

QIKPAC USER MANUAL V1.15/06.22

Important!

Before installing, operating or maintaining QIKPAC, it is essential you read the instructions in this User Manual in full.

Subject to technical changes.

Contents

Safety & General Information	4
1.1 Intended Use	4
1.2 Working area and environment	4
2. Technical overview	5
3. Technical data	5
4. Dimensions	6
5. Turning the QIKPAC On & Off	6
6. Charging the QIKPAC	7
6.1 Display state of charge	7
6.2 Charging the QIKPAC	7
6.3 QIKPAC charging times	7
7. LED Status Guide	7
3. Linking QIKPACs	8
9. Connections	8
9.1 Connecting PSU	9
9.2 Interconnecting Cables	9
9.3 Splitter	9
9.4 QIKPAC Connections	9
9.5 Connecting Shoe	10
9.6 QIKDOC Connections	10
9.7 TUF-R HP Connections	10
10. Maintenance & Storage	11
11. Transportation	11
12. Cleaning	11
13. Disposal & end of life	12
14. Error handling	12
15. CE Marking	13
16. First Aid instructions	13
17. Liability	13
18. Customer Support	14

QIKPAC User Manual // PAGE 2

QIKPAC User Manual // PAGE 3

1. Safety & General Information

WARNING!

Failure to observe the following safety instructions written throughout this manual may result in serious injury, damage to the device or property damage. Use the battery according to the instructions in this manual. Keep this manual in a safe place for future reference.

Documentation for the QIKPAC consists of this User Manual and a Datasheet. Assembly personnel must read all documentation before starting assembly. Keep all documentation for as long as the product is in your possession. Ensure that all documentation is provided to subsequent owners.

For more information and support go to:

UK: https://www.oeelectrics.co.uk/2021/11/ qikpac-battery/

DE: https://de.oeelectrics.com/qikpac/

AUS: https://www.oeelsafe.com.au/qikpac/ USA: https://www.oeelsafe.com.au/qikpac/ battery/

or contact your local sales representative.

This User Manual may change without notice. The most recent version is available on our website.

1.1 Intended Use

e&oe

The QIKPAC is only to be used under the following circumstances, any other use is considered improper use:

- together with OE approved devices and components
- only be used by trained personnel who have read this manual and datasheet and understood the product.

Failure to do so may cause Failure, Faults, Damage, Injury, Fires or Explosions.

1.2 Working area and environment

The battery is not protected against all environmental influences. If the battery is exposed to certain environmental influences, it may cause Failure, Faults, Damage, Injury, Fires or Explosions.

- · Protect the battery from heat and fire.
- · Protect the battery from direct sunlight.
- · Use the battery only indoors.
- Do not expose the battery to any water.
- Store the battery only in a temperature range between -20°C - 40°C (see QIKPAC datasheet).
- Do not cover the battery with insulating objects during charging and discharging.
- Do not expose the battery to high pressure.
- Do not place the battery in a Microwave or in any high radio frequency environment.
- Protect the battery from chemicals and salts.
- Do not drop, crush, or expose the battery to excessive force.
- Do not charge a battery in a damp or wet environment.

The QIKPAC battery is in a safe condition if the following conditions are met:

- The battery is undamaged.
- The battery is clean and dry.
- The contacts are clean, dry and undamaged.
- The battery functions are operating normally.
- The battery is unmodified, disassembled or repaired.

If it is not in the above state, it is not in a SAFE OPERATING STATE. DO NOT CHARGE, DISCHARGE, OR USE THE Battery. Contact OE Customer Support.

2. Technical overview

A. Control button

This multifunction push button can be used to turn the QIKPAC on, off, and to check the current state of charge.

B. Status LEDs

The current State of Charge ('SOC') is shown following a single 1 second press of the control button when the battery is in wake mode.

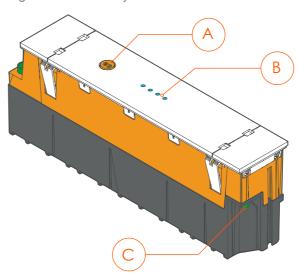
C. GST08i2 Connector One (Male)

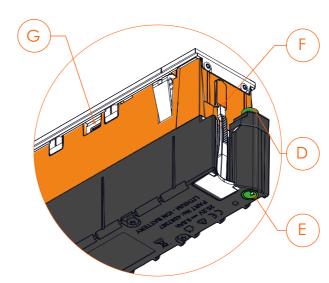
Primary GST08i2 connector.

