the required button by touching the screen at the relevant position. On multi-page menus, select the required page by touching the relevant tab.

To prevent unauthorised actions, a series of passwords are used to control access to various menu levels. To go from level 1 (public access) to a higher level, touch the button in the left-hand corner (labelled level 1) and enter the relevant passcode.
Panel Operation

The Panel is operated via a backlit touch screen. The default screen is shown below, from this screen all the panels functions can be accessed. Touching the screen causes the backlight to illuminate after a delay, the display extinguishes automatically if a period of inactivity is detected.

Some basic functions can be accessed without entering a password, others require higher level access which is achieved by entering the relevant password. To access the menus touch “level 1” and enter the password for the relevant access level. Press enter when number has been entered, use back space to correct entry errors. Passwords are printed at the rear of this manual (see page 59) it is strongly recommended to remove these passwords and store them in a safe location to prevent unauthorised access to system critical functions and parameters.
Section 5

Public access (level 1)
Public access level does not require an access code and allows anybody to review the functions outlined below.

<table>
<thead>
<tr>
<th>Level 1</th>
<th>0 Faults</th>
<th>0 Disabled</th>
<th>0 In test</th>
<th>Mute Buzzer</th>
</tr>
</thead>
</table>

If faults are present, display automatically goes to display fault mode.

- **X Lamp Faults**
- **X Comms Faults**
- **X Other faults**

Number of luminaires with inoperative lamps.

Number of other devices with communication errors.

Number of other faults not included in above.
Public Access Level 1 (Faults)

Touch any of the category buttons for further details of affected devices.

- X Lamp Faults
- X Comms Faults
- X Other faults

Touch a device on the list for full technical details.

**Active lamp faults**

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday 21 May 2012 17:00:08 BST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event</td>
<td>Lamp fault</td>
</tr>
<tr>
<td>Panel</td>
<td>Panel 2</td>
</tr>
<tr>
<td>Loop</td>
<td>Loop 1</td>
</tr>
<tr>
<td>Address</td>
<td>Address 1</td>
</tr>
<tr>
<td>Type</td>
<td>XPI/XPS</td>
</tr>
<tr>
<td>Current</td>
<td>-0.075A</td>
</tr>
</tbody>
</table>

21 May 2012 17:01:20 BST
Disabling a device causes all communication between the panel and the device to be suspended whilst ever the device is disabled. This results in the fitting no longer being tested by the panel in accordance with any pre-programmed test sequences, similarly any fault or error messages sent from the disabled devices to the panel will be ignored.

Device disable is convenient method for avoiding unwanted error messages from devices with known long term faults, (such as devices removed from service.) It is however important that devices are not unintentionally left disabled for longer than necessary, therefore indication is provided at the display of any disabled devices. An LED indicator on the main display also illuminates whenever any devices are disabled.

Touch here for a list of isolated individual addresses.

Touch here for a list of isolated entire test groups.

Touch here for a list of isolated entire panel loops.
A buzzer is provided within the control panel to attract attention to events and faults, to silence the buzzer touch the mute buzzer button.

Note for applications where the audible alarm is inappropriate it is possible to disable the buzzer completely (can be reactivated later if required) see page 48.
Public Access Level 1 (On test)

Tests can either be instigated manually (useful to confirm correct operation after maintenance work) or automatically in response to a pre programmed test regime. Whenever fittings are undergoing either manual or automatic tests, an LED indicator is illuminated on the mains display, and the LCD display gives details of which fittings are in test.

Touch here for a list of addresses currently in test

Touch here for a list of groups currently in test
Section 6

Restricted access (level 2)
The level 2 menu allows access to the system functions typically used as part of a normal maintenance regime, it is protected by a password.

The button in the top left hand corner indicates the current access level (normally level 1.)

To gain access level 2, touch the access level button in the top left hand corner of the screen and enter the Level 2 password when prompted.

NOTE: MENUS AT ACCESS LEVEL 2 ARE ABLE TO IMPACT ON THE OPERATION OF THE TEST SYSTEM, ACCESS TO LEVEL 2 SHOULD BE AVAILABLE ONLY TO SUITABLY TRAINED AND COMPETENT PERSONEL.
Level 2 (Initial menu)

<table>
<thead>
<tr>
<th>Back</th>
<th>Level 2</th>
<th>Mute Buzzer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global reset</td>
<td>Enable / Disable</td>
<td></td>
</tr>
<tr>
<td>View log</td>
<td>Test panel LED's</td>
<td></td>
</tr>
<tr>
<td>Set date / time</td>
<td>View recent test results</td>
<td></td>
</tr>
<tr>
<td>Test</td>
<td>Rest Mode</td>
<td></td>
</tr>
</tbody>
</table>

**Global reset**
Touch this to reset all network connected panels, resetting panels clears all existing faults and messages, however if the faults themselves have not been rectified they will reappear when the panel next reads the device status or conducts a device test. Test failures will only re-appear after the next failed test. All recent events and faults are logged in the event log. Touch button to initiate sequence then choose either yes to confirm or choose back to cancel.

