

Spitronics ECU - Software Settings and Configuration - Guide

The Spitronics ECU software includes a number of settings that control how the tuning environment behaves.

These settings do not normally change the engine Tune itself. They mainly affect:

- Display preferences.
- Software behaviour.
- Communication settings.
- Auto Save behaviour.
- Matrix orientation.
- Hot Keys.
- User preferences.

These settings are stored in the software configuration file and can be transferred between software versions.

Software Terminology

Spitronics software terminology has changed over time.

Earlier software may use terms such as Map where newer software uses Tune. This guide uses current terminology unless an older software name is required to identify a specific control.

Cosmos is used as the main visual reference. Hyperspace uses substantially the same configuration system unless the operation differs significantly.

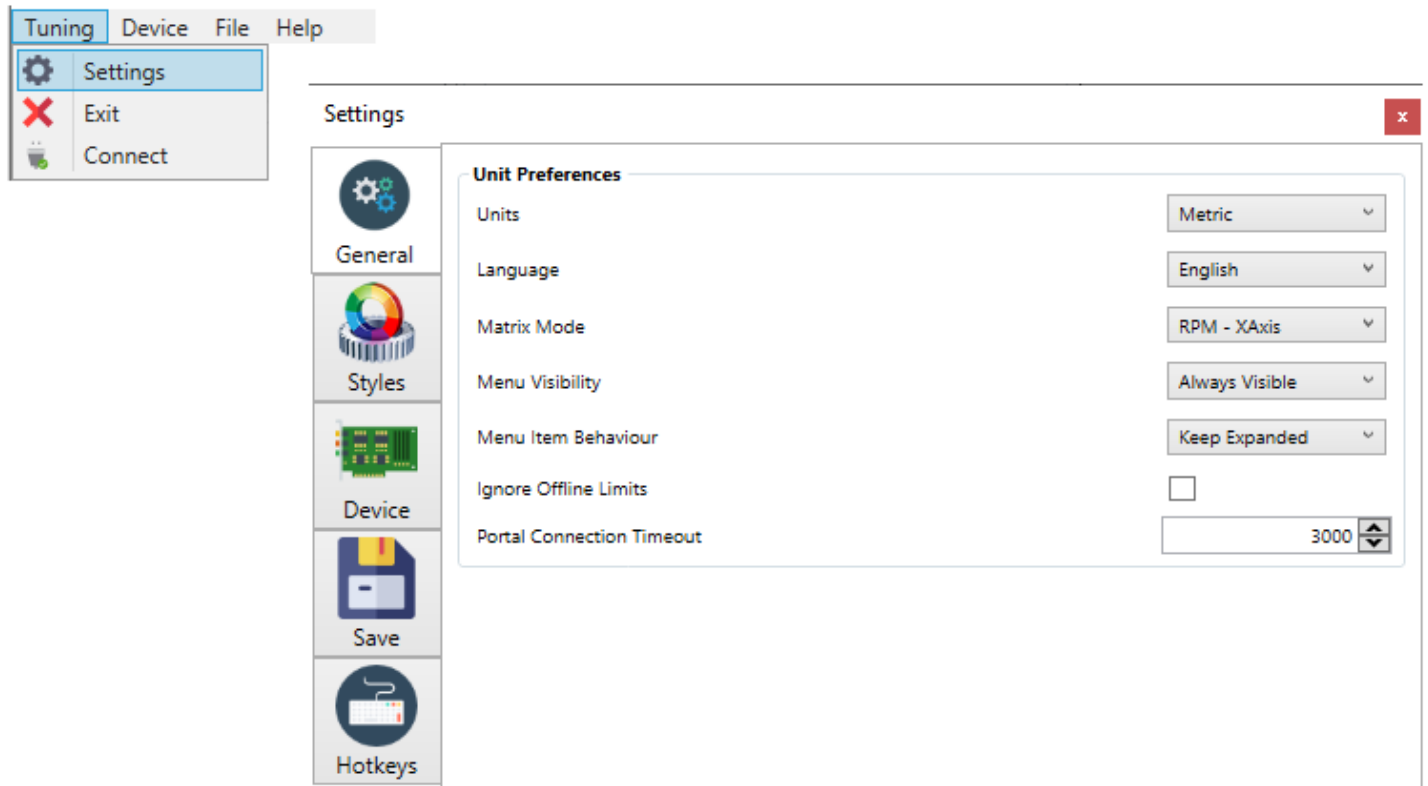
Opening Software Settings

Open the software Settings area to configure the general software environment.

