



# Portable Commissioning Tool Pro

Model: CE42-24/F(C)

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's 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 responsibility 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) In order to make the product better, we will continuously conduct improvement and innovation. We have the right to make necessary revision to the product from time to time due to the reason of sales or production, and reserve the right to revise the contents without further notice.
- (4) For personal injury or property loss and damage caused by improper operation such as improper installation and debugging, unnecessary maintenance, violation of related national laws and rules and industrial standard, and violation of this instruction manual, etc., we will bear no liability.
- (5) The final right to interpret for this instruction manual belongs to Gree Electric Appliances, Inc. of Zhuhai.

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This product can't be installed at corrosive, inflammable or explosive environment or the place with special requirements, such as kitchen. Otherwise, it will affect the normal operation or shorten the service life of the unit, or even cause fire hazard or serious injury. As for the above special places, please adopt special air conditioner with anti-corrosive or anti-explosion function.

# 2 Wiring Instructions



Fig.2.1 Parts of Controller

No.	1	2	3	4	5
Name	Touch screen of controller	Rear cover of controller	Adapter board	Short connection wire	Long connection wire
Quantity	1	1	1	1	1



Fig.2.2 Outline Dimension

# 2.1 Requirements of Operation Environment

Never operate this product in the following surroundings:

- (1) Places with corrosive gas or serious dust, salt mist or oil smoke;
- (2) Wet and damp places or places with direct sunlight;
- (3) Places near high temperature objects or places where units might be splashed by water.

# 2.2 Wiring Instructions

## 2.2.1 Wiring Interfaces

Interface symbol	СОМ	USB
Meaning	Interface of power supply and communication	Power supply, connect to PC

## 2.2.2 Power Supply Ways

- Power supply way 1: Power is supplied through USB Micro interface (USB symbol).
- (2) Power supply way 2: Connection unit through 4-core communication wire. Power is supplied by unit. This power supply way will be adopted for site enviroment.

# 2.2.3 CAN Comunication Unit(Multi-VRF) Wiring Methods

There are two methods to connect this product with the air conditioning system: Method 1: Connect with IDU network of CAN comunication unit.



Fig.2.3 Connected with IDU Network of CAN Comunication Unit



Fig.2.4 Debugger Interface in IDU Mainboard of CAN Comunication Unit

Method 2: Connect with ODU network of CAN comunication unit



Fig.2.5 Connected with ODU Network of CAN Comunication Unit



Fig.2.6 Debugger Interface in ODU Mainboard of CAN comunication unit

#### Wiring instructions:

- 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 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.2.5. during connection, one end of 4-core long connection wire is connected with COM interface of this product; the other end is connected with CN2 interface of ODU mainboard (Fig.2.6).
- (4) DIP of ODU address shall be set. You must set this DIP in main control ODU. The setting code (SA8) of main control unit shall be set to "00". Otherwise, it is invalid.

#### NOTE:

The debugging interfaces in IDU and ODU mainboards as shown in Fig.2.4, Fig.2.6 are only for reference. Detailed interface position please refer to the actual IDU mainboard and ODU mainboard.

#### WARNING:

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

# 2.2.4 RS485 AC Unit(U-match) Wiring Methods







Fig.2.8 Interface in IDU Mainboard of RS485 AC Unit

#### Wiring instructions:

- This product is applicable to the RS485 AC unit and can be connected to the unit network through the IDU;
- (2) If the product is connected to the network through the IDU, connect according to Fig.2.7. During connection, one end of the 4-core long connection wire is connected with COM interface of this product, and the other end is connected to the COM1 or COM2 interface of the IDU.



## 2.2.5 RS485 Water Heater Unit Wiring Methods

Fig.2.9 Connected with RS485 Water Heater Unit Network

#### Wiring instructions:

- This product is applicable to RS485 water heater unit, which can be connected to the unit network through the wired controller;
- (2) When the product is connected to the network through the wired controller, connect according to Fig.2.9. During connection, one end of the 4-core long connection wire is connected with COM interface of this product, and the other end is connected to the adapter board of the product. The adapter board is connected to the Unit interface of the wired controller through the 4-core short connection wire. The communication line originally connected to the Unit interface is plugged into any of the 4-core connectors of the adapter board.

#### WARNING:

The wiring of the water heater unit must be restored, otherwise it will affect the actual use of the user!

# 3 Display and Operation Instructions

# 3.1 Unit Type Selection

Unit Type Selection	OK
CAN Comunication	
R\$485(AC)	
R\$485(Water Heater)	

Fig.3.1 Unit Type Selection Page

This product supports CAN communication unit(Multi-VRF), RS485 AC unit(U-match), RS485 Water Heater three types of units; after the product is powered on, automatically determine the connected unit type, without the user to manually select.



