

List of Commands

General System Commands

ERR?

Reports the previous error. If no error has occurred, the device responds

```
0; No error
```

Otherwise an error message approximately following the SCPI 1999 standard is returned.

***OFF**

The output stage of the device is disabled. This mode allows to fully program the device but it does not emit light and synchronous trigger signals. This is the factory default mode at system startup.

***ON**

Output stage is activated. Upon this command the laser will immediately start operating with the specified parameters. If it is in external trigger mode (see below) it will start sending pulses depending on whether a trigger signal is present on the trigger input or not.

***RBT**

Reboot the system and start with system defaults.

***IDN**

Identify the system. It will send its model and serial number in the form `Dlnsecxxxx_yyyyy` where `xxxx` represents the central wavelength in nanometers and `yyyyy` is the serial number.

Save / Recall, User / Factory Settings

***SAV**

Save user settings. This is useful if you want to start your device in a mode different from the factory preset. The command saves a number of parameters describing the mode of operation in a non volatile EEPROM memory which will be applied after a system power-on or reboot: the current setting, timer settings, current mode of operation (auto trigger/external trigger/continuous operation) and sleep or active mode). **WARNING:** The EEPROM has a limited number of 100.000 write cycles. This is pretty much and should be fully sufficient for a very long time, however when you are using scripting languages, LabView or similar to program the laser make sure you are not accidentally saving to the EEPROM in every run because that might degrade the memory very fast. You can query the number of write cycles that have already been performed by sending the `NSAV?` command(see below).

***RCL**

Load and apply the previously saved user settings from the non-volatile memory.

***RST**

Restore factory default settings. This overwrites all user settings by the initial factory defaults, applies them immediately to the system and saves them to the non-volatile memory, increasing the number of saves by one.

NSAV?

Query the number of EEPROM write cycles (max. 100.000 guaranteed, see above). If NSAV has reached 100.000 it may still be possible to save data to the memory but data integrity is not guaranteed anymore. We do not guarantee for proper operation and accept no liability for any damages to the device, other things, persons

Laser power settings

PWR <n>

Set pulse current to approx. <n> % of maximum power

PWR?

Get approx. Pulse power in % of maximum

Mode of Operation

EXT

Externally triggered mode (overrides LAS & INT)

LAS

CW laser operation (overrides EXT & INT)

INT

Internal trigger operation (overrides EXT & LAS)

STOP

Stop internal trigger, listen to external trigger (same as EXT)

Timer programming

PRE <P>

Set clock prescaler for internal trigger to <P> where <P>=[1,8,64,256,1024] such that $f_{rep}=16\text{MHz}/256/\langle P \rangle$

PRE?

Get clock prescaler value <P> of internal auto trigger

WID <N>

Set pulse width of auto trigger to <N> where <N>=[0..255] such that $t_{pulse} = 1/16\text{MHz} * \langle P \rangle * \langle N + 1 \rangle$

WID?

Get pulse width <N>