Typical settings are grouped into areas such as:

- General.
- Styles.
- Device.
- Save.
- Hotkeys.

The exact appearance may differ slightly between software versions.



General Settings

General Settings control the basic software preferences.

Typical options include:

- Units.
- Language.
- Matrix Mode.
- Menu display behaviour.
- Offline editing options.
- Portal communication settings.

Units

Select the preferred measurement system.

Typical options are:

- Metric.
- Imperial.

This changes how values are displayed in the software.

It does not change the ECU calculations.

Language

Select the preferred software language where additional languages are available.

If only one language is installed, no additional selection may be shown.

Matrix Mode

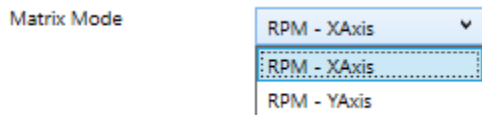
Matrix Mode determines the orientation of the RPM axis in Matrix tuning.

Typical options include:

- RPM on X-Axis.
- RPM on Y-Axis.

This setting changes only the way the Matrix is displayed.

It does not change the actual Tune data or ECU calculations.



Menu Visibility

The software Tree or menu can be configured to suit the user's preferred working method.

Typical behaviour may include:

- Always visible.
- Auto hide.
- Keep expanded.
- Auto collapse.

These settings affect only navigation and screen layout.

They do not change the ECU Tune.

Ignore Offline Limits

Some software versions provide an option to ignore normal editing limits while working offline.

This allows values to be entered outside the normal connected-Device limits.

Use this feature carefully.

A value that can be entered offline may still be unsuitable or unsafe for the actual Device or engine application.

Always verify the Tune before downloading it to the ECU.

Portal Connection Timeout

Portal Connection Timeout controls how long the software waits for a response when communicating with online Spitronics services.

The normal default should generally be used unless there is a specific communication problem.

Style Settings

The software appearance can be customised to improve visibility and suit the tuner.

Style settings may include:

- Background colours.
- Graph colours.
- Grid colours.
- Axis colours.
- Font colours.
- Marker sizes.
- Line thickness.
- Indicator widths.
- Matrix colours.
- 3D Cube colours.

These settings are stored in the software configuration file.

