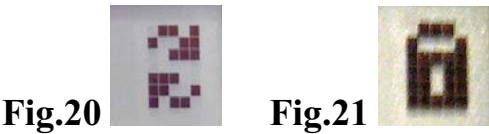


5.5.3 First phase - electric parameter check

A FEW POINTERS ON DISPLAY KEY OPERATION:

During normal operation, the display will cycle through available data. The display changes to a different screen every 5 seconds, or screens may be scrolled manually by pressing the UP (2nd key from display) and DOWN keys (3rd key from display). Either way, pressing the ESC key (right next to the display) calls back the previous menu.



Auto-scroll is indicated by 2 arrows in the top left corner of the display (see Fig.20). To stop auto-scroll, press the ENTER key (4th key from display). A padlock will appear (see Fig.21).

1A) If the measurements taken previously (see section 5.5.1) are found to be correct, the system will proceed to the next checks. The 12 screens outlined below are shown alternately as listed in this section.

Type	OUTD
PN	-----

2A) shows inverter serial number and firmware revision level.

S/N	-----	xxxxxx
FW	rel.	C.0.1.1

3A)

E-tod	0	Wh
\$-tod	0.0	\$

E-tod: Daily energy output.
\$-tod: Daily energy savings. Value is expressed in the set currency.

4A)

E-tot	-----
E-par	0 KWh

E-tot: Lifetime energy output (since first installation)

E-par: Partial energy output (during selected period)

5A)

P-out	0 W
T-inv	- °C

P-out: Measured instant output power

The second line of the display shows the higher of two temperatures:

T-inv: inverter heat sink temperature or

T-boost: Heat sink temperature

6A)

Ppk	W
Ppk Day	W

Ppk: Maximum peak power achieved since partial counter was activated

Ppk Day: Maximum peak power achieved during the day. Counter will reset when unit is powered off.

7A)

Vgrid	197 V
Vgrid Avg	0 V

Vgrid: Measured instant grid voltage

Vgrid Avg: Average grid voltage during the last 10 minutes of operation

8A)

Igrid	0.8 A
Fgrid	50.18 Hz

Igrid: Measured instant grid current

Fgrid: Measured instant grid frequency

9A)

Vin1	0 V
I in1	0.0 A

Vin1: Instant input voltage measured at channel 1 input

Iin1: Instant input current measured at channel 1 input

10A)

Vin2	0 V
I in2	0.0 A

Vin2: Instant input voltage measured at channel 2 input

Iin2: Instant input current measured at channel 2 input

Or:

Vin	0 V
I in	0.0 A

In a configuration with one input connected and a second input connected in parallel, this screen is shown instead of the 2 screens described in 9A) and 10A)..

11A)

Pin 1	0 W
Pin 2	0 W

Pin1: Measured instant input power of channel 1

Pin2: Measured instant input power of channel 2

Pin	0 W
------------	------------

In a configuration with one input connected and a second input connected in parallel, this screen is shown instead of the screen described in 11A)..

12A)

Riso	0.0 Mohm
Ileak	73 mA

Riso: Measured insulation resistance. Unlike the parameters discussed above, this is not an instant value but a one-of-a-kind measurement taken upon inverter start-up.

13A)

Inverter OK
Wed 17 May 11 23

If all items described above tested OK, the inverter shows a corresponding message in the display top line along with date and time. Clock malfunctioning or other non-function-related faults (meaning such faults that do not affect the inverter's ability to generate energy) are shown in the bottom line of the display in place of date and time.

The following error messages are provided:

- CLOCK FAIL indicates clock malfunction; contact service
- BATTERY LOW
- SET TIME, appears the first time the unit is powered up or after the battery has been replaced.
- FAN FAIL: contact service
- MEMORY FAIL: Data logging malfunction. Contact service.

5.5.4 Main menu

When the grid connection sequence described in section 5.5.3 and all electrical parameter checks are completed, other screens become available. These screens let you monitor inverter operation.