D. GST08i2 Connector Two (Female) Secondary GST08i2 connector.

E. GST08i2 Connector Three (Female) Tertiary GST08i2 connector

Fig 1. QIKPAC key features





F. Slide mechanism

Several QIKPACs can be linked together to increase runtime.

G. USB-C Bootloader Port

The USB-C bootloader port is for programming and updating the QIKPAC and auxiliary control functions. For OE approved accessories only - this is not device charging port.

3. Technical data

Battery Capacity	240Wh
Usable Capacity	200Wh
Output Voltage	21.0V - 29.4V
Input Voltage	30V MAX
Maximum Output current per port	6A
Total shared MAX output current	12A
Features	 Short Circuit Protection Over Current Protection Under Voltage Protection Battery Overvoltage Protection Unit Over Temperature Protection
Safety Standards	 IEC/UL 62368-1 (Safety) IEC/UL 62133-2 (Li-ion Safety) EN/IEC 61000-6-3 (EMC) & 61000-6-3 FCC 15B (USA-EMC) UN38.3 (Shipping)
Weight	1.3kg (2.83lb)
Operation Temperature	10-35 °C (50-95 °F)

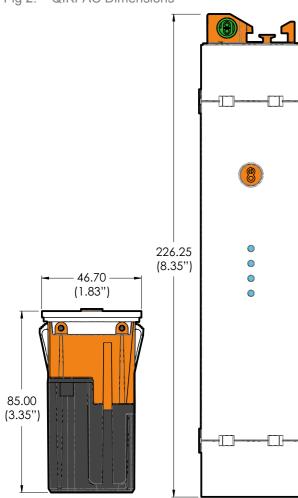
QIKPAC User Manual // PAGE 4 QIKPAC User Manual // PAGE 5

4. Dimensions

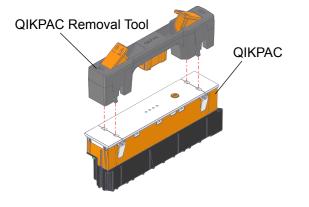
QIKPAC is part of the OE QIKFIT range, and fits into our standard 41.5mm slot in materials 1.00mm - 3.0mm thick. The length of the slot is determined by the number of QIKPAC Batteries and other OE components.

For further details on how to calculate the length of slot required, visit the OE website.

Fig 2. QIKPAC Dimensions



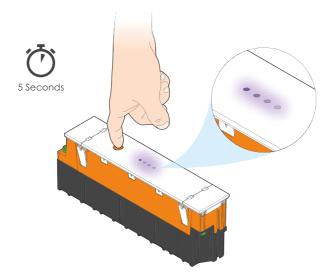
Once the QIKPAC has been inserted into a slot, the QIKPAC removal tool is required to extract it.



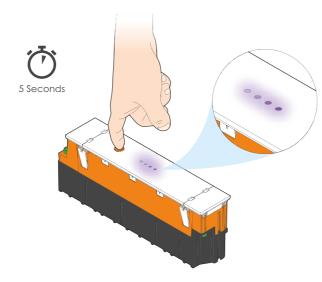
e&oe

5. Turning the QIKPAC On & Off

You will receive the QIKPAC in 'Ship Mode' which allows the battery to retain charge during shipping, and turns off the power to its outputs. To "Wake" the QIKPAC from Sleep Mode, press and hold the control button (approx. 4 seconds). Four pink LEDs will illuminate sequentially, indicating that the QIKPAC is powering on.



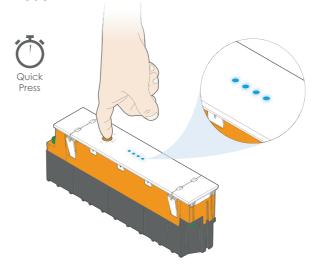
To turn off the QIKPAC and put it into Ship Mode, press and hold the Control Button for five seconds. Four purple LEDs will de-illuminate sequentially - In the reverse order to the "Wake" sequence.