Application Styles

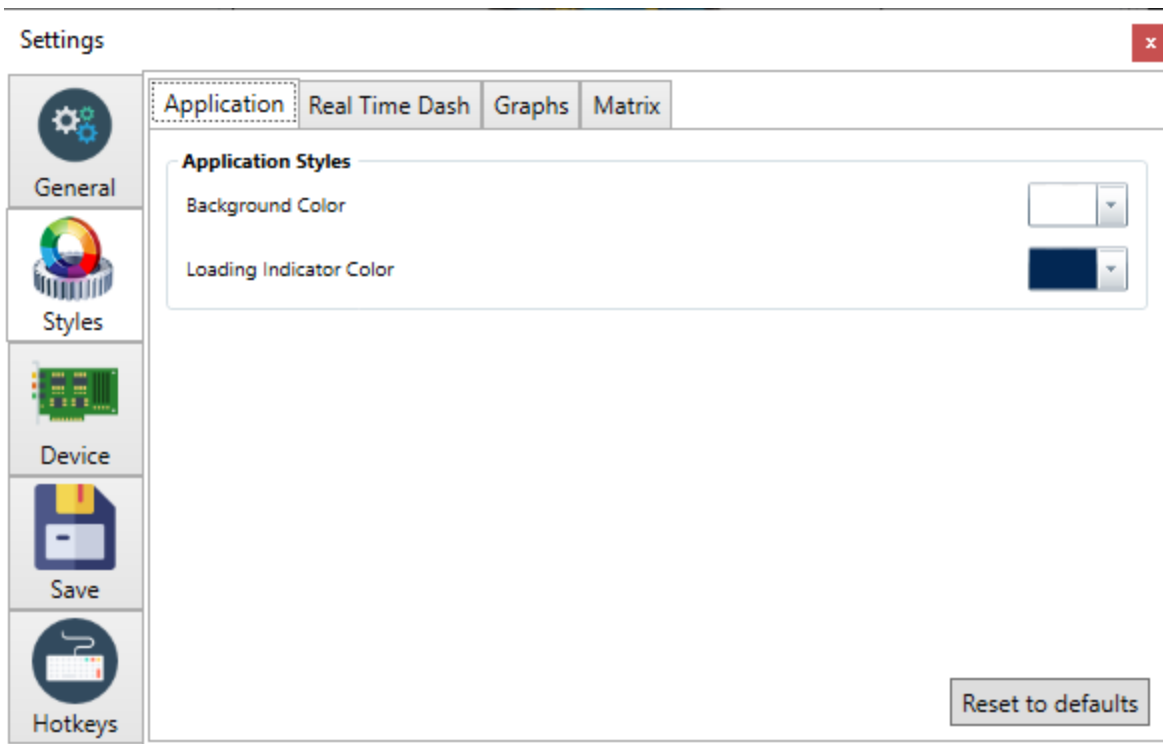
Application Styles control the general appearance of the software.

Typical selections may include:

- Main background colour.
- Loading indicator colour.
- Highlight colours.
- General interface colours.

These settings can be useful when tuning in different environments such as:

- Workshop.
- Dyno room.
- Outdoor vehicle.
- Bright sunlight.
- Low-light conditions.



