

CLIPSAL[®]

by **Schneider** Electric



**Spark-e-mate
Bluetooth[®] Logging Options
for PC, Android and iOS**

493BTL & 493BTLi

Installation Instructions

Contents

1.0	<i>Bluetooth</i> Logging Option 493BTL	4
1.1	Introduction.....	4
2.0	<i>Bluetooth</i> Logging to a PC	5
2.1	Spark-e-log PC Client Software (493BTL).....	5
2.2	Pairing Your <i>Spark-e-mate</i> with Your Computer's <i>Bluetooth</i>	6
2.3	Establishing the <i>Bluetooth</i> Wireless Connection	9
2.4	Creating New Jobs	11
2.5	Logging Your Test Results.....	11
2.6	Printing Your Test Results	11
3.0	<i>Bluetooth</i> Logging to an Android Device	12
3.1	Spark-e-log Android App (493BTL)	12
3.2	Pairing Your <i>Spark-e-mate</i> with Your Android Device.....	12
3.3	Establishing a <i>Bluetooth</i> Connection	14
3.4	Settings Menu	15
3.5	Opening Existing Jobs or Creating New Jobs	15
3.6	Logging Your Test Results.....	17
3.7	Printing and/or emailing Your Test Results.....	18
4.0	<i>Bluetooth</i> Logging to an iOS Device	20
4.1	Spark-e-log iPhone App 493 (BTLi).....	20
4.2	Getting Ready to Connect <i>Spark-e-mate</i> with Your iOS Device	21
4.3	Establishing a <i>Bluetooth</i> Connection	22
4.4	Settings Menu.....	24
4.5	Editing or Deleting Jobs and Creating New Jobs	25
4.6	Logging Your Test Results.....	28
4.7	Printing and/or emailing Your Test Results.....	30

Apple, iPhone and iOS are trademarks of Apple Inc.

2.0 Bluetooth Logging to a PC



For logging test results to a PC or laptop, your *Spark-e-mate* must have the *Bluetooth V2.0* module fitted, indicated by this symbol.

2.1 Spark-e-log PC Client Software (493BTL)

First you'll need to download the *Spark-e-mate* Logging System for PC software (freeware) from:

www.sparkemate.com/software/log.zip

The software is in a ZIP file which needs to be extracted to your hard drive. The installation instructions are contained in the READ_ME.txt file.

Once properly installed, clicking on the Spark-e-log *Bluetooth* icon on your desktop will bring up this splash screen:



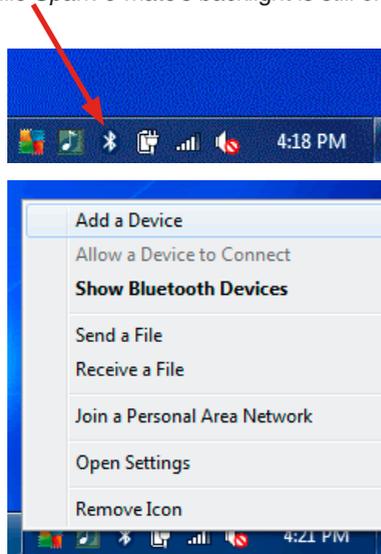
Then the main Logging System window appears:



You must now CLOSE Spark-e-log and go to the next step of pairing.

2.2 Pairing Your *Spark-e-mate* with Your Computer's *Bluetooth*

1. Turn on *Spark-e-mate* by pressing its ON/RESET button and make sure the backlight is on.
2. On your Laptop, right click on the *Bluetooth* icon and select "Add a Device" from the pop-up menu while *Spark-e-mate's* backlight is still on:

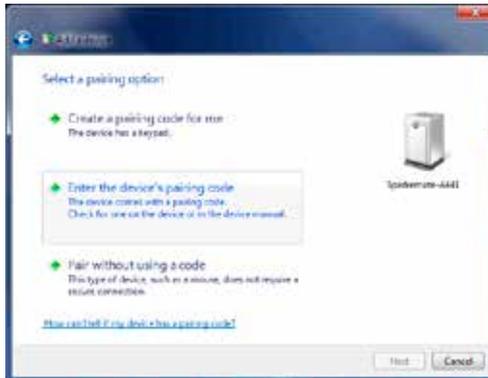


3. Wait until your *Spark-e-mate* shows up in your "Add a Device" window:



4. Select *Spark-e-mate* from the list and click on "Next".

5. Select “Enter the device’s pairing code” and click on “Next”:



6. The default pairing code is “1234”:



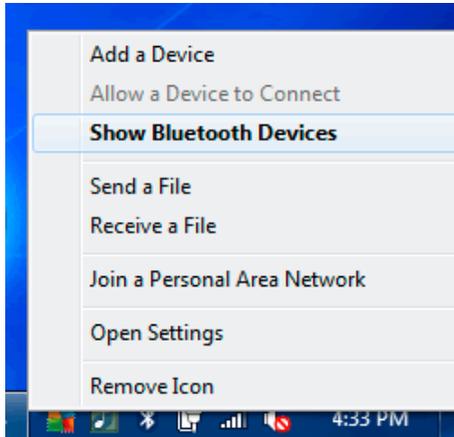
7. Click on “Close”:



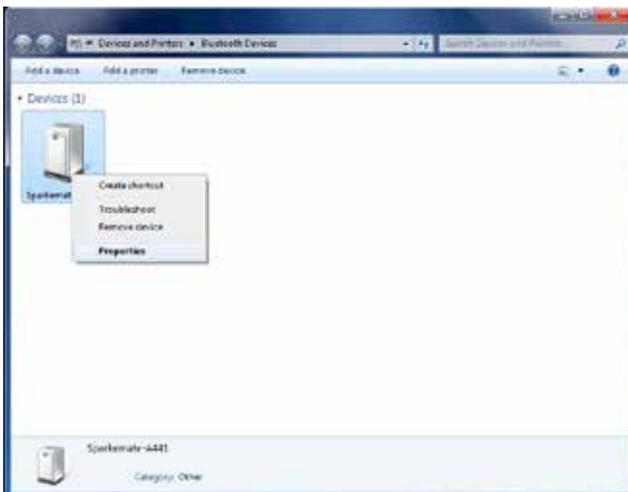
8. The last step in pairing is to take note of which COM port has been assigned to your *Spark-e-mate*. Right click once more on the *Bluetooth* toolbar icon:



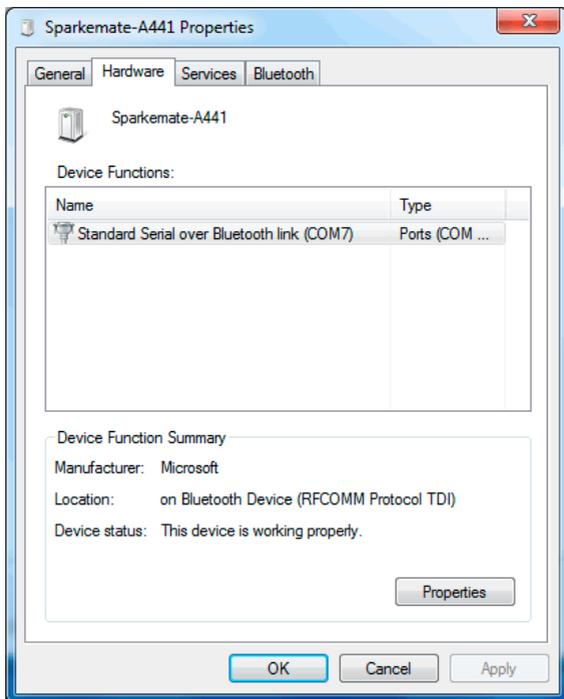
9. Select “Show *Bluetooth* Devices” from the pop-up menu:



10. Right click on the *Spark-e-mate* icon and choose “Properties”:



- Choose the “Hardware” tab (“Services” tab in VISTA) from the Properties window and take note of the assigned COM port. In the example below COM 7 has been assigned, but the COM port may be different for your computer:



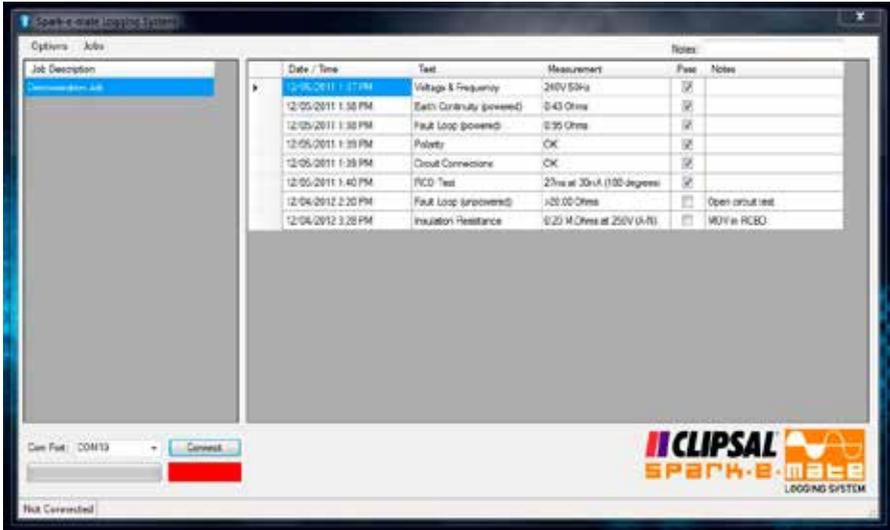
- Click “OK”. *Spark-e-mate* is now paired to your computer and this process should NOT need to be repeated.

2.3 Establishing the *Bluetooth* Wireless Connection

- Go to your laptop, make sure your laptop *Bluetooth* is turned on and click on the *Spark-e-log* shortcut on your desktop to start the *Spark-e-log* Logging System.

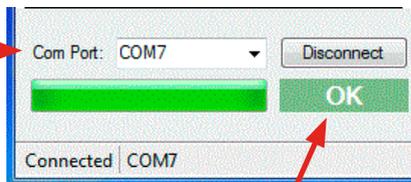


Then the main Logging System window appears:



2. Turn on *Spark-e-mate* by pressing its ON/RESET button.
3. Choose the correct COM Port and click the Connect button while *Spark-e-mate's* backlight is on:

COM Port 7
example only.
It may be different
for your computer.



4. Within 30 seconds the CONNECTED icon should flash green and the *Spark-e-mate Bluetooth* connected symbol appears:



Bluetooth connected symbol.

5. You are connected ready to log results.

2.4 Creating New Jobs

The first thing to do is to create a new job by clicking on the “Jobs” tab. You can then name and number it, and pin notes to each test. Jobs and test results are automatically saved until you manually delete them using the “Delete Job” tab.

2.5 Logging your Test Results

Whenever the LOG symbol appears, you can press the LOG button to send the displayed test result to your computer. Both *Spark-e-mate* and your computer will beep to indicate successful data transfer. The test result appears and is saved in the Logging System window.



LOG button for sending test result to laptop



Press the LOG button to send result to laptop

2.6 Printing Your Test Results

Bring up the required job and click on the Spark-e-log “Jobs” then “Print Test Report” to print the Test Report:

Energisation or Re-verification of an Installation (AS/NZS 3000:2007 Clause 8.4)

Date of energisation and original verification details are to be recorded and available on site at the accessible point. This also facilitates the process of re-verification at a later date.

