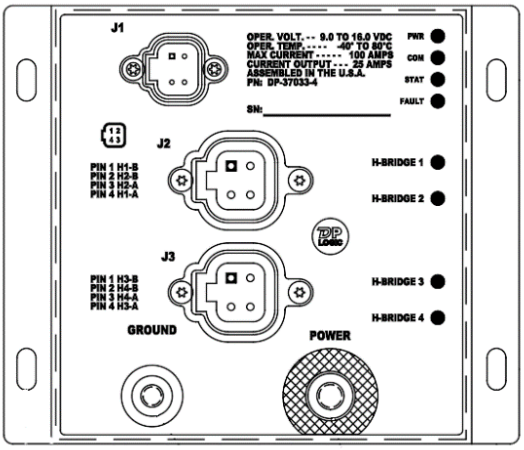
A Murrelektronik Company

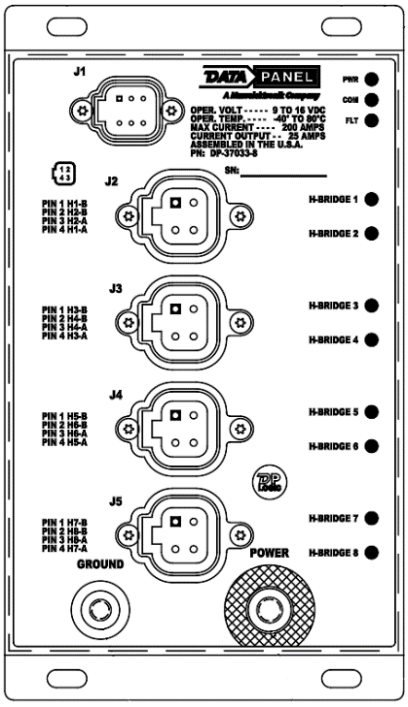
DP-37033-4 / DP-37033-8

QUICKSTART GUIDE

Document Control No. DP-37033-4/-8 REV A

22 June 2023

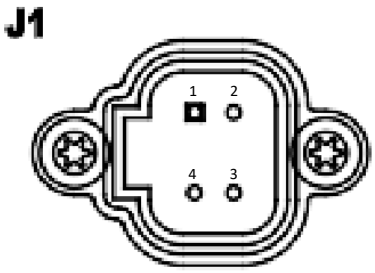
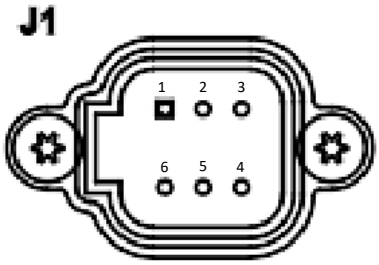