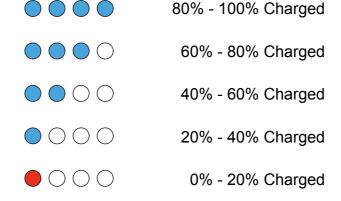
Once the QIKPAC is in Sleep Mode it will use only a small amount of standby power. enabling it to retain charge over long periods of time.

Charging the QIKPAC 6.1 Display state of charge

To see the current State of Charge (SOC) of a QIKPAC battery, short press the Control Button with the QIKPAC battery in wake mode.



The status LEDs will illuminate as per one of the below states to indicate the current SOC.



When the QIKPAC reaches 0% - 20% charge, a single red LED will remain lit without the control button being pressed.

6.2 Charging the QIKPAC

The QIKPAC can be charged in several ways, but all involve the use of the green GST08i2 connectors. All three GST08i2 connectors are both INPUTS and OUTPUTS. The LEDs will blink to indicate the current state of charge during the charging process. See Section 7 for further details.

Lithium Cells do not have memory as other battery technologies do, so it is safe to charge the QIKPAC at any state of charge without detriment to QIKPAC's life span.

PLEASE NOTE: It is possible to charge the battery while it is connected to one or more active accessories. However, this may increase the charge time.

6.3 QIKPAC Charging times

It takes approximately 5-7 hours to charge a completely empty QIKPAC battery. Two QIKPAC batteries linked together also takes approximately 6-8 hours. Three QIKPAC batteries takes approximately 9-11 hours.

The charging time depends on various influences, e.g. the temperature of the battery or the ambient temperature. Actual charging time may differ from specified charging time.

QIKPAC is shipped with approximately 30% charge. This is a legal requirement for shipping.

7. LED Status Guide

As viewed with the Control Button to the right of the Status LEDs.

LED Function	LED Code	Description
State of Charge (SOC)		80-100% ON for 5 Seconds after short button press
Short Button press		60-80% ON for 5 Seconds after short button press
Short Button press		40-60% ON for 5 Seconds after short button press
Short Button press		20-40% ON for 5 Seconds after short button press
		0-20% constantly ON without button press

e&oe

QIKPAC User Manual // PAGE 6 QIKPAC User Manual // PAGE 7

LED Function	LED Code	Description
Charger plugged in but Battery FULL		100% Battery LEDs ON
Charging	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	80-100% ON FLASHING
Charging	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	60-80% ON FLASHING
Charging	*	40-60% ON FLASHING
Charging	* 000	20-40% ON FLASHING
Charging	* 000	0-20% ON FLASHING

Charging		0-20% ON FLASHING
Fault mode		Over current fault on one of the ports. All outputs will remain disabled until cleared by a short button press. Current range allowed from a single port: 6.5 - 10A allowed for up to 20 seconds 10 - 19A allowed for up to 5 seconds. Combined current of over 19 Amps will cause QIKPAC to immediately turn off (after 320mS delay)
Fault mode		Maximum or Minimum charging temperature limit reached. (Charge: +5 to +45C) QIKPAC will not be charged while in this mode however it can still supply power to connected devices. LEDs indication happens only if a power supply is connected. Fault will be cleared automatically once battery cells are within temperature range.
Fault mode		Maximum or minimum Discharge temperature limit reached (Discharge: -20 to +60C) QIKPAC will not supply power nor receive charge from the PSU in this mode. Fault will be cleared automatically once battery cells are within temperature range.
T	0 0 0 0	D 1 " ' :
Turning On / Start up		Press button (approx. 4 secs): Four Pink LEDs

light up from left to right will turn on in 1 second intervals. All LEDs on

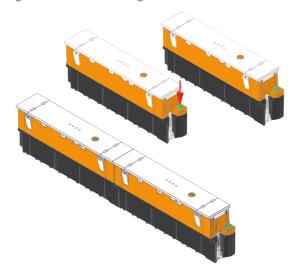
a successful startup.