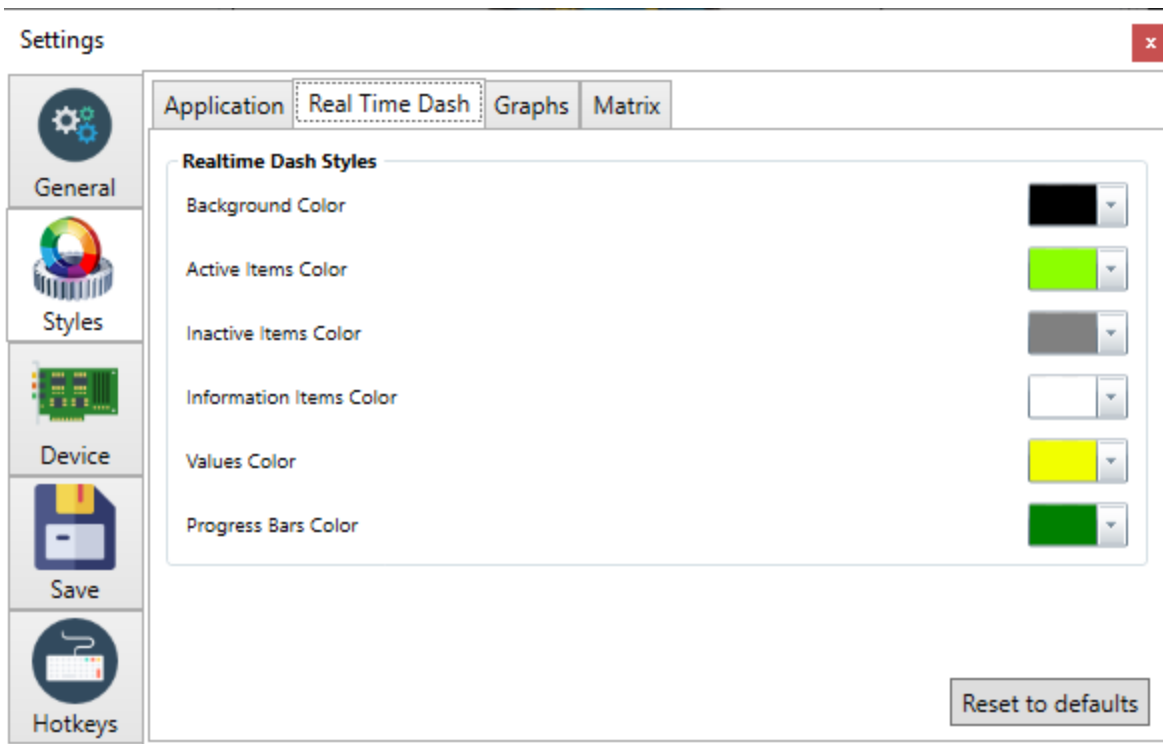
Real Time Dash Styles

Real Time Dash Styles control the appearance of the live operating display.

Typical options include:

- Background Color.
- Active Items Color.
- Inactive Items Color.
- Information Items Color.
- Values Color.
- Progress Bars Color.

These settings can be useful when tuning in different environments such as a workshop, dyno room or bright outdoor conditions.



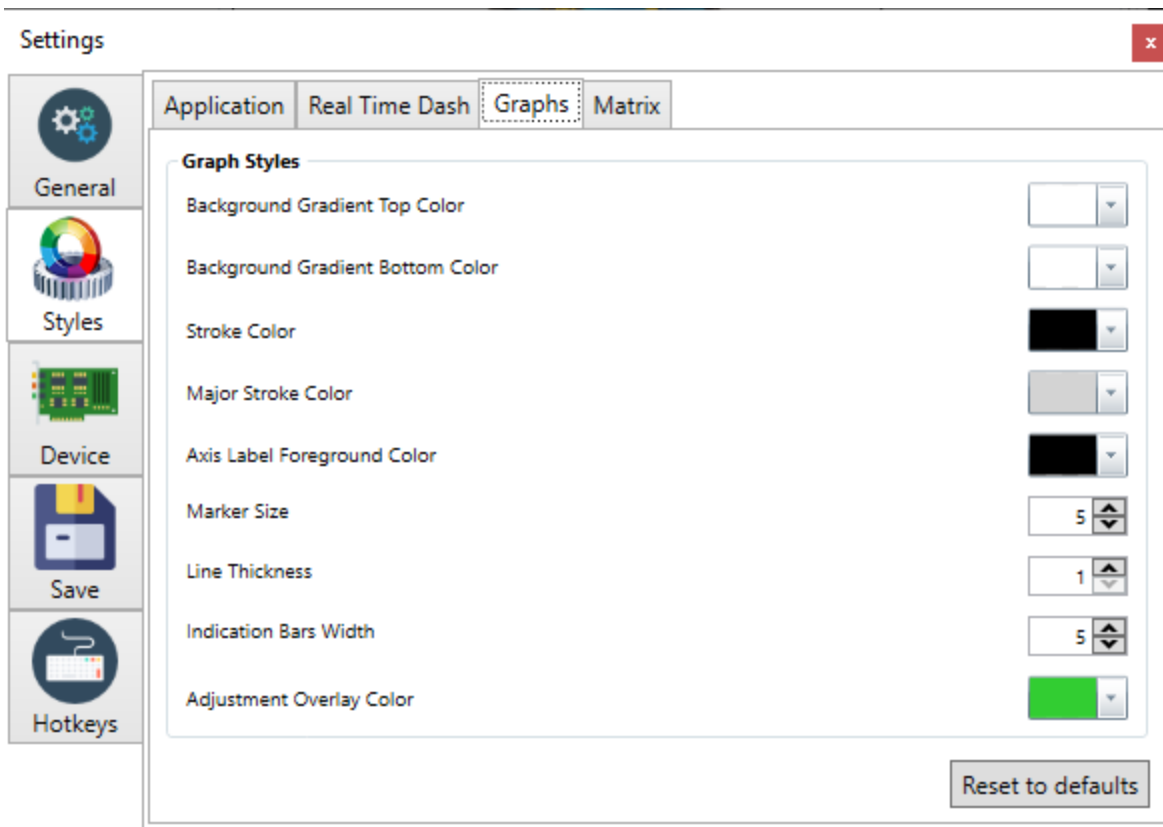
Graph Styles

Graph Styles control the appearance of Graph tuning screens.

