



CTP System Operation and Technician Field Guide

Managing CTP self-test
exit and emergency
lighting systems using
the CleverSparky
digital Logbook



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Section 1 – The Clevertest Plus System (CTP) explained



The CTP system uses Self-testing Exit and emergency lights and a digital log book app to improve duration test efficiency, accuracy and compliance management for sites that would typically have had their emergency lights manually tested.

All Exit signs and emergency lights in the Clevertronics LP or L10 ranges include an option to activate an in-built timer (Clock) that can be set to initiate an automatic 90 min duration test every 6 months.

CTP Self-testing saves time compared to traditional manual testing by removing the need to initiate a duration test via a manual test facility then wait around for 90 minutes to start the inspection process to collect test results.

CTP allows contractors to visually inspect fittings immediately reducing duration test collection times by up to 60%.

CTP fittings test automatically but are not connected, networked or cabled together. Each luminaire is a stand-alone fitting with its own clock/timer.

A circuit/s of fittings can be activated to test at the same time via a switching sequence at the lighting circuit breaker/s.

After the fittings complete each duration test, the LED indicator will flash in different sequences to display either a passed test or indicate the cause of a failed test.

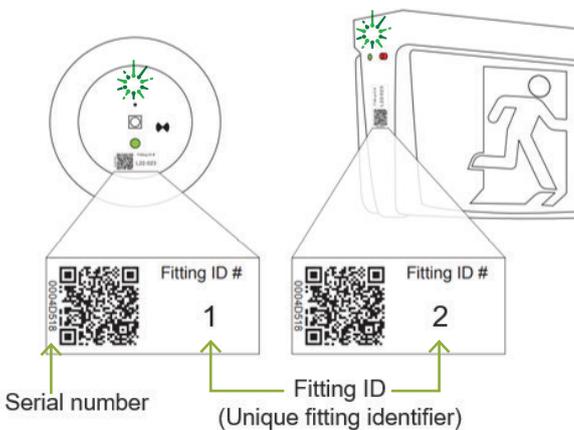
Each fitting must then be inspected, and the results recorded in a log book.

CleverSparky is the Clevertronics digital logbook app used in the Clevertest Plus System.

Section 2 – CTP – Installation and /self-test activation



CTP capable fittings can be identified by the green CTP splash label



Correct Installation of CTP Self-testing Emergency Lights

Clevertronics CTP fittings must be installed ensuring that the QR code/serial number label and a unique fitting ID are clearly visible.

The QR code and/or serial number is used to automatically load the Clevertronics product part numbers and descriptions into the Cleversparky app when building the fitting register.



Additional QR codes labels are supplied with each fitting for labelling drawings or registers as required.

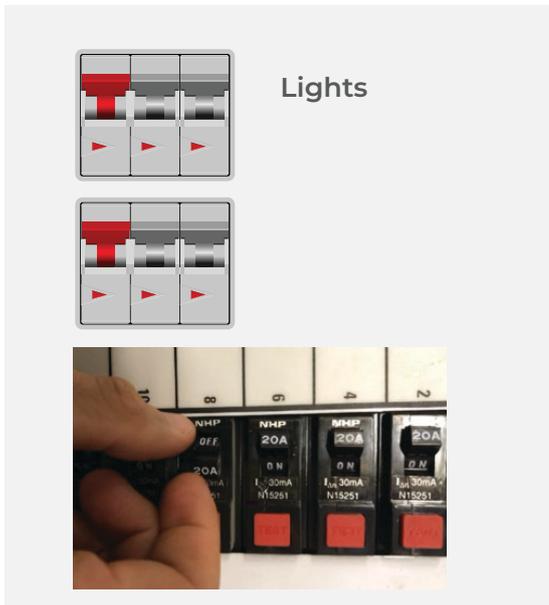


Activating the self-test timer on CTP Fittings

If the site you are working on is a new construction and/or all fittings are Clevertronics LP / L10 and you can choose to activate CTP Self-testing function to make the lights automatically perform a 90- minute duration test every 6 months.

 CTP capable fittings can be identified by the green CTP splash label

Perform this process below on every circuit breaker that contains emergency lighting to activate self-testing mode and begin a duration test.



Use the circuit breaker to activate the CTP self-test function by switching the lighting circuit on and off in the on and off in the following sequence: (use a stop watch as the timer needs to be accurate).

NB: The time of day you activate the self-test will be the same time that they test in future so keep that in mind.

After completing the activation sequence, the indicator LED on every exit sign and emergency light will begin flashing in a 30 second cycle as per below to indicate that self-test is activated, and the fittings are testing.

You will know the activation has been successful when you see the emergency lights discharging. The exit signs and other luminaires will show the fast green flash followed by the amber/off testing flash.



FAST GREEN FLASH



CTP Activated Flash

The fast flash indicates that the CTP self-test mode has been activated on an emergency luminaire or exit sign.



SLOW AMBER FLASH (2s Amber, 2s Off)



TESTING

Fitting is currently performing a test.

CTP fittings will run for 130 mins (2 hours +10 mins) on their first (Commissioning) Test then 100 mins (90 mins +10) on every subsequent test.

NB – If you don't see this on every fitting then repeat the activation process paying special attention to the timing of your breaker switching.



