

Renewable Demonstration Unit

Solar PV & EESS

User Instructions

Table of Contents

General Health and Safety Advice	2
User Instructions	3
Equipment Key	6
Contact Us	7

To be used only by a competent person.



General Health and Safety Advice

.

Please carry out the following to ensure safe methods of work during the use of this demonstration unit.

- 1. Ensure that the demonstration unit is connected by a competent person to ensure electrical safety.
- 2. Inform your electrical tester about this rig, so that it can be included in the portable appliance test, where appropriate.
- 3. Inform your manual handling advisor, so that anyone using the rig can be trained and a risk assessment carried out.
- 4. Ensure the battery is suitably maintained by a competent person.



User Instructions



Pre-check all equipment is fixed, connected appropriately and clean.



Check all switches and breakers are in the "OFF" position.





Plug the unit into a mains socket.



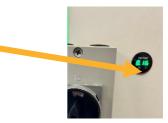
Switch red L.E.D. trail on via the Residual Current Circuit Breaker in the Consumer Unit, to simulate Distribution Network Operator fossil fuel supply.





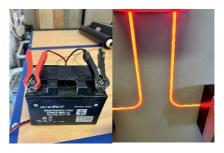


Ensure voltage is present via the reading on digital display.





Check red L.E.D.'s are showing a charge of the Electrical Energy Storage System.





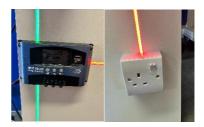
Document the solar level if equipment available to do so (irradiation meter).







Evidence green L.E.D.'s are connected to the Electrical Energy Storage System and simulate the battery supplying the Consumer Unit independently of the D.N.O. supply.



Note: This unit will either default to battery, or PV – whichever is supplying the most voltage.



Operate the functional switches to evidence load at relevant junctures.



On completion of demonstration, isolate all supplies, unplug rig and secure mains cable appropriately.



Equipment Key

- 1. AC Isolator
- 2. RCBO Type Consumer Unit
- 3. Critical Light
- 4. Critical Socket
- 5. DC Isolator
- 6. Photovoltaic Panel

- 7. Electrical Energy Storage System
- 8. Fossil energy
- 9. Green energy
- 10. Meter to gauge usage
- 11. PCR (Defaults to max. supply – PV, or EESS – whichever is greater)





Contact Us

Unit 8 Easter Industrial Park, Ferry Lane,

Rainham, Essex RM13 9BP

01708 528240

training@thequantumgroup.uk.com

April 2024

