

SCC70A1 centralized control system with gate
SIA01A1 manual

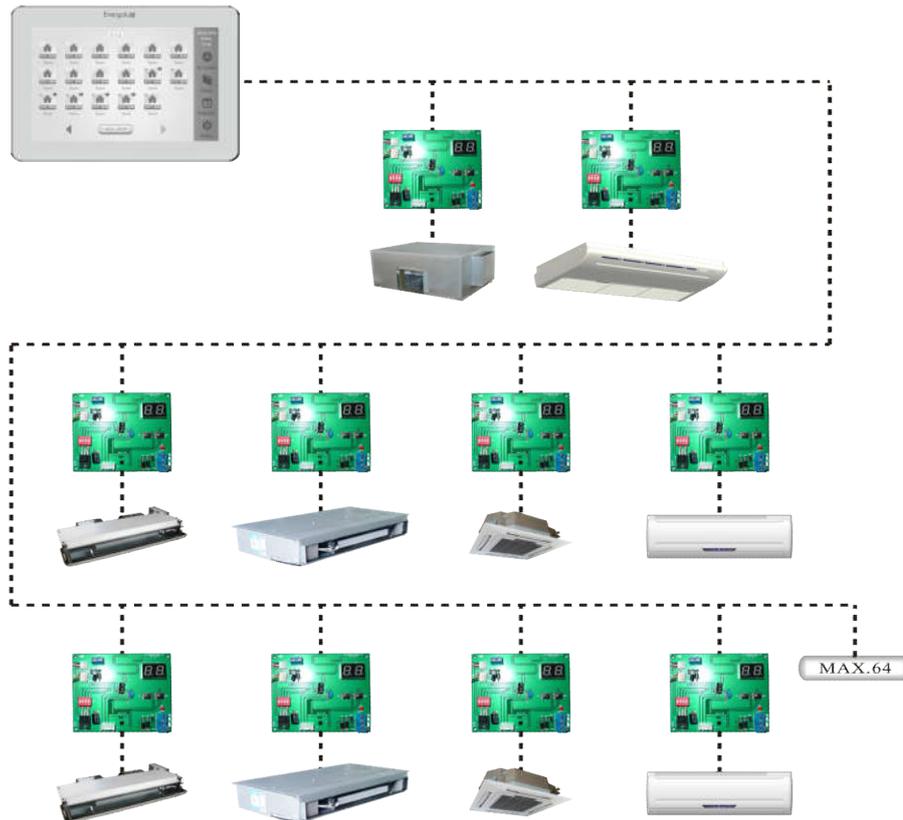
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Function description

1. This system can control max.64pcs super uno AC.
2. This system can single/Zone/All control to set functions of operation mode, fan speed, setting temperature, weekly timer etc of super uno AC.
3. This system can carry weekly timer ON-OFF function.
4. It can separate super uno AC to Max.20 zones, and each zone can control max.64pcs super uno AC, and each super uno AC use some operation in some zone.
5. Model: Low ESP Duct, Middle ESP Duct, Cassette, Floor ceiling, Cassette fan coil.

