



Owner's Manual

Original Instructions

Commissioning Tool 3

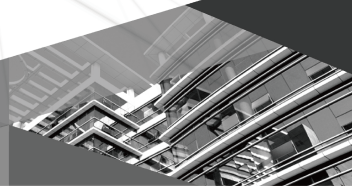
Model:

DE43-00/EF(CM)

Thank you for choosing this product. Please read this Owner's Manual carefully before operation and retain it for future reference.

If you have lost the Owner's Manual, please contact the local agent or visit www.gree.com or send an email to global@cn.gree.com for the electronic version.

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



To Users

Thank you for selecting Gree product. Please read this instruction manual carefully before installing and using the product, so as to master and correctly use the product. In order to guide you to correctly install and use our product and achieve expected operating effect, we hereby instruct as below:

- (1) This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- (2) This instruction manual is a universal manual, some functions are only applicable to particular product. All the illustrations and information in the instruction manual are only for reference, and control interface should be subject to actual operation.
- (3) If the product needs to be installed, moved or maintained, please contact our designated dealer or local service center for professional support. Users should not disassemble or maintain the unit by themselves, otherwise it may cause relative damage, and our company will bear no responsibilities.
- (4) All the illustrations and information in the instruction manual are only for reference. In order to make the product better, we will continuously conduct improvement and innovation. If there is adjustment in the product, please subject to actual product.

Contents

1 Safety Notices (Please be sure to abide)	1
2 Components and Wiring Instructions	1
2.1 Use Environment	3
2.2 Wiring Instructions	3
3 Display and Operation Instructions	9
3.1 Communication Interface Identification	9
3.2 Homepage Display	12
3.3 General Buttons and Icons	13
3.4 Buttons Operation	13
4 Functions	15
4.1 Functions for CAN Communication Units	15
4.2 Functions for RS485 Communication Units	23
4.3 Functions for Power Line Communication Unit	24
4.4 Controller Setting	25

1 Safety Notices (Please be sure to abide)



Warning: If not abide strictly, it may cause severe damage to the unit or the people.



Note: If not abide strictly, it may cause slight or medium damage to the unit or the people.



This sign indicates that the operation must be prohibited. Improper operation may cause severe damage or death to people.



This sign indicates that the items must be observed. Improper operation may cause damage to people or property.

2 Components and Wiring Instructions

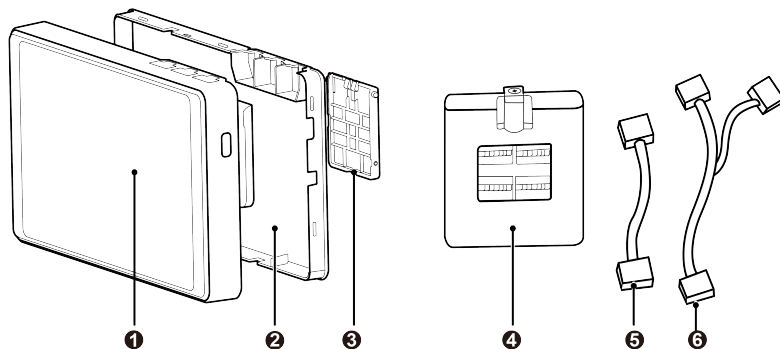


Fig.2.1 Controller Components

No.	①	②	③	④
Name	Controller Touch Screen	Controller back cover	Support	Patch board
QTY	1	1	1	1
No.	⑤	⑥	—	—
Name	Short wire	Long wire	—	—
QTY	1	1	—	—

Unit: mm

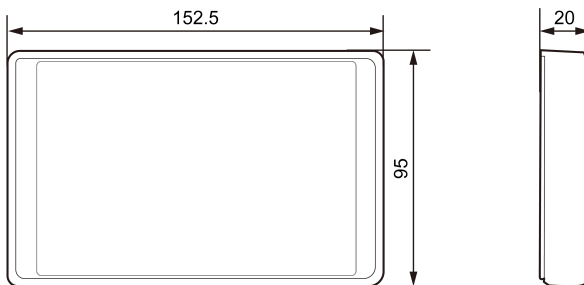


Fig.2.2 Outline Dimensions

The wiring instructions for the controller components are as follows:

The length of the long wire is 5.5 meters, which is used when connecting this product to the unit; The short wire length is 0.25 meters, mainly used for some engineering wiring, paired with patch board and long wire. If the user uses other communication cables, it is recommended that the total length should not be longer than 5.75 meters, the wire diameter is not less than the wire diameter of this product,

and ensure that the wire sequence is correct.

2.1 Use Environment

Never use this product in the following conditions:

- (1) A place with corrosive gas, heavy dust, salt mist or fumes;
- (2) Humid place or somewhere with direct sunlight;
- (3) A place that is close to hot objects or easy to get wet because of splashing water;
- (4) Working temperature range for the commissioning tool: 0~48°C.

2.2 Wiring Instructions

2.2.1 Wiring Ports

Interface	Meaning	Remarks
HBS	HBS communication	Power line communication unit
CAN	CAN communication	VRF
RS485	RS485 communication	Air Handler
USB	Power and computer connection	USB Type-C

2.2.2 Power Supply

- (1) Power supply mode 1: Power is connected through the USB interface.
- (2) Power supply mode 2: Power is provided by the unit through a 4-core communication wire. This mode is used depending on the actual use environment.

2.2.3 CAN Communication Connection

To suit different types of units, this product can be connected by using the following two methods:

Method 1: Connect to the air conditioner network through CAN communication with the indoor unit.

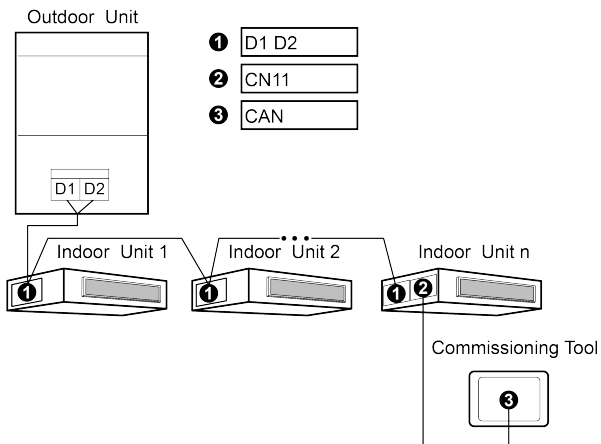


Fig.2.3 CAN Communication Connected with IDU Network

Method 2: Connect to the air conditioner network through CAN communication with the outdoor unit.

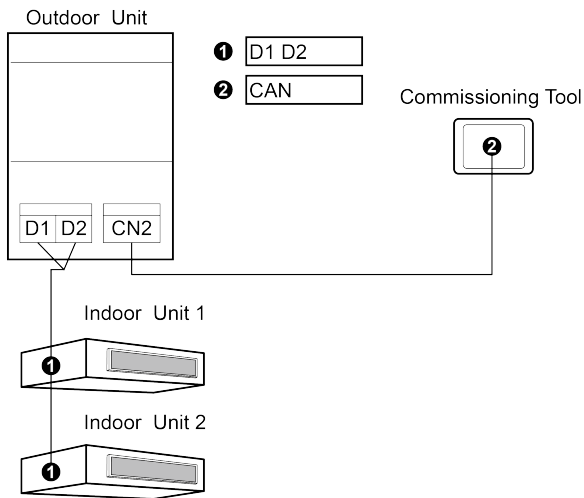


Fig.2.4 CAN Communication Connected with ODU Network

Wiring instructions:

- (1) This product is applicable to multi VRF units, connectable with IDU network or ODU network.
- (2) If this product is to be connected with IDU network, connect according to Fig.2.3. This product can connect with any one indoor unit in series. During connection, one end of the 4-core long connection wire is connected with

COM interface of this product; the other end is connected with IDU CN11 interface (CAN-DEBUG).