Pressing the ESC key (right next to display) gives access to 3 new screens:

Statistics

Settings

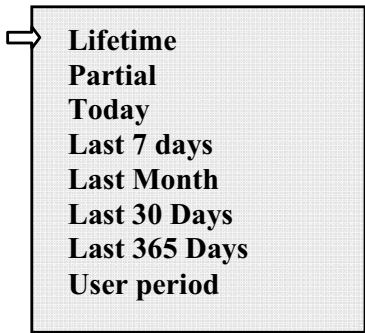
Info

A FEW POINTERS ON DISPLAY KEY OPERATION:

- Press the UP (2nd key from display) and DOWN keys (3rd key from display) to scroll through items.
- Press the ESC key (right next to display) to go back to the previous menu.
- Press ENTER (4th key from display) to open the selected submenu.

5.5.5 *Statistics*

Select the Statistics menu to display the following submenu:



5.5.6 *Information*

The display has 2 lines; use the keys at the side of the display to scroll through items or open the corresponding submenus as described in section 5.5.3. An arrow on the left side of the display highlights your current selection as shown in the following figure:



5.5.6.1 Lifetime

Select Lifetime to view the following information:

Time	h
E-tot	KWh
Val.	\$
CO2	lb

- Time: Lifetime operation time
- E-tot: Lifetime energy output
- Val.: Money earned
- CO2: CO2 saving compared to fossil fuels

5.5.6.2 Partial

Select Partial to view the following information:

Time	h
E-par	KWh
Ppeak	W
Val.	\$
CO2	lb

Time: Total operation time since counter was last reset *

E-par: Total energy output since counter was last reset *

PPeak: Maximum peak power measured since Partial counter was activated

Val.: Money earned since counter was last reset *

CO2: CO2 saving compared to fossil fuels since counter was last reset *

* Hold the ENTER key (4th key from display) depressed for over 3 seconds to reset all counters in this submenu. After 3 seconds, a warning sound is repeated 3 times.

5.5.6.3 Today

Select Today to view the following information:

E-tod	KWh
Ppeak	W
Val.	\$
CO2	lb

E-tod: Total energy output during the day

Ppeak: Peak power achieved during the day

Val: Money earned during the day

CO2: CO2 saving compared to fossil fuels during the day

5.5.6.4 Last 7 days

Select Last 7 days to view the following information:

E-7d	KWh
Val.	\$
CO2	lb

E-7d: Total energy output during the last 7 days

Val.: Money earned during the last 7 days

CO2: CO2 saving compared to fossil fuels during the last 7 days

5.5.6.5 Last Month

Select Last Month to view the following information:

E-mon	KWh
Val.	\$
CO2	lb

E-mon: Total energy output during the month

Val.: Money earned during the month

CO2: CO2 saving compared to fossil fuels during the month.

5.5.6.6 Last 30 Days

Select Last 30 Days to view the following information:

E-30d	KWh
Val.	\$
CO2	lb

E-30d: Total energy output during the last 30 days

Val.: Money earned during the last 30 days

CO2: CO2 saving compared to fossil fuels during the last 30 days

5.5.6.7 Last 365 Days

Select Last 365 Days to view the following information:

E-365d	KWh
Val.	\$
CO2	lb

E-365d: Total energy output during the last 365 days

Val.: Money earned during the last 365 days

CO2: CO2 saving compared to fossil fuels during the last 365 days

5.5.6.8 User period

User period

This feature measures energy saving during a period selected by the user.

Press ENTER from the "User period" screen to access the following submenu:

Start	23 June
End	28 August

Use the display keys to set the start and end date of the period as follows:

- Use ENTER to move from one field to the next (from left to right)
- Use ESC to go back to the previous field (from right to left)
- Press ESC repeatedly to go back to the previous menus as described in section 5.5.3

To set days:

- Press DOWN to scroll numbers backwards (from 31 to 1)
- Press UP to scroll numbers from 1 to 31

To set the month:

- Press DOWN to scroll months from December to January
- Press UP to scroll months from January to December

If set dates are inconsistent, the display alerts the user to the problem:

Data err