1. System frame

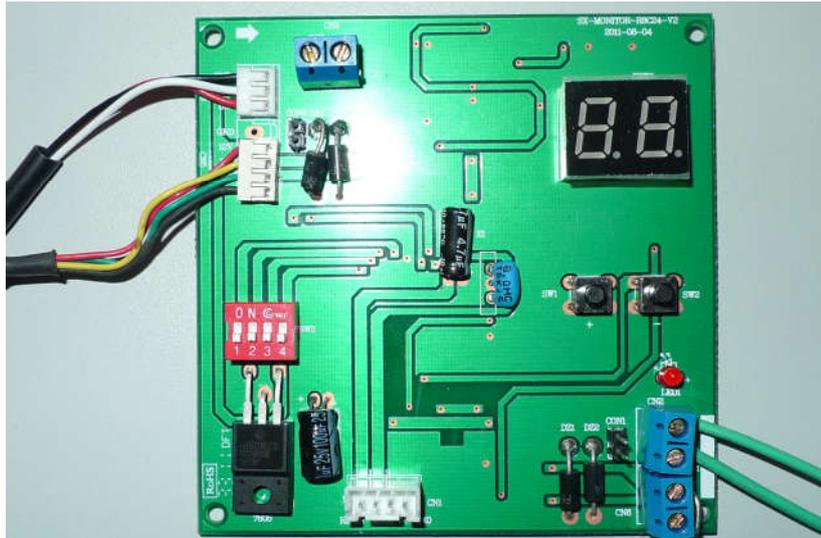


The whole long distance control system is including Touch screen, Adaptor PCB and super uno AC. The touch screen can drive max.64pcs adaptor PCB by cable RS-485.

Touch screen as below picture 1, and adaptor PCB as below Picture 2:



Picture 1



Picture 2

2. Interface operation manual

The interface of touch screen is including Monitor interface, initial setting interface, super uno AC control interface, and centralized control interface.

Monitor interface can monitor registered super uno AC's working status(ON/OFF, Have/No fault);

Initial setting interface is used for super uno AC which registered and connect with control system, and it can start monitor from control system.

Super uno AC control interface can observe the room temperature and fault status of each super uno AC, and carry out control of each super uno AC.

Centralized control interface can carry out control of each super uno AC, zone super uno AC, and all super uno AC.

1. Control interface



Above picture is "01~32" control interface, and this interface can show startup&working status from address 1 to 32 of super uno AC. If super uno AC named "default", this super

uno AC is in “un-startup” status. If it’s named others, it means super uno AC is in startup status. (The initial setting operation will be explain in chapter “Initial setting interface”).

As to “Startuped” super uno AC, if name no any background color, it means super uno AC in turn off status, as No.2~8 machines in above picture; if name with red background color, it means the manchine have faults as No.1 manchine in above picture; if name with blue background color, it means the machine is in turn on status.

The user click “33~64” button, it will enter into control interface of Adress 33-64., and the interface and function is same as address “01~32”, and no duplication any more.

The user click icon of super uno AC, it will enter into “Super uno AC control seeting” interface.

2. Initial setting interface

click “initial setting” button in control interface, it will enter into initial setting interface, and the initial setting interface is including “machine named setting” interface and “Zone choose setting” interface.

机组命名设定								
1~8	1	2	3	4	5	6	7	8
9~16	default							
17~24	default							
25~32	default							
33~40	default							
41~48	default							
49~56	default							
57~64	default							

注：若机组名不是“default”则激活，若改机组名为“default”则注销。

Machine named setting interface

Above picture is “Machine named setting” interface, and each one of 64pcs manchines have one input form.

If user need resgister super uno AC, it need input character to input form, after change the name, it’s finish register, and it can input max.8 characters in input form.

If user need logout one super uno AC, it need input “Default” in corresponding input form(Must small letters), it finished logout.

Click “Zone setting” button in lower right corner, it enter into “zone choose setting” Interface.



Zone choose interface

Above picture is “Zone choose setting” interface.

The User can choose zone No. through input form in left side, and it can separate all super uno AC’s to max.1-20 zones, “0” means no zone. The super uno AC in some zone can carry out some control operation in “centralized control setting” interface.

As to registered super uno AC, the corresponding position will have button to make ”zone choosing”, as above picture showed super uno AC with address 1-8. For other not registered super uno machines, it’s no this button.

The operation details can be done according to remarks on interface.

Note: When you choose zone, pls make sure normal communication between touch screen and all super uno ACs.

3. Control setting interface of Super uno AC



Above picture is Control setting interface of Super uno AC, and it can finish control to single super uno AC.

The content above the white line of this interface is corresponding super uno AC status (Room temperature and Fault information), and the content below white line is setting options.

When user need change setting options, after change, it need click "Application" button to carry out it. If user don't need change setting options, it need click "come back" button to drop out the setting to this super uno machine.