ELECTRICAL INSTALLATION & VERIFICATION RECORD		INSTALLATION:		
DATE OF ENERGISATION: / /		Demonstration Job		
Testing Organisation & Department				
Test Equipment:	Model Number:	Serial Number:	Date of Purchase or Last Calibration:	
Spark-e-mate Electrical Installation Tester	Digital Cat. No. 493	A00001	12/04/2013	
Manufacturer:	Design: 2000 Pro EM			
Test Date and Time	Test	Measurement	Notes	Result
13/04/2011 1:37:48PM	Voltage & Frequency	243V/50Hz		Pass
13/04/2011 1:38:25PM	Earth Continuity (grounded)	0.23 Ohms		Pass
13/04/2011 1:38:56PM	Fault Loop (grounded)	0.85 Ohms		Pass
13/04/2011 1:39:30PM	Polarity	OK		Pass
13/04/2011 1:39:12PM	Circuit Connections	OK		Pass
13/04/2011 1:40:29PM	AC220 Tap	0.77ms @ 200V/1000 degrees		Pass
13/04/2012 3:30:12PM	Fault Loop (ungrounded)	0.80 Oh Ohms		Fail
13/04/2012 3:32:26PM	Insulation Resistance	0.26 M Ohms @ 500V DC/1kV	Open (result fail)	Fail
Other Comments				
Tested by:		Signature	Date: / /	

1 of 1

There are a few blank fields that you will need to complete by hand.

3.0 Bluetooth Logging to an Android Device



For logging test results to an Android device, your *Spark-e-mate* must have the *Bluetooth V2.0* module fitted, indicated by this symbol.

3.1 Spark-e-log Android App (493BTL)

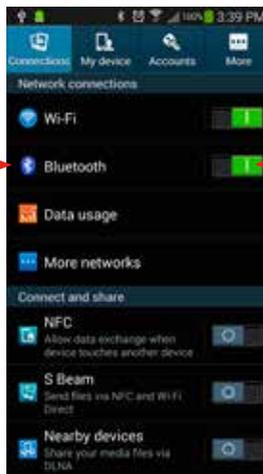
First you'll need to install the free *Spark-e-mate* Logging System App from the Google Play store by searching for "sparkemate" or "sparkelog":



3.2 Pairing Your *Spark-e-mate* with Your Android Device

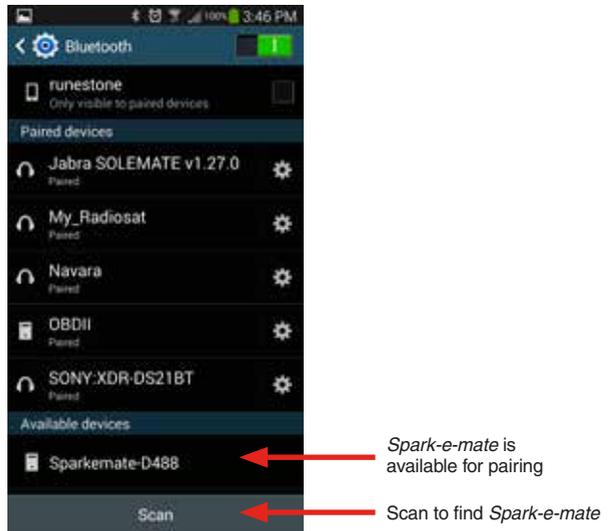
1. Go into the settings screen on your Android device and make sure *Bluetooth* is turned on (the sliding switch should be green):

Tap on *Bluetooth* to see paired devices

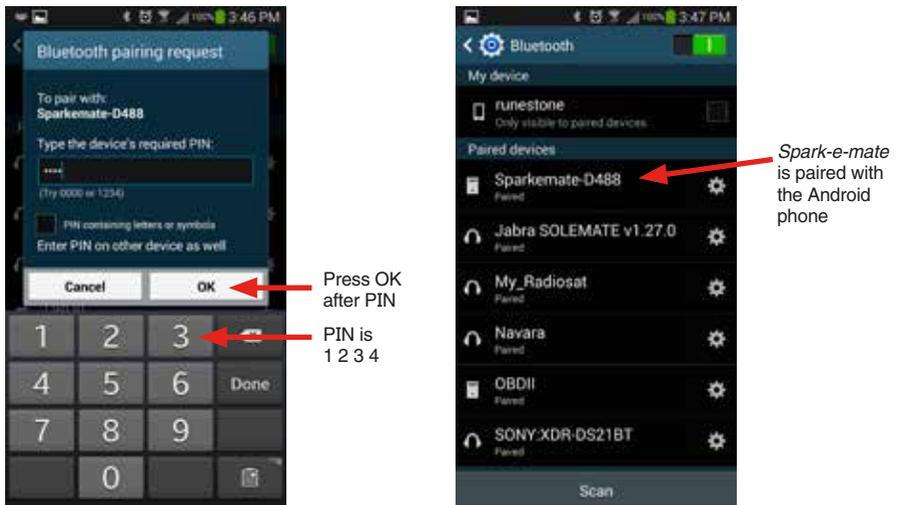


2. Tap on the word "*Bluetooth*" in the above settings menu and you will see all of your currently paired *Bluetooth* devices (next page):

- Turn on *Spark-e-mate* then press “Scan”, as per screen below, to find your *Spark-e-mate* and list it under “Available devices”.