⚠ **IMPORTANT! EMERGENCY LIGHTING** 🚶



This building contains Clevertronics Clevertest Plus exit and emergency luminaires that will self-test every six months without the need to perform a manual discharge test.* The Pass/Fail result of the most recent test is displayed on each fitting's LED status indicator and can be collected via a simple visual inspection or recorded in the CleverSparky App.

*Any non-self-test exit signs and emergency luminaires on this site require manual duration testing.

Visual Displays – Every 30 seconds the exit sign or luminaire's status LED will cycle through short periods of a fast green flash and then display the test status through "traffic light sequences" for visual inspection.

- Fast Green Flash; indicates that the self-test function has been activated on a luminaire, this is followed by one of the visual indications shown below to confirm the fitting status.
- Solid Green; Passed last test, Record as passed.
- Slow 2 sec Amber flash; Fitting is currently performing a test.
- Solid Amber, Short Green; Tested and passed within the last 5 days, Record as passed. (After 5 days indicator reverts to Solid Green)
- Blinking Amber; Battery failed duration, Record as failed.
- Blinking Amber and Green; LED lamp failed, Record as failed.
- Short Red/Amber and longer Red sequence; Control gear reset required. Record as failed.

Refer to the *Clevertest Quick Guide* available for download at our websites.

Site will perform a self-test during the _____ week of the _____ month and during the _____ week of the _____ month.

To initiate a battery duration test outside of these weeks turn off the circuit breakers powering emergency lighting for 18 seconds then back on again. This will not change the scheduled test dates.



From a power "ON" state → OFF 18 secs → ON

SITE CONTACT

Insert Business Logo or name and phone number here



NEED ASSISTANCE?
www.clevertronics.com.au
www.clevertronics.co.nz

MANAGE TEST RECORDS AND SITE COMPLIANCE ACROSS MULTIPLE SITES WITH THE APP






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The CTP Switchboard Label for the DB

The Label Template is available for download at Clevertronics.com.au/solutions/clevertest-plus-system or purchased from Clevertronics. via your preferred electrical wholesaler.

Section 3 – The CleverSparky digital logbook app – Mobile and Web

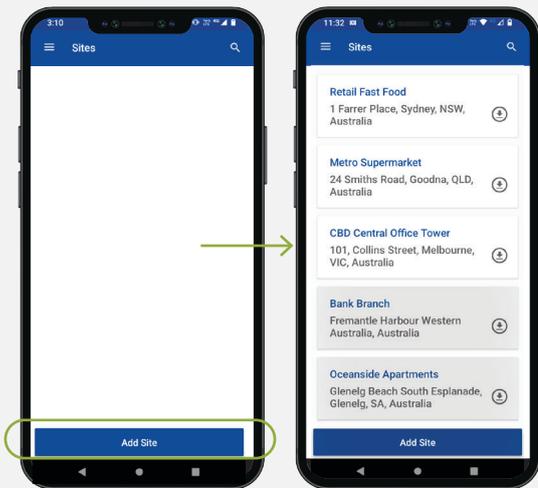


The CleverSparky Apps Explained

- CleverSparky is a digital log book app that is a fantastic tool to replace paper emergency lighting log books.
- The CleverSparky app is available for download from the App store, Google Play or accessed on the web @ cleverSparky.com
- The Mobile app is the onsite technician's tool for recording log book test results, updating fitting details following maintenance /replacements and sending reports on the go.
- The Web app @ cleverSparky.com is a business organisation's account management tool. Manage multi-user access, Upload Site drawings and Excel file registers, Customise test reports and get a dashboard view showing the status of on-time testing, quantity's of sites and Emergency lighting assets.
- Create an individual account, an account for your Business or join a customer's existing business account to manage logbook testing on their behalf.



Mobile App View

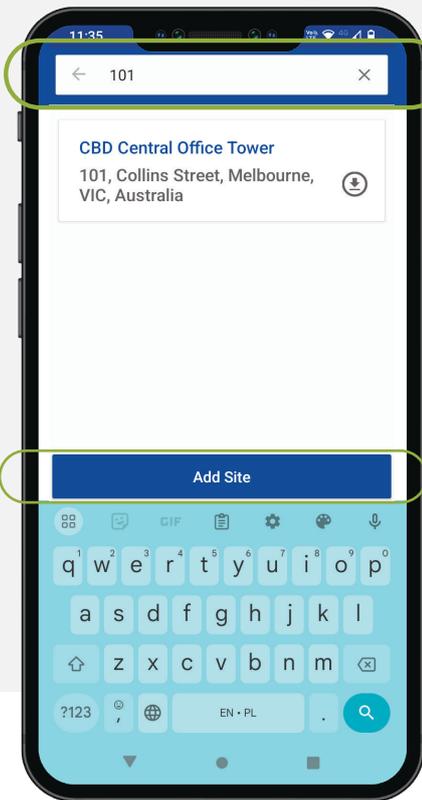


Adding and Viewing Sites in CleverSparky

After creating an account or accepting an invitation to join a CleverSparky account you will be able to view any existing sites in the account or add new sites and fitting registers.

“**Add Site**” to enter an address and begin populating the fitting register.

Web App View



Easily filter sites in your list by site identifier or address.