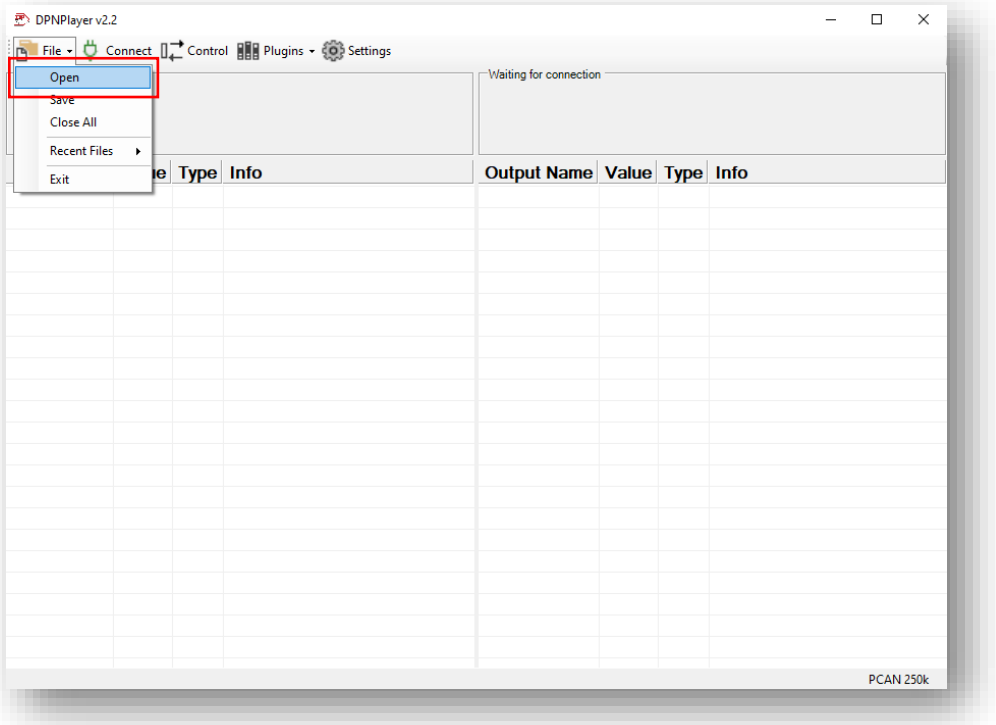
DOCUMENT REVISION HISTORY

Rev	DCN	Date	Description
A	-	22 June 23	First Draft for Quickstart Guide

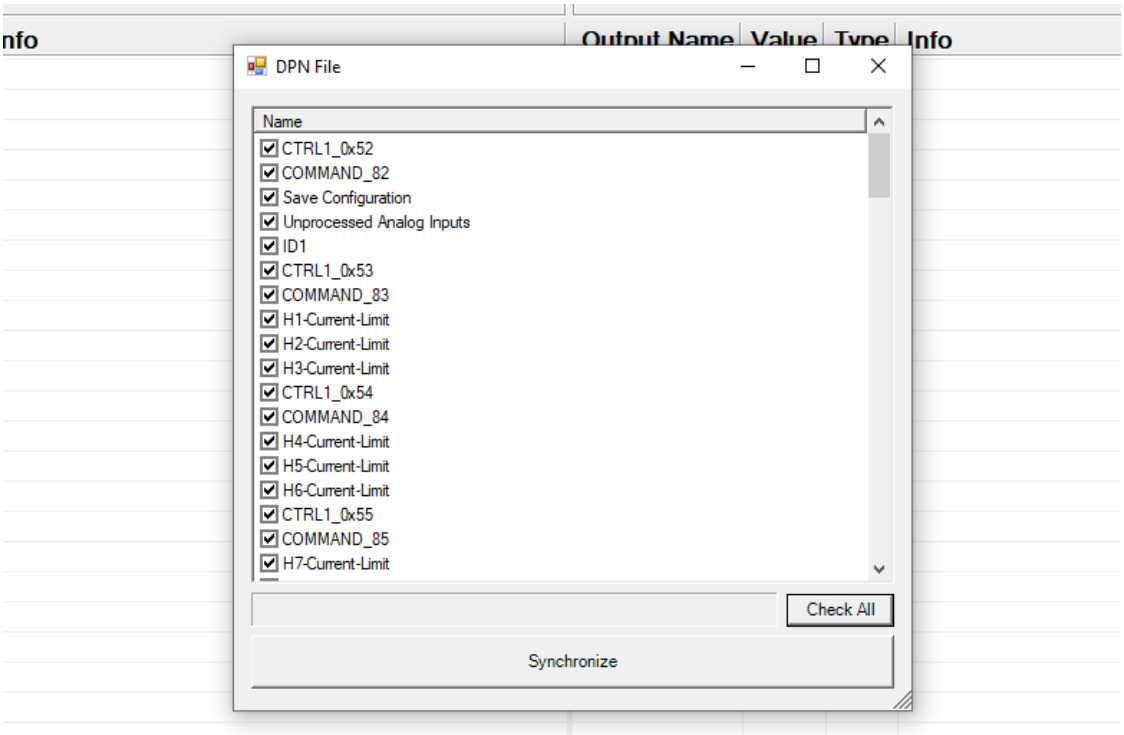
Step 1: Prior to connecting via your PC, the module should be connected like so. Voltage from your power supply is recommended to be set at 14.5VDC.

37033-4		37033-8	
			
Connector	**Function**	**Connector**	**Function**
J1-1	Node Power	J1-1	CAN High
J1-2	CAN High	J1-2	NC
J1-3	NC	J1-3	Node Power
J1-4	CAN Low	J1-4	NC
		J1-5	Shield
		J1-6	CAN Low

