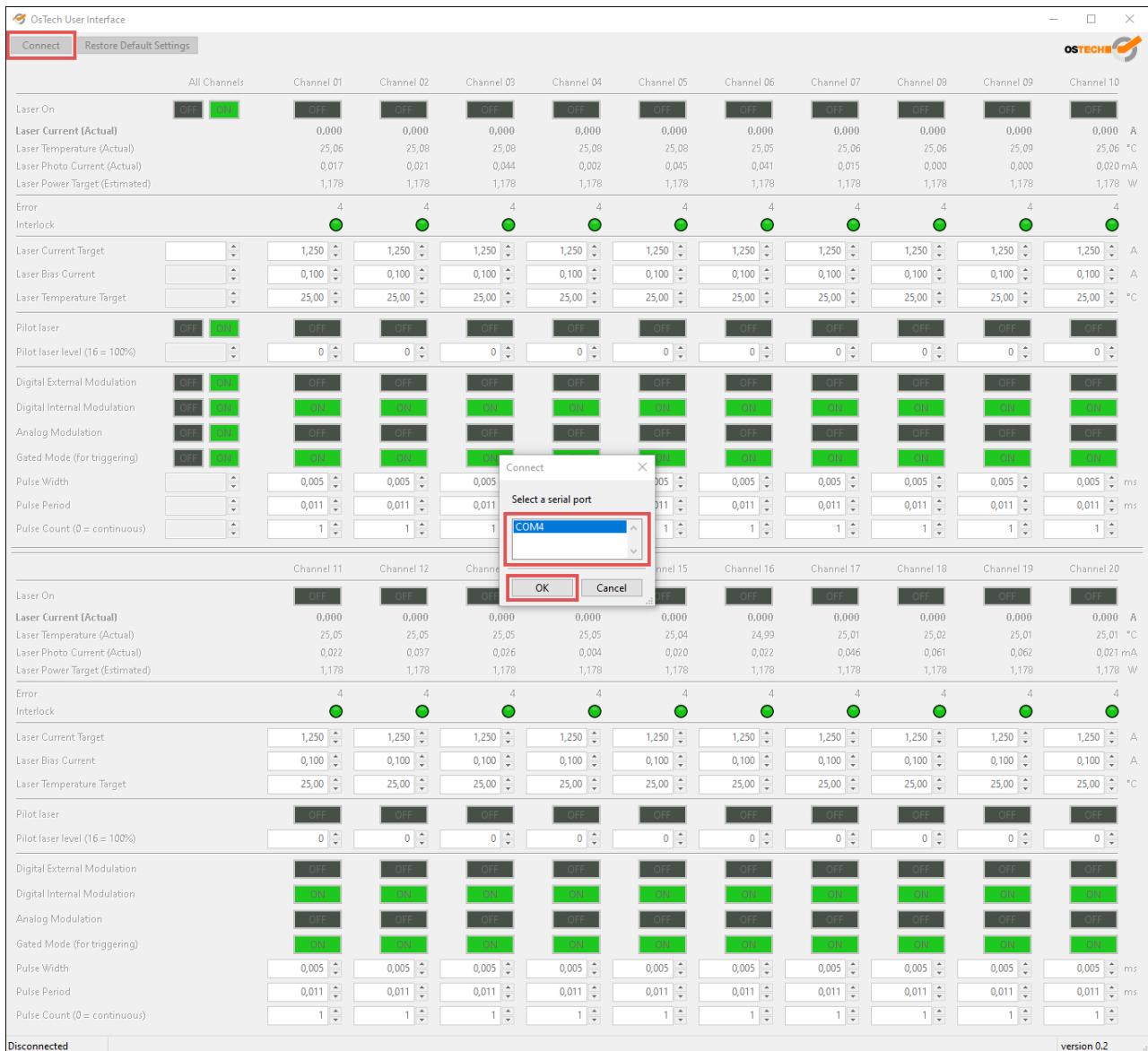


OsTech User Interface

The purpose of this application is to operate and monitor OsTech multichannel devices. There are several versions of this application, each for a different number of channels. This manual describes all these versions. However, the figures show the 20-channel version.



Click on "Connect" to connect the application to the OsTech multichannel device. All found serial interfaces are shown. Select the right one and click "OK".

There are columns that show the current values of the device. In the top half of the window channels 01 to 10 are shown, and in the bottom half you can see channels 11 to 20. The values are updated continuously, but it can take a while until all values of all channels are updated once.

The ON/OFF buttons show the current state. Click on a button showing "OFF" to turn the laser or the modulation on and vice versa.

There are fields with values that can be changed. If you select such a field, the background turns blue. This means that the value in this field was not modified. It is still the same value as in the device. As the value is changed, the background turns orange. The changed value can be entered and transmitted to the device by pressing the ENTER key. Press ESC or select another field to abort the modification. The current value in the device is shown again.