LED Function	LED Code	Description
Ship mode / Shut down	0000	Short Button Press (0-5 secs): Four Pink LEDs light up then switch off one at a time from right to left.
Ship mode		Press & hold then re- lease (5-15 secs): One LED light will light for 1 second - this confirms the QIKPAC is in ship mode. This is the mode QIKPAC will arrive in, when shipped

8. Linking QIKPACs

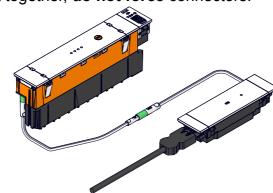
Several QIKPAC batteries can be linked together to increase capacity and runtime of connected devices. To link one QIKPAC to another, simply click one battery to the next as shown below.

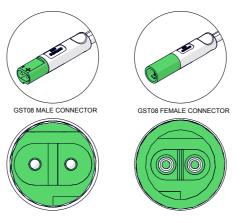
Fig 3. QIKPACs being linked



9. Connections

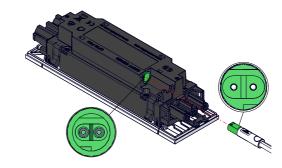
QIKPAC batteries and associated OE components can be connected together using GST08 interconnecting cables. These cables must be corrected aligned to slot together, **do not force** connectors.





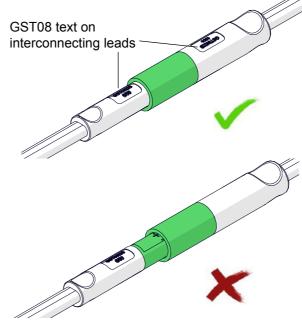
9.1 Connecting PSU

Align underside of PSU with writing on connector facing up.

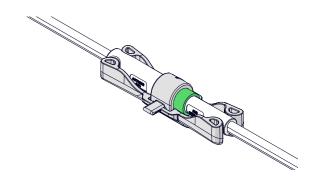


9.2 Interconnecting cables

Align writing on male and female cables to slot together.

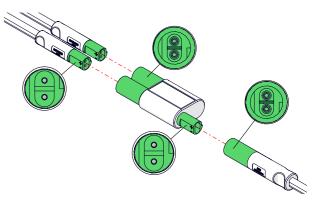


GST08 interconnecting cables can be secured together using a GST08 cable retention clip.

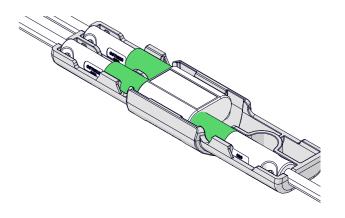


9.3 Splitter

GST08 splitter enables a single OE ANIMATE system DC power source to provide power to two devices via GST08 interconnect leads. Cables and splitter must be correctly aligned to slot together easily, do not force connectors together. Align + and - symbols on splitter to the writing on the interconnecting lead.



GST08 splitter and interconnecting cables can be secured together using a GST08 splitter retention clip and then screwed to a surface for cable management.

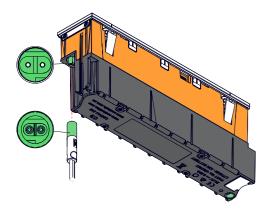


QIKPAC User Manual // PAGE 8 QIKPAC User Manual // PAGE 9

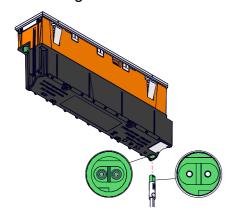
e&oe e&oe

9.4 QIKPAC Connections

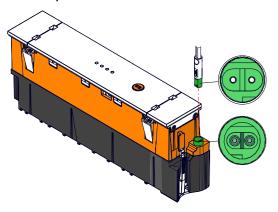
QIKPAC battery power input, align writing on the interconnecting cable with battery slide.



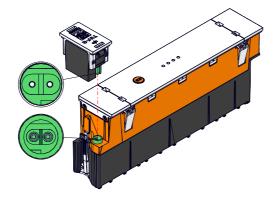
QIKPAC battery power output, align writing on interconnecting cable with white cover.



Align writing on interconnecting cable with white clip.

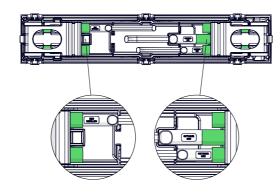


Align TUF-R HP with QIKPAC, both green GST08 connectors should be on the same side.



