

EM760 Icd Keyboard User Manual

1.Keyboard Functions

1.1 Structure of LCD keyboard

Control panel of EM760 inverters: LCD keyboard.

The LED keyboard consists of an LCD display, nine operation keys, and two status indicators.

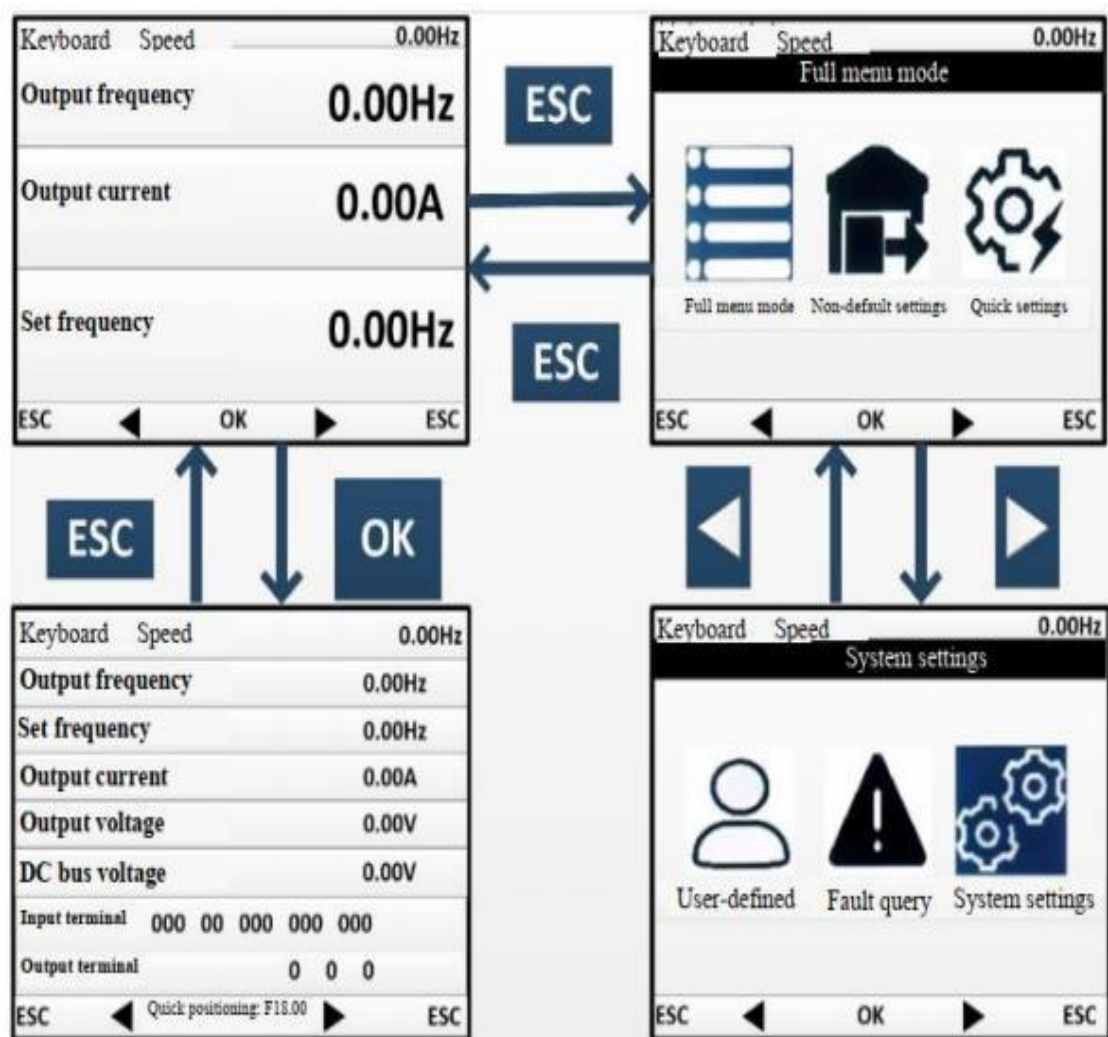
Users can perform parameter setting, status monitoring and start/stop of the inverter via the keyboard.

2.LCD Keyboard Operation

The LCD keyboard menu is divided into monitoring (Level 0), menu mode selection (Level 1), the function code selection (Level 2) and the detailed function code (Level 3) from low to high. The menu levels are represented by numbers in subsequent text of this manual.

Menu mode selection has 6 options: full menu mode displays all function codes; user-defined mode displays only function codes of user group F11; non-default mode displays only the function codes that differ from the default settings; fault query allows the user to view the latest three fault records saved; guide mode allows setting motor parameters-related function codes in order for self-learning operation; system setting allows setting the brightness, backlight time, language and view of the software version

When the keyboard is powered on, it shows the level 1 menu,i.e. the monitoring interface (main monitor), by default. On the monitoring interface (main monitor) press the LEFT key  to switch the function code displayed in the second line and press the RIGHT key  to switch the function code displayed in the third line; the function codes for switching is set by using F12.33-F12.37; in the level 1 menu, press the ESC key  to enter level 0 menu; in the level 0 menu, use the LEFT key  and the RIGHT key  to select a different menu mode. In the level 0 menu, press the ESC key  to go back to the main monitoring interface of level 1 menu. The procedure for menu mode selection is shown in the figure below.



