



Valve Nodes Teardown

This teardown demonstrates how to take apart all components relating to the valve nodes. To assemble the valve nodes, follow the instructions in reverse.

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INTRODUCTION

In this teardown, you will be shown how to take apart (and reassemble) an Open-Storm valve node pair.

TOOLS:

- [Phillips #1 Screwdriver](#) (1)
 - [Phillips #2 Screwdriver](#) (1)
 - [Flathead 3/32" or 2.5 mm Screwdriver](#) (1)
 - [Flathead Screwdriver](#) (1)
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Step 1 — Tools Required



i You will need 2 small screwdrivers 2 large screwdrivers

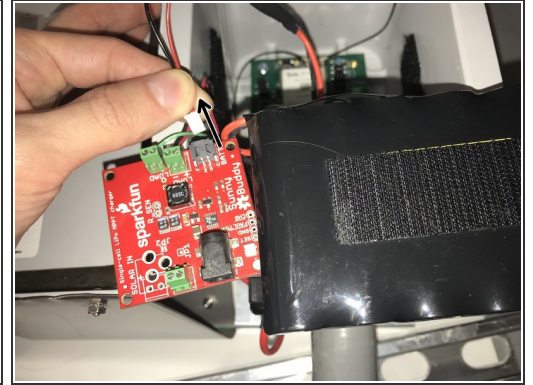
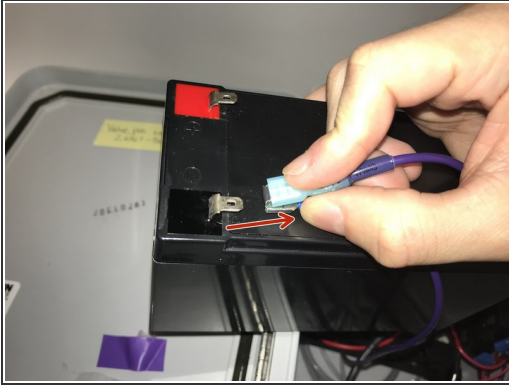
- 2x flat head
 - One ~5/64
 - One ~ 1/2
- 2x Phillips
 - One #1
 - One #2 (x 4)

Step 2 — Nodes Overview



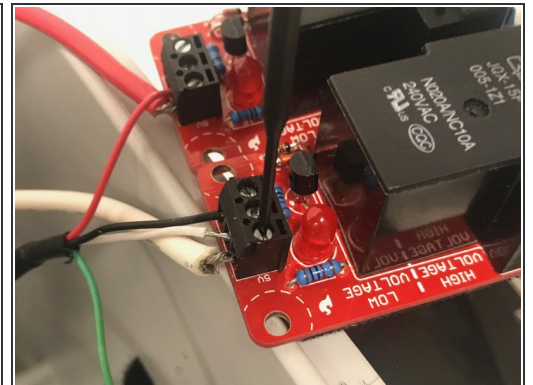
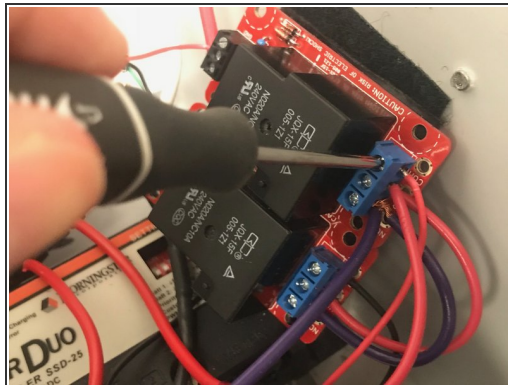
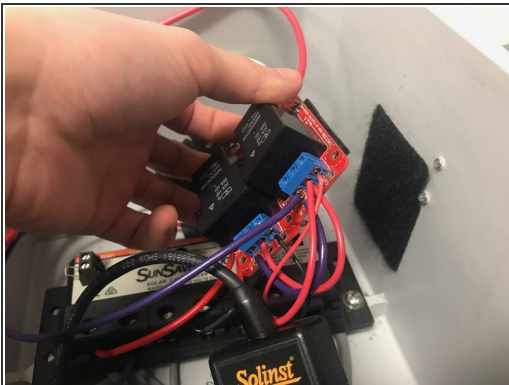
i Here we can see the two fully built nodes for the valve. We will use this as the starting point for our teardown.