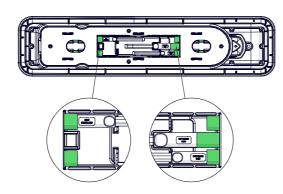
9.5 Connecting Shoe

QIKPAC connecting shoe connections, writing on interconnecting cables is visible once cables are fitted into place.



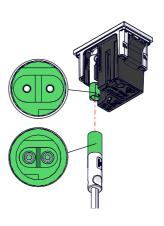
9.6 QIKDOC Connections

QIKDOC connections, writing on interconnecting cables is visible once cables are fitted into place.



9.7 TUF-R HP Connection

The writing on the interconnecting cable should align on the inside of the TUF-R HP module as shown below.



10. Maintenance & Storage

QIKPAC battery has a life span like all other batteries, to prolong battery life follow these storage instructions.

- Do not assemble and disassemble a battery.
- Handling of batteries, especially when wearing jewellery, could result in a serious burn.
- Remove the battery pack from the charger when it is fully charged and ready for use.
- For long term storage of QIKPAC:
 QIKPAC should be stored at 40-60%
 charge (2 LEDs) in a low humidity
 environment (less than 70% RH)
 with no corrosive gases and no
 condensation on cells and charged
 yearly to keep them at this level.
 Ideal Temperature ranges:
 Up to 3 Months: -20°C to 40°C
 Longer Duration: 10°C to 20°C (Ideal)

Storage:

- The battery is set to Ship/Shutdown mode.
- The battery is out of the reach of children.
- The battery is clean and dry.
- The battery is indoors.
- The battery is separate from other devices or chargers.
- The battery is in an electrically nonconductive package.
- The battery is not stored outside the permissible temperature range.

11. Transportation

The QIKPAC must be packaged and transported according to the current regulations for lithium ion batteries. These are also applicable when the product is repackaged in case of a return delivery.

The packaging must be labelled with a UN3480 lithium ion battery label as shown below.

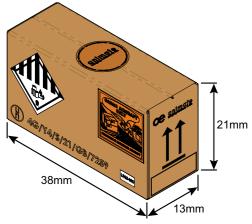


Fig 4. QIKPAC Packaging

If packed with other components, the QIKPAC must remain in its primary packaging. In this scenario, the battery label must be placed on the external packaging.



Fig 5. Shipping Labels

Regulations for transporting lithium-ion batteries are set for road transport, air transport (IATA) and sea transport (IMDG). The Battery Pack must be handled with care to minimize the risk of malfunction, damage and injuries.

IATA rules as of April 2016 states that lithium batteries may only be charged to a max of 30% if they are to be transported by air (freight aircraft).

QIKPAC User Manual // PAGE 10 QIKPAC User Manual // PAGE 11

12. Cleaning

Sharp cleaning agents, high-pressure cleaners or sharp objects can damage the battery. If the battery is not cleaned properly, components may not function properly and safety devices may be overridden.

· Clean the battery with a soft, slightly damp lint free cloth.

If the battery is not serviced or repaired correctly, components may no longer function properly and safety devices may be overridden. Persons can be seriously injured or harmed.

- Do not service or repair the battery vourself.
- If the battery needs servicing or repair: Contact OE Customer Support.

Disposal & end of life

QIKPAC is not designed for user repair. In the event of damage, please contact OE Customer Support. For UK disposal please visit www.complydirect.com

For Australian disposal please visit: https:// bcvcle.com.au/

For USA disposal please visit: https://www. epa.gov/recycle/used-lithium-ion-batteries The QIKPAC is an electrical and electronic device that must be disposed of separately from household trash in accordance with the WEEE directive 2012/19/EU. Products of this type are labelled with the symbol



Fig 6. WEEE Directive Logo

e&oe

shown on the below.

Before disposing of materials and components, check their recyclability. Recycle all parts if possible. Dispose of all materials and parts according local guidelines and regulations. Batteries should be recycled, to avoid the release of hazardous substances into the environment.

Under normal use each QIKPAC is capable of an estimated 2,500 charge cycles with 70% capacity remaining. This estimate is dependant on type of load and usage.

14. Error handling

In the event of an error QIKPAC will alert the user by using a specific LED status, as described in section 7. LED Status.

Most errors can be rectified by removing the source of the fault (over-current on a port) then pressing the button to turn it back on to clear the fault, or by allowing the QIKPAC to cool down. The fault modes are a built-in protection feature for the safety of the user, and to prolong the life-span of the battery.

