

User Manual

Constant Current XDischarger XDS1901 - v1.0



OPERATIONAL INSTRUCTIONS

Discharger uses LED and buzzers for indicating various stages of discharge and messages.

Discharger Indicators:-

- LED:

LED flashes while discharger gets ON or OFF.

- Buzzer:

Buzzer beeps while discharging ON and OFF.

- Battery Temperature:

Device gets automatically off when battery temperature reaches 80 degree celsius.

Do's

- Clean the battery terminals before connecting it.
- Connect the discharger cables to correct polarity.
- Set the correct mode for discharging for the battery.
- Connect the discharger with a mobile application.
- When discharger cycle gets over, put the battery immediately on charge to save the battery life
- Keep the battery top dry and clean during discharging.

Don'ts

- Do not insert AH value in Mobile application repeatedly.
- Do not discharge damage battery.
- Do not discharge the battery with corroded terminals.
- Avoid connecting discharging cables to reverse polarity.
- Do not extend the battery cable which may result to loss in output voltage.
- Do not spill over any liquid material over discharger.
- Do not switch on and off the physical switch on the discharger body.

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INTRODUCTION

To conduct discharger test on 12V Battery with a predefined inbuilt resistive load.

Communication

Discharger uses wireless communication with Mobile Application using bluetooth connectivity.



Discharger has separate 12 V supply input which can be used to discharge battery with lower voltage rating

SAFETY NORMS

Unpacking:

Dischargers are supplied in packed condition from our factory. Proper care must be taken during the unpacking of the discharger to ensure that the discharger does not get damage.

Storage:

The Discharger should always be kept in a dry and clean area.

Electrical Protection:

Do not connect the Discharger with reverse polarity. This may blow off the output fuse link.

TECHNICAL SPECIFICATIONS

Dc Input Voltage	(12V)
Discharging Load	100W (8.3A)/200W (16.8 A)/300W (24.9 A)/400W (33.2A)/500W (41.5 A)/600W (49.8 A)
Discharger Cut of Voltage	9.5 V
Battery Type Selection	Inverter / Solar / Backup / Automotive / SMF
Display Parameter	Battery Voltage, Discharging Current, Load, Battery temperature, Discharging Time
Physical Protection	Wrong / Reverse Connection and Overload
Thermal Protection	Discharger gets OFF if the battery temperature rises above 80 degrees
Discharger ON / OFF Switch	Toggle 1 : Takes input voltage from battery Toggle 2 : Takes input voltage from 12 V Adaptor
Indication	Buzzer, LED
Dimension	230 mm x 155 mm x 155 mm
Max Weight	2.8 kg

MOBILE APPLICATION SPECIFICATION

Mobile application connects with discharger via bluetooth, it discharges the battery with smart algorithm depending on the type of battery and discharging type.

In return it gives back battery parameter like Voltage, temperature, wattage, current after completion of Discharging process.

Suitable for Operating System	Android
Connectivity with Discharger	Bluetooth
Emergency Power OFF	Abort Button
Data Communication	BEEConnect Server

Discharge form

Discharging type	Select discharging type of the battery. 1. Voltage based 2. Time based
Battery Type	Select type of battery needs to be discharged 1. Inverter Battery 2. Solar battery 3. Backup Battery 4. Automotive Battery 5. SMF Battery
Battery Rating	Enter battery rating
Max time	Enter maximum time to which discharger discharges the battery
Target voltage	Enter voltage (discharger will remain on until battery voltage matches this target voltage)
Threshold voltage(%)	± % of entered target voltage

Discharge results

Battery Voltage	Displays voltage of the Battery
Battery temperature	Displays Battery temperature
Discharging Load	Displays discharger load (watts)
Discharging Time	Displays complete time taken to discharge the battery (HH;MM)
Discharging Complete (%)	Displays complete time taken to discharge the battery (in graphical manner)
Discharging Current	Displays active discharge current

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OPERATING PROCEDURE

Step 1: Connect the discharger to the battery with proper polarity.

Step 2: Pair the bluetooth with the android mobile.