Adding Fittings details into a site

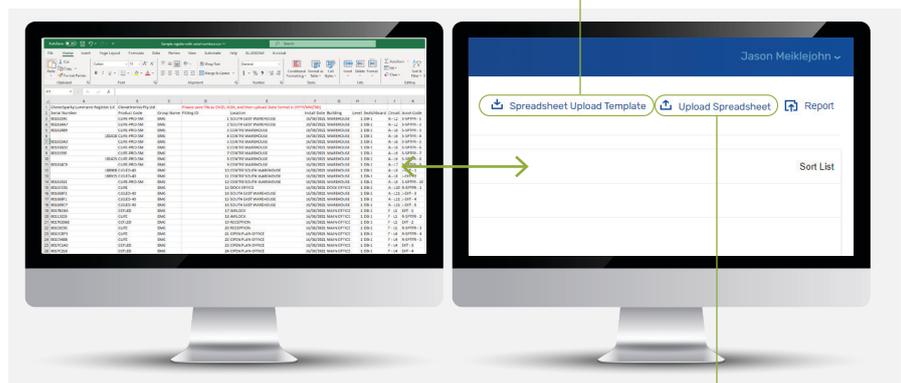
After creating a new site in your account, there are several options for adding in the fitting details.

For small sites, it is easily done using the **mobile app** by either scanning the QR code or manually entering the Serial number.

You can then add the other information such as the location, Fitting ID, Circuit, Switchboard and any other relevant details.

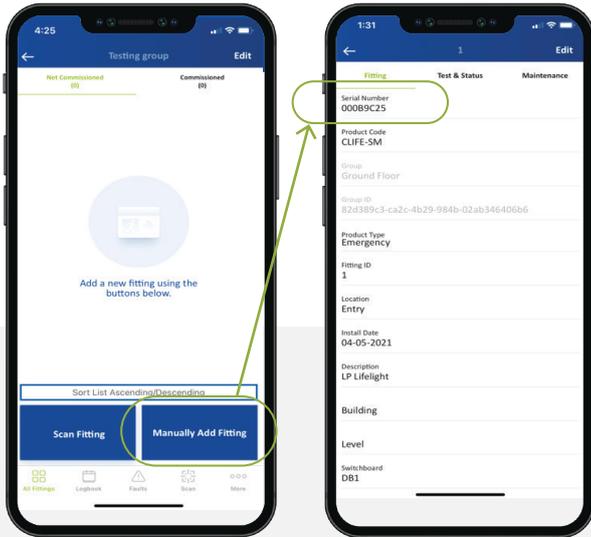
Registers can also be loaded up via an Excel template directly into the **web app**. This is the preferred method for larger sites.

Download spreadsheet template.



Upload your completed Spreadsheet.

Section 3 – The CleverSparky digital logbook app – Mobile and Web

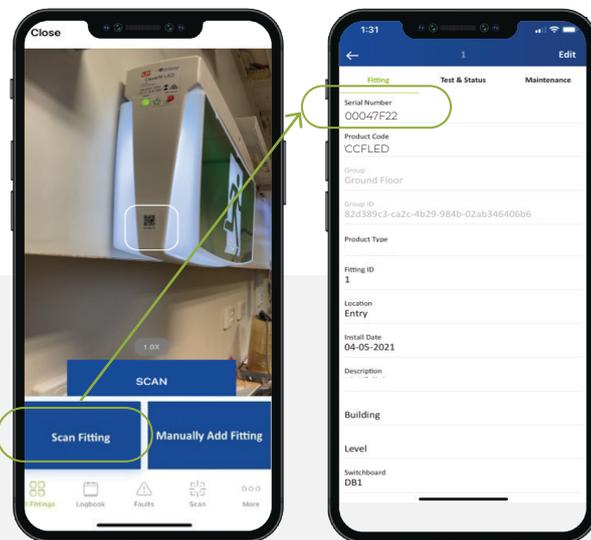


Adding Fittings details into a site – Mobile app method

Manually add fitting via mobile app

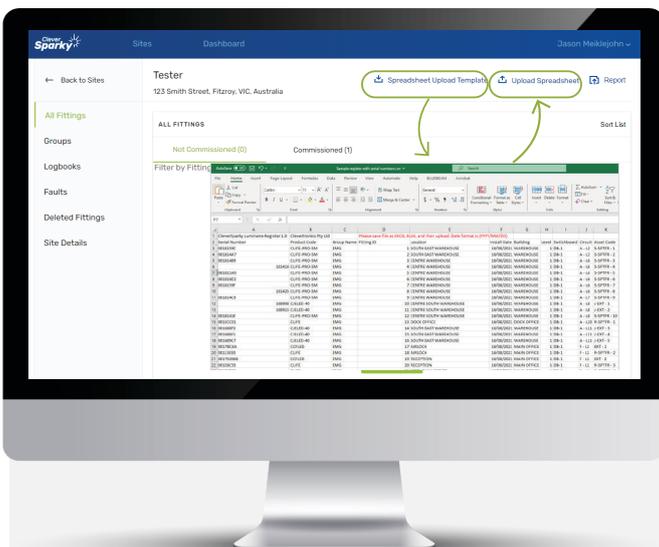
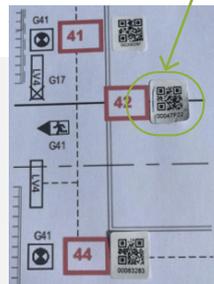
Select “**Manually Add Fitting.**”

Type in the serial number from under the **QR code.**



Or Scan QR code

If preferred, you can also scan the QR directly from a **labelled drawing.**



Adding Fittings details into a site – Web app method

The **Excel template** can be downloaded and uploaded from within a site page.