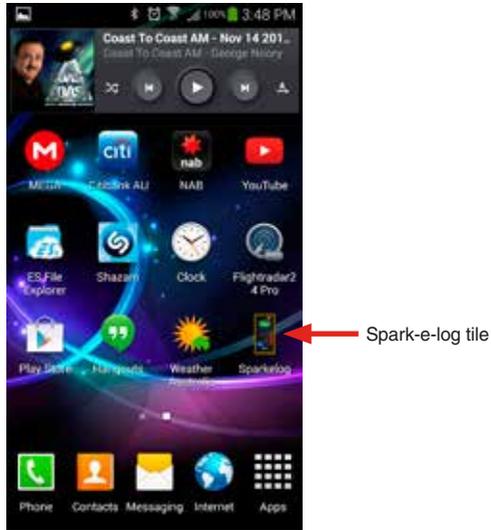
- Press the *Spark-e-mate* entry in “Available devices” and the pairing process will begin. When you are asked to enter a pairing PIN code, enter “1234” and click “OK”:



- Your *Spark-e-mate* will then be shown in the list of paired devices.

3.3 Establishing a *Bluetooth* Connection

1. Find the Spark-e-log tile within your installed apps and press it:



2. Spark-e-log will then start. Make sure your *Spark-e-mate* is turned on and it will automatically connect within a few seconds (the status icon will turn green and display “Connected”):



3.4 Settings Menu

Press the “Settings” button to enter a few basic things such as your email address, Company details, *Spark-e-mate* serial number and last calibration/purchase date:



3.5 Opening Existing Jobs or Creating New Jobs

1. Go back to the main menu and press the “Jobs & Logs” button:

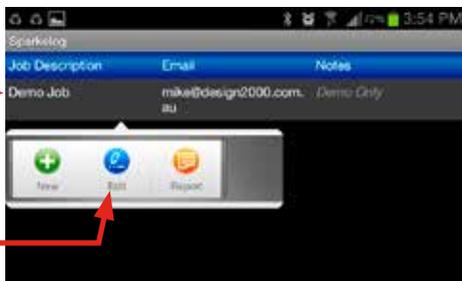


Press to bring up the “Jobs & Logs” menu

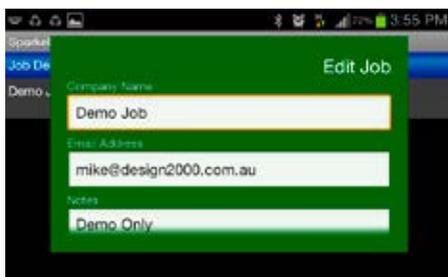
2. Tapping on a job entry will bring up all tests logged under that job. To add a new job, edit an existing job or produce a job test report, push and hold the required job entry:

Push and hold a job entry to display the pop-up menu

"Edit"



3. To edit the job tap on "Edit" in the pop-up menu:

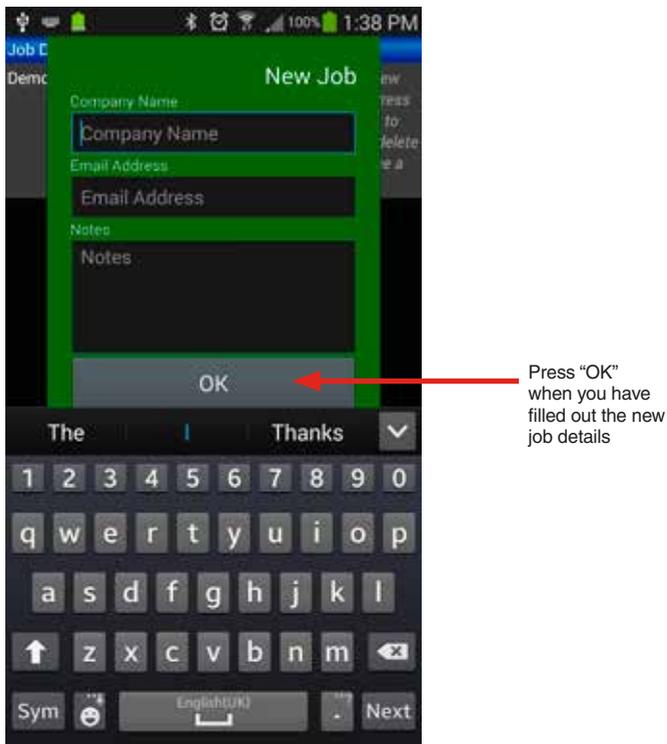


4. To create a new job tap on "New" in the pop-up menu:

Tap to create a new job



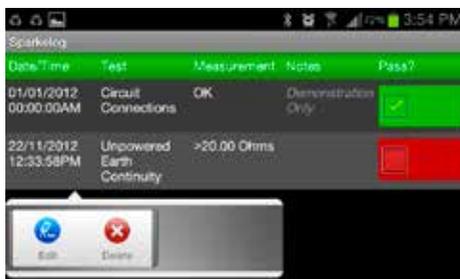
5. You will then be prompted to fill out the new job details:



3.6 Logging Your Test Results

Tapping on a job entry brings up a list of all tests logged under that job. If no tests have yet been logged for that job, such as when a new job has just been created, the log screen will be empty. You must be in the log screen before you start logging results from your *Spark-e-mate* so that log entries are added under the correct job.

To edit or delete a logged test, push and hold a log entry and choose the required action from the pop-up menu:



You can tell that *Spark-e-mate* is connected to your Android device and is ready to log when you see the *Bluetooth* symbol in the bottom-right corner of the *Spark-e-mate* display.

Whenever the LOG button appears on the *Spark-e-mate* display, you can press the LOG button to send the displayed test result to your Android device and store it against the currently selected job. Both *Spark-e-mate* and your Android device will beep to indicate successful data transfer. The test result appears and is saved in the Spark-e-log System:



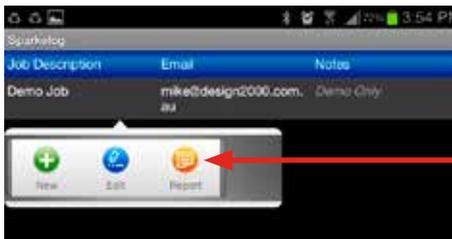
LOG button for sending test result to your Android device



Press the LOG button to send result to your Android device

3.7 Printing and/or Emailing Your Test Results

1. Push and hold the required job entry to bring up the “Report” button:



Tap on the “Report” button to print or email the test report

2. You are then prompted to print or email the report. Reports are generated in PDF format and are stored on your Android device in the “Sparkelog” directory (you should back-up and delete these reports occasionally to free up storage space).

