

Optical Power Meters: Extending Optical Power Meter Displays

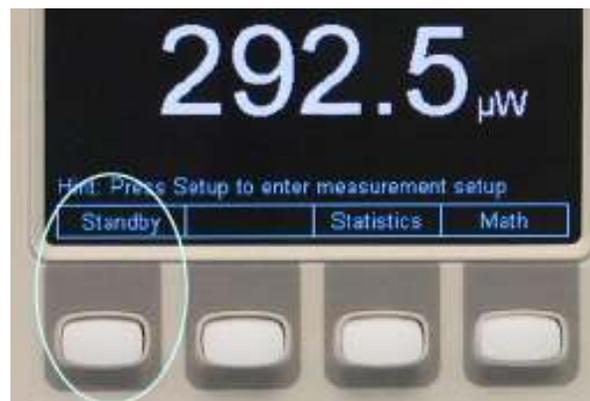
Newport's High performance Optical Power Meter models, 1918-C, 1918-R, 1928-C, 1936-C, and 2936-C, use large, high contrast color TFT screens to provide crisp readings and flexible displays. Current display technology offers an expected display lifetime of 20,000 hours. Earlier versions typically had the lifetime of approximately 10,000 hours. When the optical power meter is used in 24/7 settings for 365 days, which is not an unusual setting for many high volume manufacturers, 10,000 and 20,000 hours translates into only 1.14 years and 2.28 years, respectively. Recognizing these limitations, we have employed several screen saver features to help extend the display usage time and help environments by saving energy.

Firmware Upgrade

We recommend the user to download and upgrade to the latest firmware on the optical power meter. The models mentioned above are field upgradable. Specifically, two features are worth noting: Standby and Dimming.

Standby Mode

The 'Standby' button appears on the most left hand side soft button. Pressing that button will immediately switch the screen to Standby mode and turns off the display. The power meter will wake up with a press of any button. Note that the electronics are still running in the background, so there is no need of another warm up.



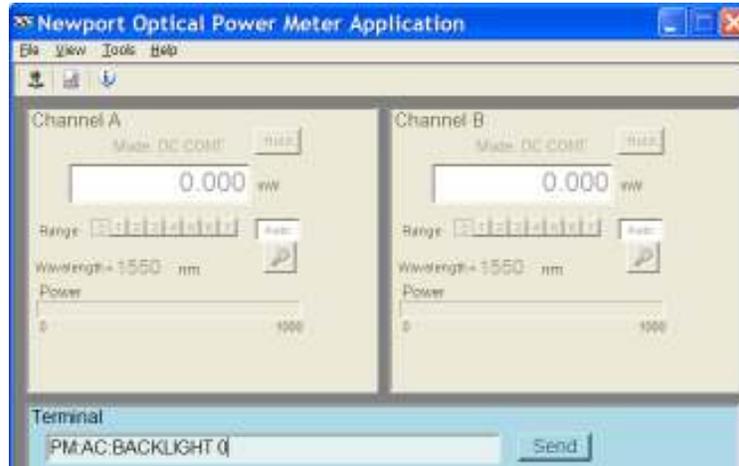
Dimming Setting Adjustment

We have implemented a new computer command

PM:AC:BACKLIGHT nn

where nn = 0, 1, 2, 3, 4. When nn = 0, the timeout is 4 hrs; nn = 1 timeout is 8 hrs; nn = 2 timeout is 12 hrs; nn = 3 timeout is 24hrs; nn = 4 never do any brightness dimming.

The default setting is 1, or 8 hours, but we recommend to switch the setting to 0, or 4 hours. This command only reduces the LCD brightness and has no effect on any other function. Pressing any button or sending a computer communication will change the brightness level back up.



Adjustment of Brightness Level

The factory default of the Brightness setup is 80 %, but we recommend reducing it to a lower setting if the display lifetime is of a concern. Press the 'Enter/Setup' key on the right hand side of the meter, and then the 'System' soft key right below the screen.



Powering Off When the Meter is Not Used for a Prolonged Period of Time

This is the most obvious way of saving the display lifetime and energy consumption. Please consider turning the optical power meter off at the end of the day, when the power meter is no longer in use.