Operation Manual DR-235/250Dual

The display has 4 different layouts, by touching the upper of display you can select one by one all of these:

- PEP Power,

- FWD/REF Power,

- Power in dbm,

- Modulation Scope,

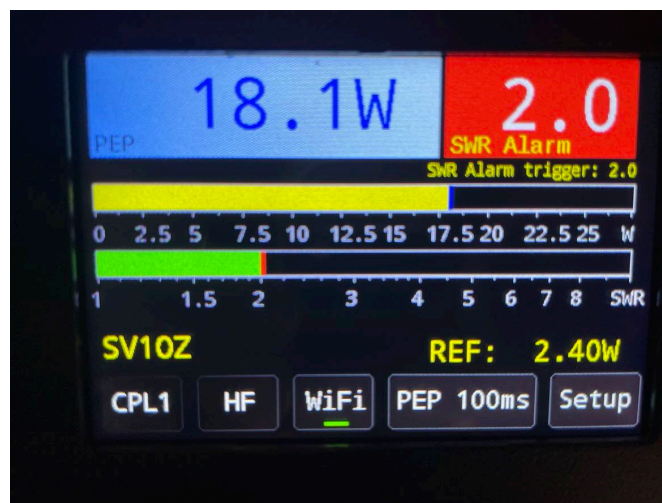The screen below shows a SSB signal of 1.4KW at an SWR of 1.00

The PEP reading is visualized by a second blue bar, going further than the first one.

- Below we have an indication of an Hi SWR signal in PEP display.

- SWR is above the Alarm setting of 2.0, so the SWR is now activated

- Red border and an audio Alarm Output is enabled as alarm is over 2.0.

The PTT in the rear panel (2 X RCA connectors), will be interrupted, as long as Alarm is 'ON".

Reset can be done by touching the RED border area of SWR reading.

I am showing signals with high SWR in order to better observe the SWR bar.

- The bar graph scale is auto range selected, from microwatts to kilowatts.

- Scale ranges can be changed in Setup Menu, under "Scale Ranges"

Now the default scales have been set to 11, 22 and 55, for max scale indication

of 1.1, 2.2, 5.5, 11, 22, 55, 110, 220, 550... microwatts, milliwatts, watts…

- PEP button has 3-time delay selections for smooth SSB or CW readings 100ms,1sec & 2sec

- HF button can be programmed in Setup menu "Screen Buttons", to select 1 > 4 band profiles. When only 1 band selected then button cannot change to others. Only the last selected

- WIFI button is present in display **ONLY** if you have connected your meter to your router and has taken IP. Then can receives WIFI signal, otherwise button is hided.

- PEP reading is available at display layouts as well, "dbm and Scope", at lower right of display.
- Other displays (PEP & FWD/REF), show at lower right, reflected power in watts

- In Setup mode and under "Display functions", is screensaver for selecting options or turn it off.

When screensaver comes on after 15 min and you can see your call moving around on display. (If you have it setup).

- Under "Display functions", you can select Low power floor.

This selects the lowest start indication of scale.

Recommended: is "0.01W" selection

- In setup under "Your Call" can put your call/name to see it always in startup & working/selected display.

- Here you see the Display Mode Showing Forward & Reverse Power and SWR

- Here you see the Modulation Scope layout showing an SSB signal.

   Maximum full-screen sweep rate is at 800ms.

Note that the PEP indication is visible in lower right.

- PEP period is selectable in the Configuration Menu as 0.1ms, 1sec or 2.5sec.

- Last display Mode layout, CPL1/2 & Band selected is stored in EEPROM and will become the default mode when the meter is powered up next time.
- Tap on top of display to switch between different layout modes.

Modulation scope scan period can be altered in Setup Menu:

- 400ms
- 800ms etc.

SWR Alarm has two setup options for better use:

1. SWR Alarm is between 1.5 to 3.9   4.0 = Alarm OFF
2. SWR Alarm Power (for return power) 1mW,10mW,0.1W,1W,10W (we suggest the 10W), in case you have auto tuner

ATTENSION…

If you select in Setup menu "Reset to Default", ALL profiles will be deleted and meter needs to be again calibrated.

> ➤ Follow the Calibration Instructions…

Enjoy your meter!!!!

73's de Dimitris

❖ The following page is just a reference to see how navigation of setup Menu is, but refers to older firmware and **is not actually the latest**.

Configuration Menus
Enter with a long push.
Navigate with Rotary Encoder and Push Button

```
  8 Debug Display
  9 Reset to Default
Config Menu:
  0 Exit
->1 SWR Alarm
  2 SWR Alarm Power
  3 PEP Period
  4 Screensaver
  5 Scale Ranges
  6 Serial Data
  7 Calibrate
```

```
SWR Alarm Threshold:
Adjust->   3.0
Range is 1.5 to 3.9
4.0 = SWR Alarm Off

    adjust 1.5 to 3.9,
                to Off
```

```
  9 Reset to Default
  0 Exit
Config Menu:
  1 SWR Alarm
->2 SWR Alarm Power
  3 PEP Period
  4 Screensaver
  5 Scale Ranges
  6 Serial Data
  7 Calibrate
  8 Debug Display
```

```
SWR Alarm Power:
Select->1    1mW
Available thresholds
1mW 10mW 0.1W 1W 10W
          ->2   10mW
          ->3   0.1W
          ->4    1W
          ->5   10W
```

```
  0 Exit
  1 SWR Alarm
Config Menu:
  2 SWR Alarm Power
->3 PEP Period
  4 Screensaver
  5 Scale Ranges
  6 Serial Data
  7 Calibrate
  8 Debug Display
  9 Reset to Default
```

```
PEP sampling period:
Select->1     1s
Available periods
1, 2.5 or 5 seconds
          ->2   2.5s
          ->3    5s
```

```
  1 SWR Alarm
  2 SWR Alarm Power
Config Menu:
  3 PEP Period
->4 Screensaver
  5 Scale Ranges
  6 Serial Data
  7 Calibrate
  8 Debug Display
  9 Reset to Default
  0 Exit
```

```
ScreensaverThreshld:
Select->2    1uW
Available thresholds
1uW-10mW,   10x steps
          ->3   10uW
          ->4  100uW
          ->5    1mW
          ->6   10mW
          ->1    Off
```

If all three Ranges are set as equal, then
only one Range is in effect:

    Example, all set as 2:
    2mW, 20mW … 20W, 200W, 2kW

If two Ranges are equal, then only two
Ranges in effect

Ranges 2 and 3 cannot ever be larger than
9.9 times Range 1

Range 2 is equal to or larger than Range 1

Range 3 is equal to or larger than Range 2

```
  2 SWR Alarm Power
  3 PEP Period
Config Menu:
  4 Screensaver
->5 Scale Ranges
  6 Serial Data
  7 Calibrate
  8 Debug Display
  9 Reset to Default
  0 Exit
  1 SWR Alarm
```

```
► Turn or Push to Exit
► Select Scale Range:
       1st Range =  6
    ->2nd Range = 12
       3rd Range = 24
```

```
Adjust, Push to Set:
       1st Range =  6
===>   2nd Range = 12
       3rd Range = 24
```