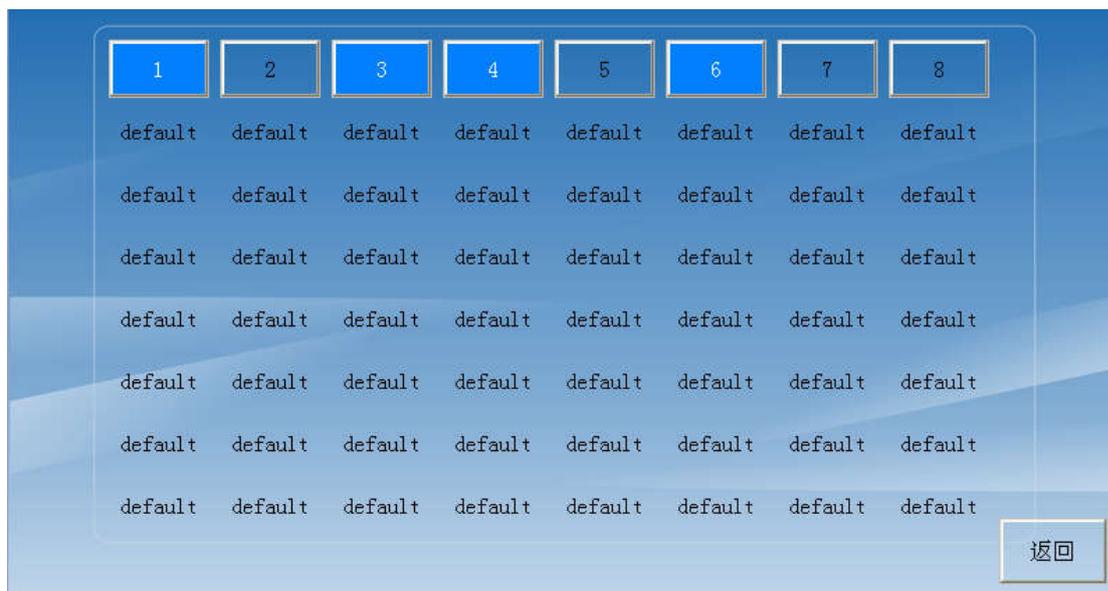
4. Centralized control setting interface



Above picture is "centralized control setting" interface, and after user finish setting up parameter, it can choose "single choose" operation, "zone choose" operation, and "all choose" operation for super uno AC.

a. Single choose operation

When user do single choose operation, it will have a "single choose" page as below:



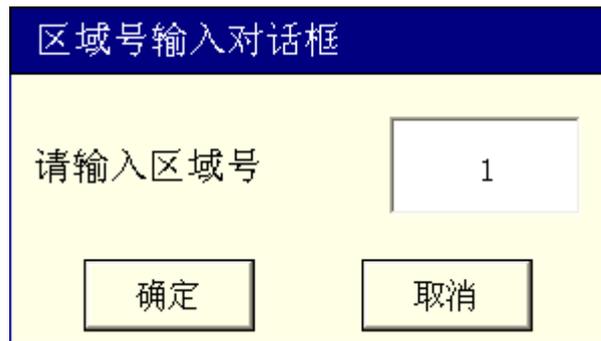
As above picture, “1”, “3”, “4”, “6” super uno AC will get some setting command. Other super uno ACs will not get some command.

Note:

1. The super uno machine will implement command as soon as user click button, to avoid click wrong button, user need pay attention to choose it.
2. To protect the safety of electricity grid system, user can choose one super uno AC per 4 second.

b. Zone choose operation

When user do zone choosing operation, it will have a dialog boxes to choose zone as below:



If user have made zone setting on “initial setting” interface, it can use this option. Eg: Super uno AC “1”, “2”, “3” is belong to Zone 1, and input 1 in this zone input form, and then click”confirm” button, and then Super uno AC“1”, “2”, “3”in zone1 will be set up some control parameter.