Example report output:

Energisation or Verification of an Installation

(AS/NZS 3000:2007 Clause 8.4)

Date of energisation and original verification details are to be recorded and available on site in this accessible record. This also facilitates the process of re-verification at a later date.



www.design2000.com.au
9-11 Rose St., Upper Farnhee Gully, Victoria 3156
Ph (03) 9758 5933 Fax (03) 9758 5560

ELECTRICAL INSTALLATION & VERIFICATION RECORD		INSTALLATION:	
DATE OF ENERGISATION: / /		Demonstration Job	
Testing Organisation & Department: Design 2000			

Test Equipment	Model Number	Serial Number	Manufacturer	Date of Purchase or Last Calibration
Spark-e-mate Electrical Installer Tester	Clipsal Cat. No. 493BTL	A012345	Design 2000 Pty Ltd	29/04/2013

Test Date and Time	Test	Measurement	Notes	Result
01/01/2012 00:00:00AM	Circuit Connections	OK	Demonstration test result. As you log results with Spark-e-mate they will appear on this screen. Press and hold a result to edit on device. Tap the 'Done' button to pass a result. Flip the screen to the right -> to go back to jobs.	Pass
17/05/2013 04:10:03PM	Unpowered Fault Loop	~20.00 Ohms		Fail
22/05/2013 12:58:18PM	Voltage & Frequency	246V 50Hz		Pass
22/05/2013 12:58:20PM	Polarity	OK		Pass
22/05/2013 12:58:58PM	RCD Test	13ms at 30mA (90 degrees)		Pass

General Comments: Tap a job to view test results. Press and hold a job to add, edit and delete jobs or produce a test report.

Tested by: _____ Signature: _____ Dated: 22/05/2013

TEL: 03 9758 5933 FAX: 03 9758 5560 WEBSITE: HTTP://WWW.DESIGN2000.COM.AU EMAIL: SALES@DESIGN2000.COM.AU

You can customise the graphic logo shown in the report by placing a JPG-format file named “logo.jpg” (without quotes) in the “Sparkelog” directory on your Android device. The image should be exactly 600 pixels wide by 300 pixels high and less than 100 DPI.

4.0 Bluetooth Logging to an iOS Device



For logging test results to an Apple iOS device, your *Spark-e-mate* must have the *Bluetooth Smart* module fitted, indicated by this symbol

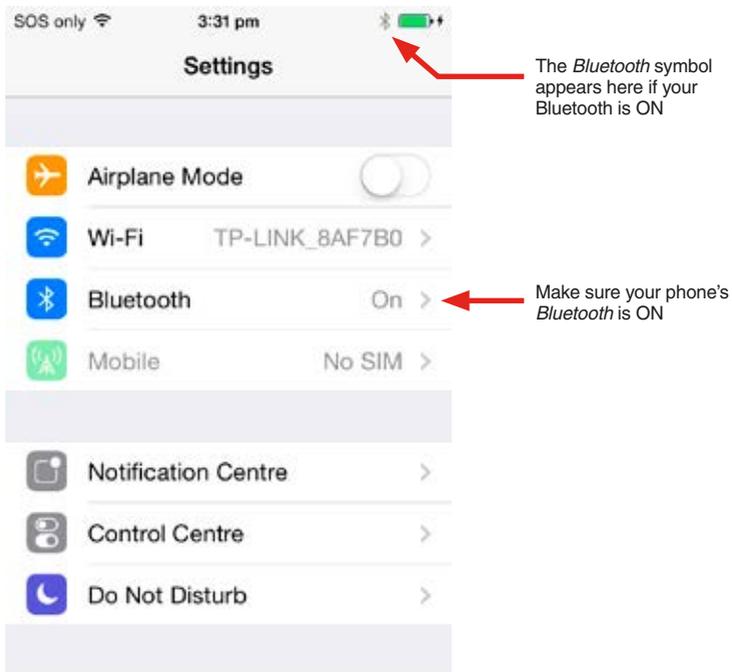
4.1 Spark-e-log iPhone App (493BTLi)

First you'll need to install the free *Spark-e-mate* Logging System App from the Apple App Store by searching for "sparkemate" or "sparkelog":

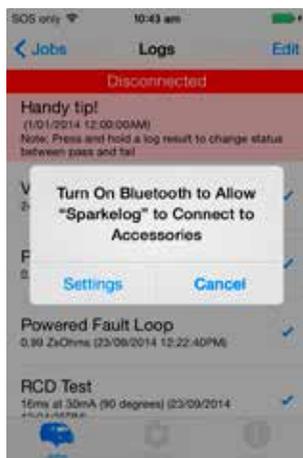


4.2 Getting Ready to Connect *Spark-e-mate* with Your iOS Device

- Go into the settings screen on your iPhone and make sure *Bluetooth* is turned on:



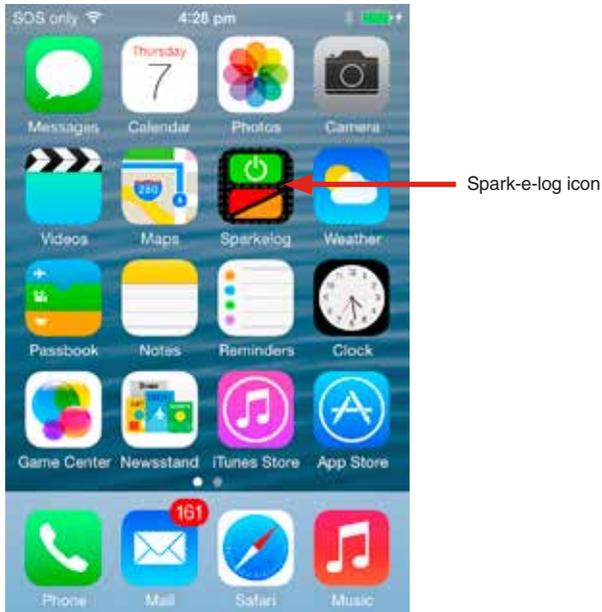
Important: Unlike previous *Bluetooth* technologies, the *Bluetooth* Smart module in the *Spark-e-mate* 493BTLi does **not** need to be “paired” with your phone or have PIN codes entered before you can use it. All you need to do is install the *Spark-e-log* App and make sure your phone's *Bluetooth* is turned on.