**View Log**
Displays the event log.
The event log contains details of all recent panel and system events, such as date and time of tests see next page for further details.

**Set date and time**
Use the various buttons to set the current date and time, press “OK” when finished to save current settings or press “back” to cancel.

**Enable Disable**
Used to disable devices (exclude them from any communication with the panel) this means that fittings will not be tested, and their status will not be reported at the panel.
See page 37 for further details.

**Test panel LED’s**
Touching this button will cause all panel indicators to light and then extinguish in sequence, use regularly to confirm that all indicator lamps are functional.

**View recent test results**
Shows the date and time of all recent test start and endings.

**Test**
Provides access to the manual test menu used to verify luminaire operation after repairs etc. See page 54 to 56 for further details.
Level 2 (View log)

In total the event log holds details of the last 1000 events. Once the event log memory is full each new entry into the log will automatically replace the oldest event already in the log. The event log can only be reset by Cooper Lighting and safety personnel.
It is possible to enable / disable individual addresses, entire test groups or an entire loop of devices connected to a panel. An enable all button is also provided to re-enable all disabled devices by a single touch of a button.
It is possible to enable / disable individual addresses, entire test groups or an entire loop of devices connected to a panel. An enable all button is also provided to re-enable all disabled devices by a single touch of a button.
To disable by test group follow a similar procedure but select “enable / disable by group instead. To disable all devices connected to a loop, select enable / disable by loop.

Touch here to enable or disable devices, touch once to disable, touch again to re-enable.
Section 7

Restricted access (level 3)

Skilled engineer functions
Level 3 (Skilled engineer level)

The level 3 menu allows access to the system functions typically used during initial commissioning and system configuration.

The button in the top left hand corner indicates the current access level (normally level 1.)
To gain access level 3, touch the access level button in the top left hand corner of the screen and enter the Level 3 password when prompted.

NOTE: MENUS AT ACCESS LEVEL 3 ARE ABLE TO IMPACT ON THE OPERATION OF THE TEST SYSTEM, ERASE THE ENTIRE SYSTEM CONFIGURATION SETTINGS AND ERASE ALL PROGRAMMED SITE DATA.
ACCESS TO LEVEL 3 MUST BE AVAILABLE ONLY TO SUITABLY TRAINED, COMPETENT AND EXPERIENCED PERSONNEL.
All activities carried out at the panel are recorded in the system log and cannot be erased, do not activate level 3 functions unless you have been fully trained to do so.
### Level 3 (Initial menu)

<table>
<thead>
<tr>
<th>Back</th>
<th>Level 3</th>
<th>Mute Buzzer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global reset</td>
<td>Commission</td>
<td></td>
</tr>
<tr>
<td>Configure</td>
<td>Test</td>
<td></td>
</tr>
<tr>
<td>Analogue level</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Global reset**
Touch this to reset all network connected panels, resetting panels clears all existing faults and messages, however if the faults themselves have not been rectified they will re-appear when the panel next reads the device status or conducts a device test. Touch button to initiate sequence then choose either yes to confirm or choose back to cancel.

**Commission**
Used to autolearn the panel, download data from a PC to the panel, upload data from the panel to a PC for editing and to add new devices. (see page 42.)

**Configure**
Used to set up panel and device settings such as address text, luminaire test thresholds, panel text, test scheduling etc, see pages 49 and 50 for further details.

**Test**
Used to manually start and stop group tests, and also to test individual fittings, see pages 54-56 for further details.

**Analogue level**
Displays read time information about the current voltage and current data for the selected luminaire see pages 54 to 56 for further details.
Level 3 (Commission)

Level 3 commissioning functions

**Site data**
Contains menus to carry out a full autolearn or maintenance autolearn.
Allows site configuration data to be downloaded from a PC or uploaded to a PC for editing and subsequent downloading back to the panel.
Note; PC software is only available to Cooper Personnel, (it is not available for purchase.) See page 44 for further details.

**System details**
Shows full system details including number of panels on the network, software version, number of devices per loop etc.

**Network settings**
Used to set up the network, program the number of panels on the network, configure the addresses of networked panels and establish network compatibility settings, see page 45 for further details.

**Printer Settings**
Allows the configuration of a supported external printer.

**Factory reset**
Resets all settings to their original factory default settings, select factory reset, then choose either yes to continue or press back to cancel.

*Caution! This will erase all settings and site data, use with extreme care.*
After a factory reset, a series of squares will appear on the touch screen, touch these as they appear, this is used to calibrate the screen.

