

INSTALLING THE ASNET COMMUNICATIONS BOARD IN THE T80HV CHARGE CONTROLLER



The Apollo Solar Network (ASNET) option card shown at the left is used for Control between parallel T80HVs and for Data with the Apollo System Controller (ASC). The card has 2 RJ-45 connectors which are connected in parallel, so there is no difference between them. The connectors accept CAT-5 cable. The data communications uses RS-485 multi-drop voltage levels with a MODBUS-like format. The data communications is isolated from the power and ground of the T80HV.

The 4 LEDs between the RJ -45 Connectors are used to confirm good communications on both the Parallel T80HV path and the ASNET data path. They are labeled Rx and Tx for each path.

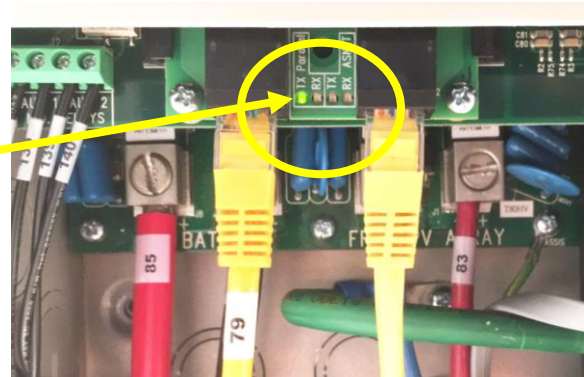
The ASNET Card is plugged into the upper board in the T80HV which is inside the wiring box cover. See the circle at the right. Turn the PV and the Battery power to the T80HV OFF before inserting or extracting this card.



Note the 2 black card guides which hold the card and direct it into the connector at the rear.

When properly seated, the board is held in place with 2 number 6-32 screws.

The 3rd photo shows the ASNET card in place and working with 2 CAT5 ASNET cables plugged in.



Note the Green LED between the RJ-45 Connectors which is flashing indicating that the Parallel Data is being transmitted.

If all the LEDs stay dark, or glow solid green, there is a problem in this ASNET card.

The chart below shows the pattern you will see from the LEDs.

PARALLEL T80 COMMANDS	LEDS	INITIATED BY ASC	ASNET DATA LEDS
MASTER T80HV Tx	LED ON	MASTER T80HV Rx	
SLAVE T80HV Rx	OFF	MASTER T80HV Tx	