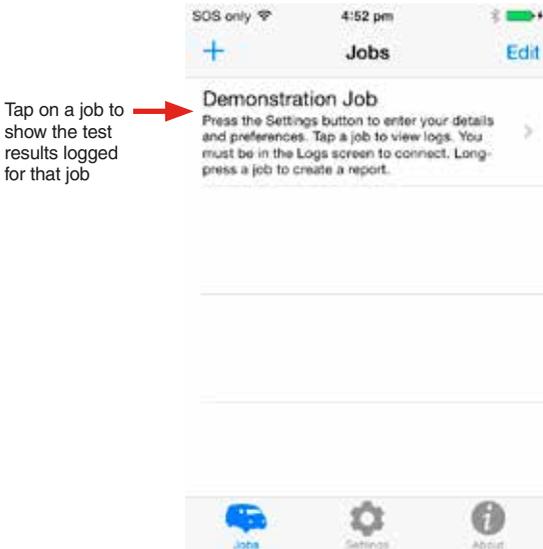
If your phone's *Bluetooth* is OFF when you start the *Spark-e-log* App, it will let you know and guide you to the Settings screen.

4.3 Establishing a Bluetooth Connection

1. Find the Spark-e-log App icon on your installed Apps screen and press it:

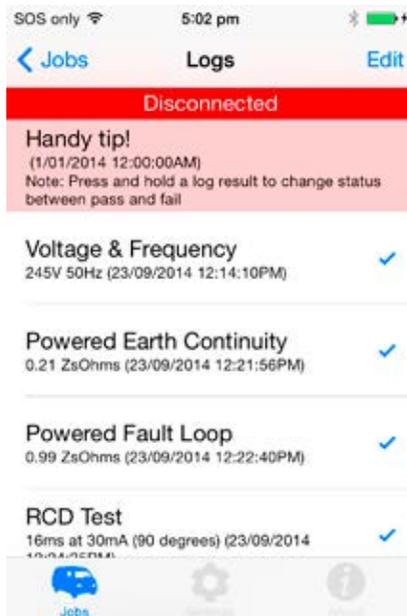


2. Spark-e-log will then start. Make sure your *Spark-e-mate* is turned on:



When first installed, the Spark-e-log App comes with a single demonstration job entered into its database as shown above.

Let's quickly test the *Bluetooth* connection. Press the demonstration job to bring up a list of example logs (test results) under that job:



After a few seconds your *Spark-e-mate* will connect to your iPhone and you will hear a sound with the "Connected" message displayed:

Press here to navigate back to the "Jobs" screen

The status line at the top of the "Logs" list will change from a red "Disconnected" to a green "Connected" message

A pop-up message will appear whenever whenever *Spark-e-mate* connects or disconnects

If a button is shaded light grey it is disabled and can't be pressed.

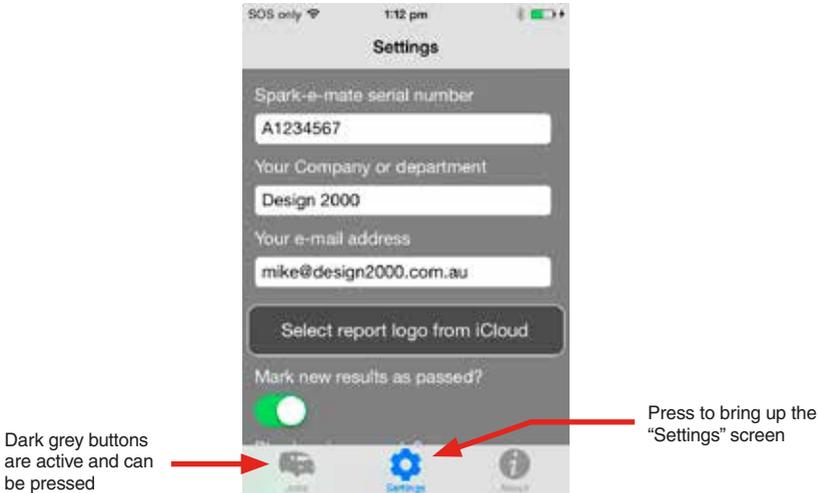
You can also press here to navigate back to the "Jobs" screen

It's important to remember that you must select a job and be in the "Logs" screen before *Spark-e-mate* will connect. If you navigate away from the "Logs" screen *Spark-e-mate* will disconnect.

4.4 Settings Menu

Before we start logging and reporting, it's time to let Spark-e-log know about yourself and your *Spark-e-mate*.

