

LCD Messages:

- 1) SHINE xxV-20A
REV : xxxxxxxxxxxxxx
- 2) PV : OK / FAIL
GRID : OK / FAIL / FORCED CUT
- 3) BATT VOLT : xx.xV
PV CRNT : xx.xA /
BATTERY CHARGED
- 4) MODE : AUTO / 100% SOLAR / CHG
BATT TYPE : TUBULAR / FLAT
- 5) CHARGING SOURCE :
PV + GRID BOTH / PV CHG / GRID
CHG / NO CHG
- 6) TODAY'S SAVINGS :
xx.x UNITS
- 7) TOTAL SAVINGS :
xxxxx.x UNITS

Fault messages

- 1) OVER PV CURRENT
CHG OFF IN : xxx SEC
- 2) OVER CRNT PROT.
RETRY IN : xxx SEC
- 3) BATTERY HIGH
CHARGER OFF
- 4) OVER TEMPERATURE
PROTECTION
- 5) TEMP SENSOR FAIL

Note: During operation of user selectable switches LCD backlight will glow for 3 minutes.

User Selectable Switches:

1) Auto / Manual:

Auto Mode – System will work based on internal algorithm as per availability of power source.

Manual mode – User selectable operations can be activated either charger mode or 100% solar can be selected.

a) Charger – Will act as an additional solar charger with inverter charger.

b) 100% Solar – Unit will work on solar mode irrespective of mains power being available.

2) Tubular / Flat plate: As per the battery type.

TECHNICAL SPECIFICATIONS

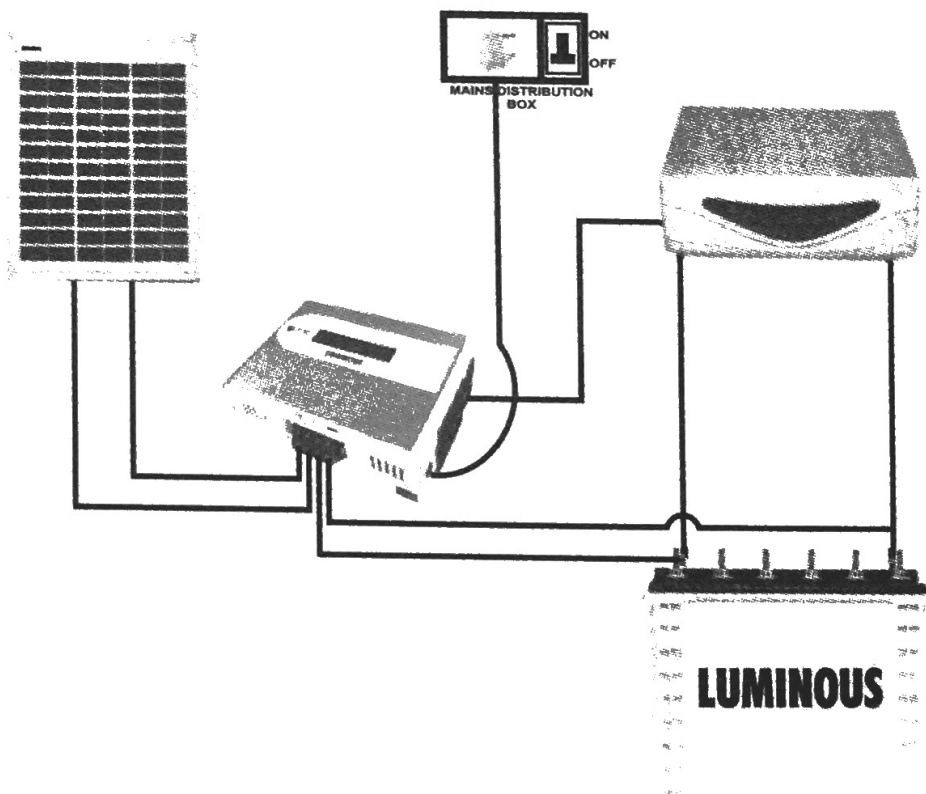
PARAMETERS	SHINE 2420	
System Rating	12V - 20A	24V - 20A
Recommended UPS/Inv. Range	Upto 1KVA@12V	Upto 2KVA@24V
Maximum Output Current	20A	
Nominal Output Voltage	12V	24V
Number Of Batteries (in series)	1	2
Mode Selection	Auto / Manual (Charger / 100% Solar)	
Battery Type Selection	Tubular / Flat Plate	
Battery High Cut Off	17V±0.2V	34V±0.4V
Efficiency	>95%	
Max Panel Open Circuit Voltage	24V	48V
Display	LCD 16x2	
Operating Temperature Range	0-50°C	
IP Rating	IP - 20	
Humidity	95% RH-Humidity	
Noise Level	55dB	
Dimensions - LxWxH(mm)	178x71x159	
Weight - Net & Gross	1.2Kg & 1.3Kg	
Ventilation	Natural	
Reverse Battery Protection	Yes	
Reverse PV Protection	Yes	
Reverse Curnt. from Batt. to PV	Yes	
Over PV Current Protection	Yes	
Battery High Voltage Protection	Yes	
Over Temperature Protection	Yes	
Restart After Any Protection	Every 1 Minute	
Wire gauge for Battery & PV input	6 Sq.mm	
Wire gauge for input Grid & UPS/Inv.	6 Sq.mm	

