






















// TEST OPERATING PROCEDURES

Led Displays OFF -  BLINK -  ON - 

// MODES					
Modes		Red LED	Yellow LED	Green LED	Description
Mode 0	Off Mode				220VAC is disconnected.
Mode 1	Standby Mode				220VAC is supplied to device – At first connection or after AC Reset. Device is waiting for voltage rise above 50V and then decrease to less than 15V to move to Mode 3 in order to simulate PV voltage drop at night.
Mode 2	Waiting Mode				PV voltage is higher than 50V. Device is waiting for voltage less than 15V to move to Mode 3.
Mode 3	Timing Mode				PV voltage is lower than 15V. Device starts 7 - 8 min. timer. If during this period PV voltage remains under 15V, device switches into Mode 4. If during this period PV voltage goes higher than 50V, device switches into Mode 2.
Mode 4	Operating Mode				Device applies a voltage against the earth to PV modules. If PV voltage goes higher than 50V, device switches into Mode 2. In case the current is more than 10.2mA the device will limit the output current and will drop the 'VDC OUT' voltage.
Mode 5	Error Mode				Over-current is detected.
					Over-voltage is detected.

// DAY TEST

1	Check that the AC cable connected well to device.
2	Check that the DC cable connected well to device and to inverters.
3	Check that all inverters working properly.
4	Check the LED display status:
4.1	Mode 1 Perform 'Configuration Test' below.
4.2	Mode 2 Perform 'Configuration Test' below
4.3	Mode 3 Disconnect the device from AC source, check the connectors from device to all inverters. Connect the device and Perform 'Configuration Test' below.
4.4	Mode 4 Disconnect the device from AC source, check the connectors from device to all inverters. Connect the device and Perform 'Configuration Test' below.
4.5	Mode 5 Mode 5 - Reset the device (Disconnect AC source for 2sec.) - Perform 'Configuration Test' below

// NIGHT TEST

1	Test should be after dark.
2	Check the LED display status:
3	Test should be after dark.
4	Check the LED display status:
4.1	Mode 1 Perform Day Test
4.2	Mode 2 Perform 'Configuration Test' below.
4.3	Mode 3 Wait 7-8 min. than device will enter Mode 4. If not entered into Mode 4 wait another 10 min. If failed to enter Mode 4 - reset a device (Disconnect AC source for 2 sec.).
4.4	Mode 4 Device is in operation mode, measure voltage of earth to PV modules according to 'VDC OUT' on device.
4.5	Mode 5 Reset the device (Disconnect AC source for 2sec.) - Perform 'Configuration Test' below.

// CONFIGURATION TEST	
Step 1	Disconnect AC voltage of all inverters.
Step 2	Disconnect DC voltage of all inverters.
Step 3	Connect AC voltage of all inverter.
Step 4	Wait for inverters capacity to discharge to less than 15V. Device should enter into Mode 3 . Device starts 7 - 8 min. timer. If during this period PV voltage remains under 15V, device switches into Mode 4 .
Step 5	During Mode 4 measure voltage of earth to PV modules according to 'VDC OUT' on device.
Step 6	Connect DC of all inverters.
Step 7	Check that device is in Mode 2 .
Device fault	If one of above steps is failing - please contact Vigdu support.