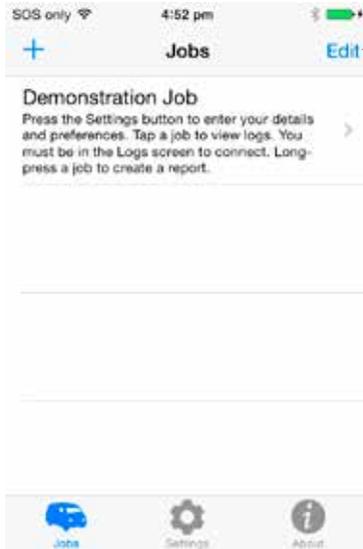
Navigate back to the Jobs screen, then press the "Settings" button to enter a few basic things such as your email address, company details, *Spark-e-mate* serial number and last calibration/purchase date:



- Your serial number can be found on a sticker on the back of *Spark-e-mate*.
- To use Spark-e-log without sounds, slide the "Play Sounds" option across so that it is no longer green.
- If the "Mark All New Logs As Passed" option is enabled (green) then all new tests you log will be automatically marked as "Passed" and you must manually change them to "Failed" if needed, otherwise they will always be marked as "Failed" and you will have to manually set each result to "Passed" as required. Note that Spark-e-log will always mark simple GO/NO GO tests such as "Circuit Connections" as passed even if this option is disabled. It is always your responsibility, not Spark-e-log's, to interpret any result and mark it as passed or failed after consulting with current AS/NZS 3000 Standards.
- If your *Spark-e-mate* is new, enter the date of purchase as the last calibration date.
- Any changes you make to the settings are automatically saved when you leave the screen.
- To select a logo to appear on the first page of the PDF report, place the image (in any file type and resolution) on your iCloud drive and press the "Select report logo from iCloud" button. The contents of your iCloud drive will then be shown from which you can select the image by tapping it. A "Success" message will be displayed once the image has been imported and converted.

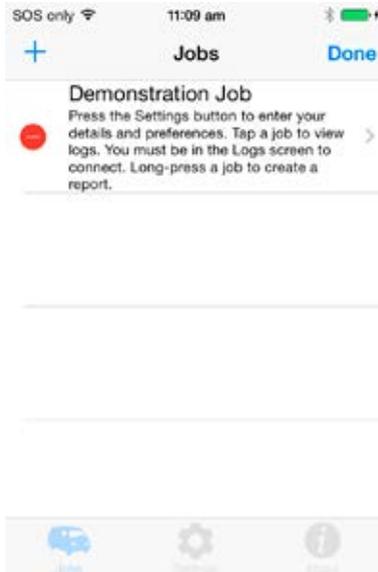
4.5 Editing or Deleting Jobs and Creating New Jobs

1. Go back to the “Jobs” screen and press the “Edit” button:

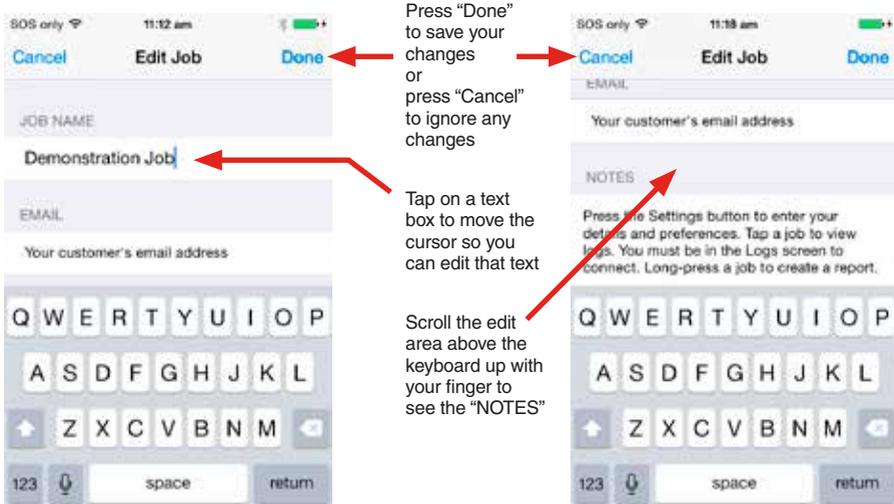


Press the Edit button to make changes to job entries

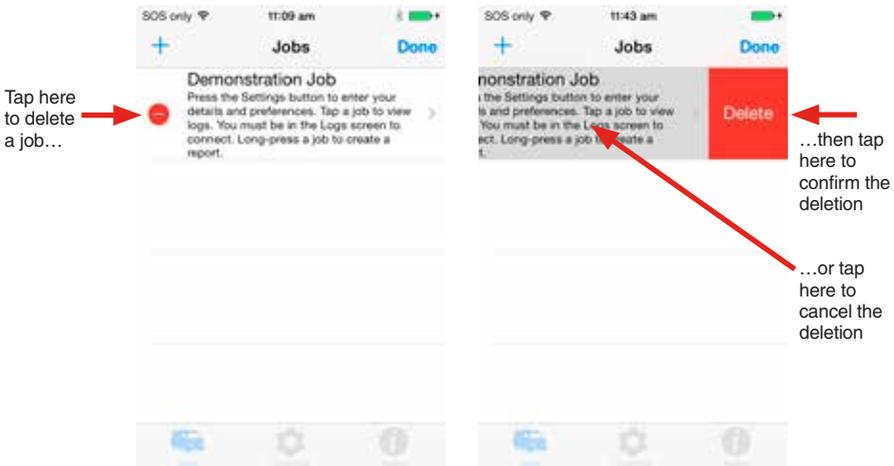
2. The “Edit” screen will appear:



3. To edit the job simply tap the job entry and you'll be able to change the Job Name and your customer's email address. You can also add or edit any optional notes associated with that job:



4. To delete a job tap on the red "-" circle in the edit screen:



5. To add a new job tap the “+” button:

6. After pressing “Done” the new job will appear in the “Jobs” list. Press “Done” again to exit the Edit screen:

4.6 Logging Your Test Results

Tapping on a job entry brings up a list of all tests logged under that job. If no tests have yet been logged for that job, such as when a new job has just been created, the log screen will be empty. You must be in the log screen before you start logging results from your *Spark-e-mate* so that log entries are added under the correct job.

