

# Overview of ICE Commands

All commands are issued to the Master board via either TTL Serial or USB Serial. For testing purposes, we recommend talking to the Master board via USB Serial using a terminal program such as [putty](#).

*Note: All commands are case insensitive.*

There are 2 types of commands:

- Commands for the Master board
- Commands for individual Slave boards, routed by the Master.

All commands for the Master Board are prefixed with the character “#”, so Commands **#Slave** and **#Devices** are commands for the master. Any command that does not start with “#” will be sent to the current slave board that the master is talking to. The **#Slave** command shows/sets what slot (1-8) the master board is talking to.

## Sample Conversation

For example, let's say you have a Quad Temp board in Slot 2 and a Peak Lock Servo & Current Controller in Slot 5. Then you may have the following conversation over the serial:

```
#Slave
6
#Slave 2
2
SetTemp 3 24.56
24.56
Bipolar 3 Off
Off
#Slave 5
Laser Off
Off
```

A translation of the above conversation with the ICE Master board is as follows:

What slave device are you talking to?
I'm talking to the device in slot 6 (Master)
Please start talking to the device in slot 2
Ok, I'm now talking to the device in slot 2 (Master)
Set the temperature setpoint of channel 3 to 24.56°C
Done, set to 24.56°C (Quad Temp in Slot 2)
Disable bipolar mode for channel 3
Done, bipolar mode is now off (Quad Temp in Slot 2)
Please start talking to the device in slot 5
Ok, I'm now talking to the device in slot 5 (Master)
Please turn off the laser

Ok, the laser is now off (Peak Lock in Slot 5)

## Sample Command Description

The documentation for every command will look like the example below:

### TempMin

#### Description

Arguments:

```
[Int] CHANNEL  
[Float] MINTEMP
```

Example:

```
TempMin 3 14.32  
14.3
```

I<sub>2</sub>C Command Number: 26

Sets the minimum temperature for channel CHANNEL to MINTEMP. Returns **TempMin?**.

*Note* You cannot set MINTEMP greater than the temperature setpoint. Attempting to do so will not change the minimum temperature. <html></div></html>

**TempMin** is the name of the command. The arguments list shows the parameters that must be included when running the command. The datatype (integer, floating point number, ascii characters) for the argument is bracketed ([ ]) before the name of the argument. The Description section describes what the function does and how the arguments are used. The first line of the example section is INPUT and shows what should be typed into *putty* or similar terminal program and the second line is a sample of the output sent back to the terminal program after the first line is completed and ENTER is pressed.

From:

<https://www.vescent.com/manuals/> - **Product Manuals**

Permanent link:

<https://www.vescent.com/manuals/doku.php?id=ice:commands:overview>

Last update: **2023/11/30 21:29**