2.1 Full menu mode

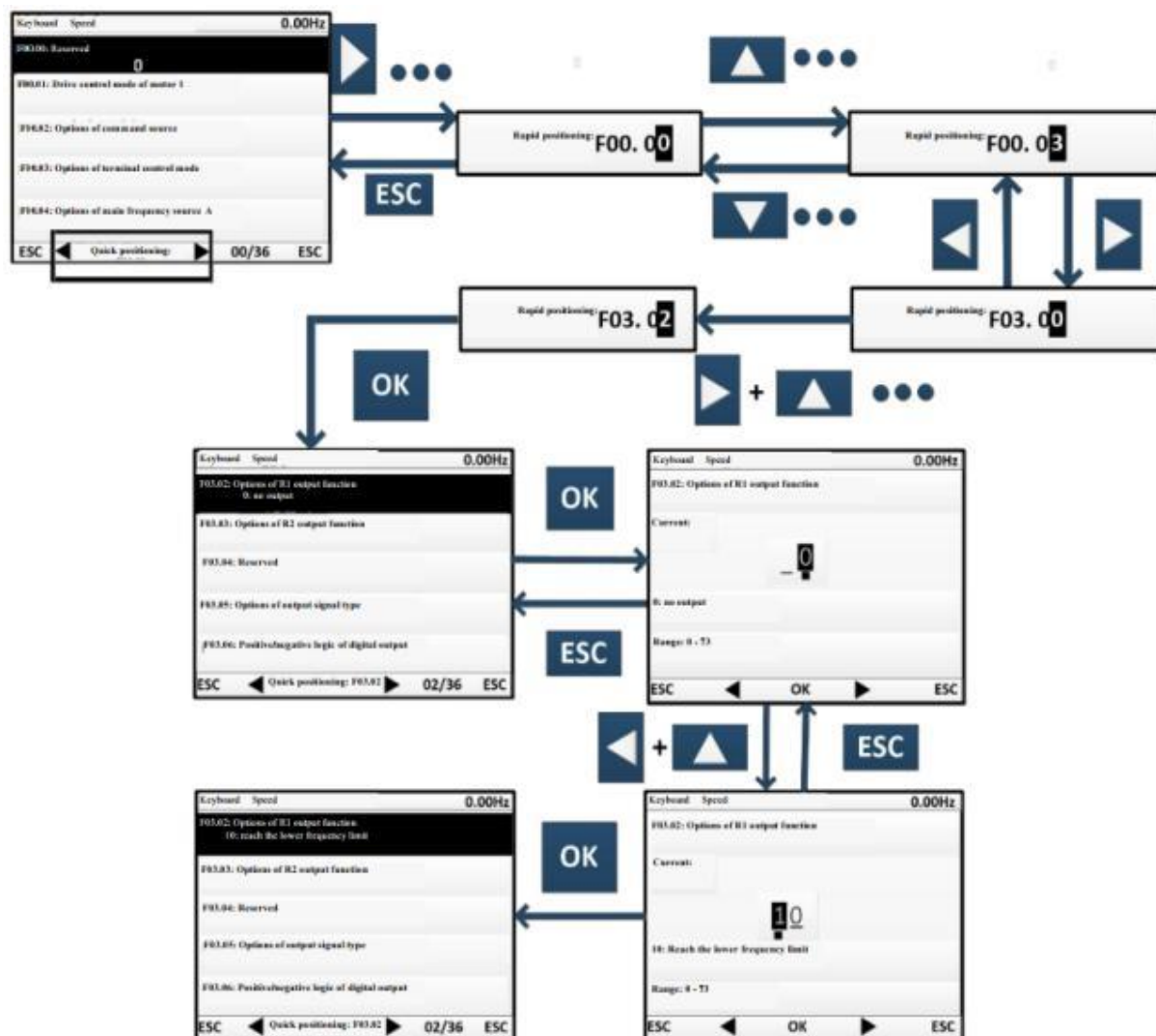
In the full menu mode, press the ENTER key **OK** to enter the Level 2 menu and select any function code. Then press the ENTER key **OK** to enter the Level 3 menu and view or modify the function code. Except for a few special ones, the function codes needed by general users can be modified.

In all menu modes, the user needs to press the ENTER key **OK** to save parameter modifications.

In the Level 3 menu, press the ESC key **ESC** to abandon parameter modifications: if the function code is equal to the unmodified value, directly exit the Level 3 menu and go back to the Level 2 menu; otherwise, the unmodified value will be restored and displayed, and the user can press the ESC key **ESC** to exit the Level 3 menu and go back to the Level 2 menu.