Step 3 — Unplug Batteries



- For the large node unclip the battery
- For the smaller node, detach the battery from the solar charger

Step 4 — Large Node Step 1: Disconnect and Remove the Relays

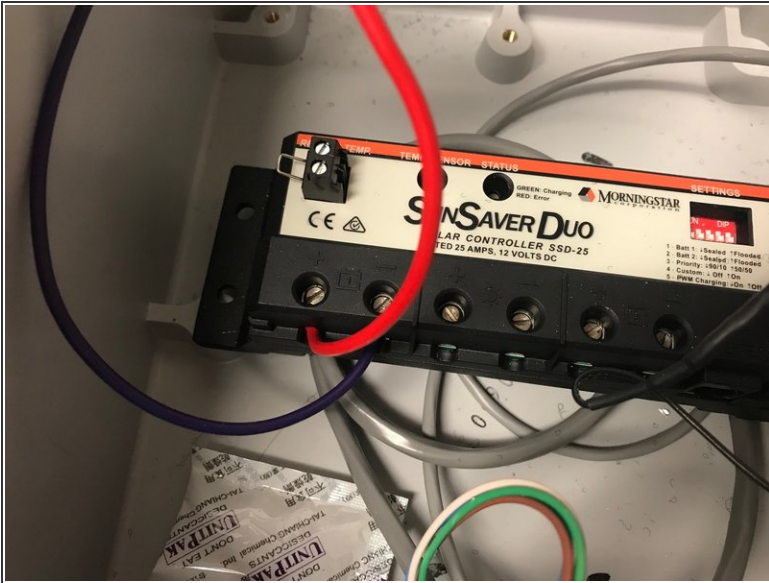



Ensure battery is disconnected



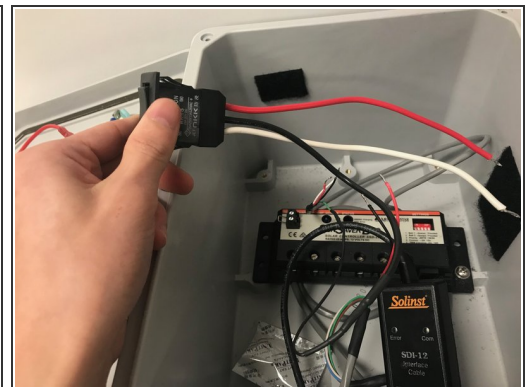
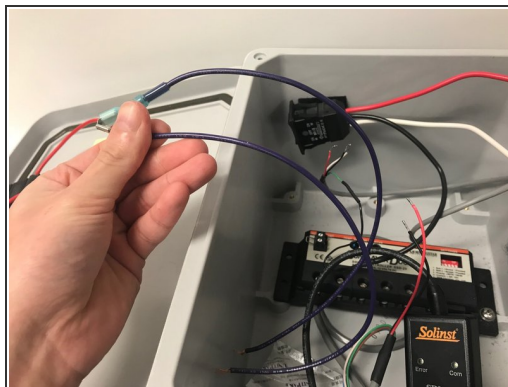
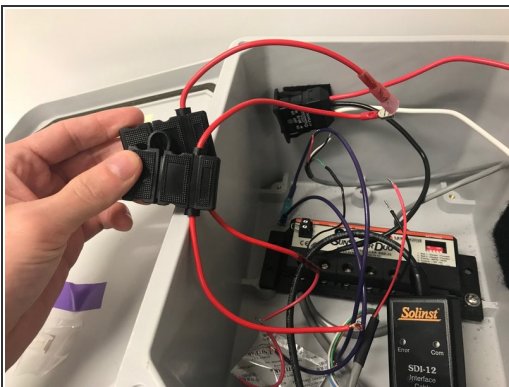
You will use both types of (small) screwdrivers