Typical options include:

- Background colour.
- Grid colour.
- Axis colour.
- Marker size.
- Line thickness.
- Indicator bar width.
- Adjustment overlay colour.

The aim is to make the active Graph and Realtime position easy to see while tuning.



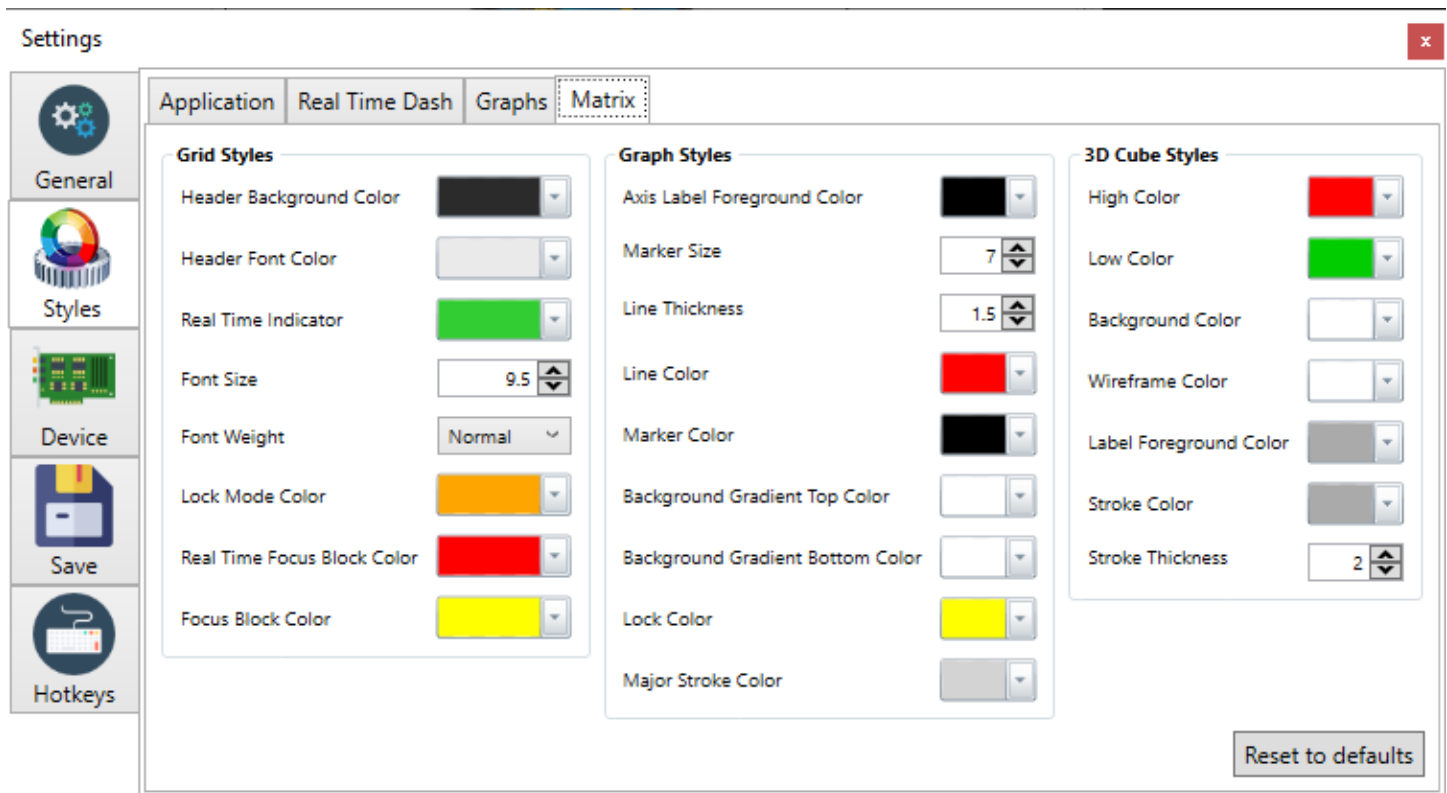
Matrix Styles

Matrix Styles control the appearance of Matrix tuning.