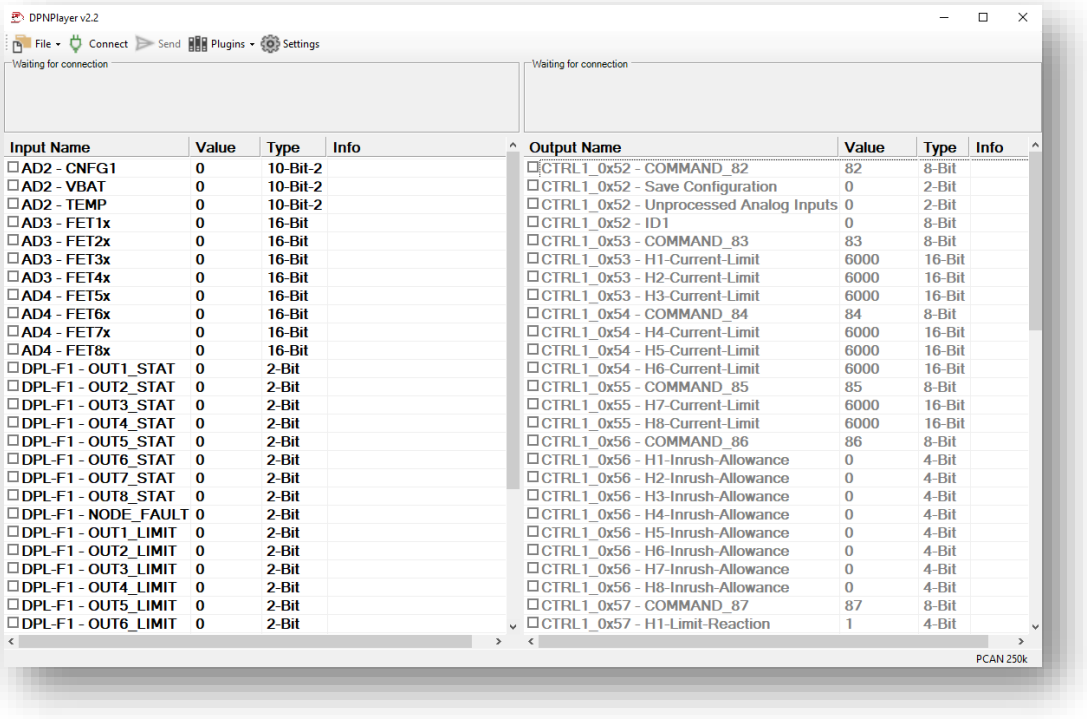
Step 2: Open DPNPlayer and click File > Open and select the "**35012-2H-CNFG.dpn**" file.



Step 3: Once the file is opened, this window will pop up. Click 'Check All' and then 'Synchronize'.



Step 3: Once the correct DPN file has been opened, this is how the window should look.

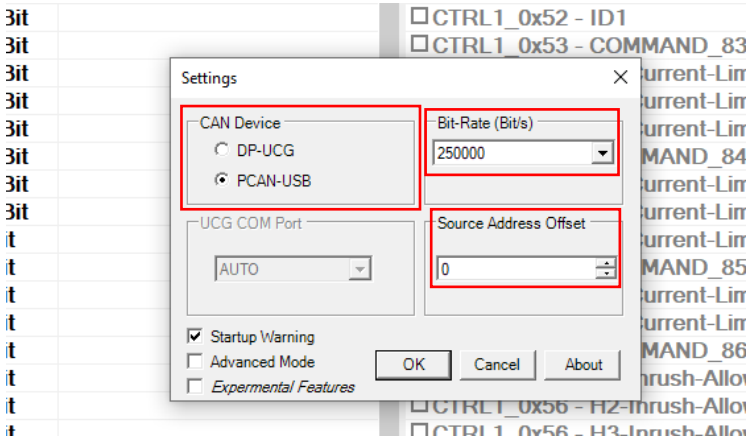


Step 4: Click on Setting and select the CAN device you are connected you are using to connect to the module. If you are using a Data Panel UCG, select **DP-UCG**. If you are using a Peak Tool, select **PCAN-USB.**

