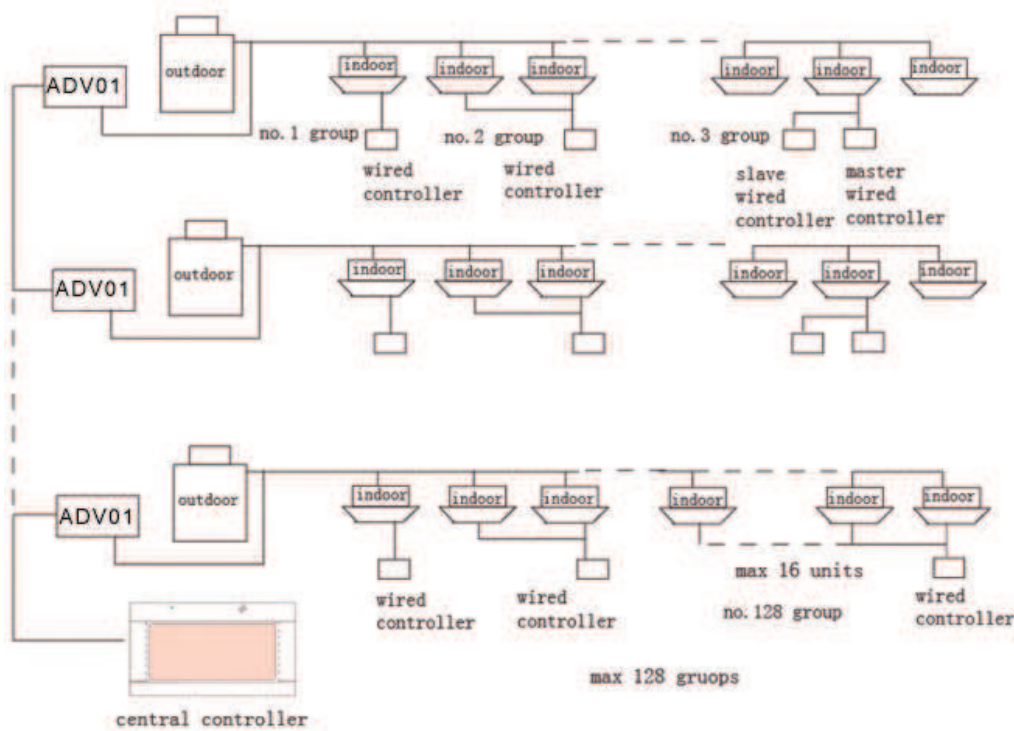


3. Control function

1. Features and functions of central controller

Central controller RWV02 Mainly design for MVi series system. Can control and monitor the indoor units condition ,maximum can control 128 groups ,each group can maximum connect to 16 indoor units. All the controls, ,such as individual control ,zone control, time setting, timer setting etc. ,can be realized by touch screen. Connecting diagram as follows:



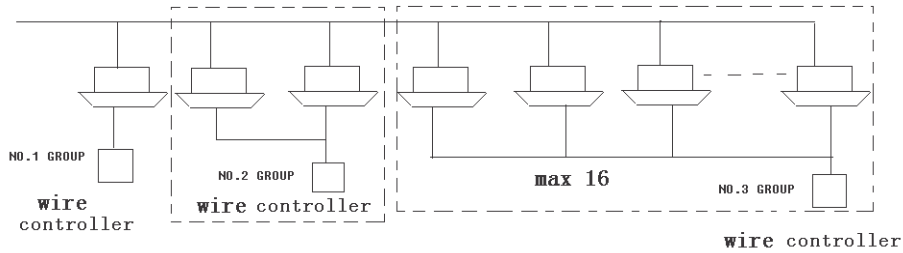
Main functions of central controller

1. Maximum can monitor 128 groups* indoor unit operation mode ,airflow speed, temp., setting ,ON/OFF ,error code display etc. condition.
2. Can set mode ,airflow speed ,temp. etc. for individual /zone /All .
3. Can check indoor unit real temp., pipe temp. etc. parameters.
4. Can set LIFO (Last enter have high priority),central control ,lock etc. 3 types of operation modes.
5. Can monitor the indoor units malfunction and save the error code for future checking.
6. Receive the external signal input, after receiving the fire alarm signal and alarm.
7. Weekly timer setting ;
8. Can set random units groups to one zone ,maximum can set 128 groups to one zone, after set zone ,each indoor unit of this zone can have same operation status.(default setting :one group is one zone).

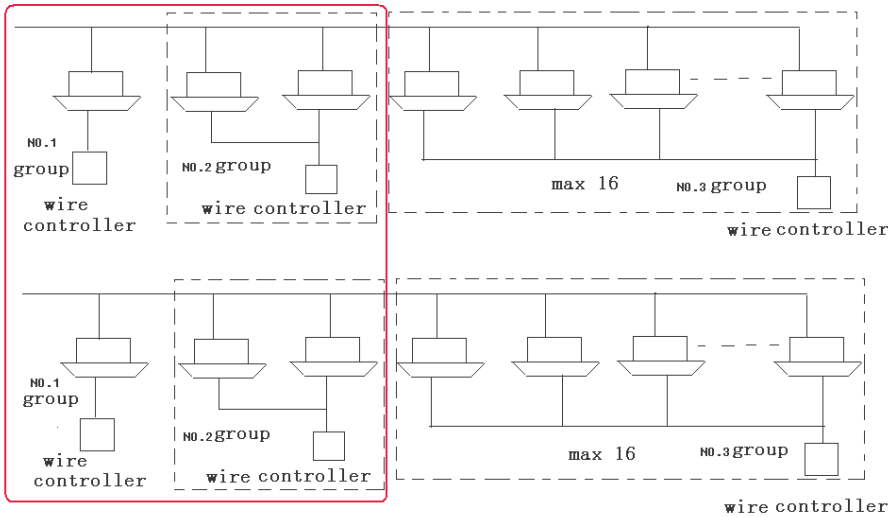
(8)Central controller Mainly design for MRV series system.