# 3.2 Main Page Display and Buttons

#### NOTE:

The homepages of the three unit types are slightly different. Fig.3.2 shows the home page of the CAN communication unit.

No.	Name	Instructions	
1	System time	When the controller is connected with communicat network, current day, hour, minute, a.m./ p.m.(12-h clock) will be display;	
2	Entrance of help	Press this button to enter help page and view help information;	
3	Touch button	<ul> <li>Press Touch Button once to turn on/off the screen of this product;</li> <li>Press and hold Touch Button for 5sec to reset the touch screen;</li> </ul>	
4	IDU error reminder	When this icon appears, it indicates the indoor unit has error currently;	
5	IDU status	Entrance of viewing IDU status parameters;	
6	Project setting	Entrance of project setting options;	
Ø	ODU error indication	When this icon appears, it indicates ODU module has error currently;	
8	ODU status	Entrance of viewing ODU status parameters;	
9	Unit control	Entrance of unit control operation;	
10	Unit debugging	Entrance of unit debugging operation;	
(11)	System status	Entrance of viewing system status parameters.	

# 3.3 General Buttons

Display	Name	Meaning	Display	Name	Meaning
<	Return	Press this button to return to the previous page		Option	Option is selected/not selected
$\bigtriangledown$	Page up	One page up	$\triangle$	Page down	One page down
	Reduce	Press this button to decrease value	+	Increase	Press this button to increase value
◄	Left	Press this button to decrease value		Right	Press this button to increase value
	Down	Press this button to decrease value		Up	Press this button to increase value

# 3.4 Buttons Operation Instructions

This product uses a capacitive touch screen so that user can operate the units by just touching the screen.

Buttons on the screen are presented in the following ways:

(1) Icon

Icon button can be operated directly. See section 3.3 for more details.

(2) Text

Press Text button to enter corresponding page; (take IDU parameter setting page as an example);

IDU Setting Press it to enter parameter setting of this item.

(3) Icon + Text

According to the meaning of Text, select a certain function or enter a certain page. (take sound setting as an example);

(I) Sound Press it to enter sound setting page.

# **4** Function Instructions

# 4.1 CAN Communication Unit(Multi-VRF) Function Instructions

## 4.1.1 System Status

On the home page of CAN communication unit, press 👫 to enter into

viewing system parameters of CAN communication unit.

<	System Status	
s	ystem: 1	
No.	Parameter Name	Parameter
1	Model: MV2 Single Fan Side Discharge	0x6070
2	VRF Unit Operation Mode Cool Mode	
3	VRF Unit Hot Water Mode	Off Mode
4	System Defrosting State	No
	12	

Fig.4.1 CAN Communication Unit Viewing System Parameters

## 4.1.2 ODU Status

On the home page of CAN communication unit, press it o enter into viewing ODU status of CAN communication unit.

<	Outdoor Unit Parameter View	
s	ystem: 1 Module:	1
No.	Parameter Name	Parameter
1	Rated Capacity	18.0KW
2	Outdoor Ambient Temperature	18°C
3	Compressor 1 Operation Frequency	OHz
4	Fan Speed	0
	1/7	

Fig.4.2 CAN Communication Unit Viewing ODU Parameters

#### NOTE:

When the module has error, click **()**Error at the right lower corner to enter into viewing module error.

## 4.1.3 IDU Status

On the home page of CAN communication unit, press 📑 to enter into viewing IDU status of CAN communication unit.

🕻 IDU Parameter Overview 📲					IDU 🖿
Pro	oject No.	Inlet Temp	Outlet Temp	EXV	Mode
	129	10℃	-30℃	0	Cool
		<	1/1	>	Error

Fig.4.3 CAN Communication Unit Viewing IDU Parameters

#### NOTE:

- Note: When the indoor unit of current system has error, click @Error at the right lower corner to enter into viewing IDU error;
- ② Select the indoor unit for viewing through clicking IDU at the right upper corner on this page;
- ③ Click IDU project code button 129 in the list to enter into viewing detailed IDU parameters.

## 4.1.4 Unit Debugging

On the home page of CAN communication unit, press  $\equiv$  to enter into unit debugging of CAN communication unit.

🕻 Unit Debug			
1.Detect Main Control Unit Setting			
2.Allocate Unit Address			
3.Confirm ODU Module Quantity	1	ОК	Details
Startup 1/6	>	Stopp	bage

Fig.4.4 CAN Communication Unit Unit Debugging

#### NOTE:

During debugging, you need to click or to enter into the next debugging in certain steps.