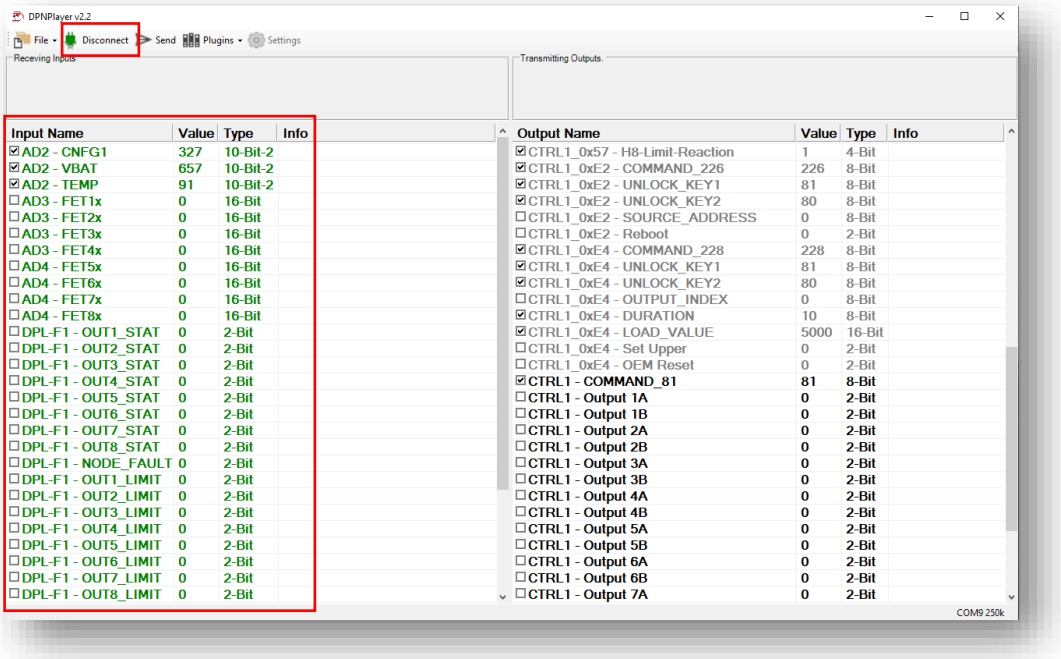
You can also select the **BAUD rate** you are using and the **Source Address Offset** for your connected device.

Click “OK” when finished.

In this example, we are using a Peak tool to connect. Our module is set at a BAUD rate of 250k and at a Source Address Offset of 0.

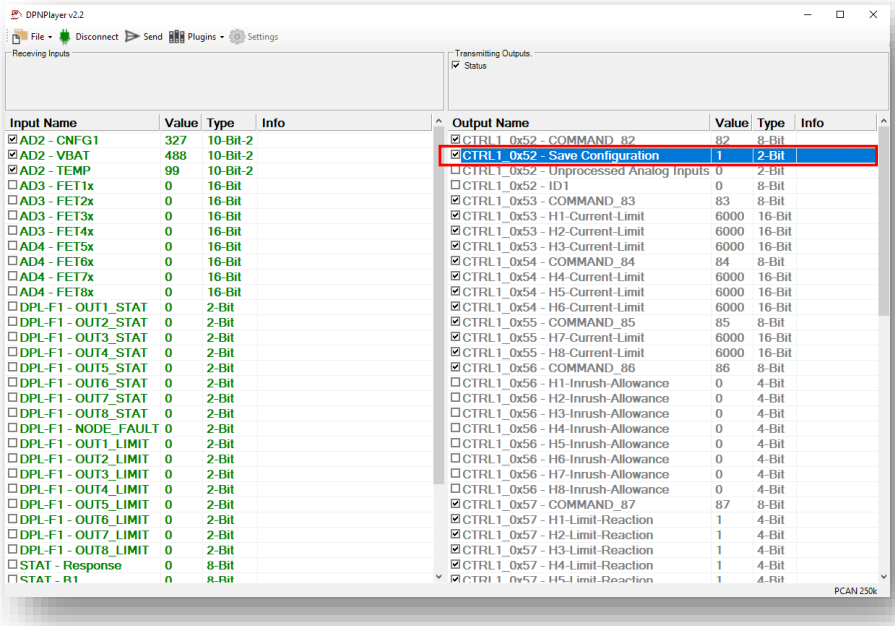


Step 5: Once the module is hooked up, click ‘Connect’ on DPNPlayer tool bar, and the left column should turn green, as seen in the image below.