- (3) If this product is to be connected with ODU network, connect according to Fig.2.4. During connection, one end of the 4-core long connection wire is connected with COM interface of this product; the other end is connected with CN2 interface of the ODU main board.
- (4) DIP of ODU address shall be set. Please set this DIP in the master ODU. The setting code (SA8) of the master unit shall be set to "00". Otherwise, it is invalid.

WARNING:

After finishing operating this product, the wiring of the air conditioner must be resumed. Otherwise, it may affect the actual operation!

2.2.4 RS485 Communication Connection

For the air handler that uses RS485 communication, the commissioning tool can be connected by using the following three methods.

Method 1: Connect the commissioning tool individually to the outdoor unit.

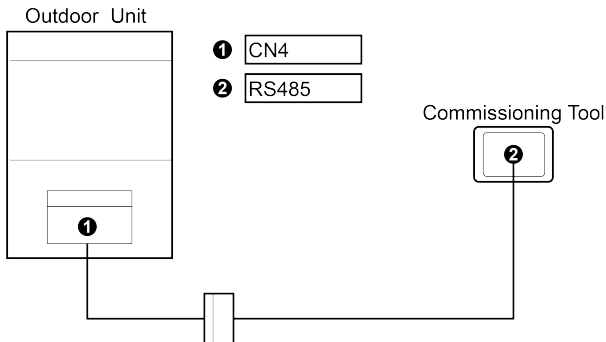


Fig.2.5 Commissioning Tool Connected with RS485 Communication ODU

Method 2: Connect the commissioning tool individually to the indoor unit.

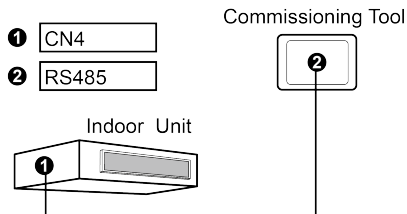


Fig.2.6 Commissioning Tool Connected with RS485 Communication IDU

Method 3: Connect the commissioning tool simultaneously to the indoor and outdoor units.

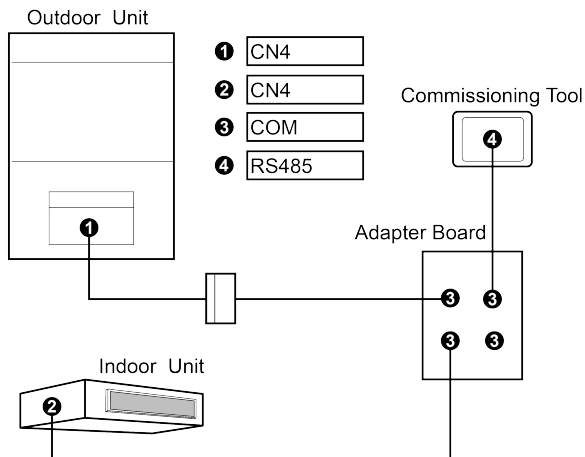


Fig.2.7 Commissioning Tool Simultaneously Connected with RS485 Communication IDU and ODU

WARNING:

When the commissioning tool is simultaneously connected to the indoor and outdoor units of RS485 communication, only the 2-core communication wire can be used for the indoor unit.

2.2.5 Power Line Communication Unit Connection

For the units that use power line communication, the commissioning tool can be connected through the HBS communication interface of the indoor unit.

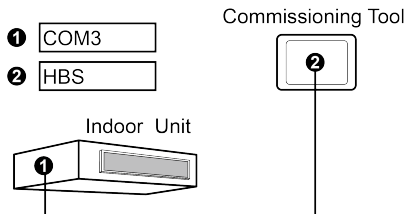


Fig.2.8 Commissioning Tool Connected with Power Line Communication Unit

3 Display and Operation Instructions

3.1 Communication Interface Identification

This communication tool supports CAN, RS485 and HBS communication. After connecting to power, this product can automatically identify the communication type of the connected unit. When identification is completed, it will automatically enter the homepage of the corresponding communication unit; there is no need to select manually.