Can control and monitor the indoor units condition ,maximum can control 128 groups ,each group can maximum connect to 16 indoor units. All the controls, ,such as individual control ,zone control, time setting, timer setting etc. ,can be realized by touch screen. Connecting diagram as follows:

Group



Zone

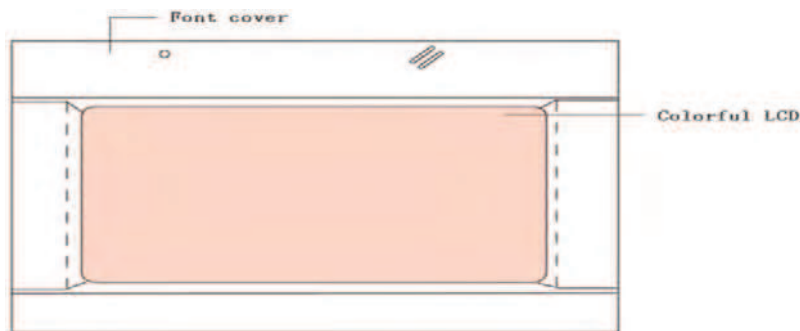


We can set several group with same function or near position as one zone.

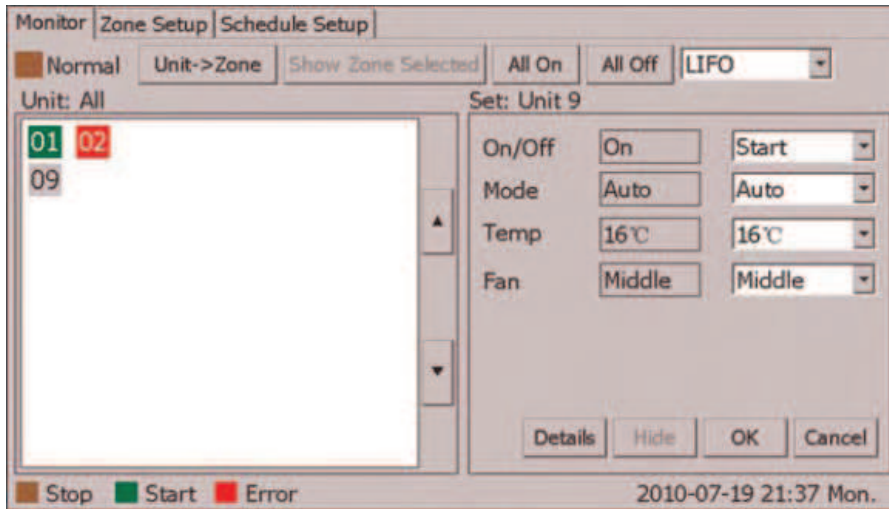
We can control the whole zone ,also can control one group individually. Default group can put into one corresponding zone.

Minimum one zone has one group ,maximum one zone can have 128 groups.

Part name

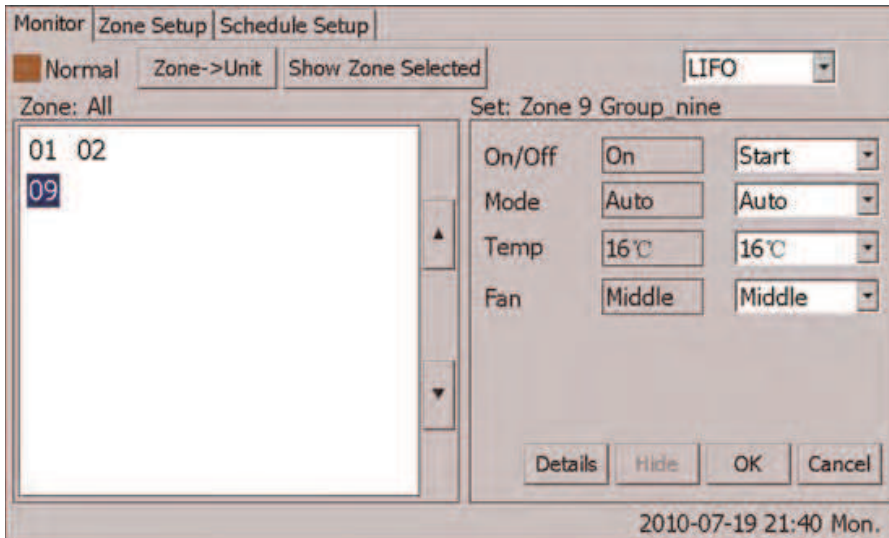


Indoor unit display



The indoor unit be checked will display in this page ,if one page can't display all the units ,we can use page up/down button check .
 use green color standard unit in operation ,use brown color standard for stop unit ,use RED color standard for the unit with malfunction.

Zone display



Default design are: each indoor unit stay at the corresponding number zone ,such as No.1 unit stay no.1 zone ,No.2 unit stay at zone 2,No. 128 unit stay at no.128 zone.
 When the indoor unit in communications, the zone can be displayed.
 When select one zone ,the right side condition frames will display the indoor unit condition with smallest no. of this zone.