**Logo**
Allows the selection of alternative logo’s to be displayed on the panel during normal quiescent operation.
In addition to the default Cooper logo, additional bitmap logo’s can be downloaded during commissioning by Cooper Lighting service engineers.

**Group Allocation**
Allows individual fittings to be assigned to test groups as required, test groups enable the staggering to prevent complete loss of protection immediately after a full discharge test.
See page 46 for further details.
Locale
Allows the selection of local language (if supported)

Loop Configuration
Feature to be added in future generation

Download site data from PC
When commissioning and configuring a new Easicheck installation, all necessary data (e.g. Luminaire location text, required test group allocation and current value) can be inputted via the touch screen display.
However to save time, when commissioned by Cooper Lighting and Safety personnel, a laptop PC with special Cooper software can be used to considerably speed up the task.
The download data menu allows the data to be downloaded from the PC to the panel.
Specific instructions on uploading and downloading are provided with the upload / download software.
Note; PC software is only available to suitably trained Cooper Personnel, (it is not available for purchase.)

Upload site data to PC / Download data from PC
This menu allows the configuration data to be uploaded from the panel to a computer where it can be edited before being downloaded again back to the panel.
It also allows pre-programmed data to be downloaded from a computer to a panel.

Erase site data and reset.
This menu erases all existing site data and resets the panel, this would normally only be used after major on site system reconfiguration.
To erase all site data, touch this button then touch either yes to confirm or back to abort.

NOTE: touching yes will permanently erase all site data, requiring a subsequent full re-commissioning of the system.
This action will be stored in the log which cannot be erased.
Initiating an auto learn procedure will instigate the automatic learning of the devices connected to the data loop. Once started auto learn procedure cannot be stopped until complete, this may take a few minutes on a fully loaded system. The panel will scan the loop looking for the installed devices and the addresses of those devices.

Caution this will erase all existing data, device text etc. To add new devices to an existing loop please select the pre-addressed option.

When autolearn is complete the result screen will appear, this shows the total number of devices found and also a breakdown of the different types of devices found. All devices now need to be configured with location text, current value, test group allocation etc.
Level 3 (Commission - Network settings)

Touch here to specify the number of panels on the network, use the up and down buttons to select the correct number then press ok to save.

Touch here to specify the address number of the current panel, use the up and down buttons to select the correct number then press ok to save.

Touch here to specify which other Cooper products (if any) are likely to share the same network.

Note: the correct setting of these parameters is vital to ensure reliable network communication.
Level 3 (Commission - Group Allocation)

- Global reset
- Commission
- Configure
- Test
- Analogue level

- Buzzer Mode
- Configure address
- Edit panel text
- Add/delete address
- Scheduled tests
- Programmable input

- Group allocation

- Group 2
- Group 3
- Group 4
- Group 5
- Group 6

Touch here to scroll through list of groups

Indicates qty of devices currently in each test group

Touch chosen group to add devices to it.

Touch here to move this fitting from its existing group (e.g. Grp 3) to the current selected group (e.g. grp6)
Level 3 configure

Buzzer mode
Used to set the buzzer operation preferences see page 48 for further details.

Configure address
Used to configure the location text for each device and to set the battery parameters for each luminaire, see page 49 for further details.

Edit Panel text
Used to set the location text for the panel itself, useful on networked systems to distinguish between information relating to different panels, see page 51 for further details.

Group allocation
Allows individual devices to be assigned to test groups as required. See page 46 for further details.

Add delete address
Used to add new devices to the system or to delete redundant devices from the system e.g after building alterations, see page 52 for further details.

Scheduled tests
Used to set up test schedules for short functional tests and full rated duration tests, see page 53 for further details.
Level 3 (Configure - Buzzer mode)

When EasyCheck detects a fault, it will display details of the fault along with the address text of the faulty device. Use "edit address text" to assign the required address text to each device.

NOTE: when commissioned by Cooper Lighting, a PC will be used to automatically download the address text to each device.

Buzzer activates automatically in the event of a faults, and beeps to indicate a button press.

Buzzer remains silent automatically in the event of a faults, but beeps to indicate a button press.

Buzzer is completely disabled.
When Easicheck detects a fault, it will display details of the fault along with the address text of the faulty device. Use “edit address text” to assign the required address text to each device.

NOTE: when commissioned by Cooper Lighting, a PC will be used to automatically download the address text to each device.
For Easichek to function correctly, each device must be programmed correctly. Current measuring devices require current values to be set to enable the panel to establish the correct fault parameters for each emergency luminaire. Simply select the increment and decrement values required from the field shown, once set select OK.

**NOTE:** when commissioned by Cooper Lighting, a PC will be used to automatically download the appropriate battery data for each device.

EC125 devices can also be configured as maintained or non-maintained devices on this menu.
Location text can also be assigned to each panel, this is useful when several panels are networked together, since by giving each panel a different name / location the source of network messages can easily be identified.