If more than one communication types are identified, it will enter the homepage of the unit whose communication type is first identified.

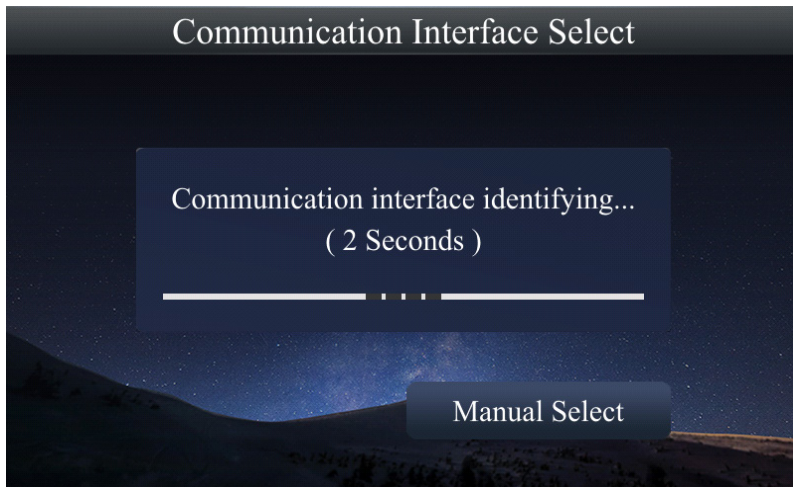


Fig.3.1 Identifying Communication Interface

If communication of the unit is irrelevant to the functions of the commissioning tool, or the user knows exactly the communication type of the current unit, then the user can select the communication interface manually to enter the homepage of the unit.



Fig.3.2 Manual Selection of Communication Interface

3.2 Homepage Display

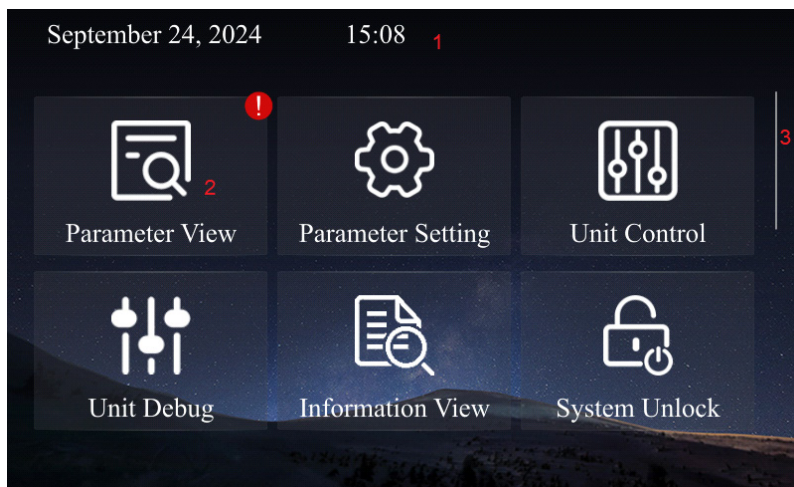


Fig.3.3 Homepage of CAN Communication Unit

No.	Name	Notes
1	Homepage status bar	The left side shows the current system date and the center shows the current time;
2	Function access	Access to functions: Tap to enter the corresponding function page.
3	Scroll bar of the list of function access	The scroll bar appears when the number of items exceeds the maximum number of items displayed on one page.

Note: The homepage of RS485 communication unit and the homepage of HBS communication unit are similar to the page showed in Fig.3.3.

3.3 General Buttons and Icons

Display	Name	Meaning	Display	Name	Meaning
	Return	Tap to return to the previous page.		On/Off	Tap to turn on/off a function.
	Fault query	Tap to enter the page of fault query.			

