

YR-E16b Wired Controller User Manual



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- This system should be installed by a qualified HVAC professional. Incorrect installation may cause fire, water damage, personal injury or death.
- When abnormalities such as a burnt smell are detected, immediately power off the main switch and contact a licensed contractor.
- Do not obstruct or cover ventilation grill on the air conditioner. Do not put fingers/objects into inlet, outlet or swing louver
- Do not allow children to play on or near the outdoor system equipment

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### Wired Controller YR-E16b

WIRED CONTROL PANEL FUNCTIONS

**Features and Interface** 

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ᅙ∰়়ে⊗⊗⊮⊄	ـ₩७୬ଭ୪४⁄Დ∆	Thursday 01.01.2015 <b>10:30</b> АМ			
Set temp. <b>76°F</b> Indoor temp. 70° Indoor humidity 32%	Set temp. <b>76°F</b> Indoor temp. 70 °F Indoor humidity 32%RH				
Mode	Menu	Swing			
_					

Left	Mode key in the main interface, return key in other interface.
$\left\langle \right\rangle$	Intelligent key, press it to enable intelligent mode immediately.
$\triangleleft$	Left/Right key, fan speed adjustment key, swing angle adjustment key in the main interface, direction adjustment key in other interface.
$\stackrel{\frown}{\bigtriangledown}$	Up/Down key, temp. adjustment key in the main interface, shift direction and value adjustment key in other interface.
	Menu key in the main interface, enter key in other interface.
Right	Swing key in the main interface, back to the main interface through the key in other interface. When the swing function is invalid, press the key to adjust fan speed.
U	On/Off key

ſ∕∫n	Quiet function,
彩	Turbo function.
Ô	Child lock function. Pree the Left and Right keys at the same time in the main interface for 5s to either set or cancel the function.
Ø	Forced defrost function.
Ho.	Ventilation function.
Ą	Health function.
	Quick start function.
r∕j₽	Night quiet function, this function operations only at night when set.
史	Electrical heating.
	Health airflow.
(=)	Health airflow up.
()	Health airflow down.
R R	Sleep function.
	Error code function, this icon will display in the main interface when the wired controller or the indoor unit linked to the controller has an error.
Ċ	Schedule.
	Filter.

#### 

ۂ	Tem	Temp. ECO.			
ک	Motio	Motion sensing.			
<i>\</i> ۲	Motio	on sensing follow.			
<b>\$</b> \$\$	Motio	on sensing evade.			
Thursday 1 01.01.2015	0:30am	30 Bate, week, clock display area, the format the of date can be changed through the time function			
set 7	<sup>temp.</sup> 6° <sup>F</sup>	function. Temperature display area, set temperature can be adjusted by the Up/Down key. If energy saving function is not set, the range of set temperature is 60°F-86°F, or the adjustment range will be limited. The default lowest temp. of cooling/ dry mode is 74°F, the default highest temp. of heating mode is 78°F. The adjustment step is 1°F when temp. is displayed in Fahrenheit. The range of set temp. is also limited by energy			
Indoor tem	np. 70 *F.	Indoor temperature display area. The value may be from the indoor unit or the wired controller. This can be turned on/off in the function setting.			
Indoor hum	idity 32%RH	Indoor humidity display area.			
(23)	Mode Intelligen The mo setting	nt Cooling Heating Fan Dry ode cycle depends on mode in basic setting function.			
		Up/Down swing and Left/Right swing function.			
K	Fan speed, the cycle type of fan speed can be set through basic setting.				
Qty. online	The quantity of indoor units connected to the wired controller.				

Defrost	Defrost function.			
Standby	The state of the indoor unit, this area can also display "operation"			
Master	The stat area also means t controllo controllo functior	The state of wired controller, this area also can display "slave". "Master" means the wired controller is the main controller, "Slave" means the wired controller only can control parts of functions.		
PM2.5	A++	Reserved function.		
Outdoor temperature display area. It can be set whether display or not.				
Ouldoor hur	nidity 32%RH	Outdoor humidity display area. It can be set whether display or not.		
Above f	unctions	are only valid for parts of model.		

#### OPERATION

#### **Settings & Functions**

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#### Schedule

Press the menu key in the main interface to enter the operation settings menu.



Schedule options include segmented timing and random timing. It can be selected through display setting. The default is segmented timing.

#### Segmented timing

Schedule • Segmented timing • Random timing

- 1. The segmented timing will only operate in cooling or heating mode. Time can be adjusted in 24 hours, the default format of time display is 12-hour. Temperature can be adjusted from 60°F to 86°F, "OFF" can also be set meaning power off.
- 2. Firstl, the left and right arrows flash beside the time of wake-up. Next press the enter key ,the arrows will be static, continue to press left or right key to adjust time followed by the enter key to confirm. The four direction keys can move the arrow when they are flashing.
- 3. Press ok key to confirm the setting according the prompt below the screen.
- 4. The default value is the same in the figure below.

