

# BT-1 BLUETOOTH MODULE



Bluetooth Module for Solar Charge Controllers

Version 2.1



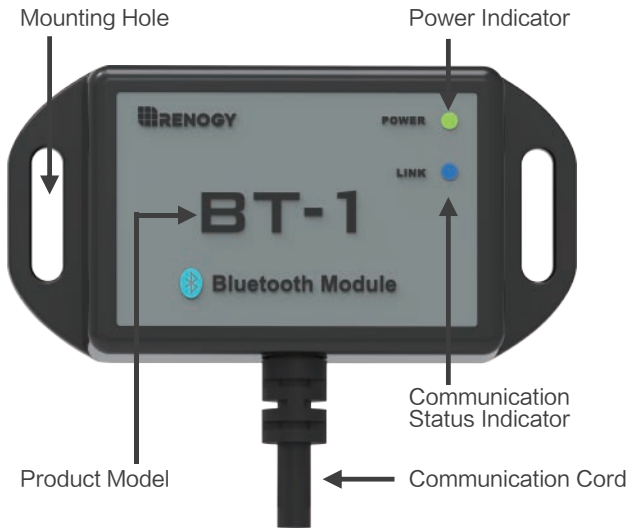
## General Information

The Renogy BT-1 is a great addition to any compatible Renogy solar charge controllers. Powered by its RJ12 communication port, the BT-1 provides wireless monitoring of system data and allows users to change parameters through the Renogy DC Home smart phone App.

## Key Features

- Wirelessly monitor and control compatible solar charge controllers via Bluetooth
- Connects to our user-friendly smart phone App, Renogy DC Home, to keep track of your system
- Embedded exclusive Bluetooth chip with high efficiency and low energy consumption
- Bluetooth 4.2 and BLE technology provides fast and uninterrupted communication
- Powered directly through RJ12 communication port
- Signal range up to 82ft ( 25m )
- Two LED lights indicate the power and Bluetooth connection condition

## Identification of Parts





## To Download App

1. The Android version of the Renogy DC Home APP is available to download on Renogy.com and the Google Play Store.

In the Google Play Store, simply search “Renogy DC Home” in App store to download.

2. For IOS version, simply search “Renogy DC Home” in App store to download.

# Operation

## ■ Connection

Connect the BT-1 Bluetooth module to any Renogy solar charge controller with an RJ12 port and RS232 communication protocol.



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## ■ Communication status indicator

Green Power Indicator:

Power Indicator	Status	Note
	Solid (Green)	Power On
Off	Power Off	

Blue Communication Indicator:

Link Indicator	Status	Note
	Flashing (Blue)	Communicating
Off	Stand by	

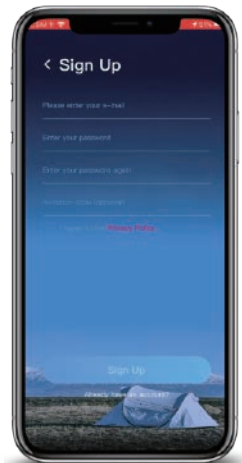


## Compatible Models

Compatible Models	All Renogy Controllers with RJ12 port RNG-CTRL-ADV30      RNG-CTRL-RVR20 RNG-CTRL-WND10      RNG-CTRL-RVR30 RNG-CTRL-WND30LI      RNG-CTRL-RVR40 RNG-CTRL-WNDPG10      RNG-CTRL-RVR60 RNG-CTRL-RVR100
Communication Protocol	RS232
Port Type	RJ12

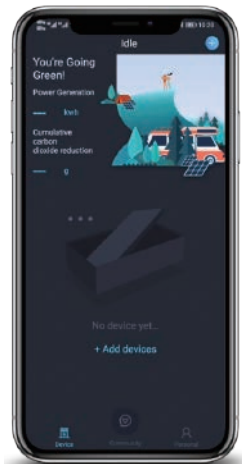
## ■ How to Connect Via Renogy DC Home App:

1. First-time users of the Renogy DC Home App will need to create an account. If you have an existing Renogy.com account, you can use those same credentials. Otherwise, you will need to register a new account.



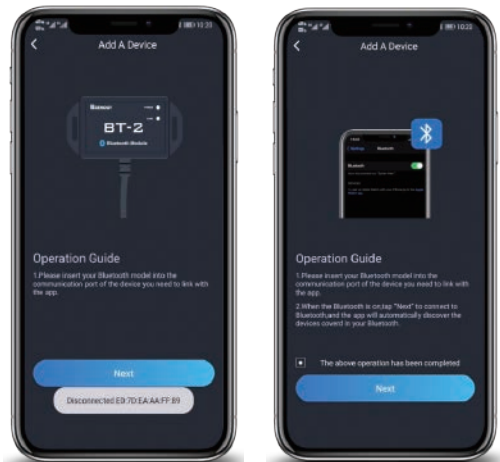
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2. After logging in successfully, you need to add your device. You can do this by clicking the blue plus button located on the upper right corner or by tapping the blue “+Add devices” link at the bottom of the screen.