3.4 Buttons Operation

The display screen of the commissioning tool is a capacitive touch screen. The user operating interface is a total touch control interface.

Buttons on the interface are displayed in the following manners:

(1) Icons/Words

Icons can be touched to operate. See section 4.2 for details.

Words such as “OK”, “Cancel” can be touched to operate.

(2) Icons + Words

The combination of icons and words can be used to enable/disable or select a certain function, or enter a certain page. They can have two or three states, depending on the corresponding function.

Meanings of different states (Take the button of function enabled/disabled as an example):

 Light grey, which indicates invalid/unavailable. The related function is invalid and cannot be selected.

 Dark, which indicates disabled/unselected. The related function is off and

can be turned on by tapping.



Blue, which indicates enabled/selected. The related function is on and can be turned off by tapping.

(3) Slide

Slide vertically/horizontally to scroll through the displayed content.

(4) Slider

Touch and hold the slider and then drag vertically or horizontally to adjust values (such as brightness and temperature).

(5) Section buttons

In sections that display listed items, such as the page of settings shown in Fig.3.4, the combination of text + underline is a section button.

Tapping a section button can enter the corresponding page and proceed to the next step.

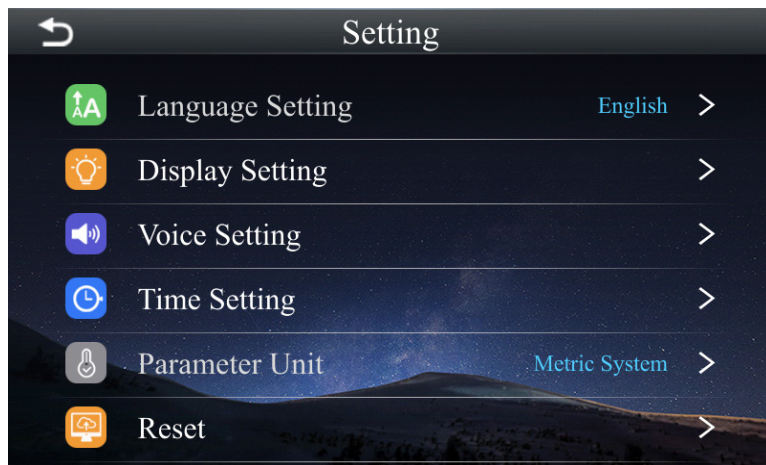


Fig.3.4 Section Buttons on the Page of Settings

4 Functions

4.1 Functions for CAN Communication Units

4.1.1 Parameter Query

The commissioning tool is equipped with the functions of system parameter query, outdoor unit parameter query, indoor unit parameter overview and indoor unit parameter query. Take the query of outdoor unit parameters as an example.

On the homepage, tap the parameter query to enter the access page of parameter query. Then tap “ODU Parameter” to enter the query page of outdoor unit parameters.

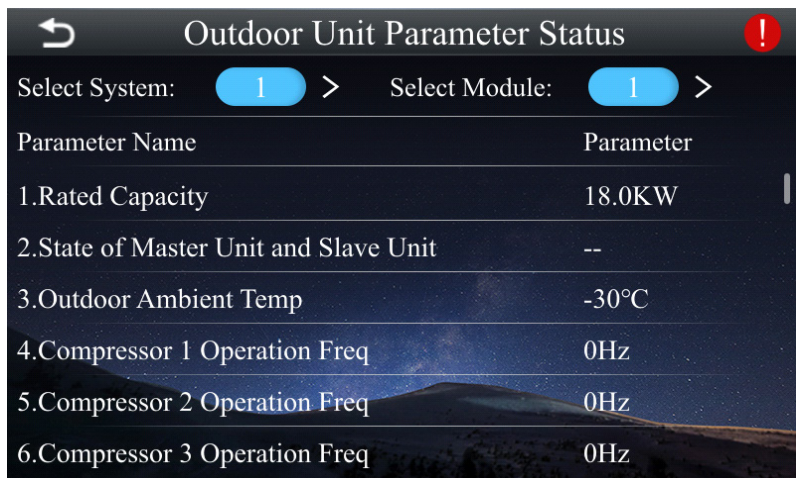


Fig.4.1 Query Page of ODU Parameters

(1) Select a system

Tap the system number to enter the page of system selection. Select the number of system that is to be queried.