Step 5 — Large Node Step 2: Disconnect the Wires from the SunSaver Duo



-  Use the (large) flat head screwdriver


Step 6 — Large Node Step 3: Remove Components and Wires from Node



-  The switch will most likely still be connected to the small node and will not be able to be fully removed. We recommend removing it from the enclosure to make it tidy



Step 7 — Large Node Step 4: Unscrew and Remove the SunSaver Duo



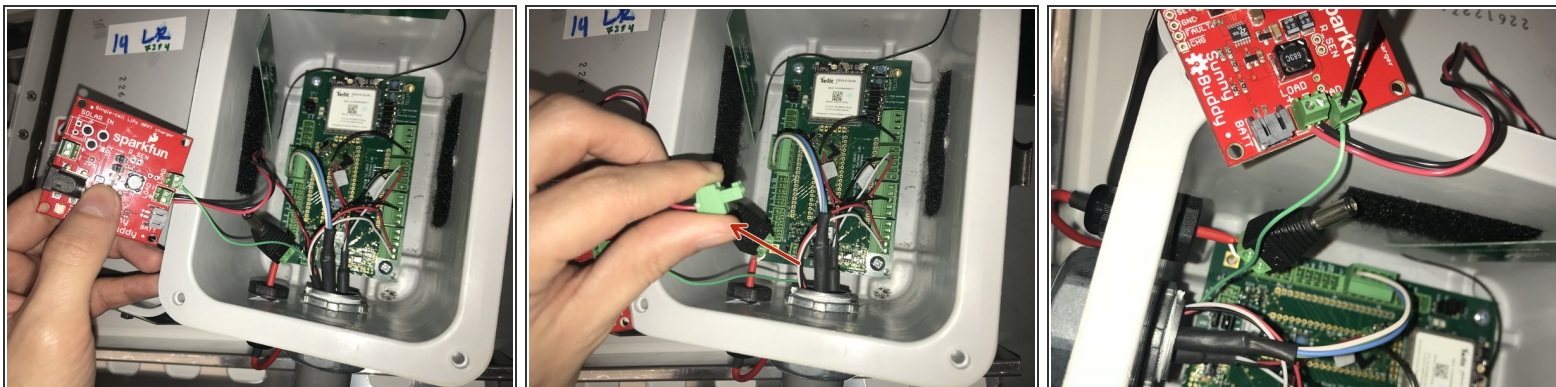
 Use the (large) Phillips screwdriver


Step 8 — Large Node Step 5: Component Overview



-  We have provided a picture of the inside of the enclosure to depict what will still remain inside
-  With the interior of the large node removed, these are the components we have (from left to right):
- SunSaver Duo
 - Relays
 - Battery
 - Battery Wires/Connectors
 - Switch (still connected to the small enclosure via the conduit)


Step 9 — Small Node Step 1: Disconnect the Solar Charger



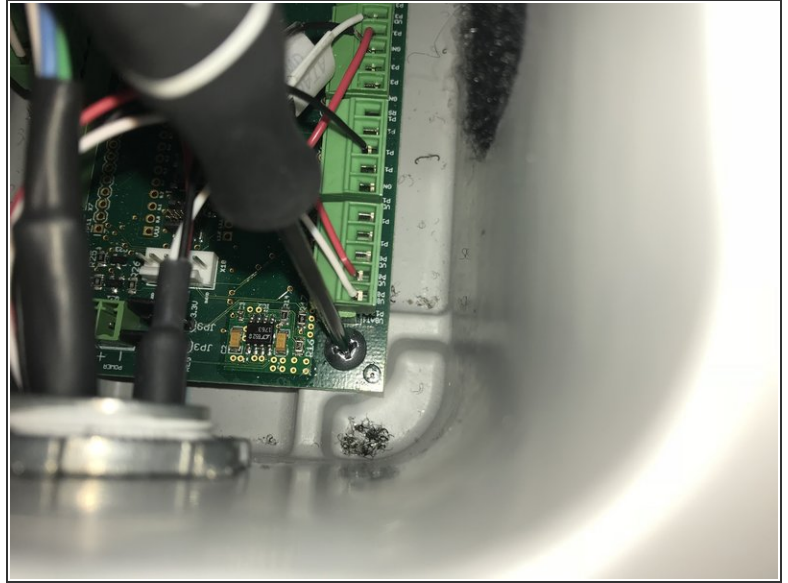
-  With the battery removed, our first step will be to remove the solar charger:
- Pull out the solar charger terminal from the board
 - Unscrew the green wire from the solar charger using the (small) flat head screwdriver