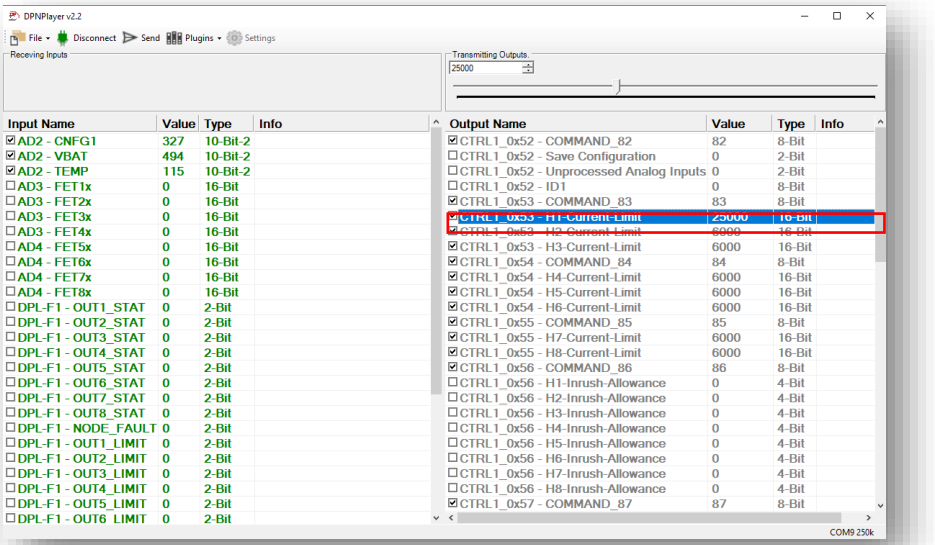
NOTE: ANY OUTPUT VALUES IN GRAY TAKE EFFECT ONLY WHEN **‘SEND’** IS CLICKED.

Step 6: To have configuration settings saved after a power cycle, ensure ‘**Save Configuration’** is checked.



Step 7: To monitor individual output currents and have a configurable response when a current limit has been exceeded, you can set the User Current Limit using '**Hx-Current-Limit'**. (Note: 1000 = 1 Amp)

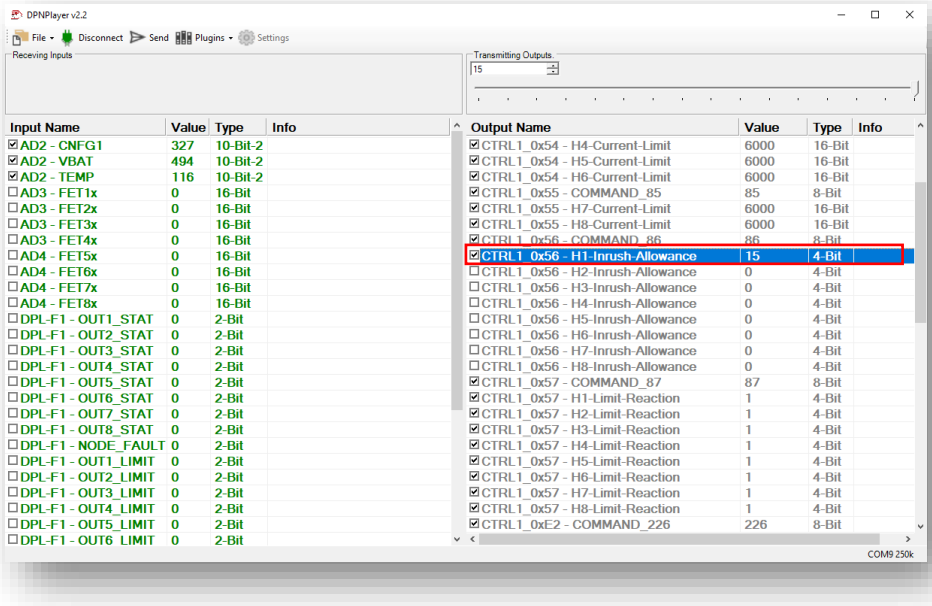
In this example, the configurable response will be triggered when HB1 exceeds 25 Amps.



NOTE: IF NOTHING IS SET, MODULE WILL USE HARDWARE LIMIT (**29 AMPS**).

Step 8: To set a time limit for an inrush that exceeds the set current limit, you can adjust the Inrush Allowance using **'Hx-Inrush-Allowance'**. (Note: Value is in 100ms Increments)