Schedule			Thursday _ 01.01.2015	<b>0:30</b> AM
	Heat (monfri.)	Cool (monfri.)	Heat (satsun.)	Cool (satsun.)
Wake ◀6:00 am ►	70°F	OFF	70°F	OFF
Leave 8:00 am	70°F	85°F	62°F	62°F
Return 6:00 pm	70°F	85°F	OFF	78°F
Sleep 10:00 pm	62°F	82°F	62°F	62°F
Cancel				Ok

1. Keep pressing Left/Right key to speed uptime adjustment.

#### **Random timing**

Schedule O Segmented timing 

Random timing

1. When • flashes in the schedule editing interface, press the enter key to enter the setting interface.

Schedule Thursday 10				0:30AM	
No. W	/eek	Mode	Temp	Time	Enable
🕀 Add					
<ol> <li>Wee</li> </ol>	ekday	¢	26.0°F	12:47	N
<li>2 Ever</li>	ryday	ଝ୍ଟିଞ	22.0°F	14:22	Y
<li>3 Mon</li>	nday	Θ	19.0°F	15:34	N
3 Tues	sday	۲,	20.0°F	09:25	Y
<ul> <li>Dele</li> </ul>	ete				
	1	Press ◀ 🕨	for page turni	ng	
Cano	Cancel Ok				
Schedule Setting Thursday 10:30					
Sc	hedu	le Set	ting	Thursday - 01.01.2015	0:30AM
Sc Mode	hedu <sub>Temp</sub>	le Set On/Off	ting <sub>Time</sub>	Thursday - 01.01.2015 Enable/ Disable	0:30AM Week
Sc Mode O Auto	hedu <sub>Temp</sub>	le Set <sup>On/Off</sup>	ting <sub>Time</sub>	Thursday 01.01.2015 Enable/ Disable	<b>O:30</b> AM Week O O Week Every
Sc Mode O Auto	hedu <sub>Temp</sub>	le Set <sub>On/Off</sub>	ting <sub>Time</sub>	Thursday 01.01.2015 Enable/ Disable	Week O O Week Every day day
Sc Mode O Auto O Cool	hedu Temp	le Set on/off	ting Time	Thursday 01.01.2015 Enable/ Disable	Week OO Week Every day O Mon. Tue.
Sc Mode O Auto O Cool • Heat	hedu Temp 20.5	le Set On/Off ON	ting Time 14:20	Thursday 1 01.01.2015 Enable/ Disable N	O:30 <sub>AM</sub> Week ○ O Week Every day Mon. Tue. ○ O Wed. Thu.
Sc Mode O Auto O Cool • Heat O Fan	hedu Temp 20 <sup>r</sup>	Ie Set On/Off ON	ting Time 14:20	Thursday 1 01.01.2015 Enable/ Disable N	O:30AM Week ○ O Week Every day day ● O Mon. Tue. ○ O Wed. Thu. ○ Sat
Sc Mode O Auto O Cool O Fan O Pry	hedu Temp 205	Ie Set On/Off ON	ting <sup>Time</sup> 14:20	Thursday 01.01.2015 Enable/ Disable N	O:30AM Week ○ ○ ○ Week Every ● ○ Mon. Tue. ○ Wed. Thu. ○ Wed. Thu. ○ Sun Sun

- 1. Intelligent mode, 76°F, power off, 12:00, enable and weekday is default.
- 2. If the schedule that you are setting has been set before, the interface will prompt you that the schedule already exists. You need to cancel it or change the repeated parameters. Press Up/ Down key or Left/Right key to shift between "Cancel" and "Ok."
- 3. If the time on timer you are setting is in conflict with the existing timer off, the interface will prompt you to change the time. In the same way ,the time of timer off needs to be different from timer on. In summary, if the later setting conflicts with the previous, the prompting interface will display.



1. After setting, press Ok to confirm the timing and go back to schedule interface simultaneously.

- In the schedule display interface, the mode icon in white means timer on and the gray mode icon means timer off. Press Up/Down key to select different schedule. Use the Left/Right key to change pages. When the number flashes, press the enter key to display the setting interface where it can be edited.
- 2. Celsius or Fahrenheit can be selected. 12-hour or 24-hour clock can also be selected.
- 3. Press the enter key to delete a schedule when "①" flashes. The delete interface will display. Now choose the number you want to delete through the direction keys and enter key.

