



DS3 Cable App

User's Manual



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1 Introduction

The **DS3 Cable App** is an application for Windows that lets you configure and update your DS3 data loggers.

A DS3 data logger is composed of multiple boards: the main board, one or more sensor boards, and an optional communication board. All of them include a programming connector (Figure 1) which is used for communication between the DS3 board and the DS3 Cable App running on the computer.

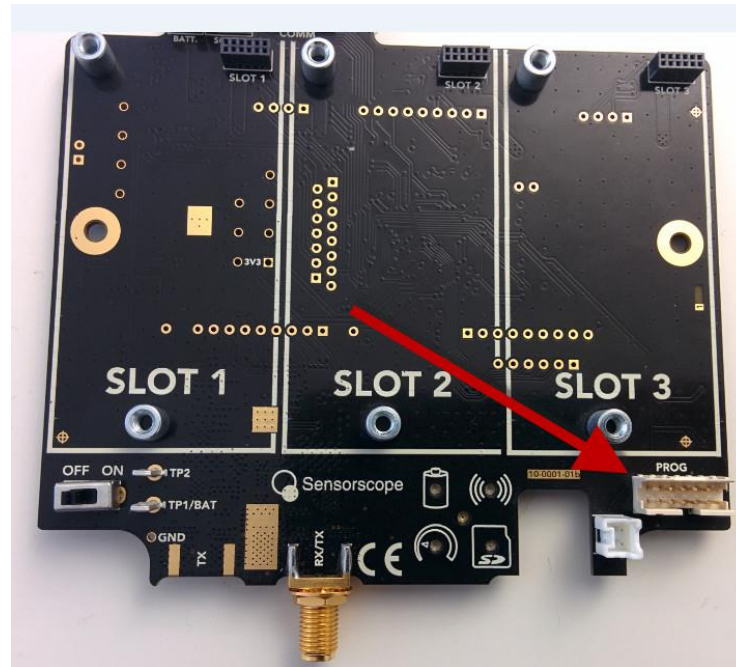


Figure 1 – A programming connector is available on all DS3 boards.

The application does not require any kind of installation, simply unzipping the archive is enough. To update and/or configure your DS3 data loggers, you will need:

- The DS3 data logger with charged batteries
- The *DS3 Cable App* available on your computer
- The *DS3 Cable* to connect your data logger to the computer (Figure 2)



Figure 2 – The DS3 Cable.

When updating or configuring your data logger please be sure to closely follow the steps indicated in this manual. Improper use of the application may **permanently damage** your device.

2 Connection to the Board

2.1 Connection

First make sure that the batteries of your DS3 data logger are charged.

If you want to update or configure a sensor or a communication board, plug it into your DS3 data logger as usual. This is important, because the board must be powered by the DS3 data logger for the communication with the computer to work properly.

Then follow these steps:

- Connect the *DS3 Cable* to a USB port and let Windows install the required drivers if needed
- Plug the *DS3 Cable* into the programming connector of the board
- Turn on the DS3 data logger
- Start the *DS3 Cable App* application
- Select the communication port in the list
- Click on the “Connect” button

2.2 Disconnection

When you are done with the update and/or the configuration of the board:

- Click on the “Disconnect” button
- Stop the DS3 data logger
- Unplug the *DS3 Cable* from the DS3 data logger

2.3 Failure to Connect

To configure a board, it is required that the version of the firmware currently operating the board is at least v3. You can check the firmware version on Climaps, in the system tab on the map page. Older firmwares (v2) do not feature the communication protocol required for configuration.

If the application fails to communicate with the board, it will assume that the firmware is too old. In this case, the application will ask you whether you confirm that the board is running an old firmware version. If you have checked and are sure that this is the case, answer yes and the application will let you update the firmware and install a more recent version.

On the contrary, if you believe that the firmware version is recent enough, then the communication issue may have another cause. In this case, **DO NOT** force the update of the firmware. If you do, the configuration of the board will be lost during the update. You should rather properly disconnect the board, and follow again the steps to connect to the board.

3 Updating the firmware

To update the firmware operating the board, click on the “Update Firmware” button. You will get a warning about the dangers of updating the firmware: an improper update may render your board unusable. You should thus take special care during updates.

You will be prompted with a dialog box to select the firmware to upload from your hard drive. All firmwares can be found at the following address:

<https://files.sensorscope.ch/firmwares>

BE SURE to select the proper firmware for your hardware: uploading the wrong firmware may **permanently damage** it. If you are not sure which firmware should be used, contact us at support@sensorscope.ch.

Once the proper firmware downloaded on your hard drive, select it in the dialog box and click on the "Upload" button.

The operation lasts from a few seconds up to a minute. During this interval, do not attempt to disconnect the device or even move it as a loose cable may interrupt the update, and ultimately render your board unusable.

4 Configuration

Each board has a set of configuration values that you can change using the *DS3 Cable App*.

Once connected to the board, simply click on the "Change Configuration" button to access the configuration dialog box. There, all configuration variables are listed and you can change and save them. Once the *DS3 Cable App* disconnected, simply reboot your DS3 data logger for the new configuration to be loaded and used.

5 Setting a Password

You can protect your board, and especially your configuration, with a password.

For instance, DS3 main boards let you choose a radio security key to make sure your data cannot be received by other users' DS3 devices. However, other users could still connect to your board with the *DS3 Cable App* to read the key you are using.

By setting a password, only you will be able to access the configuration of the board. If you set a password, a prompt appears upon connection to enter your password to unlock the board. **BE SURE** to remember your password, as there is no way to remove it or to change it without first unlocking the board.