Typical options include:

- Header colours.
- Font colours.
- Realtime indicator colour.
- Lock Mode colour.
- Focus block colour.
- Graph colours.
- Marker colours.
- Axis colours.
- Background colours.

The 3D Matrix Cube may also have separate colour and line settings.



Device Settings

Device Settings control Bluetooth communication behaviour between the software and the ECU.

Typical settings include:

- Maximum Poll Error Count.
- Bluetooth Selection.
- Bluetooth Delay.

Most users should leave these settings at their default values unless communication problems are experienced.

Maximum Poll Error Count

Maximum Poll Error Count determines how many communication errors are allowed before the software considers communication to be lost.

This helps prevent a brief communication interruption from immediately disconnecting the Device.

Do not increase this value unnecessarily.

A high error count may hide a wiring, USB or Bluetooth communication problem.

USB Communication

USB is normally the preferred communication method where available.

The standard USB communication setting should normally remain at its default value.

If USB communication is unstable, first check:

- USB cable.
- Connector.
- Grounding.
- PC USB port.
- Device power supply.
- Electrical interference.

Do not use software delay settings to hide a physical communication problem.

Bluetooth Device

Enable Bluetooth Device when using an applicable Bluetooth communication module.

Disable it when normal USB communication is used.

USB does not use these settings.

Bluetooth Delay

Where Bluetooth communication repeatedly disconnects, the communication delay may be increased slightly.

A common indication of unstable communication is a communication indicator that repeatedly flashes red during normal operation.

Increase Bluetooth delay only enough to obtain reliable communication.

Bluetooth can not be used for Firmware loading. It has to be done with the USB cable.