Display and LCD explanation



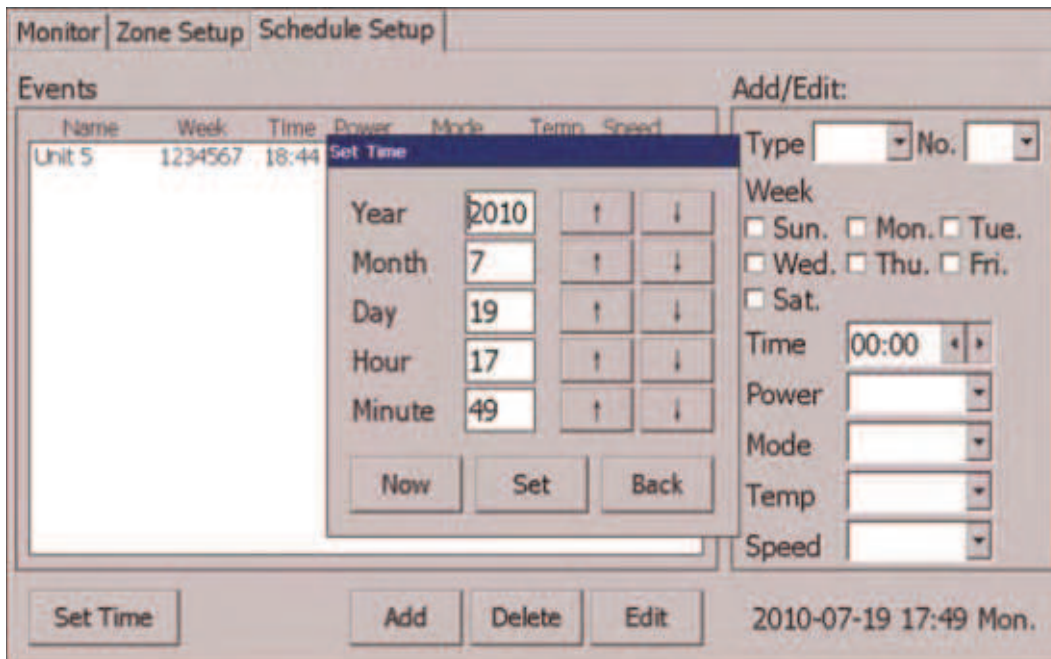
Button Explanation:

- Monitor: Main View
- Zone Setup: Zone set
- Schedule Setup: Weekly timer setting
- Unit->Zone: From Unit no. display change to Zone display
- Zone-> unit: From Zone display to Unit no. display
- Start All: All ON
- Stop All: All OFF
- Show Zone Schedule: Display the indoor unit no.
- On/Off: Unit On/Off
- Operation Mode: Operation mode and setting
- Set Temperature: Temp. display and setting
- Fan Speed: Fan speed display and setting
- TC1 Temp: Indoor gas pipe temp.
- TC2 Temp: Indoor liquid pipe temp.
- Room Temp: Indoor real temp.
- Error Code: Error code
- OK: All the condition setting finished, press OK send out order;
- Cancel: Cancel

Icons

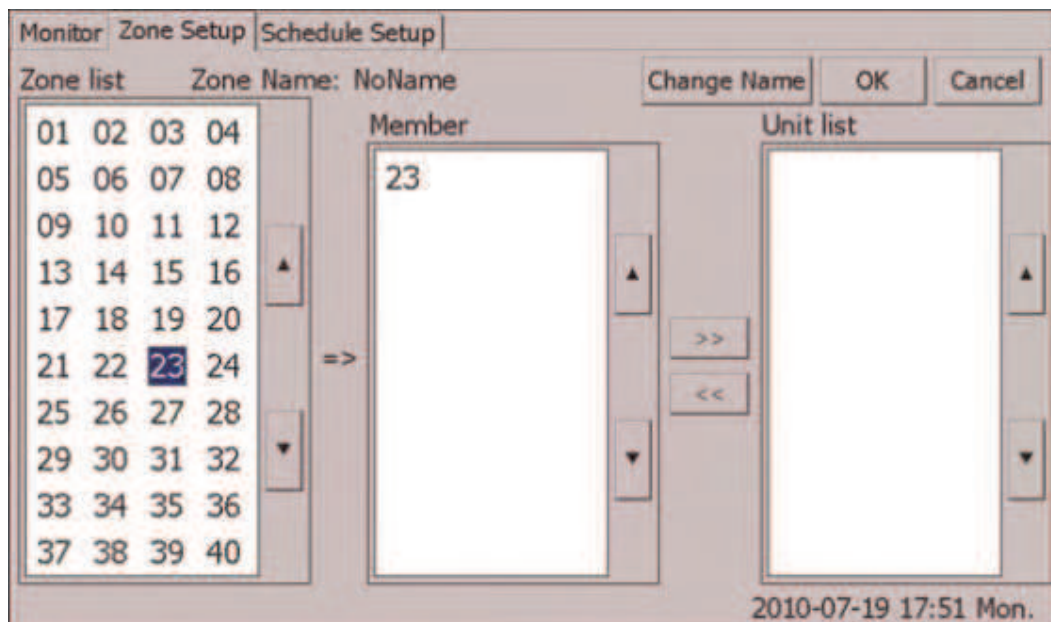
- grey: Operation
- Brown :Stop
- Red: malfunction

Date and time setting



Press "set time", the timer setting interface will pop-up. adjust the year/month /date and time by pressing the up/down button.

Zone name setting



Select the zone no. to be changes, press "change name",enter the zone name interface.