Quick positioning function: The full menu mode displays all groups of function codes and quick positioning can facilitate operations. To locate a function code, it is only required to set the function code to display and press the ENTER key **OK** to display the function code.

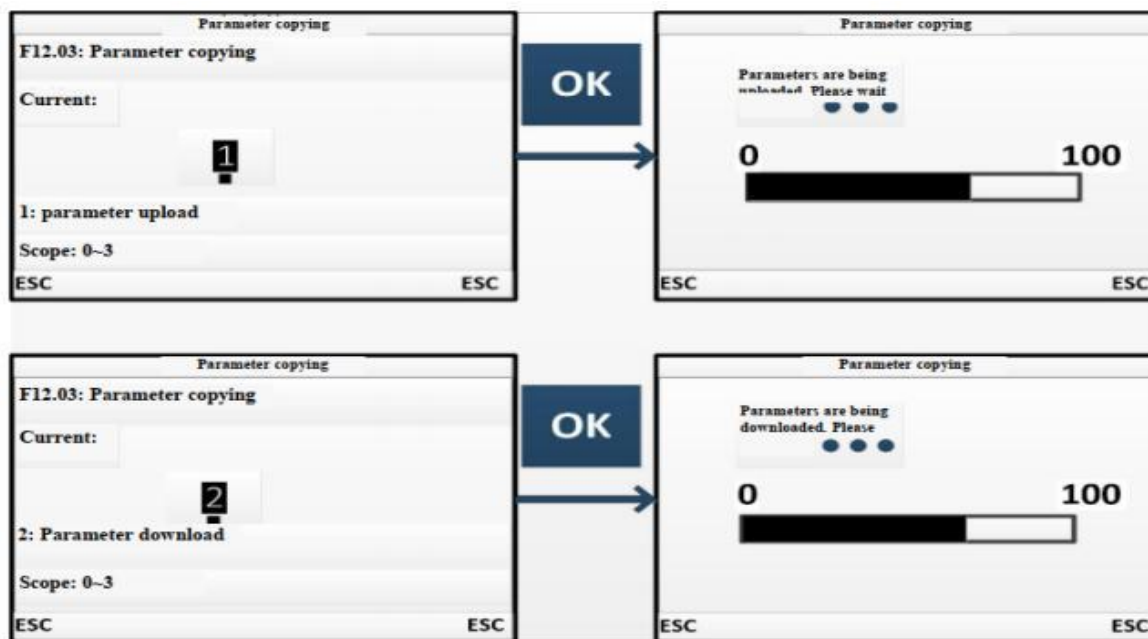
The process of changing the value of the function code F03.02 to 10 from the initial status upon power-on in the full menu mode is shown in the following figure. In level 2 menu, the number of function code groups can be known through the function code progress indication. As shown in the following figure, 02/36 means group F03 consists of 36 function codes, and the cursor is currently located at F03.02.



3. Parameter copying

For convenient parameter setting between inverters using the same function parameters, the keyboard is provided with parameter uploading and downloading functions. When function code F12.03 is set to 1 and ENTER is pressed **OK** for confirmation, inverter-related parameters will be uploaded to the keyboard; upon uploading, the keyboard shows the progress; when uploading is completed, the value of the function code will automatically change to 0. The keyboard with uploading completed may be inserted into another inverter that needs to use the same parameters.

Once the keyboard is inserted, you may change the value of the function code F12.03 to 2 and download the parameters to the inverter. If you set the value of the function code F12.03 to 3, motor parameters will be downloaded in addition to normal parameters. Upon downloading, the keyboard will show the progress. Similarly, upon completion of parameter downloading, the value of the function code will automatically change to 0.



It shall be particularly noted that:

1. No keyboard can be used for parameter downloading before it undergoes parameter uploading, as unknown parameters in the keyboard without parameter uploading may cause failure of an inverter by disturbing existing parameters in the inverter. If a keyboard is used for parameter downloading without parameter uploading, it will prompt presence of no parameter in the keyboard, suggesting parameter downloading is unsuccessful; press ESC to exit; perform uploading again before downloading.

2. For parameter downloading to an inverter with a different version of CPUS software, the keyboard will prompt whether to continue downloading regardless of the different version; at this time, it is required to make clear whether parameter downloading is permitted between the two different versions. If yes, press ENTER key **OK** to execute the downloading; if no, press ESC to cancel the current operation. Be cautioned that parameter uploading and downloading between two inverters with incompatible parameters are likely to cause operation failure of the inverters.

4. Run/Stop

After setting the parameters, press the RUN key  to enable the normal operation of the inverter, and the STOP key  to stop the inverter. The M.K  can be defined to free parking or to stopping inverter operation by changing the function code F12.00 to 5.

When function code F01.34 is set to corresponding self-learning mode, it is required to press RUN  so that the inverter can enter corresponding parameter identification status; upon parameter identification, it will show "TUNE" ; when identification is done, it will return to the original display, and the function code F01.34 will automatically change to 0. Upon rotation parameter identification by the inverter, the motor may rotate; in emergent cases, the user may press STOP  to cancel identification.