There are several ways to change a value. You can just edit the number in the text field. You can also use the arrows and the mouse wheel to increase or decrease the value. This is done in steps of 0.1. In fields that only accept integer numbers the increment is 1. If you hold SHIFT the increment will double. The CTRL key changes the increment by a factor of 10 and the ALT key by a factor of 100. If you hold several of these keys at the same time the factors are multiplied. So, if you hold CTRL and ALT at the same time the increment is multiplied by 1000.

OsTech User Interface

Disconnect Restore Default Settings

Channel 01 Channel 02 Channel 03 Channel 04 Channel 05 Channel 06 Channel 07 Channel 08 Channel 09 Channel 10

Laser On ☐ OFF ☒ ON

Laser Current (Actual) 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 A

Laser Temperature (Actual) 25,00 25,00 25,00 25,00 25,00 25,00 25,00 25,00 25,01 25,00 °C

Laser Photo Current (Actual) 0,017 0,021 0,044 0,002 0,045 0,041 0,015 0,000 0,000 0,020 mA

Laser Power Target (Estimated) 1,178 1,178 1,178 1,178 1,178 1,178 1,178 1,178 1,178 1,178 W

Error 4 4 4 4 4 4 4 4 4 4

Interlock ☒ ☒ ☒ ☒ ☒ ☒ ☒ ☒ ☒ ☒

Laser Current Target 1,550 1,250 1,250 1,250 1,250 1,250 1,250 1,250 1,250 1,250 A

Laser Bias Current 0,100 0,100 0,100 0,100 0,100 0,100 0,100 0,100 0,100 0,100 A

Laser Temperature Target 25,00 25,00 25,00 25,00 25,00 25,00 25,00 25,00 25,00 25,00 °C

Pilot laser ☐ OFF ☒ ON

Pilot laser level (16 = 100%) 0 0 0 0 0 0 0 0 0 0

Digital External Modulation ☐ OFF ☒ ON

Digital Internal Modulation ☒ ON ☒ ON ☒ ON ☒ ON ☒ ON ☒ ON ☒ ON ☒ ON ☒ ON

Analog Modulation ☐ OFF ☒ ON ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF

Gated Mode (for triggering) ☐ OFF ☒ ON ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF

Pulse Width 0,005 0,005 0,005 0,005 0,005 0,005 0,005 0,005 0,005 0,005 ms

Pulse Period 0,011 0,011 0,011 0,011 0,011 0,011 0,011 0,011 0,011 0,011 ms

Pulse Count (0 = continuous) 1 1 1 1 1 1 1 1 1 1

Channel 11 Channel 12 Channel 13 Channel 14 Channel 15 Channel 16 Channel 17 Channel 18 Channel 19 Channel 20

Laser On ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF

Laser Current (Actual) 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000 A

Laser Temperature (Actual) 25,00 25,00 25,00 25,01 25,00 24,99 25,01 25,01 24,99 24,99 °C

Laser Photo Current (Actual) 0,022 0,037 0,027 0,004 0,020 0,022 0,046 0,061 0,062 0,021 mA

Laser Power Target (Estimated) 1,178 1,178 1,178 1,178 1,178 1,178 1,178 1,178 1,178 1,178 W

Error 4 4 4 4 4 4 4 4 4 4

Interlock ☒ ☒ ☒ ☒ ☒ ☒ ☒ ☒ ☒ ☒

Laser Current Target 1,250 1,250 1,250 1,250 1,250 1,250 1,250 1,250 1,250 1,250 A

Laser Bias Current 0,100 0,100 0,100 0,100 0,100 0,100 0,100 0,100 0,100 0,100 A

Laser Temperature Target 25,00 25,00 25,00 25,00 25,00 25,00 25,00 25,00 25,00 25,00 °C

Pilot laser ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF

Pilot laser level (16 = 100%) 0 0 0 0 0 0 0 0 0 0

Digital External Modulation ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF

Digital Internal Modulation ☒ ON ☒ ON ☒ ON ☒ ON ☒ ON ☒ ON ☒ ON ☒ ON ☒ ON ☒ ON

Analog Modulation ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF ☐ OFF

Gated Mode (for triggering) ☒ ON ☒ ON ☒ ON ☒ ON ☒ ON ☒ ON ☒ ON ☒ ON ☒ ON ☒ ON

Pulse Width 0,005 0,005 0,005 0,005 0,005 0,005 0,005 0,005 0,005 0,005 ms

Pulse Period 0,011 0,011 0,011 0,011 0,011 0,011 0,011 0,011 0,011 0,011 ms

Pulse Count (0 = continuous) 1 1 1 1 1 1 1 1 1 1

Connected Value changed, press ENTER to apply, ESC to reset version 0.2

In the column "All Channels" you can change a value for all channels at the same time. Current values are not shown here. There is a OFF and ON button available for turning all channels off and on respectively. To change a value proceed as described above.

There is also a button for restoring the default factory settings for all channels at the top right next to the connect button.