

CANSwitch

Firmware Upgrade Instructions



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Important information

This manual assumes you have already read the CANSwitch User Manual. If not, please familiarize yourself with the user manual before continuing to read this manual.

The newest firmware, PC utilities, user manuals, installation diagrams, etc is available from www.canswitch.co.za.

Introduction

CANSwitch has two main firmware components:

1. The WiFi module
2. The System module

This manual describes how to upgrade both these modules.

What you need

The following is needed to upgrade the WiFi module:

1. Any computer with a WiFi connection, running Windows/MacOS/Linux
2. An internet browser (Internet Explorer, Mozilla, Safari, Google Chrome, etc).
3. The latest firmware file (CANSwitchWiFiFixx.bin).

The following is needed to upgrade the System Module:

1. A computer with a WiFi connection, running Windows.
2. The latest Ladder diagram editor.
3. The latest System module firmware.

All the required firmware can be downloaded from <http://www.canswitch.co.za/downloads.html>.

Connecting to the CANSwitch

CANSwitch has its own WiFi network. In order to communicate with the CANSwitch your computer needs to be connected to the CANSwitch network. To connect to the CANSwitch network, do the following:

1. Turn on the motorcycle's ignition.
2. On your computer, scan for WiFi networks.
3. The CANSwitch WiFi network is called "CANSwitch xxxxxxxx", where the "xxxxxxx" is the serial number of the CANSwitch.
4. Select the "CANSwitch xxxxxxxx" network to connect to.
5. When asked for the password, type the "xxxxxxx" portion (8 characters) of the network name.

Note: The "0", if any, in the network name and password is the number zero - not the letter 'O'.

Once connected to the CANSwitch you can verify the connection by using your internet browser, and typing "canswitch/" into the address bar, or "10.0.0.1/". Remember to add the '/' otherwise your computer might attempt to search for the address on the internet. This will fail, as your computer is not connected to the internet (because it is connected to the CANSwitch WiFi network).

Make sure your computer's firewall settings do not block access to any TCP ports while connected to the CANSwitch, as this may prevent the computer from being able to upgrade the CANSwitch.

WiFi module

Whenever new firmware becomes available, always upgrade the WiFi module first. If no new firmware is available for the WiFi module then the system module can be upgraded.

Upgrading the WiFi module

Once your computer is connected to the CANSwitch WiFi network you can go ahead and upgrade the WiFi module:

1. Save the downloaded WiFi firmware on your computer.
2. Using your internet browser, browse to the CANSwitch by typing "canswitch/" or "10.0.0.1/" in your browser's address bar.
3. If shown (depending on your WiFi module's current version), select the "Configure WiFi" link.
4. Select the "Upgrade WiFi Firmware" link.
5. Click on the "Choose File" button, then select the file "CANSwitchWiFixx.bin" that you saved in step 1 ("xx" is the version number of the firmware).
6. Click on the "Update" button. Your browser will now send the file to the CANSwitch WiFi module. The upload can take a few minutes. Do not turn off the motorcycle's ignition during this time.
7. Once the upload is complete, your browser will show "Update Success! Rebooting...". The WiFi module is now upgraded. You may need to re-establish the WiFi connection.

System module firmware

For some versions of firmware upgrades it might be necessary to download the ladder diagram again afterwards. Make sure you have a copy of your ladder diagram on your PC. If you have never downloaded a ladder diagram to your CANSwitch then it is using the basic ladder diagram, which is automatically installed as part of the Ladder Diagram Editor program.

Performing the upgrade

Once your computer is connected you can go ahead and upgrade the CANSwitch:

1. Run the CANSwitchLadder utility if you have not already done so.
2. Click on the "Upgrade Firmware" button on the lower left of the window.
3. An "Upgrade Firmware" window will open.
4. Click on the "Browse" button to select the new CANSwitch firmware.
5. In the File dialog, select the .CSF file to upgrade the CANSwitch with then click on "Open".
6. Verify that the file loaded properly by observing the information displayed below the filename (for example, "Version 02, BMW, CANSwitch Series 3 (WiFi)").
7. Click on the "Upgrade" button.
8. Wait for the upgrade process to complete. This takes about a minute or so. Do not turn off the motorcycle's ignition during this time.
9. After the upgrade reaches 100%, click on the "Close" button.
10. Your CANSwitch is now upgraded.

Ladder Diagram

If your CANSwitch does not switch on any outputs after the upgrade it might be necessary to download the ladder diagram again. In this case, do the following:

1. In the CANSwitchLadder utility, click on “Load”.
2. In the file dialog, select the ladder diagram (.SLF) that was last used. If you have never used a ladder diagram before, select the basic ladder diagram appropriate for your bike model.
3. Click on the “Download Diagram” button to program your ladder diagram into the CANSwitch.