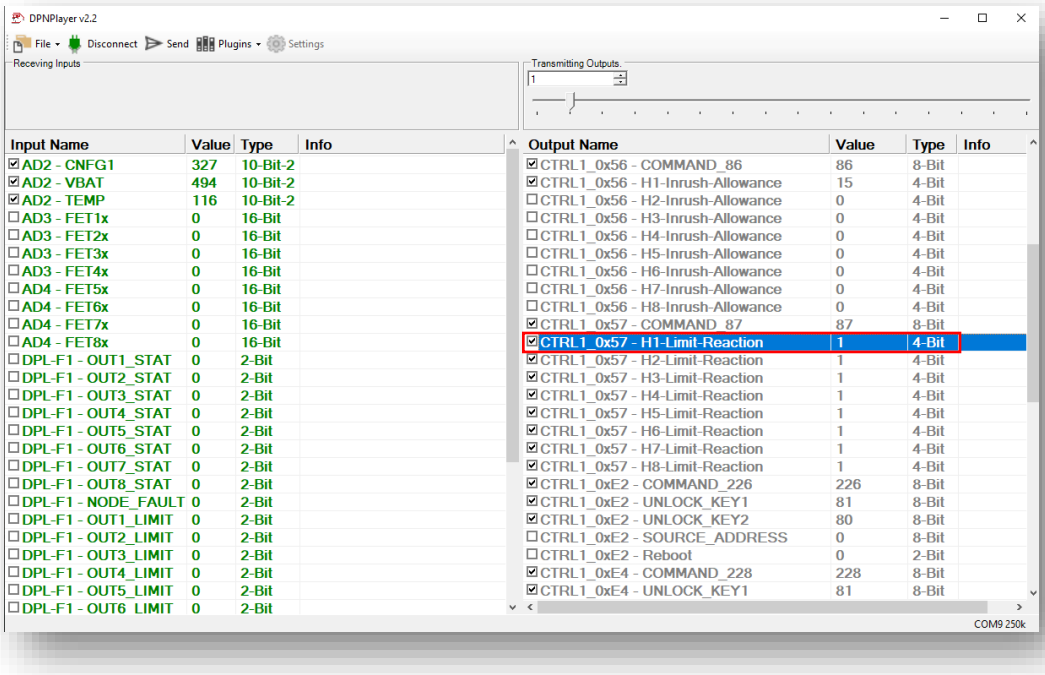
In this example, we set it for 1.5 seconds before the limit reaction is triggered.



NOTE: THE MAXIMUM TIME INRUSH ALLOWANCE THAT CAN BE SET IS **1.5 SEC**.

Step 9: To configure the module's response when exceeding the set current limit and inrush time allowance, adjust the value for '**HX-Limit-Reaction'**. (0-2)

In this example, the Limit reaction is set to 'Output Stall Current'. (Refer to next page.)



ID	Current Limit Response Description
0	Disable User Current Limit
1	Output Stall
2	Output Over Current

When configured as **'Output Stall'** ("1"):

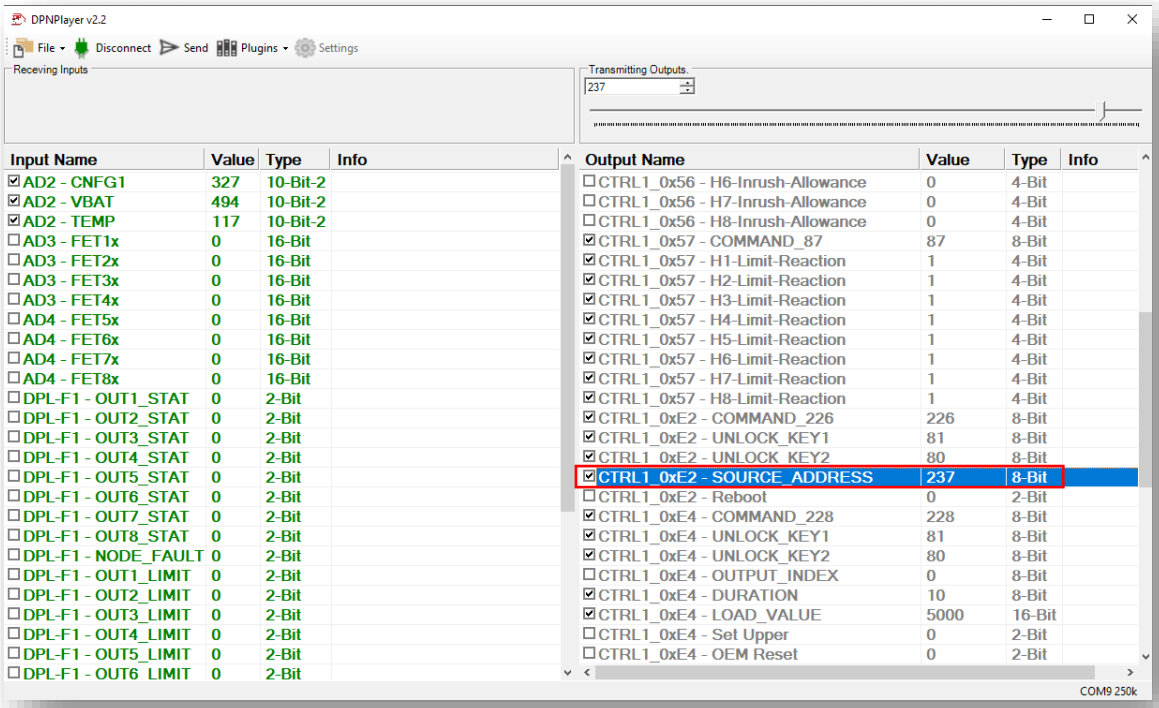
- When the User Current Limit is exceeded, the output shall shut off within 3ms.
- The output indicator will flash, and the event will be indicated on the CANbus.
- The Output Stall will be cleared when the output is commanded off.
- Output Stall shall be the default behavior.