Over-current Fault	An over-current fault is when a device attached to a port on the QIKPAC draws more than 6A. The problematic port will remain disabled until cleared by a short press of the Control Button.
Max charge Temperature	Charging temperature limit reached. QIKPAC will not be charged while in this mode however it can still supply power to connected devices. LEDs indication happens only while a power supply is connected. Fault will be cleared automatically once battery cells cool down.
Max discharge temperature	Discharge temperature limit reached. QIKPAC will not supply power nor receive charge from the PSU in this mode. Fault will be cleared automatically once battery cells cool down.

General Fault	The QIKPAC has detected
	a fault other than those
	previously listed. Contact
	OE Customer Support for
	assistance.

CE Marking

The QIKPAC Battery is CE & UKCA marked by OE Electrics as complying with:

- EU Battery Directive 2006/66EC as amended by 2013/56/EU Electromagnetic Compatibility Directive 2014/30/EU
- ROHS Directive 2011/65EU as amended by 2015/863EU plus the equivalent UK regulations
- EU Batteries Directive 2013/56/EU Safety Standards:
- IEC/UL 62368-1 (Safety)
- IEC/UL 62133-2 (Li-ion Safety)
- EN/IEC 61000-6-3 & 61000-6-1 (EMC)
- FCC 15B (USA-EMC)
- UN38.3 (Shipping)

16. First Aid Instructions

In the unlikely event that your QIKPAC breaks or bursts, certain measures must be taken to ensure the safety of persons in the vicinity.

Eyes:

Exposure is considered unlikely unless cell casing is damaged. If your eyes come into contact with a damaged battery or gas, flush with plenty of water for at least 15 minutes until the stinging and irritation subside and seek immediate medical attention.

Skin:

Exposure is considered unlikely unless cell casing is damaged. If your skin comes into contact with a damaged battery, immediately take off contaminated clothing and wash your skin with water or shower. Seek immediate medical attention if burning sensation continues.

Inhalation:

Exposure is considered unlikely unless

cell casing is damaged. Move to fresh air immediately and rest. If you experience shortness of breath, dizziness or headache, seek immediate medical attention.

Ingestion:

Exposure is considered unlikely unless cell casing is damaged. If the battery or any battery parts are ingested do not induce vomiting or give food or drink. Seek medical attention immediately. See QIKPAC MSDS here.

17. Liability

QIKPAC complies with all currently applicable health and safety regulations. However, risk can result from incorrect operation or misuse. OE Electrics is not liable for damage or injury caused by:

- Improper product use
- Disregard of the documentation
- Unauthorised product alterations
- Improper work on and with the product
- Operation of damaged products
- Worn parts
- Improperly performed repairs
- Unauthorised changes to the operating parameters
- Disasters, external influence, and force majeure
- Use with unapproved components

The information in this User Manual describes the characteristics of the product without assurances.

Resellers assume responsibility for the QIKPAC products installed in their applications. They must ensure their product complies with all relevant directives, standards, and laws. OE Electrics shall not be held liable for any damage that is directly or indirectly caused by the delivery or use of this document.

e&oe

18. Customer Support

Customer Support Team: sales@oeelectrics.co.uk +44 (0) 1924 367 255

Head Office
OE Electrics Limited
OE House
Thomas Maddison Lane
Calder Park
Wakefield
WF4 3GH
UK
Tel: +44 (0) 1924 367 255

OE Elsafe 2 / 11-17 Wilmette Place Mona Vale NSW, 2103 AUSTRALIA Tel: 1300 ELSAFE (357 233) sales@oeelsafe.com.au

OE Electrics GmbH Wehrstrasse 1a, 51645 Gummersbach Germany

Tel: +49 (0)2261 958 3001 E-Mail: info@oeelectrics.de

OE Electrics Inc.
North America
USA 1(844)-927-0600
sales@oeelectrics.com

wait, there's more!



scan to discover the entire ANIMATE range

get in touch

OE ELECTRICS LTD.

OE House, Calder Park, Thomas Maddison Ln, Wakefield WF4 3GH

t: +44 (0) 1924 367255

e: sales@oeelectrics.co.uk

www: oeelectrics.co.uk