Salient Features-

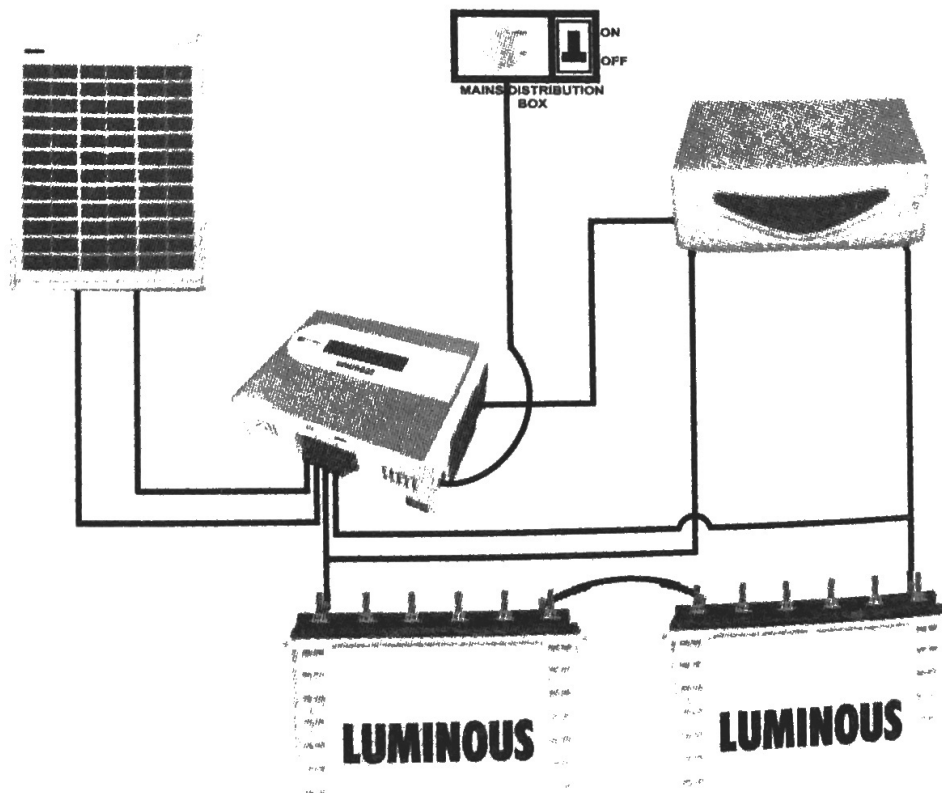
- Converts Existing non solar inverter to solar inverter.
- Automatic battery selection for 12V/24V systems.
- Automated operation to utilize maximum solar power.
- Suitable for any make / model of 12V/24V inverters.
- PV panel compatible from 100Wp-400Wp for 12V & 400Wp-800Wp for 24V.
- Easy to use, simple operation.