## 4.1.5 Unit Control

On the home page of CAN communication unit, press <u>o</u> to enter into the page of unit control.

<	IDU Conti	rol - AC	💾 IDU	
C C	ontrol		C	
(	Ξ	Z6	(* +	
*				
Cool	FanSpeed	Up&down Left&right	E-Heater On/off	

Fig.4.5 CAN Communication Unit Unit Control

Select the indoor unit for controlling through clicking **IDU** at the right upper corner on this page.

When you need to control indoor unit, after finishing operating mode, temperature and other parameters, click control button is to release control data.

(1) On/Off

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

When unit is turned off, mode, temperature, fan speed and swing can't be set.

(2) Mode setting

Press the Mode button to set unit's operation mode.

Modes for indoor units of different series are not all the same. If a certain mode is not available for the indoor unit, the icon of the corresponding mode cannot be selected.

(3) Temperature setting

Press the up or down buttons to adjust temperature. Each time pressing the button will increase/decrease the temperature by  $1^{\circ}C/1^{\circ}F$ .

(4) Fan speed setting

Press fan speed button to set unit's fan speed.

Note: Unit defaults to low fan speed in dry mode. Fan speed cannot be set in dry mode or floor heating mode.

(5) Swing setting

Pressing the button Left-Right Swing or Up-Down Swing or can turn on or off the swing function.

#### NOTE:

Swing types for indoor units of different series are not all the same.

(6) E-Heater enable

This feature is always disabled.

# 4.1.6 Project Setting

On the home page of CAN communication unit, press **S** to enter into project setting interface of CAN communication unit.

<b>〈</b> Project Se	tting	
IDU Setting	SYS Setting	IDU Error History
SYS Error History	IDU Info View	ODU Info View
System Unlock	Project No. Reset	Project No. View
	1/3 🜔	

Fig.4.6 CAN Communication Unit Project Setting

# 4.1.7 Unit Program Upgrade

This product has a batch program upgrade for the controller of the indoor unit, outdoor unit and compressor drive of the CAN communication unit via the communication network. Only controllers which use the same program can be upgraded at a time.

<	IDU Program Upgrade/Program List	
	Program List:	
	Z6L35AN(GREE)V1.bin	
	Z6L35AN(GREE)V2.bin	
	Z6L35AN(GREE)V3.bin	
	1/2	

Fig.4.7 CAN Communication Unit IDU Program List

IDU Program U	Jpgrade/Program List	
Program Name:	Z6L35AN(GREE)V3.bin	
Program Size (Bytes):	126964	
Modify Time:	2019-09-09 11:41	
Upgrading wrong program	n will make the IDU unusable!	
Cancel	OK	

Fig.4.8 CAN Communication Unit IDU Program Upgrade File Information

#### WARNING:

- ① Please ensure the correctness of the program file, otherwise the upgrade product will not be used;
- ② During the program upgrade process, please keep the product powered on.

# 4.2 RS485 AC Unit(U-match) Function Instructions

## 4.2.1 ODU Status

On the home page of RS485 AC unit, press it o enter into viewing ODU status of of RS485 AC unit.

<	Outdoor Unit Parameter View	
No.	Parameter Name	Parameter
1	Outdoor Ambient Temperature	_
2	Discharge Temperature −30°C	
3	Condenser Temperature −30°C	
4	Compressor State Off	
5	Outdoor Fan State Off	
6	4-way Valve State	Off
	1/4	

Fig.4.9 RS485 AC Unit Viewing ODU Parameters

### 4.2.2 IDU Status

On the home page of RS485 AC unit, press it to enter into viewing IDU status of of RS485 AC unit.

<	Indoor Unit Parameter View	
No.	Parameter Name	Parameter
1	Model ID	0x3018
2	Air Return Ambient Temperature	27.3°C
3	Evaporator Temperature	33℃
4	Ambient Temperature	27.3°C
5	Ambient Tempareture of Wire Controller	26.7℃
6	LED Board Ambient Temparature	_
	1/5	

Fig.4.10 RS485 AC Unit Viewing IDU Parameters

## 4.2.3 Unit Control

On the home page of RS485 AC unit, press <u>o</u> to enter into the page of RS485 AC unit unit control.

<	IDU Control -	AC		
C		16	°C +	)
*				
Cool	FanSpeed	Up&down	Left&right	On/off
	Fig.4.11 RS	485 AC Unit	Unit Control	

## 4.2.4 Project Setting

On the home page of RS485 AC unit, press S to enter into project setting interface of RS485 AC unit.