Set Zone Name

Original Name: NoName
 New Name:

q	w	e	r	t	y	u	i	o	p	Backspace
a	s	d	f	g	h	j	k	l	_	Caps
z	x	c	v	b	n	m	Space	Clear	Shift	

Input name and press set ,then the setting finished, pls. notice: Maximum 12 letters permitted.

Control explanation

Individual indoor unit setting

Monitor | Zone Setup | Schedule Setup

Normal
 Unit->Zone
 Show Zone Selected
 All On
 All Off
 LIFO

Unit: All Set: Unit 9

01	02	
09		

On/Off	On	Start
Mode	Auto	Auto
Temp	16°C	16°C
Fan	Middle	Auto

Stop
 Start
 Error

2010-07-19 21:44 Mon.

Set the indoor unit

Use ON/OFF to set start/stop the unit setting;

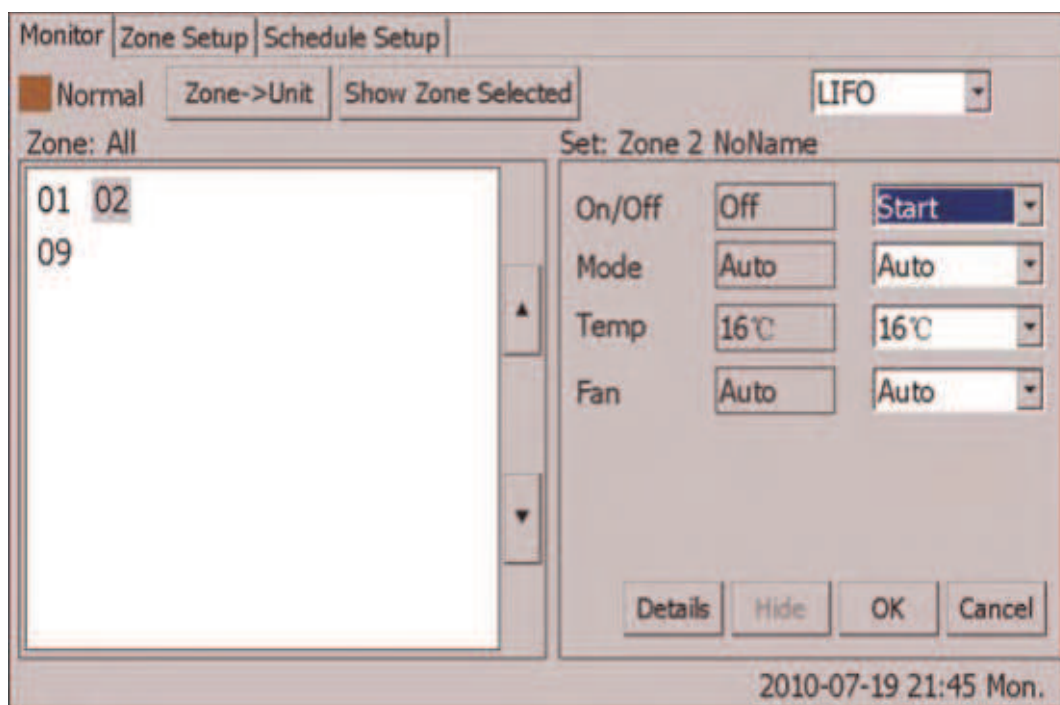
ON= Start the unit ,OFF=stop the unit ,No change=don't change the condition;

Use Mode to set the operation setting; Auto=auto, Heat=heating, Cool=Cooling, Dry=dehumidify ,Fan =Airflow ; no change =don't change the current mode,

Use temp. to set the temperature(16~30degree),set no change =don*t change current temp, fan =set airflow speed, auto=auto, high=High speed airflow ,middle =middle speed airflow, low=low speed airflow ,no change=don*t change the current airflow.

The date displayed is current setting condition.

Zone indoor unit setting



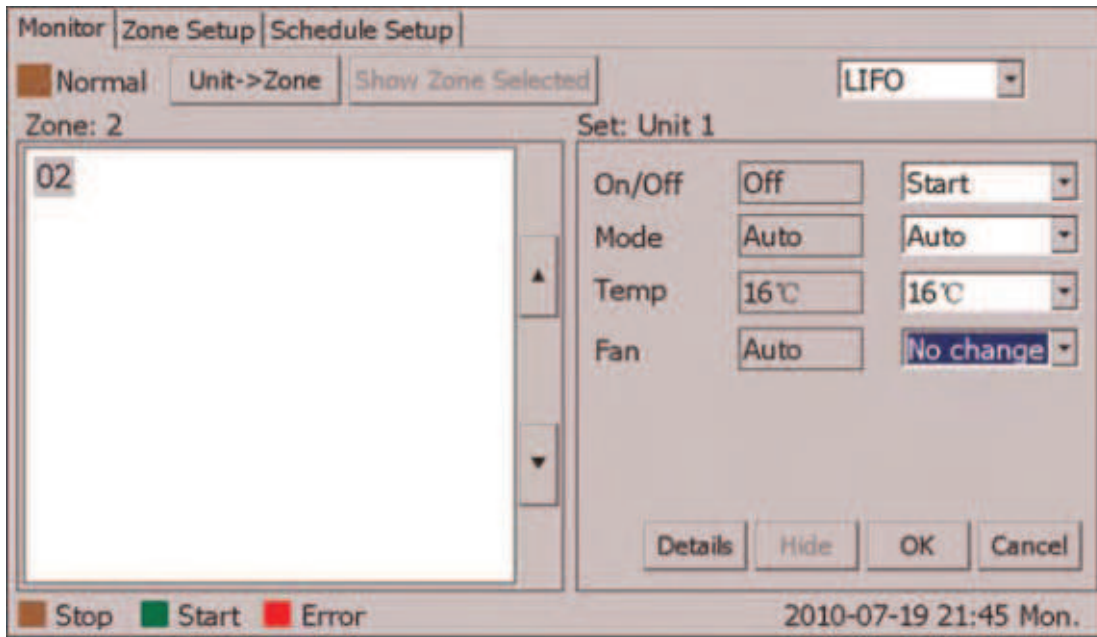
Whole zone control

Set one zone ,control from the right size control zone ,control setting method same as individual control.