Step 10 — Small Node Step 2: Unclip the Module



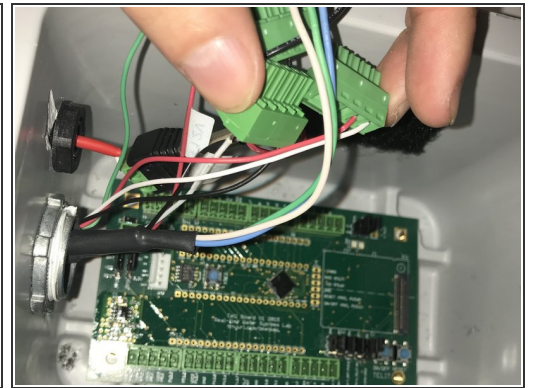
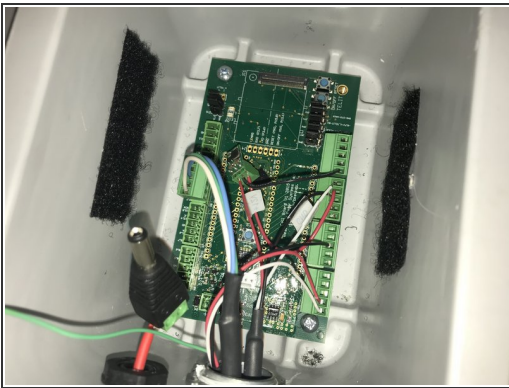
-  Pull the module from the bottom; pulling the module in a different way may damage it


Step 11 — Small Node Step 3: Unscrew the Board



-  Use the (small) Phillips screwdriver

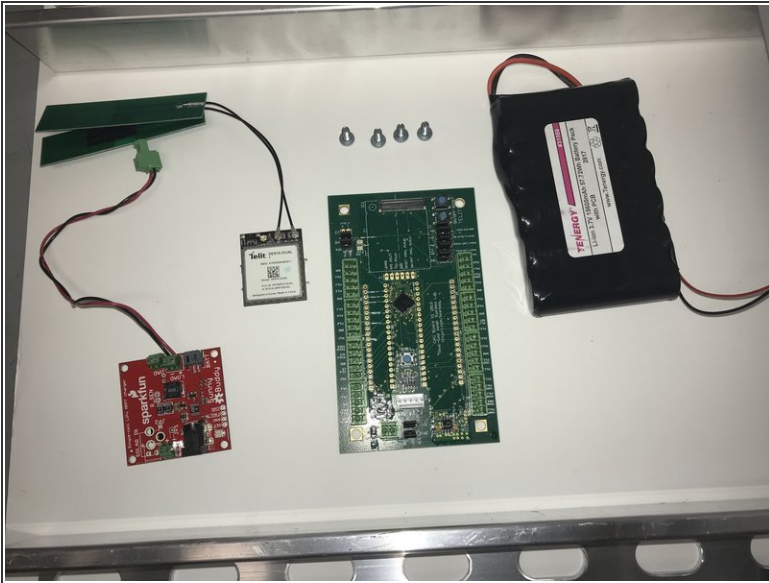
Step 12 — Step 4: Remove Terminals from Board





-  For this step, we recommend you record the current location of the current wires/terminals or refer to our pin documentation for reassembly purposes

-  [Pin Documentation](#)

Step 13 — Small Node Step 5: Component Overview



-  We have provided a picture of the inside of the enclosure to depict what will still remain inside
-  With the interior of the small node removed, these are the components we should have (from left to right)
- Solar charger with an attached terminal
 - Cell module with attached antenna on the "ANT" and "GPS" pins
 - Board with the four screws
 - The battery