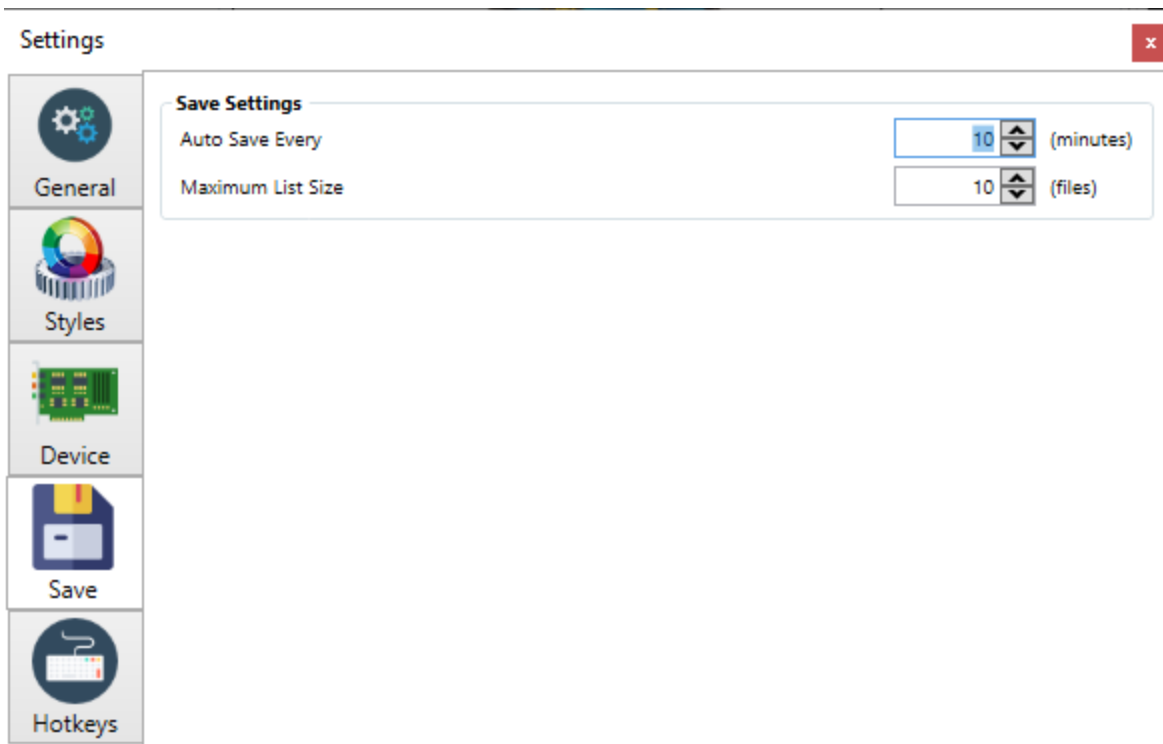
Save Settings

The software includes automatic Tune backup functions.

Typical settings include:

- Auto Save interval.
- Maximum Auto Save list size.

Auto Save should normally remain enabled.



Auto Save

Auto Save periodically stores the current Tune while it is being edited.

Typical intervals may include:

- 5 minutes.
- 10 minutes.
- 15 minutes.

The normal default is suitable for most users.

Auto Save helps recover recent work after:

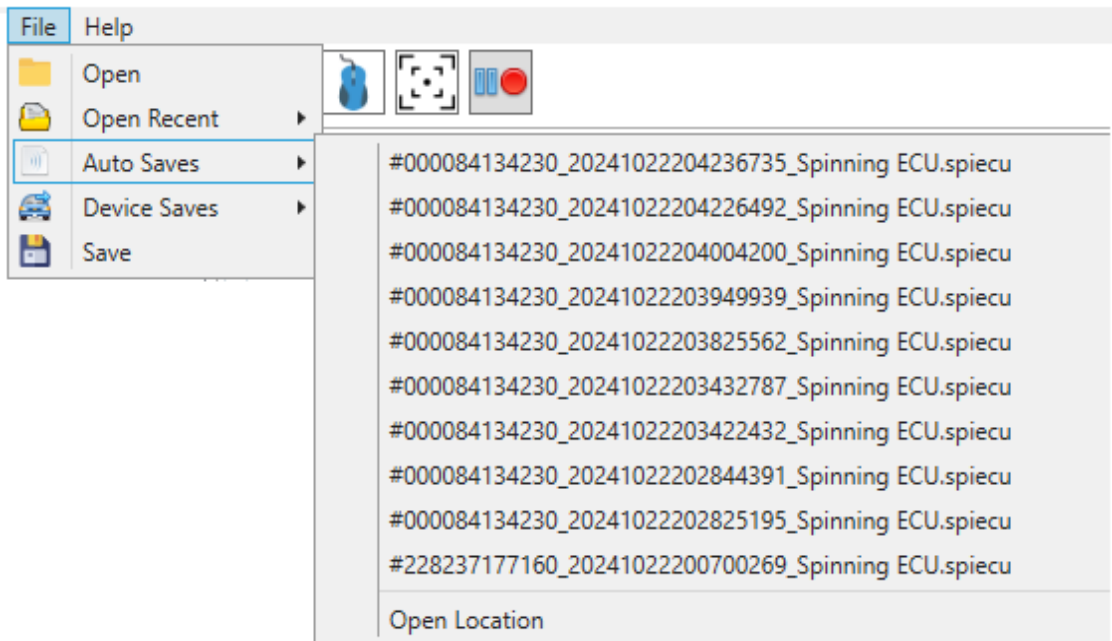
- Software crash.
- PC failure.
- Accidental overwrite.
- Unsaved tuning changes.

Detailed Tune backup and recovery are covered in the **Spitronics ECU - Tune and File Management - Guide** and **Spitronics ECU - Tune Recovery - Quick Guide**.