(2) Select a module

Tap the module number to enter the page of module selection. Select one module under the current system.

(3) Fault query

If the outdoor unit is faulty, the icon  will show up. Tap the icon to view the fault details.

4.1.2 Parameter Setting

The commissioning tool is equipped with the functions of system parameter setting and indoor unit parameter setting. Take the setting of indoor unit parameters as an example.

On the homepage, tap the parameter setting to enter the access page of parameter setting. Then tap “IDU Parameter Setting” to enter the page of indoor unit parameter setting.



Fig.4.2 Setting Page of IDU Parameters

Tap the IDU project number to select the indoor unit that needs parameter setting. For some parameter settings such as the setting of indoor unit project number, only

one indoor unit can be selected.

4.1.3 Unit Control

On the homepage, tap the unit control to enter the page of air conditioner control.



Fig.4.3 Unit Control Page

On/Off

Tap the On/Off button to turn the unit on or off.

(1) Mode setting

Tap the mode section to switch the operating mode.

(2) Temperature setting

Move the circular slider to adjust the set temperature value. Moving to the right side will increase the temperature in 1 degree increments. Moving to the left side will decrease the temperature in 1 degree decrements.

(3) Fan speed setting

Tap the fan speed section to set different fan speeds.

Note: In drying mode, fan speed is low by default and cannot be set.

(4) IDU selection

Tap the IDU selection to select which indoor unit to be controlled.

(5) Control release

If the number of selected indoor units is not 0, tap the control release and the selected indoor units will be in control.

4.1.4 Project Commissioning

On the homepage, tap the unit commissioning to enter the page of unit commissioning.

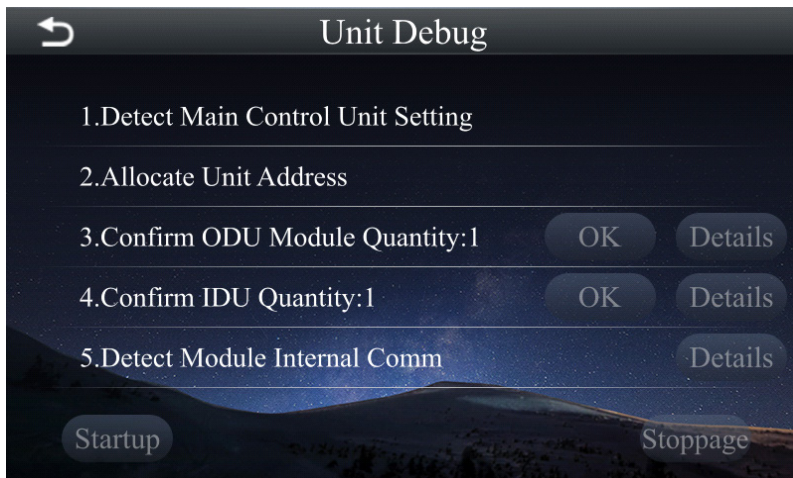


Fig.4.4 Page of Unit Commissioning

4.1.5 Device Program Upgrade

The commissioning tool is equipped with the functions of indoor unit program upgrade (attribute-based and name-based), outdoor unit program upgrade, drive program upgrade and AI module program upgrade. Take the indoor unit program upgrade (name-based) as an example.

On the homepage, tap the device program upgrade to enter the access page of device program upgrade. Tap “IDU program upgrade (name-based)” to enter the page of indoor unit program upgrade.



Fig.4.5 Page of Control Panel List for IDU Program Upgrade

Select the control panel of the indoor unit that needs to be upgraded. Tap the section button and enter the page of indoor unit program list.