Step 3: Open the application and click on the “connect” button as shown below

Step 4: Select the name of the bluetooth which is to be paired.

Step 5: Click on the start button (fig 3).

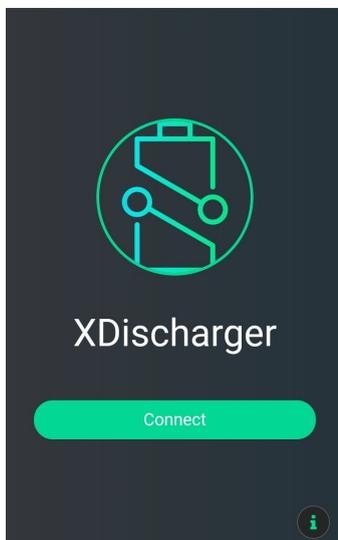


fig. 1

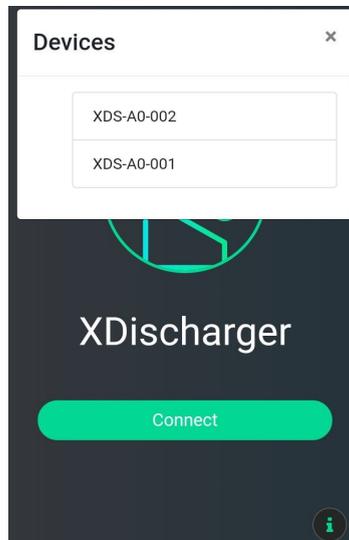


fig. 2

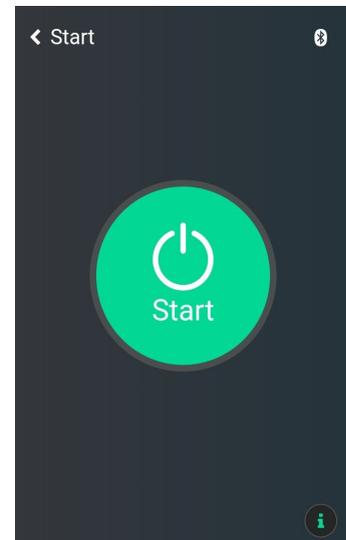


fig. 3

Step 6: Fill the form and click on the start button which is at the end of form(fig 4).

Step 7: After discharging, discharger will get off with the beep sound and the LED will flash off by taking the screen to Home Page.

Step 8: Safely remove the discharger clamp from battery after battery discharge.



fig. 4

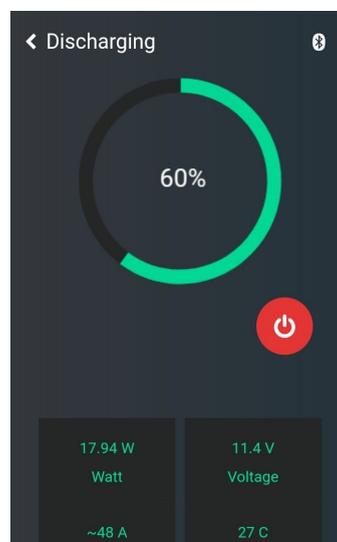


fig. 5

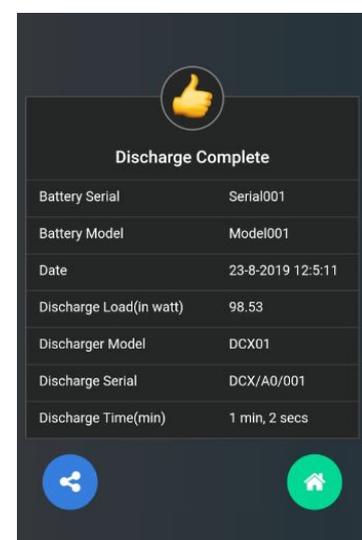


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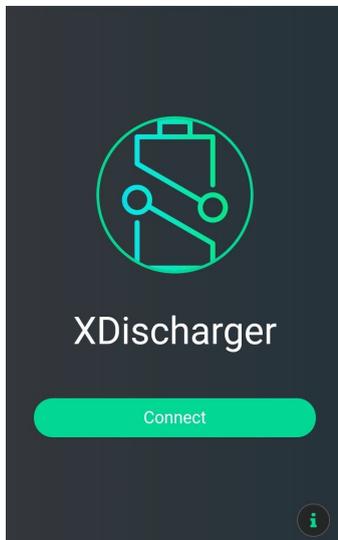


