

The purpose of this document is to allow a fast and easy handling of the product, nevertheless it is essential that you refer to the technical documentation (latest version always available on our website www.cretechnology.com) for the commissioning.

For any further information on this product, please contact your local distributor or agent or directly our support team.

- All our products have a 1 year warranty.
- Help desk: +33 492 38 86 86
- E-mail: support@cretechnology.com
- SKYPE: [support-cretechnology.com](https://www.skype.com/contact)



OPERATIONAL MODES

The **AMF COMPACT** can be configured and controlled with the front panel, which is separated into two parts:

1. The top end and middle part: dedicated to the navigation, monitoring and measure display.
2. The bottom end part: dedicated to the 3 functioning modes selection:
 - **AUTO** - This mode makes the **AMF COMPACT** operate the installation in a fully automatic mode according to its settings and configuration, external action to start: "remote start digital input", a "mains failure or TCP ModBus.
 - **TEST** - This mode simulates the start of the Auto mode with the requested sequences, according to its settings and configuration (ex: if the controller is configured in normal change over mode and test on load, then the transfer of load will be done after the engine start). To return to normal state, simply press AUTO again.
 - **MANU** - This mode allows you to manage your installation with the front panel buttons manually, while maintaining the automatic management of auxiliary and protections, ex: if you press the START button the engine will start and you will manage the auxiliaries (preheating/starter...), if you press I/O breaker button the load will be transferred according to its settings, configuration in MANUAL mode state, the protections remain active, but all external start orders and automatic sequences are inhibited.

MENUS

Once the **AMF COMPACT** is switched on, you can access the menu on 3 different levels (to access the password page, press **ESC** or **ENTER**):

- **Level 0** : No password required, just press «ENTER» to access the display,
- **Level 1** : Just press «ENTER» to go to Display menu. Press «↓» to select «configuration or «system» of the **AMF COMPACT**. Press «ENTER» to switch to password mode. Press «↑» to change the character; press «→» to move to the next character. Level 1 password is «1».

NOTE : The level 1 password gives you access to the minimum settings recommended to start your commissioning on your power plant, This level "1" is equivalent to "standard mode" on the i4Gen Suite software.

- **Level 2** : Just press «ENTER» to go to Display menu. Press «↓» to select «configuration or «system» of the **AMF COMPACT**. Press «ENTER» to switch to password mode. Press «↑» to change the character; press «→» to move to the next character. Level 2 password is «1234».

NOTE : The level 2 password gives you access to all settings to commission your power plant. This level "2" is equivalent to "advanced mode" on the i4Gen Suite software. For complex settings, not available through the front panel of the module, use i4Gen Suite (Analogue inputs, Easyflex, Scheduler, etc ..).

THE DIFFERENT MENUS WILL APPEAR AS FOLLOW

DISPLAY		CONFIGURATION (*LEVEL 2 ONLY)	
GENERATOR	Electrical measures on bus : general, frequency, voltage, powers, currents, power factor.	APPLICATION	Breaker type :select the breaker type. Level 2 : power up mode, test mode.
MAIN	Electrical measures on mains : general, frequency, voltage, powers, current, power factor.	TIMERS	Timer settings for breaker, stop sequence, Mains and engine sequence. Level 2 : Timer settings for start sequence, gas engine sequence.
ENGINE	Mechanical measures on engine : oil pressure, water temp, speed, battery voltage, running hours, starts attempts, etc...	GENERATOR	Definition of the electrical measure ratios (PT, CT) and generator nominal values (kW, kVAR, V). Level 2 : Static paralleling.
INPUTS/OUTPUTS	Real time displays for digital and analog I/Os, and CA-Nopen digital I/Os.	MAINS	Nominal values (V, Hz) PT and CT ratio.
MAINTENANCE	Real time displays for maintenance counters on hours and days.	POWER MNGT*	Load shedding: Under frequency and maximum load settings.
ABOUT	Information on hardware product : serial number, firmware version.	ENGINE	Engine definition: Engine type, speed sensor and setpoint. Level 2 : Check before start, maximum Starting Attempts By starter, Starter Order, timers.
SYSTEM (*LEVEL 2 ONLY)		J1939 ECU/ECM	Engine J1939 configuration.
EVENTS*	Events personalized list to configure.	INPUTS/OUTPUTS	Digital inputs and outputs settings. Analog inputs settings Relays outputs settings.
DATE/TIME	Regional settings, on date and time.	BREAKERS	Generator & Mains breakers control settings
SCREEN SETUP	Screen settings about contrast, backlight, screen saver, time out password and language.	GENERATOR PROTECTIONS*	Protections on frequency, voltage, current, kW, kVAR, unbalance, short-circuit and Earth Fault.
ETHERNET	Ethernet communication settings, IP, etc..	MAINS PROTECTIONS*	Protections on frequency, voltage, kW, kVAR, unbalance.
		OTHER PROTECTIONS*	Protections on speed, oil pressure, water temp, analogue inputs, battery, boost battery, J1939.
		MODIF BY VAR NUMBER*	Personalized settings (for experienced users only).