When configured as **'Output Overcurrent'** ("2"):

- When the User Current Limit is exceeded, the output shall shut off within 3ms.
- The output indicator will flash, and an output overcurrent code will be set, and the event will be indicated on the CANbus.
- A power cycle shall be required to reset over current faults and restore operation.

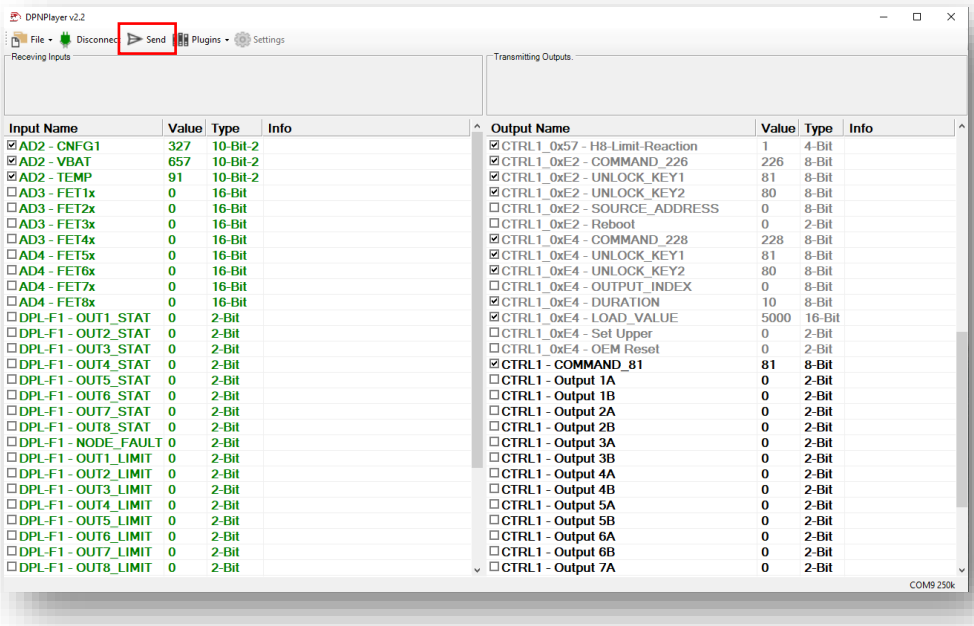
Step 10: To change the module's source address, adjust the **'Source_Address'** value.

In this example, the Source Address is set as 237 (0xED).