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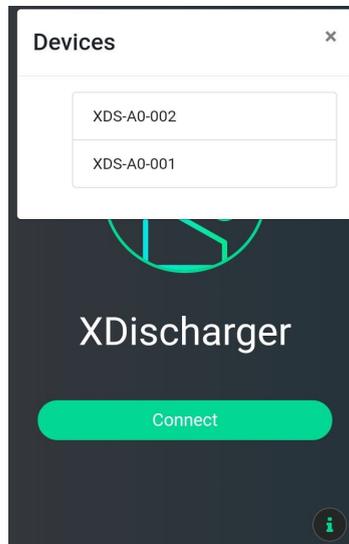


fig. 2

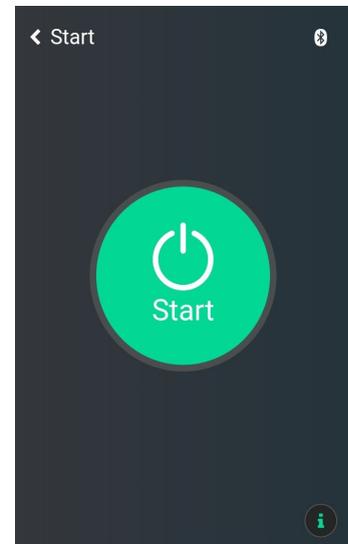


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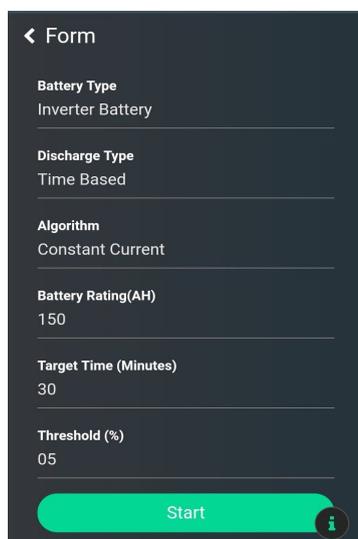


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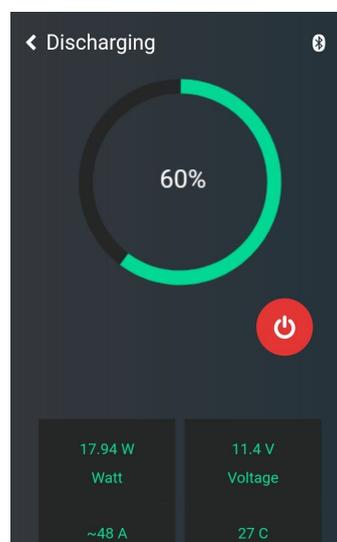


fig. 5

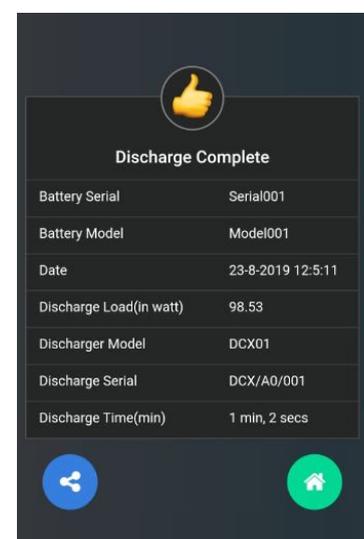


fig. 6

FAQS

Q: When shall user disconnect discharger?

A: When the discharging process is completed with an indication of beep for process completion or incase of any emergency by clicking the abort button in the Application.

Q: What if Application is not connected to discharger?

A: This can only happen if your bluetooth device is not paired with Mobile application.

Q: What if Discharger is not getting on?

A: Remove the discharger clamp and re-connect, then close the application and restart the Application again.

Thank you