Enter the Serial numbers, locations, Fitting ID's, Circuit & Switchboard and any other relevant details then upload in bulk!

Download spreadsheet template.

Upload your completed Spreadsheet.

Section 4 – Passed or Failed Test results – Via the CTP status LED



Passed Test Result – What to look for

Walk through a site and look at the LED indicator on each fitting to see if it has Passed/Failed the last duration test.

Passed Test Result

This sequence below will display for 5 days following each fitting's self-test.

You will see this repeating flashing sequence.



FAST GREEN FLASH



Followed by

VERY SLOW AMBER & GREEN FLASH* (4s Amber, 1s Green)



4 x 5 second cycles.



Regular Standby mode – Passed last test

If you visit a site later than 5 days from the last test, the Indicator will revert to this sequence.

FAST GREEN FLASH



Followed by

SOLID GREEN

(not flashing).



This sequence shows that the fitting passed its last test and has reverted to the normal standby state. At this point, you can simply walk the site and look for fittings flashing the Amber or Red failed indications as shown on the next page and know that all other fittings have passed.

Failed Test Result

A failed test result will display on a fitting that has failed its duration test until that fitting is repaired or replaced. You will see this repeating flashing sequence.

FAST GREEN FLASH



Followed by one of these flashing sequences in a repeating cycle.

FAST AMBER & RED FLASH** – CONTROL GEAR

(0.5s Amber, 0.5s Red)



If battery is disconnected
3s off

FAST AMBER & OFF FLASH – BATTERY

(0.5s Amber, 0.5s Off)



If battery is disconnected
3s off

FAILED LAST TEST. The fitting has been recently tested and has a control gear failure.

FAILED LAST TEST. The fitting has been recently tested and has a battery failure.



CTP LED Status Indicator Chart

CTP Activated Flash

FAST GREEN FLASH



The fast flash indicates that the CTP self-test mode has been activated on an emergency luminaire or exit sign.

LED Status Sequence Indications

Use the table below to visually interpret the test result using the flashing LED sequence. A “Recently Passed” indication will display for 5 days, a fault indication will remain permanently until a fitting is repaired and re-tested.

<p>1 SOLID GREEN (not flashing)</p> 	<p>NORMAL. Fitting is in a normal state awaiting next discharge test. This also indicates that a fitting passed its last test.</p>
<p>2 SLOW AMBER FLASH (2s Amber, 2s Off)</p> 	<p>TESTING. Fitting is currently performing a test.</p>
<p>3 VERY SLOW AMBER & GREEN FLASH* (4s Amber, 1s Green)</p> 	<p>FITTING RECENTLY PASSED WITH BATTERY PRESENT. The fitting has passed a test. This indication remains for 5 days after the test and then changes to solid green.</p>
<p>4 FAST AMBER & GREEN FLASH* (0.5s Amber, 0.5s Green)</p> 	<p>LAMP FAILED LAST TEST WITH BATTERY PRESENT. The fitting has been recently tested and has a lamp failure.</p>
<p>5 FAST AMBER & RED FLASH** (0.5s Amber, 0.5s Red)</p> 	<p>CONTROL GEAR FAILED LAST TEST. The fitting has been recently tested and has a control gear failure.</p>
<p>6 FAST AMBER & OFF FLASH (0.5s Amber, 0.5s Off)</p> 	<p>BATTERY FAILED LAST TEST. The fitting has been recently tested and has a battery failure.</p>
<p>7 FAST AMBER & RED FLASH WITH RED PAUSE (0.5s Amber, 0.5s Red, 0.5s Amber, 2.5s Red)</p> 	<p>COMPLETE TIMER FAILURE. The battery has failed, and the unit cannot keep time for scheduled tests during power outage.</p>
<p>8 FAST RED & OFF (0.5s Red, 0.5s Off)</p> 	<p>NO TEST RESULT. Clevertest Plus has been enabled but no test completed.</p>

* The solid green LED indicates the emergency battery is present and charging or fully charged. If the battery is not present or not charging, the green or red LED will display off. For items 4-8 this indication will remain until the fitting receives the required maintenance and passes a subsequent discharge test.