Fig.4.6 Page of IDU Program List

Select the program file to be upgraded. After confirmation, it will enter the programming status page.

WARNING:

- ① Please ensure that the program file is correct, otherwise the upgraded product cannot be used.
- ② Please keep the commissioning tool and the corresponding upgraded device powered on during the upgrade process.

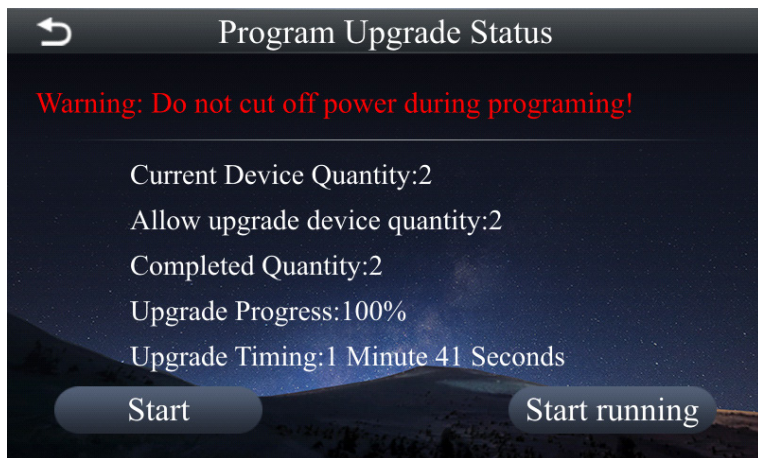


Fig.4.7 Page of Programming Status

4.2 Functions for RS485 Communication Units

4.2.1 Outdoor Unit Commissioning

For the air handler that uses RS485 communication, the commissioning tool is equipped with the functions of indoor unit commissioning and outdoor unit commissioning. Take the outdoor unit commissioning as an example.

On the homepage, tap the unit commissioning to enter the access page of unit commissioning. Tap “ODU Commissioning” to enter the page of outdoor unit commissioning.

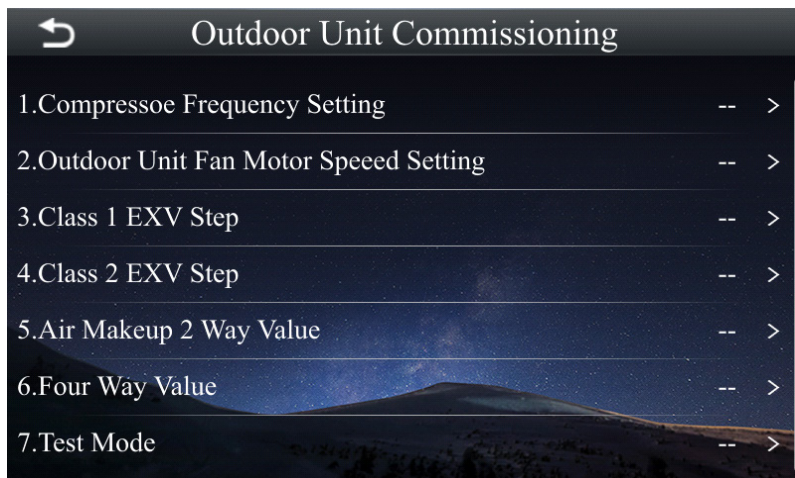


Fig.4.8 Page of ODU Commissioning

WARNING:

Because the commissioning parameters are related to unit operation, only professional technicians are allowed to use the commissioning function.

4.3 Functions for Power Line Communication Unit

4.3.1 Manual Commissioning

The commissioning tool is equipped with the functions of manual commissioning and auto commissioning. Take manual commissioning as an example.

On the homepage, tap the unit commissioning to enter the access page of unit commissioning. Tap “Manual Commissioning” to enter the page of manual commissioning.