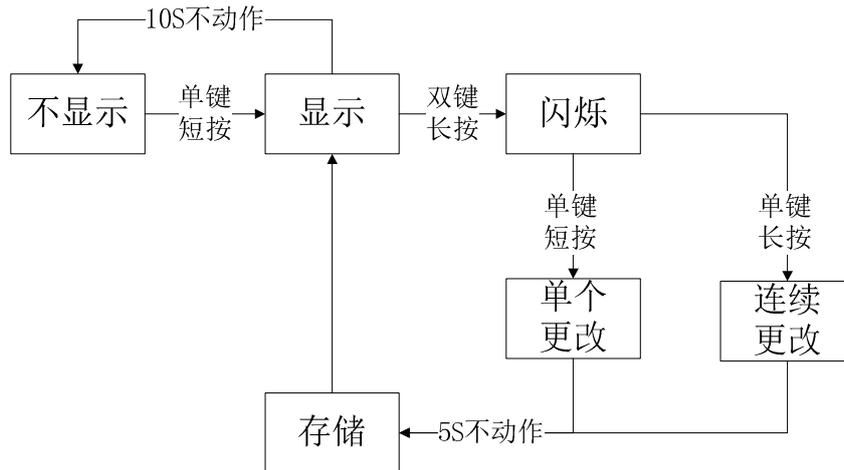
b. All choosing operation

If user want to do some operation to all super uno ACs, after setting parameter, click ”all choose” button on “centralized control setting” interface.

3. Adaptor PCB setting instruction

The setting of Adaptor PCB is for corresponding address belong to it. The address setting scope of adaptor PCB is 1~ 64。 If all adaptor PCBs is connect in some touch screen, all adaptor PCB can't have same address, otherwise system will be working in abnormal status.

Address setting of adaptor PCB mainly is done trough LED and two buttons. The setting process as below:



Note:

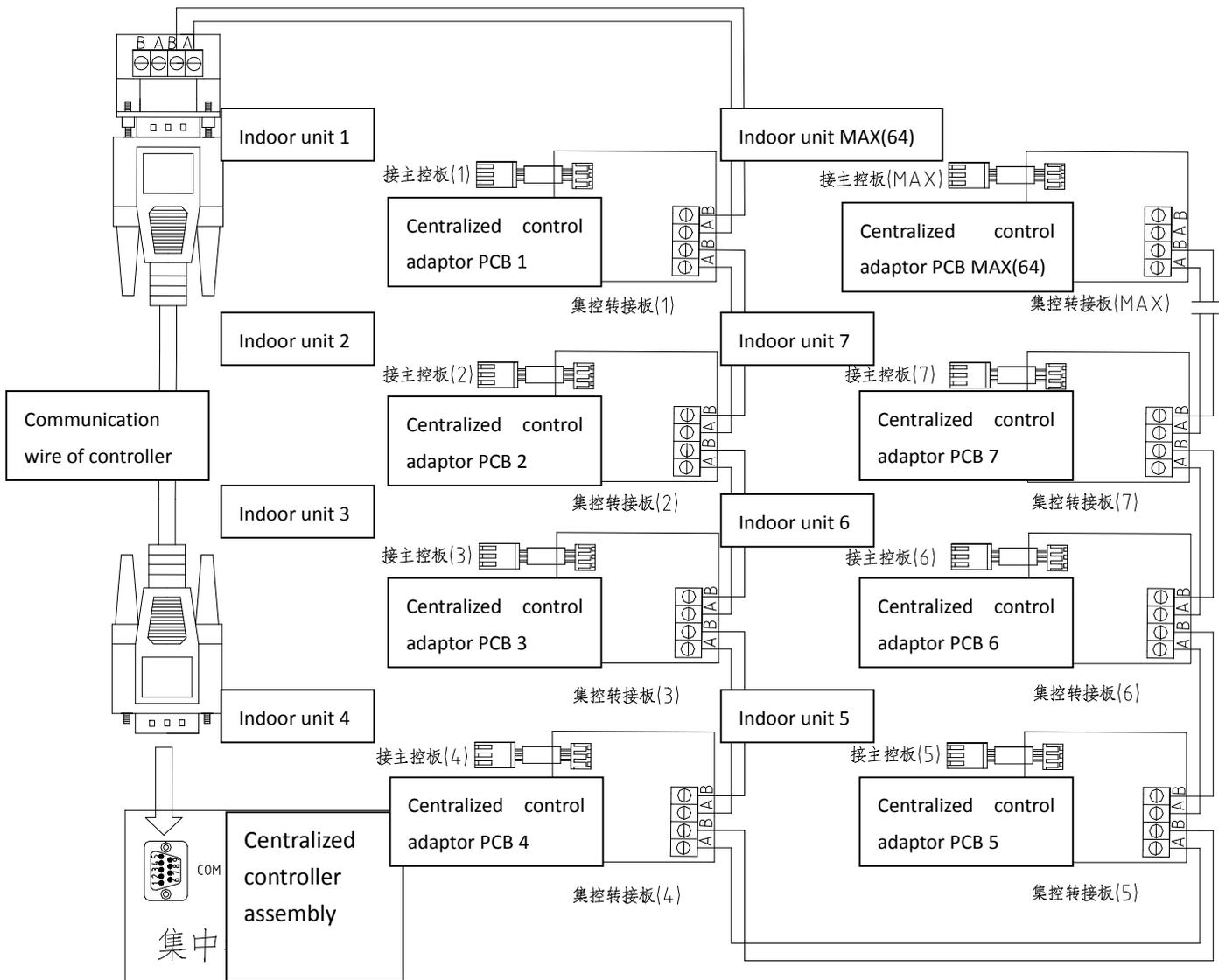
1. After set up address, pls cut off electricity of adaptor PCB at first, and then tren on electricity, and then the address can valid;
2. If super uno AC connected adaptor PCB don't want to use adaptor PCB now, it need cut off electricity of adaptor PCB, to avoid make mistake action for super uno machine.
4. Coordination instruction of Touch screen, adaptor pcb, super uno AC

