

DC Controller Status Users Guide

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Purpose

The *DC Controller Status* utility shows current information about the CMM along with recent errors logged by the controller. The current information shows the emergency status, error map compensation configuration, axis expansion coefficients, and axis temperatures. The error log shows the history of errors recorded by the controller since the last reboot. The data can be recorded and saved to a text file with minimal effort from the user.

User Interface

The user interface of *DC Controller Status* utility is shown in illustration 1.

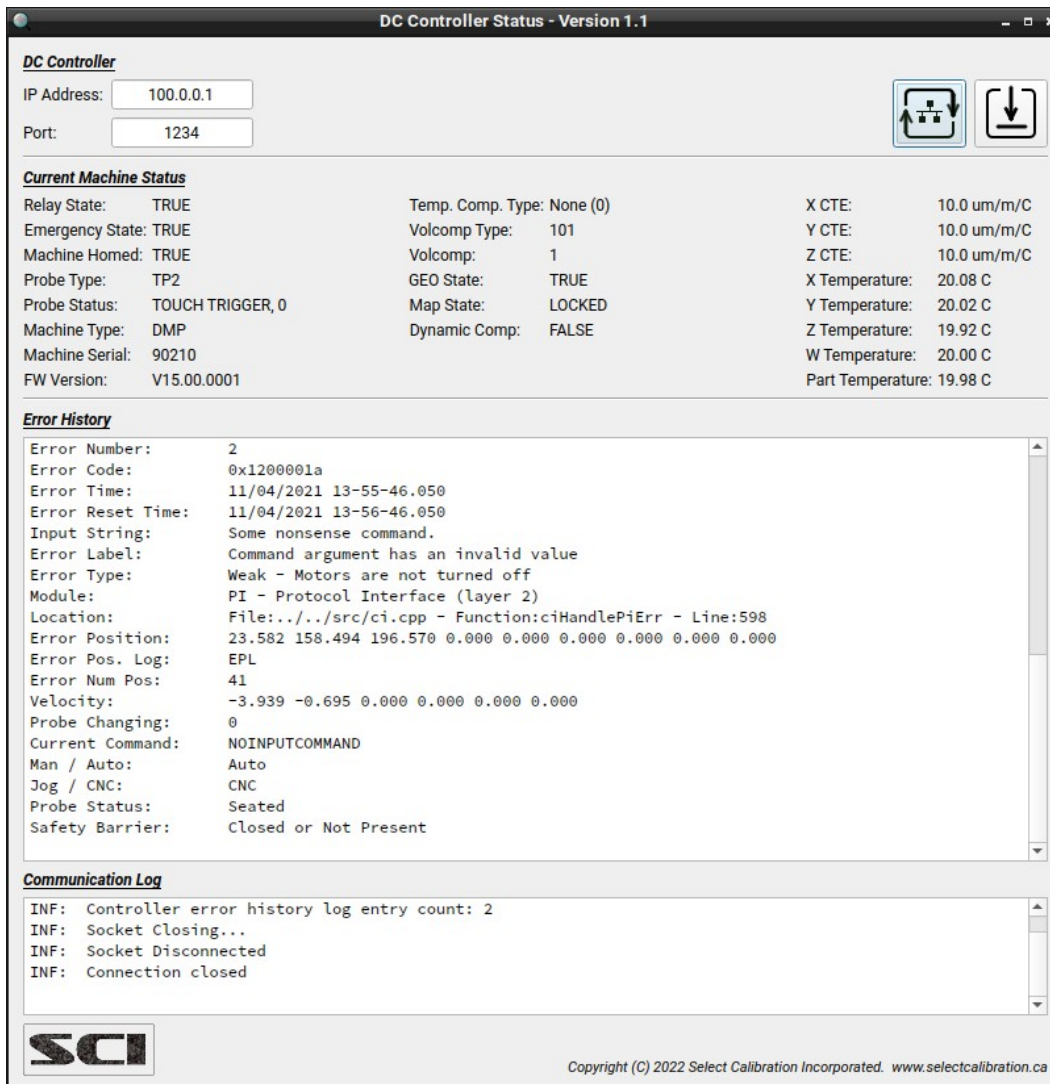




Illustration 1: Main screen of the DC Controller Status utility.