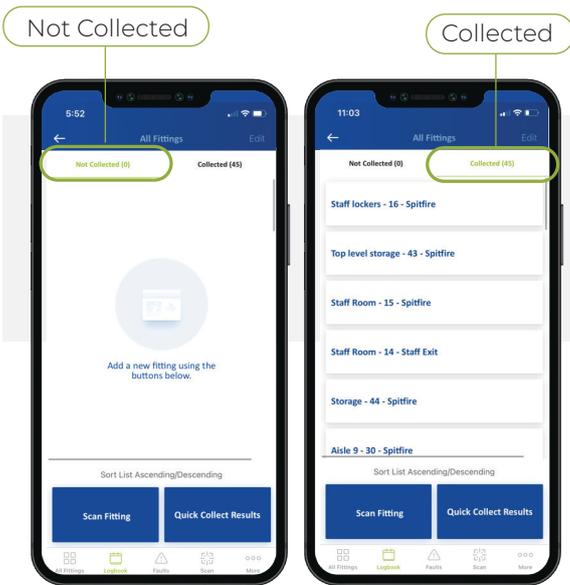
Creating a log book entry In the CleverSparky Mobile app

1. Tap to select your site.
2. Tap the **“Logbook”** button & **“Create New Logbook Entry.”**
3. Enter the details of this logbook –
 - Tap -
 - **“Fitting test date”** - Auto fills with today’s date.
 - **“Next Test Date”** Auto fills for 6 months time.
 - **“Test Duration”** Use scrolling wheel at the bottom of the screen to select “90 mins.”
 - **“View”** you can choose to view a list of **“All fittings.”** or **“Groups”** if you have set up a site with separate areas/testing groups.

Collecting a test result

1. Select your Log Book Entry.
NB: The newest one will always appear at the top.
2. Selecting the **“Quick collect results”** button opens the screen where you quickly and easily mark a test result against fittings.
 - From the **“Quick Collect”** screen you can tap to select individual fittings then mark a **“Pass Fitting/ Fail Fitting”** result.
 - Or** select multiple fittings then mark a **“Pass Fitting/Fail Fitting”** result.
 - Or** select any fittings that have failed a test, mark them as **“Fail Fittings”**, Save, then open Quick Collect again choose **“Select All”** and **“Pass fittings”** to quickly log the rest.

Save your selection when complete



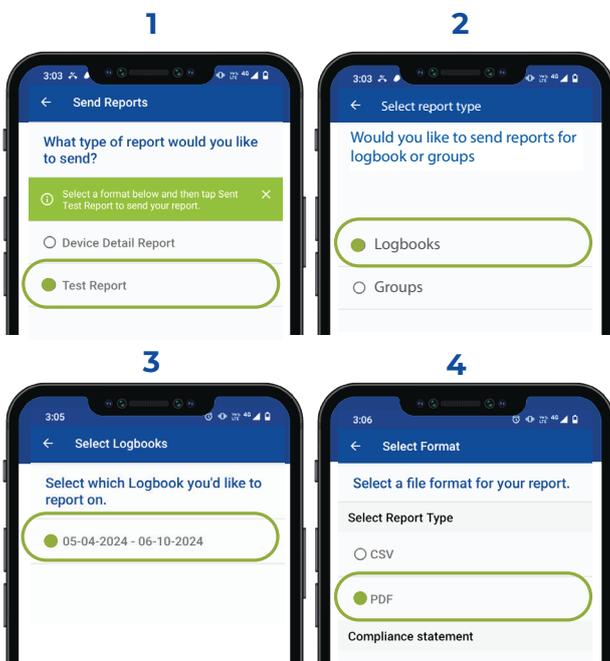
Collecting a test result

Continue until you have marked a test result on all fittings. There should be nothing left in the “**Not Collected**” column.

Sending a test report

When you have completed your log book entry you can send a test report directly from your mobile device.

Press the “**More**” menu at the bottom of the screen, then press “**Send reports**” on the next screen.



Collecting a test result

Continue until you have marked a test result on all fittings. There should be nothing left in the “**Not Collected**” column.”

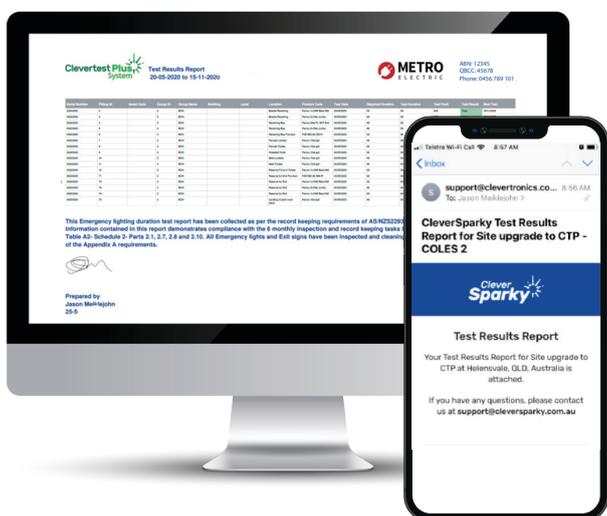
Press

1. **Test report.**
2. **Logbooks.**
3. Select your **current logbook** by the date.
4. **PDF > Send reports.**

Sending a test report

Reports will be sent to your login email address from the mobile app so check your inbox!

Reports can be previewed and downloaded on the CleverSparky Web app or sent to a preset email address.





Ordering replacement emergency lights and exit signs

Order the replacement fitting/s from your ordering list. The fittings must be Clevertronics LP or L10 Range Exit and Emergency lights. Some common examples are listed below, product codes will begin with “C” for the **LP range** or “L” for the **L10 Range**.