C Project S	Setting	
IDU Setting	SYS Setting	IDU Upgrade
ODU Upgrade	Controller Setting	System Time
	<ul> <li>1/1</li> </ul>	

Fig.4.12 RS485 AC Unit Project Setting

#### NOTE:

The IDU program upgrade, the ODU program upgrade, and the system time setting are set to the reserved function.

# 4.3 RS485 Water Heater Function Instructions

## 4.3.1 ODU Status

On the home page of RS485 Water Heater, press it to enter into viewing ODU status of of RS485 Water Heater.

<b>〈</b> Outdoor Unit Parameter View		
Select ODU: 1		
No.	Parameter Name	Parameter
1	On/off	Off
2	Cycle Temperature Setting 50℃	
3	Setting Temperature of Hot Water Outlet 40°C	
4	Communication Error	No
	1/12	

Fig.4.13 RS485 Water Heater Viewing ODU Parameters

## 4.3.2 Wired Controller Parameters

On the home page of RS485 Water Heater, press 鬪 to enter into viewing

Wired Controller Parameters of RS485 Water Heater.

<b>〈</b> WireController Parameter View		
No.	Parameter Name Parameter	
1	Unit Operation Mode	Water Heat
2	Water Level Mode Setting 2	
3	Temperature Difference Correction 0°C	
4	Cooling Mode Setting Temperature 0°C	
5	Automatic Mode Setting Temperature 0°C	
6	Direct Heating Cleaning Off	
	1/2	

Fig.4.14 RS485 Water Heater Viewing Wired Controller Parameters

## 4.3.3 Project Setting

On the home page of RS485 Water Heater, press (3) to enter into project setting interface of RS485 Water Heater.

<b>〈</b> Project S	etting	
Controller Setting	Project Information	System Time
	<ul> <li>1/1</li> </ul>	

Fig.4.15 RS485 Water Heater Project Setting

# 4.4 Controller Setting

There are three entrances in this product, which are respectively on the project setting page of CAN communication unit(Multi-VRF), RS485 AC unit(U-match), RS485 Water Heater. On the project setting page, click **Controller Setting** to enter the controller setting page.

This controller setting is mainly for the product itself, regardless of whether the communication is connected or not.



Fig.4.16 Controller Setting

Controller setting includes:

(1) Sound, temperature unit

Press the button to select one kind of setting.

(2) Backlight setting

Pressing this button can set the timeout period of screen backlight. Screen will be shut off and this product will enter sleep mode when the timeout period is over.

Pressing backlight degree - or + can adjust the backlight degree.

#### NOTE:

When the product is in sleep mode, user can wake it up by touching any part of the touch screen or the touch button at the right upper button of the screen.

(3) Comissioning tool program upgrade

On the controller settings page, click the  $\equiv Upgrade$  button to enter the program upgrade page:

<	Controller Setting/Program Upgrade	
	Program List:	
	ZJ600CV2.bin	
	ZJ600CV2_APP.bin	
	<ul> <li>1/1</li> </ul>	

Fig.4.17 Program Upgrade File List

#### NOTE:

The program upgrade needs to first connect the commissioning tool to the PC via USB, switch to USB Device mode (see Fig.4.19), create the upgrade folder in the root directory of the USB flash drive, and then put the upgrade program file into the upgrade file folder.

Controller Setting/Program Upgrade		
Brogram Name:	7 KOOCV2 APP him	
Fiogramivane.	2,000CV2_AFT.00	
Program Size (Bytes):	2097152	
Modify Time:	2019-11-19 10:20	
Upgrading wrong program	n will make the debugger unusable!	
Cancel	OK	

Fig.4.18 Program Upgrade File Information

Click the OK button to enter the program upgrade; otherwise the program will not be upgraded.

#### WARNING:

- Please ensure the correctness of the program file, otherwise the product will be unusable;
- ② After confirming the program upgrade, please power off the product and upgrade the program. During the program upgrade, please keep the product powered on.
- (4) Resume setting

Click C Reset to enter into ex-factory setting resume page. After confirming, local setting will resume ex-factory setting.

(5) USB

This product has 4GB of built-in storage space for unit operation needs, data file saving, program upgrade and other functions. It can be switched between USB Device mode and normal mode by connecting/disconnecting the PC.

In the USB Device mode, the product will be recognized by the PC as a USB flash device, and the USB flash device can be operated by the PC.



Fig.4.19 USB Device Switch Page

#### WARNING:

- The storage space of the product stores the configuration files and other files necessary for the operation of the product. After being deleted or other changes, the unit may fail to start, operate abnormally, etc.; save files of communication data and program upgrade file. Outside these file, operations on other files are prohibited.
- ② Due to space constraints, please cut the communication data save file to other storage devices in time.

# 4.5 Help Information

On the home page, click Help at the right upper corner to enter help page.







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