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<i>Option</i>	<i>Description</i>
IP Address: <input type="text" value="100.0.0.1"/> Port: <input type="text" value="1234"/>	IP address and port number of the DC controller.
	Connect to the controller and collect available information.
	Save data to a file.

Output Text Report

The output file contains all displayed information in two sections; current machine status, and error history. The error history is displayed in blocks separated by a blank line.

Current Machine Status:

```
Relay State:      TRUE
Emergency State:  TRUE
Machine Homed:   TRUE
Probe Type:      NUL
Probe Status:    No Probe
Machine Type:    DMP
Machine Serial:  1001
FW Version:      V15.00.0001
Temp Comp Type:  CFW Method (1)
Volcomp Type:    DEA (1)
Volcomp:         104
GEO State:       TRUE
Map State:       ACTIV
Dynamic Comp:    FALSE
X CTE:           12.0 um/m/C
Y CTE:           12.0 um/m/C
Z CTE:           12.0 um/m/C
Temperature X:   19.93 C
Temperature Y:   20.05 C
Temperature Z:   19.91 C
Temperature W:   20.00 C
Temperature Part: 20.02 C
```

Error History:

```
Error Number:    1
Error Code:      0x1200001a
Error Time:      01/24/2022 08-53-40.640
```

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```
Error Reset Time:    01/24/2022 08-53-44.191
Input String:       show vel
Error Label:        Command argument has an invalid value
Error Type:         Weak - Motors are not turned off
Module:             PI - Protocol Interface (layer 2)
Location:           File:../../src/ci.cpp - Function:ciHandlePiErr - Line:598
Error Position:     0.000 0.000 -195.070 0.000 0.000 0.000 0.000 0.000 0.000
Error Num Pos:      41
Velocity:           0.000 0.000 0.000 0.000 0.000 0.000
Probe Changing:     0
Current Command:    NOINPUTCOMMAND
Man / Auto:         Auto
Jog / CNC:          CNC
Probe Status:       Seated
Safety Barrier:     Closed or Not Present

Error Number:       2
Error Code:          0x1400004f
Error Time:          01/24/2022 09-28-39.770
Error Reset Time:   01/24/2022 09-28-40.279
Input String:       NOINPUTSTRING
Error Label:         The host sent an ABORT command
Error Type:         Weak - Motors are not turned off
Module:             CE - Command Executor (layer 4)
Location:           File:../../src/ce.cpp - Function:executeImmCmd - Line:1424
Error Position:     538.715 691.441 -805.394 0.000 0.000 0.000 0.000 0.000 0.00
Velocity:           0.000 0.000 0.000 0.000 0.000 0.000
Probe Changing:     0
Current Command:    NOINPUTCOMMAND
Man / Auto:         Manual
Jog / CNC:          Jogbox
Probe Status:       Seated
Safety Barrier:     Closed or Not Present
```

Notes

- The inspection software cannot be running when using this utility.
- This and other information can be accessed by using the controllers web interface. The reason for creating a stand alone utility is to simplify accessing of this data.
- The connection to the controller automatically closes once all information is collected. The status of the connection is shown in the communication log section.

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Revision History		
<i>Date</i>	<i>Version</i>	<i>Changes</i>
Jan 26, 2022	1.0	New program.
Feb 26, 2022	1.1	Translated some numerical return values into text.
Apr 2, 2022	1.2	[bugfix] Not handling null responses properly.
Oct 16, 2025	1.3	Update to handle depreciated function in socket. Updated minimum compiler level to C++11 Removed objective C references in main.cpp