The frame displayed condition is the minimum no. indoor unit condition of this zone.

Individual control of zone

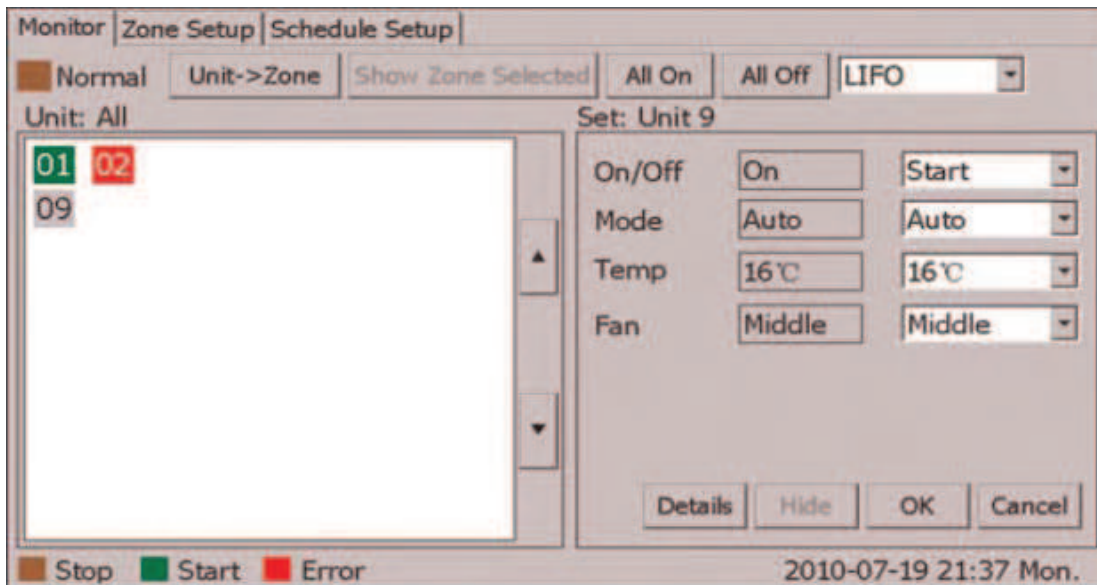
Press "show zone selected" ,the interface will display all the indoor units of target zone.



All the indoor unit setting

Press the indoor unit to be controlled ,control the indoor unit from right size frame, the control method is the same as individual control.

Press "All on",all the indoor units start to operation ,keep all the status before start ,press "All off", stop all the indoor units ,the previous setting status don't change.



Schedule setting

Monitor							Zone Setup		Schedule Setup					
Events							Add/Edit:							
Name	Week	Time	Power	Mode	Temp	Speed	Type	No.						
Unit 5	1234567	18:44	On	Auto	22°C	High								
Zone 5	1234567	18:44	On	Auto	22°C	High	Week <input type="checkbox"/> Sun. <input type="checkbox"/> Mon. <input type="checkbox"/> Tue. <input type="checkbox"/> Wed. <input type="checkbox"/> Thu. <input type="checkbox"/> Fri. <input type="checkbox"/> Sat.							
Unit All	1234567	18:44	On	Auto	22°C	High	Time: 00:00 <input type="button" value="←"/> <input type="button" value="→"/> Power: <input type="text"/> Mode: <input type="text"/> Temp: <input type="text"/> Speed: <input type="text"/>							
Unit All	1245	18:44	Off	Auto	22°C	Middle								
Unit All	67	18:44	On	Fan	22°C	Middle								
<input type="button" value="Set Time"/>							<input type="button" value="Add"/>		<input type="button" value="Delete"/>		<input type="button" value="Edit"/>		2010-07-19 21:48 Mon.	

Type : Select indoor no. setting or zone setting,. Select "zone"= setting as zone, select "group"= setting as indoor unit no.