LP	L10
 CCFLED	 LCFLED
 CCFLED-BLK	 LCFLED-BLK
 CCFPRO	 LCFPRO
 CCFPRO-BLK	 LCFPRO-BLK
 CLIFE	 LLIFE
 CLIFE-BLK	 LLIFE-BLK
 CLIFE-PRO	 LLIFE-PRO
 CLIFE-PRO-BLK	 LLIFE-PRO-BLK
 CLIFE-SM	 LLIFE-SM
 CLIFE-SM-BLK	 LLIFE-SM-BLK
 CLIFE-SM-WP	 LLIFE-SM-WP
 CWELED-BLK	 LWELED-BLK
 ARGOPUS-600-LPPOD	 ARGOPUS-600-L10POD

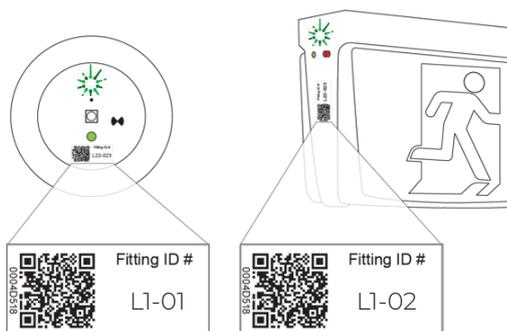
NB. All LP and L10 base model products have CTP Self-test capability as standard.

Installing replacement CTP fittings

Install the replacement Emergency lights and/or exit signs. Ensure the diffusers on the exit signs match what you are replacing EG single/double sided/ Arrows.

Ensure the QR code with serial number is clearly visible, you will need to add the sticker to the lamp head of the recessed emergency lights.

Mark the fitting ID on each light/sign as per the lighting plan. Additional QR code labels are provided with each new fitting.





Quick guide

ACTIVATION and TESTING of Clevertest Plus (CTP) Fittings

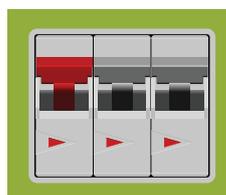
SECTION 1 Activating Clevertest Plus fittings

Products with a CTP symbol  must be activated if you would like to use the automatic self-test function. Choose from one of the methods below to activate fittings. All methods will start each fitting's in-built

timer and set them to automatically perform a 90 minute duration test every 6 months (182 days). Future tests will initiate at the same time of day as the initial activation is completed.

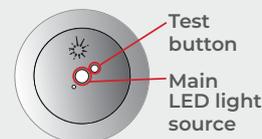
1.1 Activate groups of fittings at the circuit breaker

These two sequences will activate all fittings on a circuit and can also be done at any time synchronisation /resetting of test dates is required. This will make all lights on a circuit test at the same time.



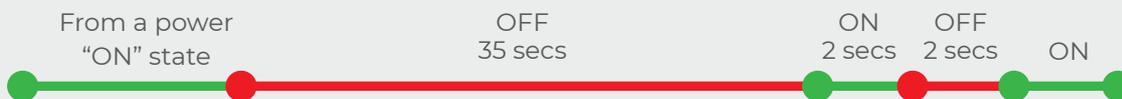
1.1.a. Activate and put fittings into immediate test

From a power ON state – switch power off and on as per the diagram below. You will know that the activation process is successful when the emergency lights' main LED light source illuminates. Exit signs will display the fast green flash to indicate that the CTP is now activated followed by the slow amber flash (meaning testing in progress).



1.1.b. Activate and not start a test

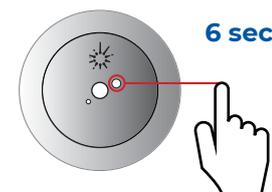
From a power ON state - switch power off and on as per the diagram below. After activation, the status LED will flash Fast Green for 30mins, and then the CTP test status will revert to "No Test Result."



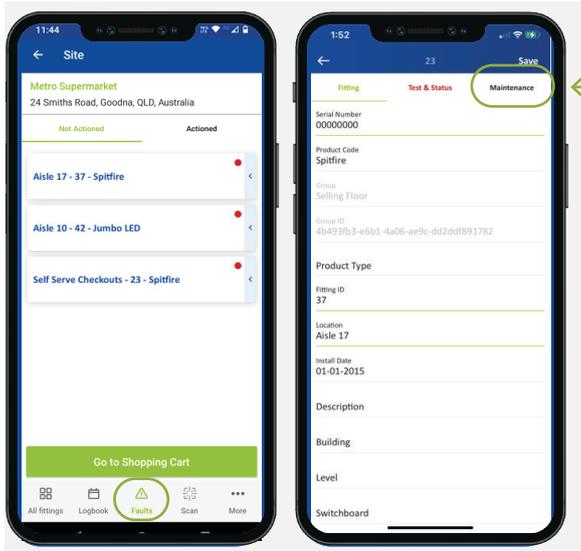
1.2 Activate individual fittings at the fitting

1.2.a Activate and not start a test

Press and hold test button for 6 seconds until light flashes green. Release and press again once. The LED will flash red several times and then display a fast green flash to indicate that CTP has been activated. This fast red flash, in between the "CTP Activated" fast green flash, will continue until the fitting undergoes a test, as this fast red flash indicates NO TEST RESULT as per item in the visual indicator table on page 3.