You can tell that *Spark-e-mate* is connected to your iPhone and is ready to log when you see the *Bluetooth* symbol in the bottom-right corner of the *Spark-e-mate* display.

Whenever the LOG button appears on the *Spark-e-mate* display, you can press the LOG button to send the displayed test result to your iPhone and store it against the currently selected job:



Both *Spark-e-mate* and your iPhone will “beep” to indicate successful data transfer. The test result appears in the Logs screen and is saved in Spark-e-log’s database.

To edit or delete a logged test, press the “Edit” button. The editing process is exactly the same as when we edited a job:

The screenshot shows the 'Edit Log' interface. At the top, there are buttons for 'Cancel', 'Edit Log', and 'Done'. Below this is a 'DETAILS' section containing the date and time '23/09/2014 12:22:40PM', the test name 'Powered Fault Loop', and the result '0.99 ZsOhms'. A 'PASS / FAIL' section shows the result 'Passed' with a green toggle switch. Below that is a 'NOTES' section. Red arrows point from the text on the left to the 'Passed' result and the 'NOTES' section.

In the “Edit Log” screen you can add notes to that test result and also mark it as Passed or Failed

The actual test result cannot be changed.

If a result is not wanted, you should delete it, take another test, then log a new result

Tip: a quick way to mark a log result as Passed or Failed is to push and hold a log entry for one second:

The screenshot shows the 'Logs' screen with a list of test results. The 'Powered Earth Continuity' test has a blue checkmark. The 'Powered Fault Loop' test has a blue checkmark. The 'RCD Test' is highlighted with a red background. The 'Circuit Connections' test has a blue checkmark. Red arrows point from the text on the left to the 'Powered Fault Loop' and 'RCD Test' entries. Another red arrow points from the text on the right to the blue checkmark next to 'Powered Earth Continuity'.

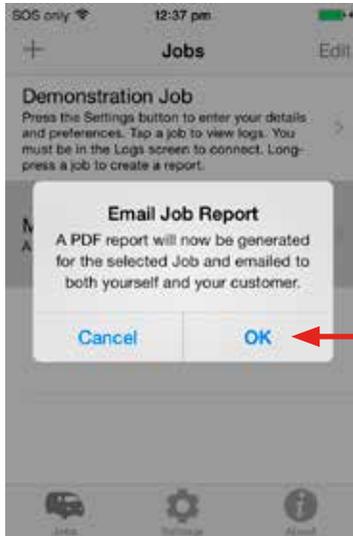
Push and hold a Log entry for one second to toggle it between Passed and Failed

Failed results have a red background

Passed results have a tick next to them

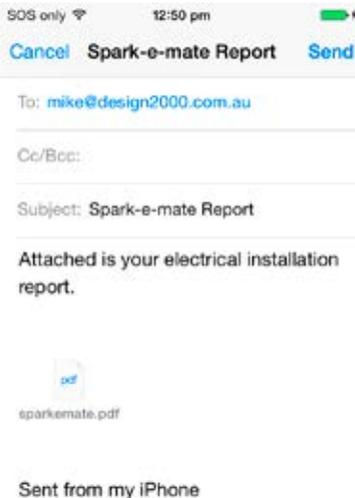
4.7 Printing and/emailing Your Test Results

1. Push and hold the required job entry for one second to generate a report:



Press "OK" to generate and email the test report to yourself and your customer

- Spark-e-log generates the report in PDF format and attaches it to an email. It will send a copy to yourself using the email address you entered into the Settings screen (see 4.4 Settings Menu) and another copy to your customer using the email address you entered for that job (see 4.5 Editing or Deleting Jobs and Creating New Jobs):



Make any required changes to the email subject or message text then press "Send"

Example report output:

Energisation or Verification of an Installation				
(AS/NZS 3000:2007 Clause 8.4)				
Date of energisation and original verification details are to be recorded and available on site in this accessible record. This also facilitates the process of re-verification at a later date.				
ELECTRICAL INSTALLATION & VERIFICATION RECORD		INSTALLATION: Demonstration Job		
DATE OF ENERGISATION: / /				
Testing Organisation & Department		Design 2000		
Test Equipment	Model Number	Serial Number	Manufacturer	Date of Purchase or Last Calibration
Spark-e-mate Electrical Installation Tester	Original Cat. No. 435STL	A1234567	Design 2000 Pty Ltd	28/10/2013
Test Date and Time	Test	Measurement	Notes	Result
23/09/2014 12:14:15PM	Voltage & Frequency	240V 50Hz		Pass
23/09/2014 12:21:56PM	Powered Earth Continuity	0.21 ZsOhms		Pass
23/09/2014 12:22:40PM	Powered Fault Loop	0.59 ZsOhms		Pass
23/09/2014 12:24:25PM	RCD Test	16ms at 30mA (90 degree)		Pass
25/08/2014 12:10:43PM	Circuit Connections	OK		Pass

The *Bluetooth* trademark is owned by the *Bluetooth* SIG.

Design 2000 Pty Ltd is a *Bluetooth* SIG registered member company licensed to use the *Bluetooth* word mark and logos.

Schneider Electric (Australia) Pty Ltd

Contact us: clipsal.com/feedback

National Customer Care Enquiries:

Tel 1300 2025 25

Fax 1300 2025 56

clipsal.com

Schneider Electric (Australia) Pty Ltd reserves the right to change specifications, modify designs and discontinue items without incurring obligation and whilst every effort is made to ensure that descriptions, specifications and other information in this catalogue are correct, no warranty is given in respect thereof and the company shall not be liable for any error therein.

© 2015 Schneider Electric. All Rights Reserved.
Trademarks are owned by Schneider Electric Industries SAS or its affiliated companies.