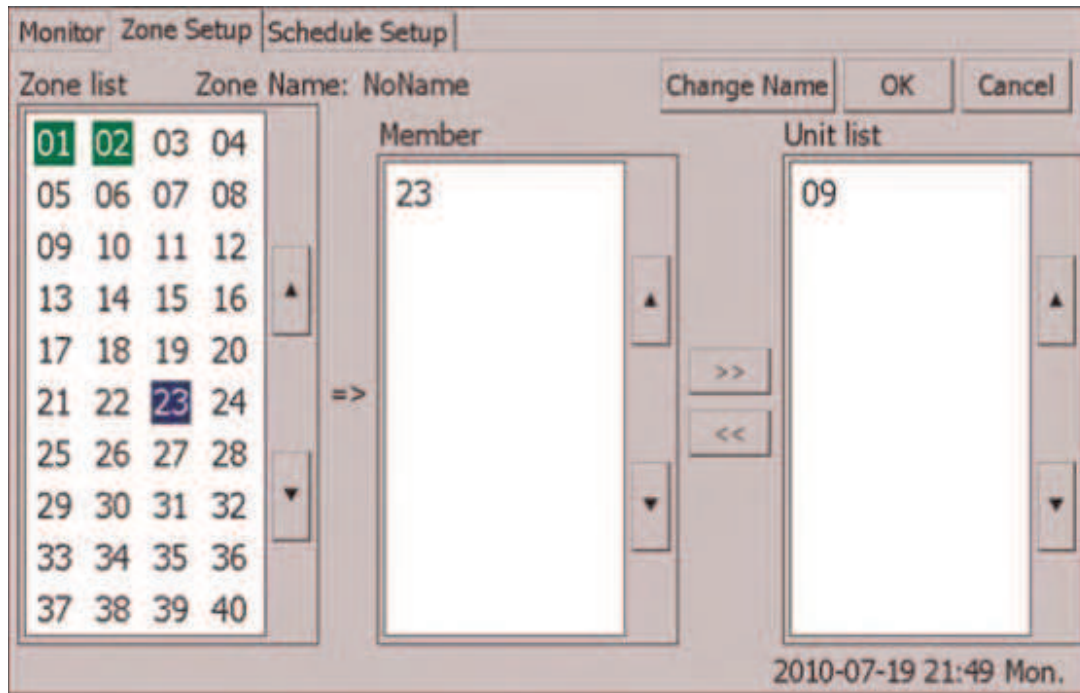
No: Zone no. or indoor unit No.

Setting: set timer setting method and indoor unit no. or zone no., select ";" before the day no. ,then set Time, ON/OFF,MODE, airflow speed, then press ADD ,one setting will finished.

Edit: select the items to be edited ,right size frame will display all the parameters, change the parameter ,then press Edit, the revise will be finished.

Delete :Select the items to be deleted, press "delete", the operation will be finished.

Zone Setting



Zone list: Zone no.

Member: indoor unit of the zone Group list*indoor unit no. First time operation, each indoor unit default as itself zone ,such as no.1 unit as zone 1,no. 128 unit as zone no. 128.

If we want to change the zone setting ,first take out the indoor unit from default zone, then add to target zone .

Zone setting

Select the zone no. from left side frame, then select the target no. of the right side frame ,press <<,the indoor unit will adds to target zone ,*member* list display the unit added .

Zone Cancel

Press the target zone no., "Member" list will display all the indoor unit no., select one indoor unit no., press >> ,the unit no. will disappear from this zone ,and right side "group list" will display the unit no.

When cancel all the indoor unit from this zone ,this zone no. will disappear.

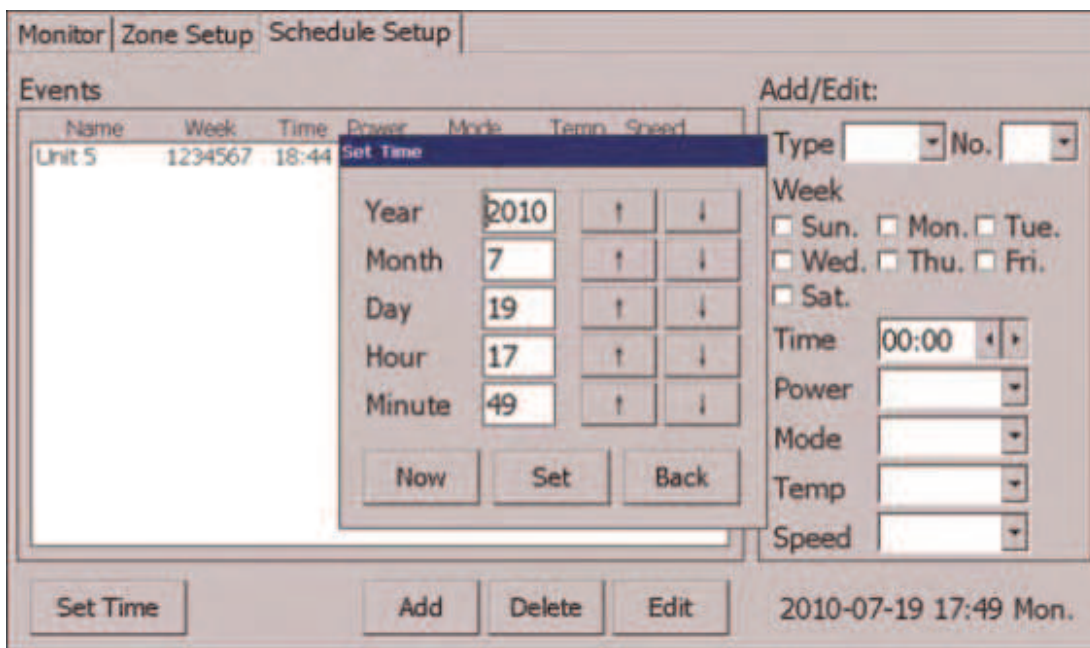
Off Power Clock setting

If power off time less than 192 hours, the internal time no need to reset;

If the power off time more than 192 hours ,the internal clock will stop , all the time will disappear and need to reset the time.

Notice:

If the power off time more than 192 hours, and don't reset the clock ,the system will supply wrong time schedule.

