

FIRMWARE CHANGES

This VariStep stepper motor card has been prepared with firmware version 1.4.0. The manual in the scope of supply is based on an older version of the firmware.

Therefore, note the following changes and additions.

Additionally Supported Devices

In addition to the VariFuel2 air/fuel ratio mixer, the following MOTORTECH devices can also be configured and controlled by the VariStep stepper motor card:

- Throttles with integrated stepper motor (ITB)
- Throttle gears (TG)

All information in the manual is also valid for these device types.

Changed Error Signals

The error signal of the *status* LED has been changed as follows:

- **Operation without errors:** flashing green
- **Warning:** flashing orange
Warnings are reset by a reference run or by downloading a configuration to the device. Warnings can for example be triggered by:
 - Unconfigured VariStep stepper motor card
 - Changing the connected device
 - Confirmation of overtemperature or overcurrent by the MICT
- **Error:** flashing red
Errors can be confirmed by the MICT by holding the buttons *Open* and *Close* simultaneously or by the external reset signal. Errors can for example be caused by:
 - Step loss
 - Overtemperature
 - Undervoltage
 - Overcurrent

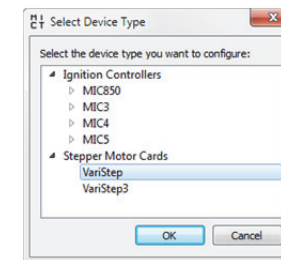
Changes and Additions to the MICT

Additions to the Toolbar and to the Menu Bar

| Menu | Function |
|---|--|
| <i>Settings -> Database settings</i> | Opens a dialog window in which various databases can be set as a source for the MICT |
| <i>Tools -> Coils</i> | Opens a database with information on MOTORTECH ignition coils |

Select Device Type

The selection of the device type has been revised. Select the entry *VariStep* in order to configure a VariStep stepper motor card.

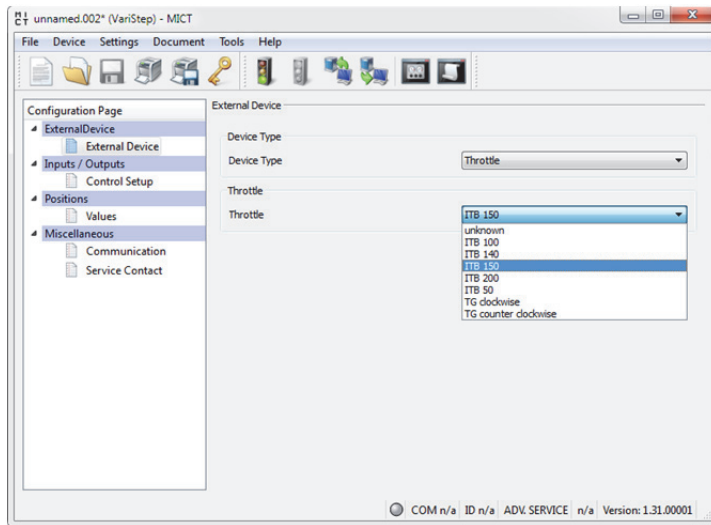


External Device

In the View *External Device* the device type selection has been extended: Throttles (ITB) and throttle gears (TG) can be selected in addition to the VariFuel2 air/fuel ration mixer.

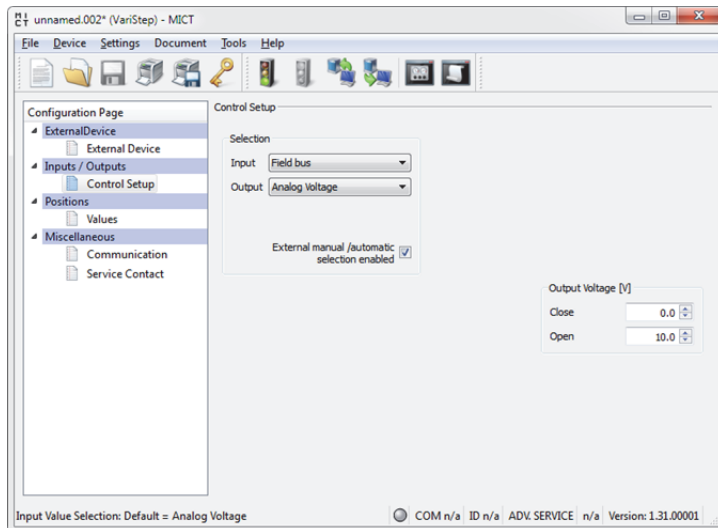
Additionally, the option *None* has been added to the device type list. This can be used when the device is decommissioned and stored or when a change between different device types is planned (e. g. between VariFuel2 and ITB throttle).

The VariStep stepper motor cards are delivered without configuration. In this case the option *unconfigured* is set for the *device type*. This option cannot be reassigned once the stepper motor card has been configured.



Inputs/Outputs – Control Setup

In the View *Control Setup*, the Input option *Field bus* can be selected. The position is then controlled by the ALL-IN-ONE. This requires a configured communication with the ALL-IN-ONE.



Miscellaneous – Communication

In the view *Communication*, the connection to the ALL-IN-ONE via CAN Bus can be activated and configured.

