

# MICRO CARE

## MICROCARE Programmable Relay Interface



### Features:

- The MICROCARE Programmable Relay Interface can be used in conjunction with any of the MICROCAR LCD MPPT range.
- The MPPT can be programmed to switch the relay at selectable voltages / conditions / parameters.
- The Programmable Relay Interface can be used as a Load shed controller, Day night switch, Generator controller or to facilitate our Solar Assist Function where the MPPT decides (based on user selectable conditions) when to power the LOAD / House using Solar / Wind power and when to power the LOAD / House via an external supply (like Eskom or a backup generator).

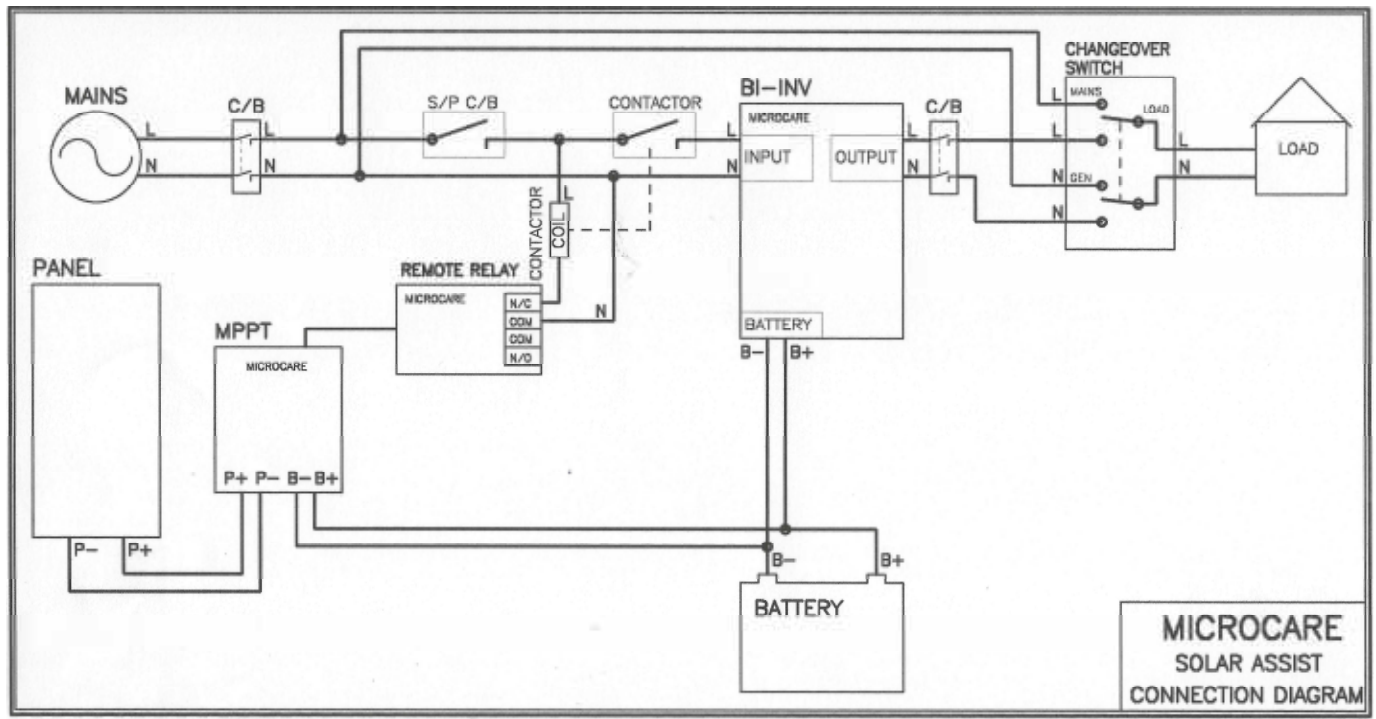
### LED Function:

- POWER – Green = Power is present
- TX – Red = Transmitting data
- RX – Red = Receiving data
- The PWR LED should at all times be on. The Two RED LED's should always be flashing with one second intervals.

### Relay Function:

- Load shed controller
  - Relay switches off when battery voltage falls below the user selected battery low voltage.
  - Relay switches on when battery voltage rises above the user selected battery good voltage.
- Day Night Switch
  - Relay switches on when panel voltage falls below the battery voltage.
  - Relay switches off when panel voltage rises above the battery voltage.
- Generator controller
  - Same operation as Load shed controller.
  - Connect COM – NC (normally close) connections to generator remote start.
- Solar Assist Function
  - Same operation as Load shed controller.
  - See diagram on page 2.

## Wiring diagram (Solar Assist Function)



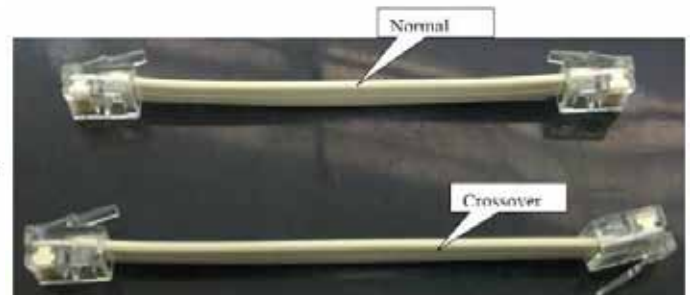
## Cables

### Connections

The MICROCARE MPPT has two **female** RJ-12 connections. The open port is for RS232 communications and the closed port as can be seen from the picture is used for programming of the internal microprocessor **only**.



**Buttons      RS232 (Com)      Programming ONLY!**



Bottom View (MPPT side)



Top View (MPPT side)



With a **Normal** cable both ends are in the same position when the cable is lying flat. One side will look like the picture above with **Pin 1** starting with **Blue**, on the other side **Pin 1** will start with **White**. Use a Normal cable to connect a MPPT to a slave.

## Specifications:

Output Current Rating	12 / 40 amps
Switching Voltage	12v-DC / 220v-AC