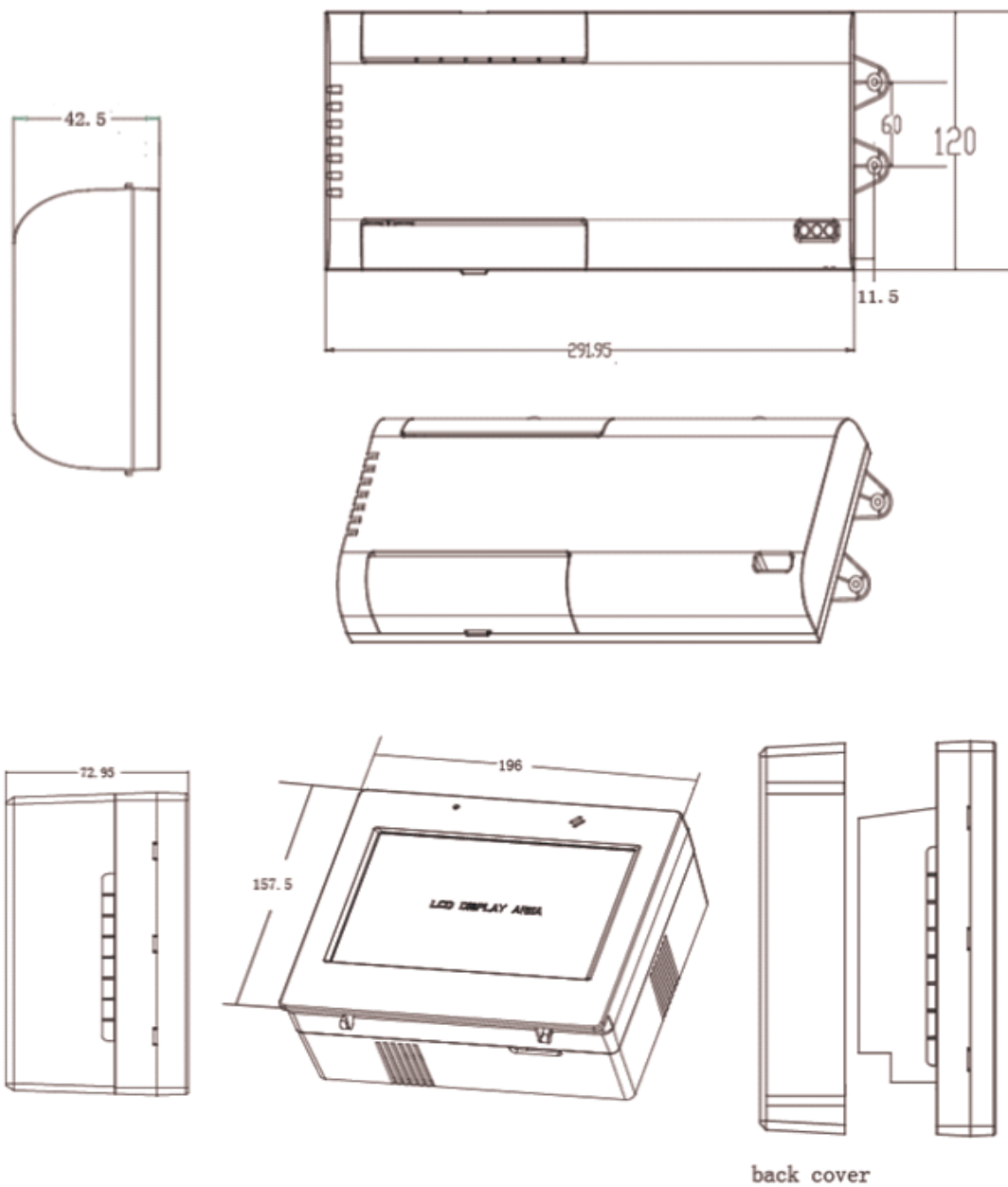


Press "Set time", the date setting interface will pop-up ,adjust the time by using ; , ; button.

Installation and connections

Dimensions

Connecting board



Installation and connections

Strong commended that RWW02 and ADV01 install the unattached power switch, it is very convenient for service.

Easy installation, allows for installation the unit either directly to the wall surface or use the back cover hole in the wall.

First fix the back cover embed the wall or wall surface.

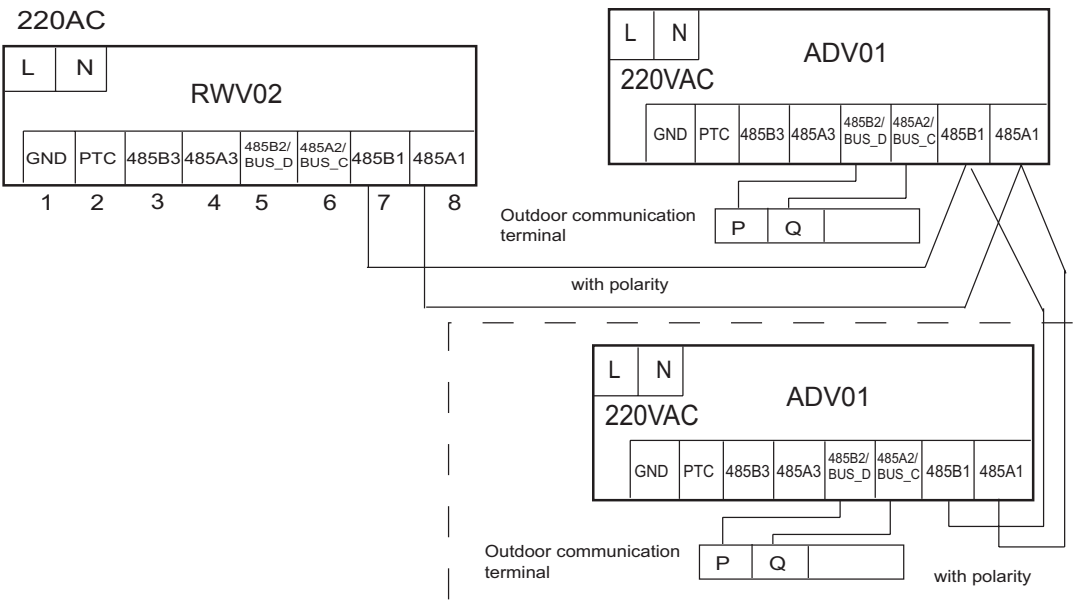
Easy installation, allows for installation the unit either directly to the wall surface or use the back cover hole in the wall.