QUICK START AMF COMPACT

WIRING CONNECTION

Wiring & Dimensions/Panel cut out, [please check on our website](http://www.cretechnology.com/en/generator-control/114/amf-compact), (www.cretechnology.com/en/generator-control/114/amf-compact) in the **technical documentations section**.

PC CONNECTION - WITH I4GEN SUITE SOFTWARE

Switch on the controller. Connect the Ethernet port (RJ45-LAN) of your computer to the Ethernet port of the controller. To be able to establish communication between the i4Gen Suite and the controller, the network addresses of both devices should be configured:

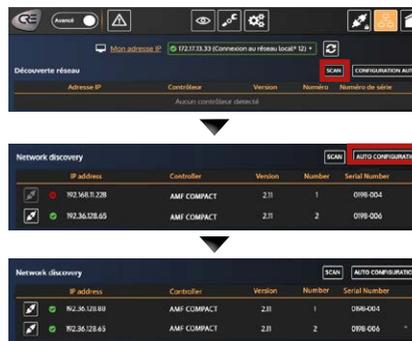
1. For PC network configuration, please refer to your Windows network settings.
2. The controller network configuration can be done from the controller front panel or via the i4Gen Suite software.
3. The network configuration of both devices has to be compatible: The IP address by default of CRE TECHNOLOGY controllers is: 192.168.11.1

Installation of the i4Gen Suite SOFTWARE

Download the latest version of the software on our website
www.cretechnology.com/en/c/33/products/software



Open the i4Gen Suite software and go on Easy connect menu (on the top right)



Click on the icon "SCAN".
Your AMF COMPACT will appear

Click on the icon "AUTO CONFIGURATION"
to adapt IP addresses

Your system is ready

You can click to connect on the product.

ONCE CONNECTED, YOU WILL BE ABLE TO NAVIGATE THROUGH THE FOLLOWING MENUS

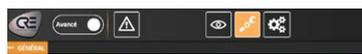
CONTROLLER SUPERVISION

(Visualization of all parameters)



CONTROLLER STATIC SETTINGS

(Parameters setting with engine stopped)



APPLICATION SETTINGS

(PC software settings)



NOTE

Before the commissioning or the operation of your equipment, please read carefully the user's manual and other related documentations.

Engines, turbines or any other type of Generator must be equipped with protections (overspeed, temperature, pressure... depending on your installation). We also offer personalized and specific training on our product range and software, as well as additional services such as: onsite support, application engineering or specific support.



Carefully apply the safety instructions. Any misuse of your equipment can lead to human or machine damages.

COMMISSIONING

- In MANU mode: Start/Stop the engine, and check protections (oil pressure, water temp, emergency stop, etc ...). Check that the configuration and wiring are done for an AMF application (Gen. breaker in and Mains breaker in). Check the phase direction and the phase concordance. Check the generator and mains voltage terminals assignment. Open and close the generator breaker and the mains breaker. Apply some load on the generator side and check the power measurement in kW per phase, it should be positive. Take some load on the mains side and check the power measurement in kW per phase, it should be positive. Press the START button to check the start sequences (cranking attempt, start motor disengagement and others auxiliaries...). Press the I/O button to check the transfer of load.
- In TEST mode - Controller configured in AMF mode and in test on load. With this mode we simulate a complete sequence as expected in AUTO mode, the load is automatically transferred to the generator after the start sequences. To stop the TEST mode sequence, press the AUTO mode button. After the engine running, the AUTO mode could be selected to take the load by the activation of an auxiliary input that has been configured to remote start on load.



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