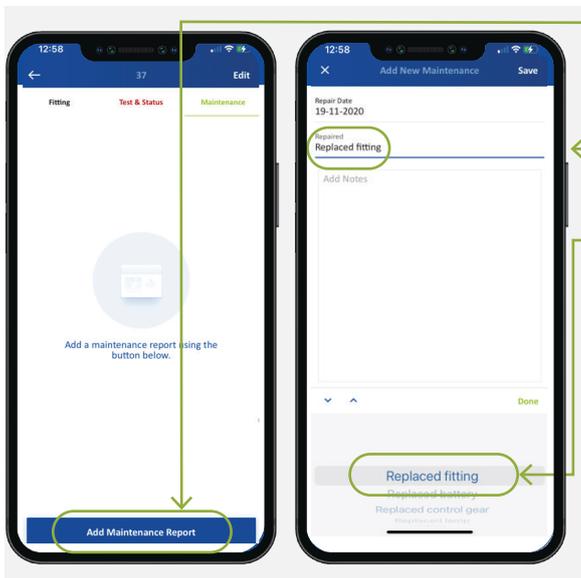
To disable the CTP function, press the test button 6 times within 10 seconds on each fitting to reset the fitting to manual test mode.



Updating the fitting register and maintenance reports

Select the **“Faults”** tab to display the list of faulty fittings recorded during the last log book entry.

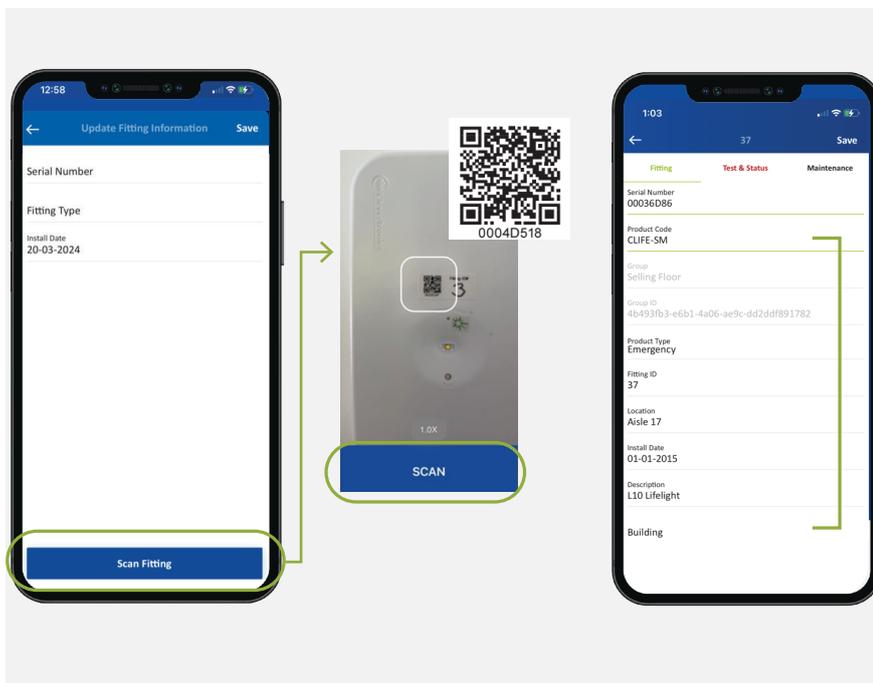
Select a fitting and tap **“Maintenance”** to enter the maintenance report and update the new replacement fitting into the site register.



Select **“Add Maintenance Report.”**

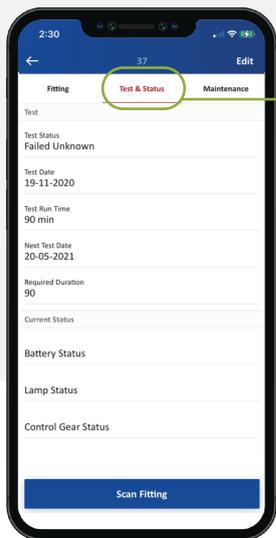
Tap here.

Select **“Replaced fitting.”**



“Scan fitting” or type in the serial number from below the QR code label, add the install date and save.

This will update the fitting details in the system and auto-populate the Product code.

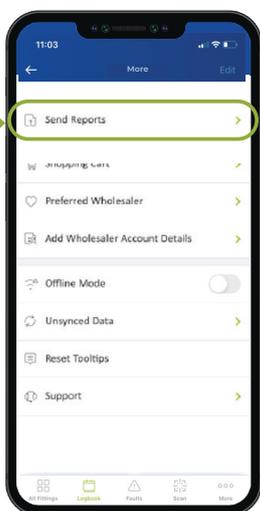
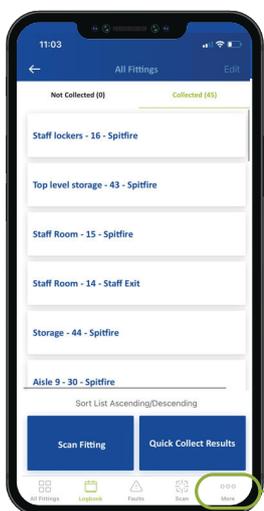


Test and Status

Even though a fitting has been replaced it will still show as faulty in the **“Test and Status”** tab until a new test result is marked.

Fitting replacements are required ASAP after faults are found.

There is no requirement for an immediate retest, the status can be updated when the logbook is completed for the next scheduled test.



