

ALL-IN-ONE.NT/.NTC: Activating Connection to MOTORTECH® Ignition Controller

This application note contains information on how to activate the communication connection between a generator & CHP control system ALL-IN-ONE.NT/.NTC and an ignition controller MIC3, MIC3+, MIC4, MIC5, and MIC6 using the configuration software GenConfig.

This application note is aimed at personnel tasked with the construction of control cabinets for gas engine gen-sets as well as the setup, operation, maintenance, and repair of gas engine gen-sets. A certain level of technical knowledge with respect to the operation of gas engine gen-sets and basic knowledge of electronic ignition systems are necessary.



Comply with the documentation of the devices

This application note is an addition to the documentation of the ignition controller and the generator & CHP control system. Read and understand the complete documentation of both devices prior to start-up.

Preparation

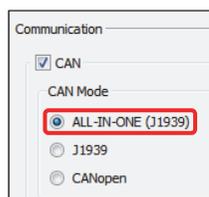
In order to activate the communication connection between an ALL-IN-ONE.NT/.NTC and an MIC ignition controller, first ensure the following:

1. The devices must be wired and interconnected via the CAN bus. Each bus end must be fitted with a terminating resistor of 120 Ω. Note that with the MIC3 and MIC3+, the terminating resistor is normally integrated in the input harness.

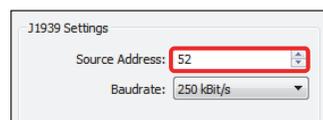
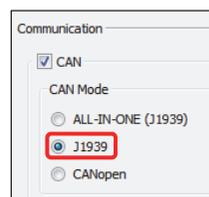
More information on CAN bus wiring can be found in section *Wiring* in the operating manual of your ALL-IN-ONE.NT/.NTC and in section *Output Wiring – CAN Bus Interface* in the operating manual of your MIC ignition controller.

2. In the MIC ignition controller, the CAN settings must correspond to the MOTORTECH ECU list you use. If necessary, make the appropriate settings via the MICT configuration software under *Miscellaneous - Communication* (entries vary).

ECU list MOTORTECH 1.1:



ECU list MOTORTECH 1.6.0:



More information on configuring communication via the MICT can be found in section *Miscellaneous – Communication* in the operating manual of your MIC ignition controller.

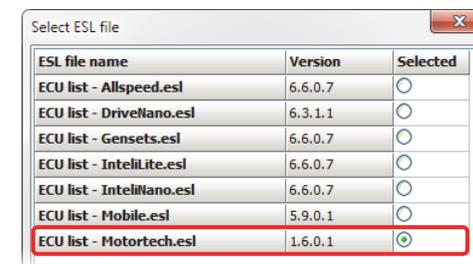
3. For communication between the ALL-IN-ONE.NT/.NTC and the MIC ignition controller, you need a password that you obtain from your MOTORTECH contact person via an email at service@motortech.de. For this, pass on the serial number of the ALL-IN-ONE.NT/.NTC from the device plate per email.



Settings via GenConfig

Note the previous section *Preparation* first. Further ensure that the ALL-IN-ONE.NT/.NTC and the MIC ignition controller are in operation and that the configuration software GenConfig is connected to the ALL-IN-ONE.NT/.NTC. Then proceed as follows:

1. In GenConfig, first select the ECU list *ECU list - Motortech.esl* with the desired version (1.6.0 or 1.1) via *Options -> ESL files*. Note that the firmwares IS-NT-AFR 2.3.1 and IS-NT-AFR 2.2 only support the ECU list MOTORTECH 1.1.



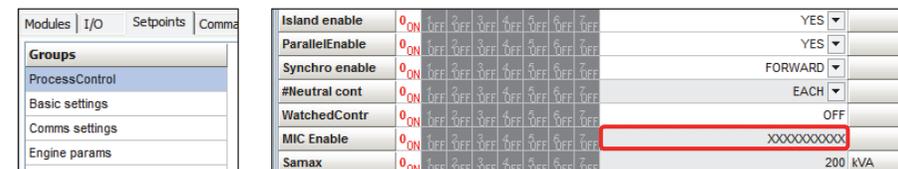
2. *Firmware IS-NT-AFR 2.3.1 and 2.2:*

For module configuration, select via *File -> Open* an archive with the identifier MIC that corresponds to your application (for example *IS-AFR-MIC-SPI 2.2*).

Firmware IS-NT-AFR 2.6.0:

For module configuration, select via *File -> Open* the archive that corresponds to your application (for example *IS-AFR-SPI 2.6.0*). Then, on the *Modules* tab, add the desired ECU with the identifier *MIC* or *MIC850* to the module configuration.

3. In the *ProcessControl* group on the *Setpoints* tab, enter under *MIC Enable* the password that you have obtained from your MOTORTECH contact person.



4. Disconnect the ALL-IN-ONE.NT/.NTC and the MIC ignition controller briefly from the power supply so that both devices restart.
 - ▶ The connection between the ALL-IN-ONE.NT/.NTC and the MIC ignition controller has been activated.