To guarantee safety of whole centralized control system in working status, the control from touch screen to super uno AC is different from the one to RC or wired RC control of super uno AC, it's mainly time interval for ON/OFF control of super uno AC.

On "centralized control" interface, if user choose "zone choosing" or "all choosing" after setted up control parameter, the system will not react immediately, it will implement it after corresponding delay according to address of adaptor PCB, the ON/OFF time interval of neighboring Address of super uno machines is 1 second. Eg: the super uno AC with address 4, if user click "ON" button, the machine will turn on in 4seconds more or less, if machine with address 5, it will turn on in 5 seconds more or less, Turn off is similar. If whole system's 64pcs super uno machines are turned on, to guarantee system safety, whole system can finish all commands in 64seconds. "User defined" interface and " single setting" interface have no limited like this, it will action immediately.

If super uno connected to centralized control system, which installed RC adaptor PCB, and user make RC operation, the super uno AC will action according to RC command. If RC send ON/OFF command, control mode choosing, fan speed choosing etc. informations, they will be reflect in centralized control system.

5. Project wiring Diagram instruction



Notes of Project wiring Diagram:

1. The signal wire of centralized control adaptor PCB can't put some cable tube as power cable, and the space distance between two cable tubes need more than 300mm;
2. The signal wire length of Centralized control adaptor PCB need less 1200m.
3. After finish connection of signal wire of Centralized control adaptor PCB, it can't use megohm meter to check isolation status .
4. The centralized control display, centralized control adaptor PCB and connector terminal A-B between centralized control adaptor PCBs need corresponding with each other, otherwise, it will result network paralysis.

Appendix
Assembly list

No	Name	Quantity	Remark
1	Centralized controller assembly	1	SCC70A1
2	Centralized control adaptor PCB	<=64	Based on user need
3	Communication wire of Wired controller	<=64	Based on user need
4	RS232 Serial connection	1	
5	Serial port adapter	1	
6	Installation, user manual	1	
7	Communication conneting wire		RVSP-2×1.0, Specification: RVSP-2×1.0, choose by user.