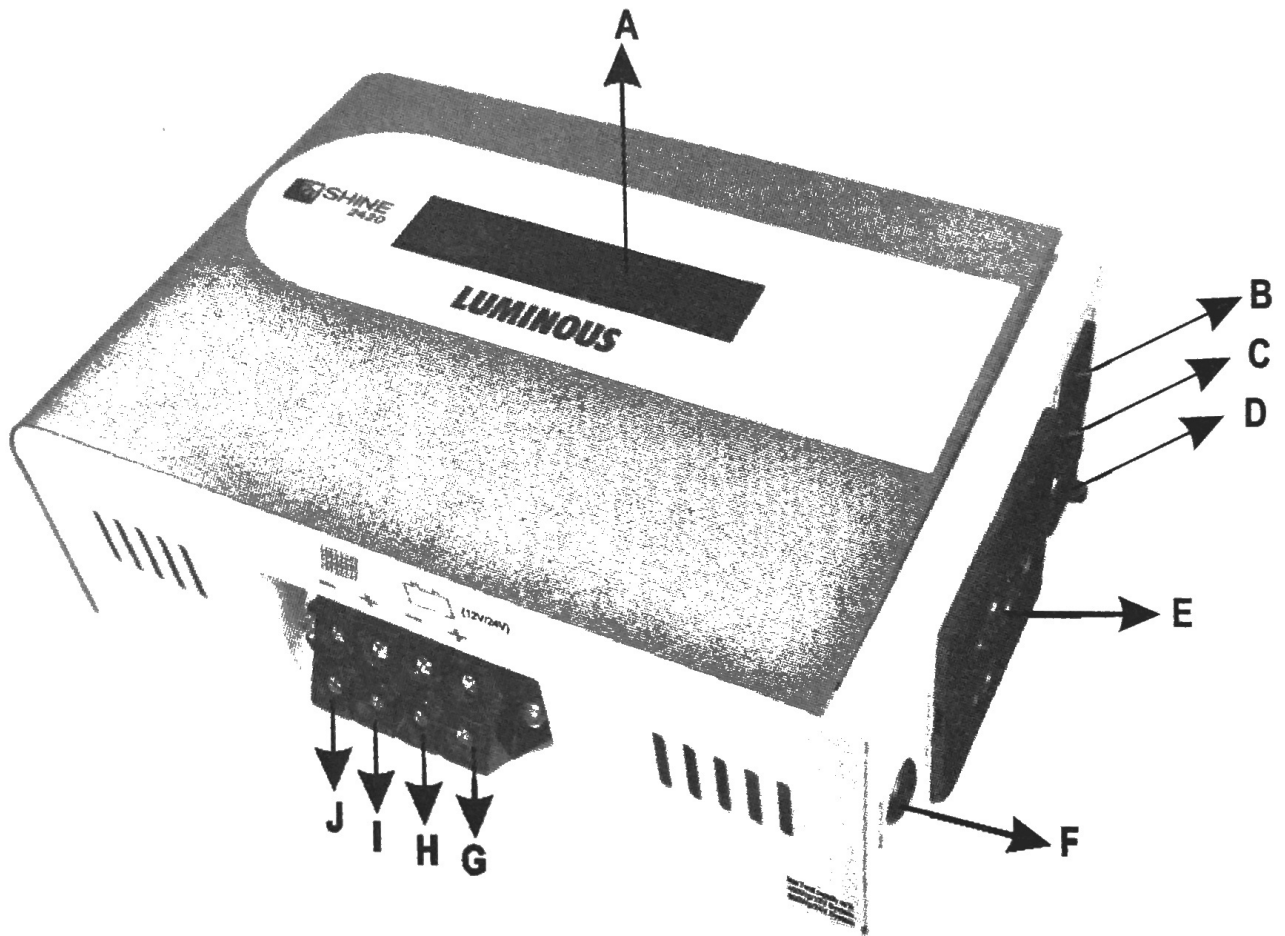
Typical Installation of Shine 2420 LCD with installed inverter

12V



24V





A) LCD display (16x2)
C) Charger / 100% solar switch (active only if manual switch is ON)
E) Inverter input socket
G) Batt. terminal negative
I) PV terminal negative

B) Auto / Manual Selection switch
D) Tubular / Flat plate selection switch
F) Mains input lead
H) Batt. terminal positive
J) PV terminal positive