

# Sending Brightness Commands to NovaStar Processors

## Overview

This example uses TCP to send commands and works with Models MSD300/MCTRL300/MCTRL500/MSD600/MCTRL600/MCTRL660/MCTRLR5/MCTRL4K.

All devices use TCP port 5200

## Examples:

55 AA 00 15 FE 00 01 00 00 00 01 00 01 00 00 02 05 00 FF FF FF FF FF 6D 5B = Set Brightness to 255 100% (0xFF)  
55 AA 00 15 FE 00 01 00 00 00 01 00 01 00 00 02 05 00 C0 C0 C0 C0 C0 32 5A = Set Brightness to 192 75% (0xC0)  
55 AA 00 15 FE 00 01 00 00 00 01 00 01 00 00 02 05 00 80 80 80 80 80 F2 58 = Set Brightness to 128 50% (0x80)  
55 AA 00 15 FE 00 01 00 00 00 01 00 01 00 00 02 05 00 40 40 40 40 40 B2 57 = Set Brightness to 64 25% (0x40)

These commands can be sent with any TCP Client tool including LaunchPad External Command buttons.

To send the brightness to multiple processors, I suggest you use a .bat (batch) script. See example .bat files in this ZIP archive.

Note : These use NCAT.exe which needs to be installed.

## Creating Additional Commands

If you need a brightness setting other than the examples, you will need to update the examples and re-Calculate the CheckSum.

Determine the desired value in hex. 255 (0xFF) is max brightness. So for example, if we wanted 10%, that would be 25 (0x19).

Assign the number 19 to the required bytes.

55 AA 00 15 FE 00 01 00 00 00 01 00 01 00 00 02 05 00 19 19 19 19 6D 5B

Recalculate the CheckSum

55 AA 00 15 FE 00 01 00 00 00 01 00 01 00 00 02 05 00 19 19 19 19 6D 5B

Open Calc.exe, set View to Programmer.

Add all bytes highlighted then add that total to 0x5555.

In this example, that will equal 0x56EF.

Change the last two bytes to EF 56 (Yes it is backward)

Final Command:

55 AA 00 15 FE 00 01 00 00 00 01 00 01 00 00 02 05 00 19 19 19 19 EF 56