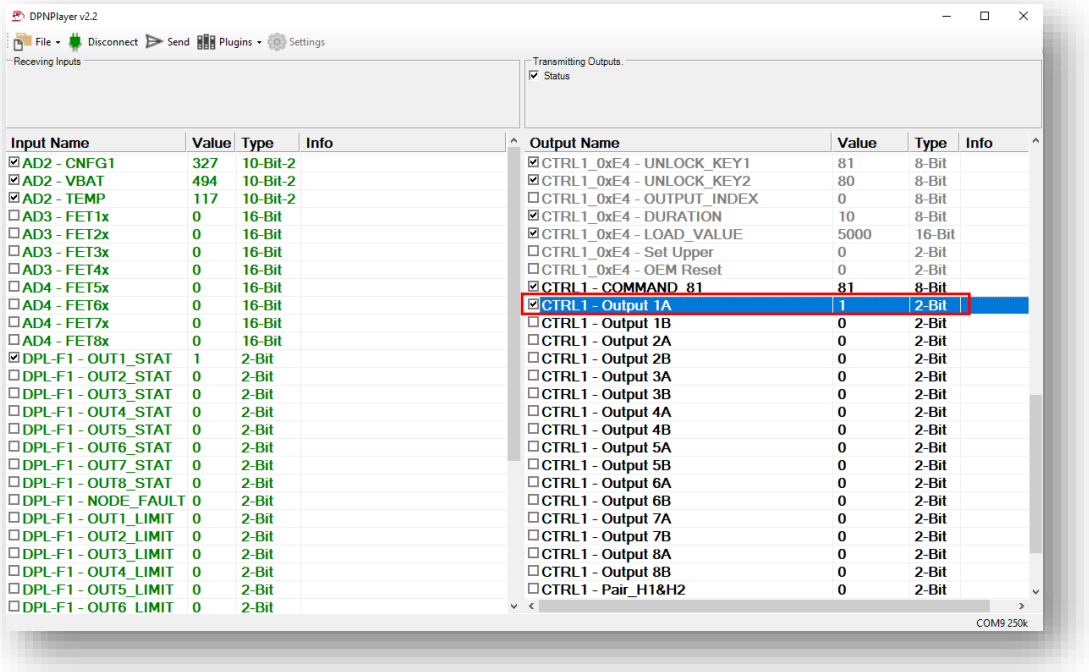
NOTE: THE RANGE FOR SOURCE ADDRESSES ARE **128-247 (0x80-0xF7).** DEFAULT IS **237 (0xED).** KEEP UNCHECKED TO LEAVE SOURCE ADDRESS AS DEFAULT.

Step 11: For all above changes to take into effect, click ‘Send’.

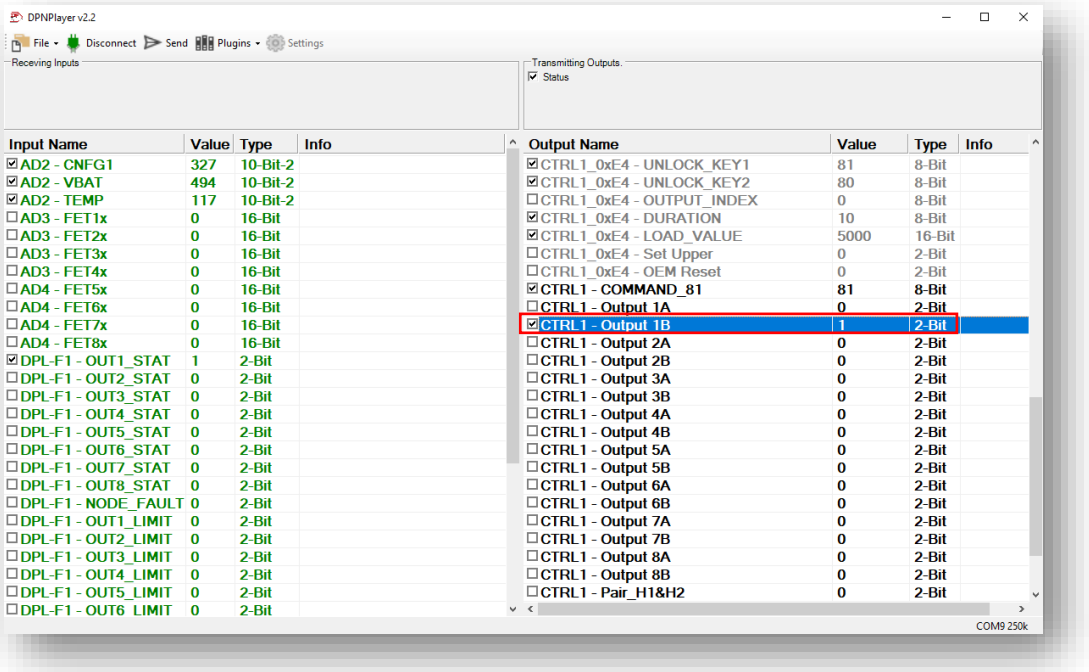


Step 11: To turn on individual H-Bridge outputs, check the box for '**CTRL1 – Output XY'**. (Note: A is channel is forward, B channel is reverse.)

In this example, the forward direction output for H-Bridge 1 is turned on. (A Channel)



In this example, the reverse direction output for H-Bridge 1 is turned on. (B Channel)



For more information, scan the below QR codes for Datasheets:

37033-4

37033-8