First fix the back cover embed the wall or wall surface.



After connecting wirings, insert the central controller into the back cover ,open the front cover , fix the central controller to the back cover by using 4 screws according to the above pictures shows ,then cover the front cover.

Wiring Connection



Cautions:

Wrong connections that power supply leads to the part of PCB burded and fire

Connecting board address setting method

OFF:1 ON:0

1	2	3	4	5	6	7	8	No.
--	--	--	0	0	0	0	0	1
--	--	--	0	0	0	0	1	2
--	--	--	0	0	0	1	0	3
--	--	--	0	0	0	1	1	4
--	--	--	0	0	1	0	0	5
--	--	--	0	0	1	0	1	6
--	--	--	0	0	1	1	0	7
--	--	--	0	0	1	1	1	8
--	--	--	0	1	0	0	0	9
--	--	--	0	1	0	0	1	10
--	--	--	0	1	0	1	0	11
--	--	--	0	1	0	1	1	12
--	--	--	0	1	1	0	0	13
--	--	--	0	1	1	0	1	14
--	--	--	0	1	1	1	0	15
--	--	--	0	1	1	1	1	16
--	--	--	1	0	0	0	0	17
--	--	--	1	0	0	0	1	18
--	--	--	1	0	0	1	0	19
--	--	--	1	0	0	1	1	20
--	--	--	1	0	1	0	0	21
--	--	--	1	0	1	0	1	22
--	--	--	1	0	1	1	0	23
--	--	--	1	0	1	1	1	24
--	--	--	1	1	0	0	0	25
--	--	--	1	1	0	0	1	26
--	--	--	1	1	0	1	0	27
--	--	--	1	1	0	1	1	28
--	--	--	1	1	1	0	0	29
--	--	--	1	1	1	0	1	30
--	--	--	1	1	1	1	0	31
--	--	--	1	1	1	1	1	32
--	--	--	--	--	--	--	--	Reserved
--	--	--	--	--	--	--	--	Reserved
--	--	--	--	--	--	--	--	Reserved

Central controller address switch:

1	2	3	4	5	6	7	8	No.
--	--	--	0	0	0	0	0	1
--	--	--	0	0	0	0	1	2
--	--	--	0	0	0	1	0	3
--	--	--	0	0	0	1	1	4
--	--	--	0	0	1	0	0	5
--	--	--	0	0	1	0	1	6
--	--	--	0	0	1	1	0	7
--	--	--	0	0	1	1	1	8
--	--	--	0	1	0	0	0	9
--	--	--	0	1	0	0	1	10
--	--	--	0	1	0	1	0	11
--	--	--	0	1	0	1	1	12
--	--	--	0	1	1	0	0	13
--	--	--	0	1	1	0	1	14
--	--	--	0	1	1	1	0	15
--	--	--	0	1	1	1	1	16
--	--	--	1	0	0	0	0	17
--	--	--	1	0	0	0	1	18
--	--	--	1	0	0	1	0	19
--	--	--	1	0	0	1	1	20
--	--	--	1	0	1	0	0	21
--	--	--	1	0	1	0	1	22
--	--	--	1	0	1	1	0	23
--	--	--	1	0	1	1	1	24
--	--	--	1	1	0	0	0	25
--	--	--	1	1	0	0	1	26
--	--	--	1	1	0	1	0	27
--	--	--	1	1	0	1	1	28
--	--	--	1	1	1	0	0	29
--	--	--	1	1	1	0	1	30
--	--	--	1	1	1	1	0	31
--	--	--	1	1	1	1	1	32
--	--	--	--	--	--	--	--	Preserved
--	--	--	--	--	--	--	--	Preserved
--	--	--	--	--	--	--	--	Preserved

Wiring standard

10.5 central controller signal wiring standard

The wire from connecting board to central controller and from master to slave controller should use twin-core shield wiring. The detailed size as follow sheet

Signal wire length	Wiring size
<100	0.3mm ²
100<X<200	0.5mm ²
200<X<300	0.75mm ²
300<X<400	1.25x2mm ²
400<X<1000	2x2mm ²

And one end of the shield level must connect to the earth .

Installation position selection

1. Don't install the position near to the noise atmosphere,
Such as Computer ,Elevator, lift or other equipment to avoid malfunction happens.
2. Don't install the controller in high humidity or heavy vibration position
3. No sun shine direct access or close to thermal resources, try to avoid the malfunction.

Troubleshooting

phenomenon	Reason	Solutions
Unit no. display Red	This unit Error happens	Check the unit
Press the LCD and no action happens	Malfunction happens because of static electricity	Stop the power and restart the unit ,if still can't resolve it ,contact our after-service people.
No signal display on the LCD	Malfunction happens because of static electricity	Stop the power and restart the unit ,if still can't resolve it ,contact our after-service people.
Controller is very hot when touch it	Pls. check whether the ambient temp. is very hot	Pls. check whether the ambient temp. is very hot
Air conditioner operate automatically	Pls. check the schedule timer setting ,change it if needed	Pls. try to install the unit below 40 ; Degree atmosphere