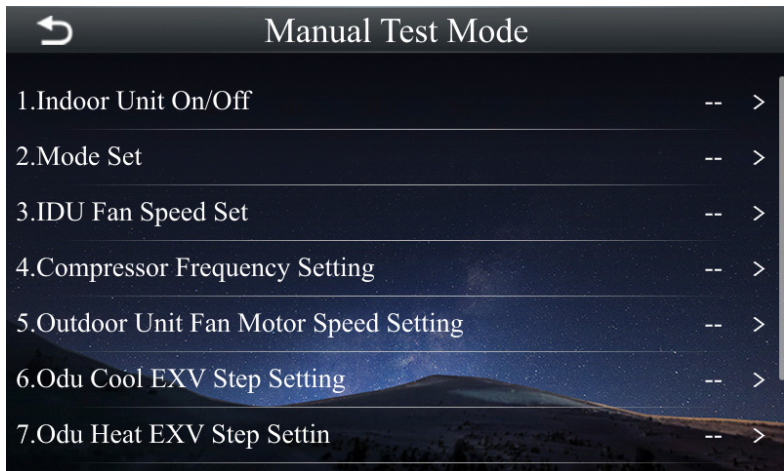


Fig.4.9 Page of Manual Commissioning

WARNING:

Because the commissioning parameters are related to unit operation, only professional technicians are allowed to use the commissioning function.

4.4 Controller Setting

On the homepage, tap “Controller Setting” to enter the page of controller setting and make relevant settings.

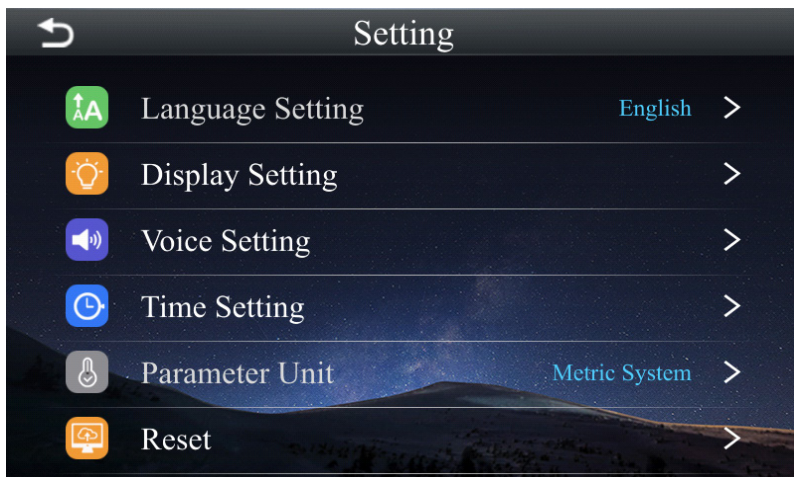


Fig.4.10 Page of Unit Settings

(1) Language setting

Tap to enter the page of language setting and switch to a different language.

(2) Display setting

Tap to enter the page of display setting, where you can set the brightness and screen lock time.

(3) Sound setting

Tap to enter the page of sound setting and select whether to mute or not.

(4) Time setting

Tap to enter the page of time setting, where you can set the time format, adjust

the time manually or synchronize the unit time.

(5) Display unit setting

Tap to enter the page of display unit setting, where you can set either metric or imperial units.

(6) Factory data reset

Tap to enter the page of factory data reset, where you can restore factory settings and change parameters to default values.

(7) Connect to PC

This product has a storage space of about 5GB, which is used for operating data saving and program upgrade. Connect one end of the USB Type C cable to the commissioning tool and the other end to the computer, and enable the function of connecting to PC, then the commissioning tool will be recognized as a USB storage device on the computer and allow file operations.

WARNING:

As the space is limited, please cut the files of saved communication data to another storage device in time.

(8) System update

Tap to enter the page of system update, select the program upgrade file, you can update the system.

(9) About

On this page, you can check the current program version and firmware version of the commissioning tool.



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