



Product Update

MIC5 Ignition Controllers

New Firmware – Release 1.12.0



Firmware 1.12.0 is a release for all MOTORTECH ignition controllers of the MIC5 series. In order to operate the MIC5 ignition controllers with firmware version 1.12.0, MICT 2.33.00000 or higher must be installed on your PC. In order to update the MIC5 ignition controllers, please read the latest operating manual which is available for download at www.motortech.de. Check your settings prior to starting your engine.

Download

The new firmware for your device, all current operating manuals and the MICT at least required for operation can be downloaded at the following address (180 MB):

<http://www.motortech.biz/downloads/MOTORTECH-SoftwarePackage-MIC5-FW-1-12-0.zip>

New Functions and Modifications

Release 1.12.0 – 2019-07-16

- The flashing behavior of the pickup LEDs (pickup 1 up to pickup 3) has been reworked.
- The flashing behavior of the status LED has been reworked.
- Bugfix: An error has been fixed that could lead to a failed assertion when the following configuration was made:
 - In addition to a type N disc, another disk with more than one event (N, N+1, N-1, etc.) was assigned to the camshaft.
 - The N disc was not assigned to the pickup input with the lowest input number.
- Bugfix: An error was fixed due to which the calculation of output energy led to wrong results for 2-stroke engines.
- Bugfix: An error was fixed in which a measurement signal for output monitoring was sporadically incorrectly interpreted and therefore a primary short circuit was reported.

Test Release 1.9.00000 – 2018-02-22

- Bugfix: An error was fixed which caused a failed assertion for a system configured with only one pickup with a N-2 disc on the camshaft as soon as the first signal was detected on the pickup input.
- New J1939 function: A configurable address filter can be set so that broadcast PGNs are only accepted from one or two specific source addresses. If the filter is deactivated, the broadcast PGNs are accepted from all source addresses.

Test Release 1.7.00000 – 2017-10-27

- New J1939 Tx-PGN 0xF004: *Electronic Engine Controller 1* for transmitting the current speed.
- The period of the J1939 task was reduced from 10 ms to 5 ms to achieve more precise transmission times.

DISTRIBUTION

Customers / others	No
Representatives and Sales Partners	Yes
OEM partners	No
MOTORTECH subsidiaries	Yes

Product Update

Test Release 1.5.00000 – 2017-07-11

- Extended info message: *Firing enabled (Start/Stop In: x, CAN y, RS485: z, speed: s RPM)*
- Extended info message: *Firing disabled (Start/Stop In: x, CAN y, RS485: z, speed: s RPM)*
- Bugfix: An error was fixed that, on systems with an N-1 disc each on camshaft and crankshaft, lead to a pickup signal loss on the crankshaft not being recognized.
- Bugfix: Fixed an error regarding the transmission of the pre-trigger voltage and the auxiliary supply voltages runtime data via CANopen and Modbus. In the event of a fault, the configured instead of the current measured values had been transmitted.
- Bugfix: An error was fixed that could lead to a failed assertion when an invalidly configured alarm was triggered.
- In order to reduce latency after changes, the calculation of the global ignition timing was changed.
- Changed behavior of status bit: Cylinder Individual Timing Limited
The status bit is now additionally also set if the global ignition timing violates the global timing limits only due to an adjustment of a cylinder individual offset.
- New CANopen object 0x2748: Runtime data *Minimum Spark Durations* with expanded range: 0 µs to 6553.5 µs, resolution: 0.1 µs
- New CANopen object 0x274C: Runtime data *Energy Outputs* with expanded range: 0 mJ to 6553.5 mJ, resolution: 0.1 mJ
- New version 9.0 of the CANopen EDS file
- New Modbus register 0x2F90: Runtime data *Minimum Spark Durations* with expanded range: 0 µs to 6553.5 µs, resolution: 0.1 µs
- New Modbus register 0x2FD0: Runtime data *Energy Outputs* with expanded range: 0 mJ to 6553.5 mJ, resolution: 0.1 mJ
- New J1939 Tx-PGN 0xFEDA: Software Version
- New J1939 Rx-PGN 0xDF00: Stop Start Broadcast (DM13)

Test Release 1.3.00001 – 2016-05-17

- Deactivation of a development function for automatic formatting of a non-volatile memory area, which was only enabled in test release 1.3.00000.

Test Release 1.3.00000 – 2016-02-29

- New info message: *Firing enabled (Start/Stop: x, CAN y, RS485: z)*
- New info message: *Firing disabled (Start/Stop: x, CAN y, RS485: z)*
- Bugfix: An error has been fixed that could lead to a failed assertion at rapid acceleration of the engine.

Test Release 1.1.00000 – 2015-03-02

- New status bit: Cylinder Individual Timing Limited
- New configuration value *ASO Mode* for selection between operation with standard or inverted polarity
- New selection *Warning acknowledge* (< 3 s high), *error and alarm acknowledge* (> 3 s high), *device reset* (> 15 s high) for the configuration value *GPI1*.
- New CANopen object *Parameter File* for support of *binary parameter file download*
- New version 8.0 of the CANopen EDS file

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OEM partners	No
MOTORTECH subsidiaries	Yes

■ Product Update

Release 1.0.2 – 2014-11-14

- In order to achieve a better hardware protection, switching behavior of high voltage power supply has been modified.

Release 1.0.1 – 2014-10-16

- Bugfix: Fixed an error that, under certain conditions, led to a shutdown during ignition when two pickups were configured.
- Bugfix: Fixed an error that, under certain conditions, led to a shutdown right after synchronization when one pickup was configured.

Release 1.0.0 – 2014-09-03

- Initial version

Known Issues

All Versions

- Pickup input types *N Magnets* and *Single Magnet* are not implemented in firmware.

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OEM partners	No
MOTORTECH subsidiaries	Yes