NOTE: when commissioned by Cooper Lighting, a PC will be used to automatically download the panel name / location text.
Level 3 (Configure - Add / Delete Address)

If a device is to be temporarily taken out of use, use the disable function, see page 37). To permanently remove a device from the system use delete device, to add a new device use add device.

NOTE when new devices are added they need to be configured with test group, location text, battery type and battery quantity etc.

The panel will ask for confirmation of deletion to confirm correct address was selected from previous screen.
Easiecheck allows extremely flexible configuration of test regimes to suit different requirements and preferences, use edit test to edit an existing test, use new test to add an additional test to the test regime.

1. **Group allocation**
   Touch here to allocate which group(s) are included in the test, you can select global (tests all groups) or a specific group press back when finished to save and exit.

2. **Duration**
   Touch to select the duration of the test, use the + / - buttons to increment / decrement by multiples of 1 hour or 5 minutes, touch "back" when finished to save and exit.

3. **Start date**
   Touch here to select the date and time of the first instance of this test. press OK when finished to save and exit.

4. **Interval**
   Touch here to specify the interval between successive instances of this particular test.
   Touch units of time to select the desired time unit (one off, daily, weekly, monthly or yearly) then use the + / - buttons to select the number of intervals e.g. To conduct a weekly test, select days as the units of measure, then use the “+” button until the display reads “every 7 days” press OK to save and exit.
The Eascheck test regime can be reconfigured at any time by deleting unwanted tests and adding new tests as required, deleting of a test permanently removes it from the test regime.

Touch “Confirm delete” to permanently delete the selected test, or press “back” to cancel.

To permanently delete all tests, touch the delete all tests button and touch yes to confirm or back to cancel.

To add a new test, touch the new test button then configure as required in the same way as the edit test functions described on the previous page.
In addition to the user defined automatic test cycles, it is also possible to manually instigate a test at any time. This is useful after routine maintenance to confirm correct operation or to demonstrate correct operation of emergency luminaires if ever required.

Touch the “not in test” button adjacent to a group to put this group into a manual test, touch again to terminate the manual test. Multiple groups can be put in test at the same time, simply select groups one at at time to start or end a test.
Level 3 (Test - test address)

Touch any fitting to initiate a manual test.

Use the Previous / next buttons to bring the current fitting out of test, and place the next / previous fitting into test. Press back to take the current fitting out of test when finished. Instead of testing a single fitting or a group of fittings at the same time. It is possible to use the auto scroll function to sequentially scroll through a list of fittings (see overleaf).
Bar chart showing current being consumed by the emergency luminaire (updated in real time).
If a luminaire has been replaced you can select update device to set the current value.
If the device being monitored is an EC141 you can also place the device in test by touching the “Not in test” button. When in test this button then displays “In test”. To end test simply touch this button again.
The next or previous buttons can be selected from the options given on the right hand side. This will display the current consumption of the next or previous device dependent upon which has been selected.
Access to various menus is controlled by passwords, this is to prevent unauthorised access to menus which could result in system malfunction or the deletion/corruption of site configuration data.

Access to levels 2 and 3 should only be available to suitably trained and competent personnel; it is strongly recommended that this password information is stored in a secure location - all activity carried out at the panel is stored in the event log which can only be reset by Cooper Lighting and safety personnel.

Level 2 password

The password to access level 2 is 2214.

Level 3 password

The password to access level 3 is 143243.

KEY POINTS

- Never carry out insulation tests on cables connected to electronic equipment.
- Do not over tighten terminal connector screws.
- Always use the correct type of cables as defined in the current Easicheck installation planning guide.
- Always adhere to volt drop limitation when sizing cables.
- Always design system configuration in line with the current Easicheck installation planning guide.
- Ensure adequate as installed drawings are kept clearly showing luminaires locations, addresses and panel identification.
Access control passwords

Access to various menus is controlled by passwords, this is to prevent unauthorised access to menus which could result in system malfunction or the deletion / corruption of site configuration data.
Access to levels 2 and 3 should only be available to suitably trained and competent personnel, it is strongly recommended that this password information stored in a secure location all activity carried out at the panel is stored in the event log which can only be reset by Cooper Lighting and safety personnel.

**Level 2 password**
The password to access level 2 is 2214.

**Level 3 password**
The password to access level 3 is 143243.

**KEY POINTS**

- Never carry out insulation tests on cables connected to electronic equipment.
- **DO NOT OVER TIGHTEN TERMINAL CONNECTOR SCREWS.**
- Always use the correct type of cables as defined in the current Easilcheck Installation planning guide.
- Always adhere to volt drop limitation when sizing cables.
- Always design system configuration in line with the current Easilcheck Installation planning guide.
- Ensure adequate as installed drawings are kept clearly showing luminaires locations, addresses and panel identification.