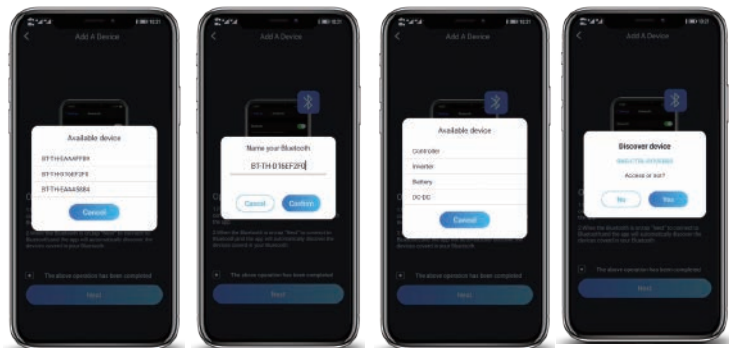


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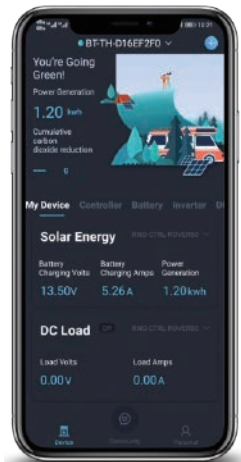
3. An Operation Guide will pop up. Follow the directions by turning on your device's Bluetooth and then selecting "Next". After confirming your connection, tap the checkbox and then select "Next". The App will now look for the device.



4. When a device is found, select the Bluetooth device, then name the device if you wish. Afterwards, press “Next” and then select the type of device you are connecting. In this example, we will select Charge Controller. When successful, the App will confirm the product SKU. If the SKU is correct, click “OK” to start communicating with your Rover 30Amp.



5. In the main interface, you can see the general parameters of the charge controller under “my devices” section.



## Technical Specifications

Description	Parameter
Model	BT-1
Standby Power Consumption	0.04W
Operating Power Consumption	0.05W
Communication Range	≤82ft (25m)
Serial Baud Rate	Fixed Baud Rate 9600bps
Communication Protocol	RS232
Port Type	RJ12
Cable Length	5.00m (16.4ft)
Dimensions	67.3 X 35 X 14mm
	2.65 X 1.38 X 0.55in
Installation Dimensions	67.3 φ3.5mm (2.66 φ 0.14in)
Operation Temperature	-20 C ~85 C (-4°F to 185°F)
Protection Grade	IP54
Weight	130g(4.58oz)

## FCC Compliance Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:



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- Reorient or relocate the receiving antenna.
  - Increase the separation between the equipment and receiver.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.

### ( 3 ) FCC 20cm Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1) L'appareil ne doit pas produire de brouillage;

2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne sur l'exposition et la conformité de rf.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Cet émetteur ne doit pas être Co-placé ou ne fonctionnant en même temps qu'aucune autre antenne ou émetteur. Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.

Renogy reserves the right to change the contents of this manual without notice.

**US**

- 📍 2775 E Philadelphia St, Ontario, CA 91761, USA
- ☎ 909-287-7111
- 🌐 [www.renogy.com](https://www.renogy.com)
- ✉ [support@renogy.com](mailto:support@renogy.com)

**CA**

- 🌐 <https://ca.renogy.com>
- ✉ [supportca@renogy.com](mailto:supportca@renogy.com)

**CN**

- 📍 苏州高新区科技城培源路1号5号楼-4
- ☎ 400-6636-695
- 🌐 <https://www.renogy.cn>
- ✉ [support@renogy.cn](mailto:support@renogy.cn)

**AU**

- 🌐 <https://au.renogy.com>
- ✉ [supportau@renogy.com](mailto:supportau@renogy.com)

**UK**

- 🌐 <https://uk.renogy.com>
- ✉ [supportuk@renogy.com](mailto:supportuk@renogy.com)

**JP**

- 🌐 <https://www.renogy.jp>
- ✉ [supportjp@renogy.com](mailto:supportjp@renogy.com)

**DE**

- 🌐 <https://de.renogy.com>
- ✉ [supportde@renogy.com](mailto:supportde@renogy.com)