Maximum List Size

Maximum List Size determines how many files are retained in the view window.

Click on Open Location if you are looking for older files.



Hot Key Settings

Hot Keys provide fast keyboard access to common software functions.

Available groups include:

- Application Keys.
- Graph Keys.
- Matrix Keys.
- Data Logger Keys.

Most Hot Keys can be customised.

Keys shown in bold cannot be changed.

Settings ✕


General


Styles


Device


Save


Hotkeys

To change a hotkey or remove the key, right click on the selected key and select an option from the dropdown menu.
Bold keys can not be changed!

Application Keys
Graph Keys
Matrix Keys
Data Logger Keys

Description	Action Key	Primary Key	Secondary Key
Enables or disables realtime tuning	None ▾	R	Not Assigned
Enables or disables mouse tuning	None ▾	M	Not Assigned
Enables or disables easy tuning	None ▾	E	Not Assigned
Show or hide all lines on maps	None ▾	H	Not Assigned
Enable or disable Initialise tuning	None ▾	I	Not Assigned
Clear diagnostic code list	None ▾	C	Not Assigned
Close the application	None ▾	F4	Not Assigned
Toggle next available lines in the chart	None ▾	T	Not Assigned
Toggle previous available lines in the chart	None ▾	G	Not Assigned
Set the digital selection	None ▾	D	Not Assigned
Switch to next control/Switch between graphs on same page	Ctrl ▾	Tab	Not Assigned
Save	Ctrl ▾	S	Not Assigned

Reset to defaults

Detailed operation is covered in:

Spitronics ECU - Editing Tools and Hot Keys - Guide

and

Spitronics ECU - Hot Keys - Quick Reference

Configuration File

Software preferences are stored in the ECU software configuration file.

This file contains settings such as:

- Units.
- Style settings.
- Device communication preferences.
- Matrix orientation.

- Menu behaviour.
- Hot Keys.
- User preferences.

This allows a user's preferred tuning environment to be carried over to a newer software version.

Software Upgrades

When upgrading to a newer software version, make a backup copy of the existing configuration file before installing or changing versions.

Typical procedure:

1. Locate the current ECU configuration file.
2. Make a backup copy.
3. Install or extract the new software version.
4. Rename the saved configuration file if the new software uses a different configuration file name.
5. Copy the saved configuration file into the new ECU software folder.
6. Start the software.
7. Verify the settings.

This can preserve:

- Colour schemes.
- Hot Keys.
- Matrix preferences.
- Software preferences.
- Communication settings.

If the default settings are used, copying the configuration file is normally not essential.

Important Upgrade Note

The configuration file stores software preferences.

It does not replace a Tune backup.

Before a major software or firmware upgrade, also keep a backup of important ECU Tunes.

Use the Tune and File Management procedure for Tune backups.

Reset to Defaults

Where available, the software provides a Reset to Defaults option for configurable settings.

This is useful if:

- Hot Keys have been changed incorrectly.
- Styles have become difficult to use.
- Communication settings have been altered unnecessarily.

- The original software configuration is required.

Resetting software preferences does not normally change the ECU Tune.

Recommended Settings

For most users, the standard software settings should be suitable.

A practical starting point is:

- Use the correct Metric or Imperial units.
- Select the preferred Matrix orientation.
- Leave USB communication settings at default.
- Use Bluetooth delay only when required.
- Keep Auto Save enabled.
- Use the default Hot Keys unless there is a good reason to change them.
- Adjust colours only where improved visibility is required.

The software should remain simple to operate.

Customisation should make the tuning environment easier to use, not more complicated.

Setup Check

After configuring the software, verify:

- [] Correct units are selected.
- [] Matrix orientation is suitable.
- [] Menu behaviour is suitable.
- [] Graph and Matrix colours are easy to see.
- [] USB or Bluetooth communication is stable.
- [] Auto Save is enabled.
- [] Hot Keys operate as expected.
- [] Configuration file has been backed up if custom settings are important.
- [] Important Tunes are backed up separately.