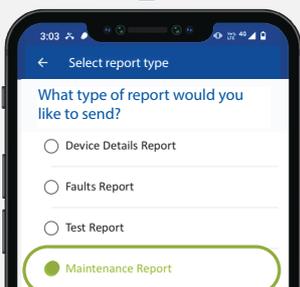
Sending a maintenance report

Press the **“More”** menu at the bottom of the screen, then press **“Send Reports”** on the next screen.

1



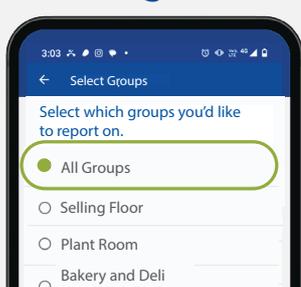
2



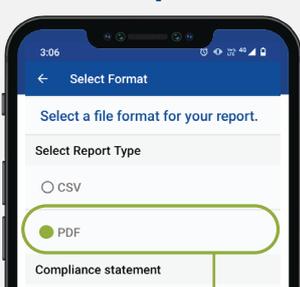
Press

1. **Groups.**
2. **Maintenance report.**
3. **All Groups.**
4. **PDF > Send reports.**

3



4





Re-testing replaced fittings

If you wish to log a retest on replacement fittings (CTP Activated) prior to the next scheduled test, then choose one of these options after ensuring each fitting has received a constant 16 hours of charge.

SECTION 2 Testing Clevertest Plus fittings

2.1 Initiating an immediate discharge test

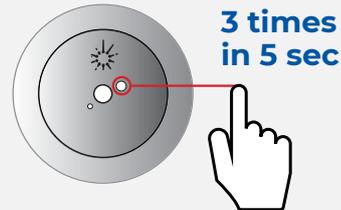
2.1.a Testing groups of fittings:

CTP fittings on the same circuit can be tested immediately by switching the circuit breaker OFF for 18 seconds, and then back ON again. This action does not alter the schedule for the six-month synchronised test.

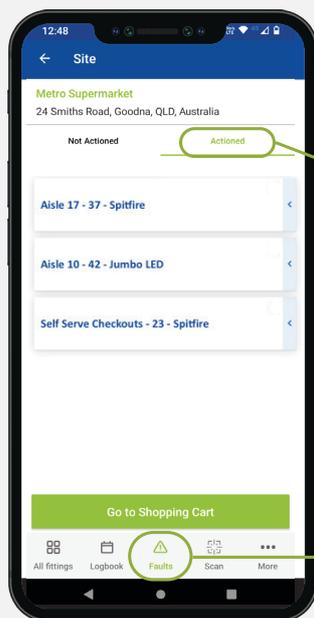


2.1.b Testing Individual fittings:

Press the test button 3 times within a five second period for an immediate discharge test. This action does not alter the schedule for the six-month synchronised test.

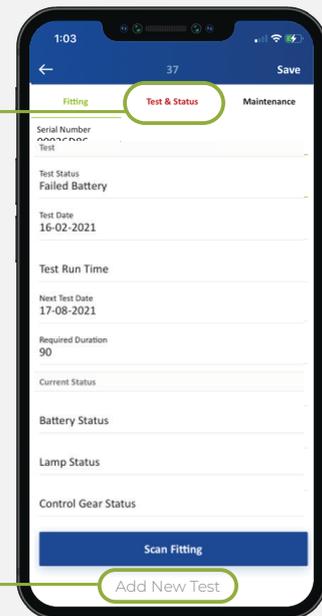


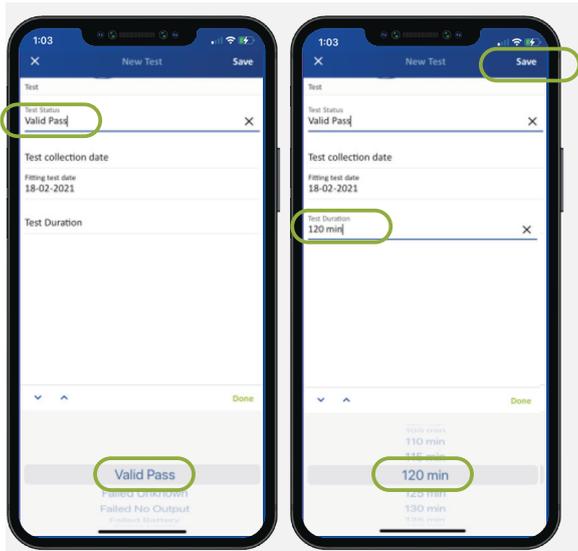
New fittings will perform a 120minute “Commissioning test” before switching to a 90-minute duration for future tests.



Logging a retest of replaced fittings

- Go to the “**Faults**” tab and select a fitting from the “**Actioned**” column.
- Select a fitting from the list.
- Select the **test and status** column.
- Select and add “**new test.**”





Logging a retest of replaced fittings

Update the “**Test Status**” and “**Test Duration**” fields and “**save.**”

This will update the fitting’s test status and remove it from the faults list.

Produce a test report via “**Groups**” or a “**Device Details**” report to provide your customer with a report showing a 100% pass!



Technical Support

For Technical support please contact us at support@cleversparky.com.au

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