Please select the No	o. you want to delete.			
all 1 2 3 4	5 6 7 8			
9 10 11 12 1	3 14 15 16 17			
(18) (19) (20) (21) (2	2 (2) (2) (2) (2)			
27 28 29 30 3	1) (32) (33) (34) (35)			
Cancel	Enter			
Time				
lime				

When the time icon is flashing, press the enter key to enter the time interface.



- 1. The default date is December 12th,2014,the time is 12:00PM and the week is Friday. Adjusting settings is the same way as schedule adjusting.
- 2. The default format is 12-hour and Month/Day/Year.

#### **Extra Function**

Press the enter key to enter the setting interface when the icon is flashing in the menu.

- 1. The default information for each function is decided by indoor unit except child lock. Child lock function is off by default.
- 2. Move the arrows using the Up/Down or Left/Right key. Arrows will display statically when you press enter key. Press the Left/Right key to choose "ON" or "OFF". After setting, press Up/Down key to confirm and move to the above or below function directly or press the enter key to set again.
- 3. The corresponding function icon will display in the main interface when a function is set in extra function.
- 4. Some functions are not available for some models. These will be greyed out. Turbo and Quiet function conflict and can't both be on. Setting one will disable the other. This is the same for health airflow up and down.
- 5. When child lock is set to ON, the interface skips to the main display automatically. The function also can be set or canceled by pressing the Left and Right keys together for 5s in the main interface.

Extra	Functi	On Thursday 01.01.2015	<b>0:30</b>
ന്ഗ്⊾ Quiet	ON	ℜ Ventilation	ON
劣 Turbo	OFF	♀ Health	OFF
😚 Child lock	∢NO►	😥 Quick start	∢NO►
Ø Forced defrost	OFF	🕼 Night quiet	OFF
Return	En	iter	Main

#### **Error Code**

Press the enter key to enter the error code display interface when the icon is flashing in the menu.

- 1. Up/Down key to choose the unit. Left/Right key to change pages.
- 2. One current error code will display and up to thirty five past error codes will display for each unit.
- 3. Press the Left and Right keys together for 5s to clear away the error history information of the current unit. Press Up and Down keys together for 5s to clear away the error history information of all the units on line. The combination method is only valid in error interface.



#### **Service Help**

Press the enter key to the service help interface when the icon is flashing in the menu.

1. Password function includes password setting and recovery. The default password is 841226. When finished entering password, press direction key to cancel or enter, then press enter key to confirm, or continue to press enter key to confirm after inputting six numbers.

Serv	ice & Help	Thursday 01.01.2015 <b>10:30</b> ам	
Password	Password setting Password recovery		
	How to set child lo	ck?	
11-1-	How to set four-wa	ay cassette angle?	
пер	How to inquire erro	or codes?	
	How to clean filters	s?	
Return	Enter	Main	

- ENGLISH
- 1. If password recovery is set, the interface will prompt as follows, then cancel or enter.



1. Help function is available for only some models. The information is gray when it is not available.

#### Sleep

The function is reserved for some models.

#### Swing

Press enter key to enter the interface when swing icon is flashing in the menu. Password is required.

1. The default information of swing type and angle control is decided by the indoor unit. When type and angle control are set in a different combination, the main interface will display corresponding icon and then swing function will be updated by indoor unit.

	Swing	Thurs 01.01.2	<sup>day</sup> 10:30 <sub>ам</sub>
Туре	● Up/Down	O Left/Right	O Four-way cassette
Angle control	● ON	OOFF	
Return	En	ter	Main

- 2. If a combination is not available, the information will be gray.
- 3. If no swing is set, the swing key in the main interface is used for adjusting the fan speed.
- 4. If Up/Down and Left/Right swing with no angle is set, swing key in the main interface controls open and close of swing.
- 5. If Up/Down and Left/Right swing with angle is set, the swing icon will flash after pressing the swing key in the main interface. Next press Left/Right key to adjust angle. Swing key is used for shifting Up/Down swing and Left/Right swing. There is no operation for 5s after swing icon flashes, the icon will be static indicating quitting adjustment.
- 6. If the indoor unit is a four-way cassette model, swing function in the menu is invalid. Swing key in the main interface is used for changing the deflector. The order four deflectors->deflector 1->deflector2->deflector3->deflector4->four deflectors. The deflector flashes for 5s when it is selected ,then press Left/Right key to adjust swing angle of this deflector at the same time.



7. Angle definition:

Up/Down swing: 1 stands for angle 1,2 stands for angle 2,3 stands for angle 3,4 stands for angle 4,5 stands for angle 5, 1 and 2 stand for health airflow up,4 and 5 stands for health airflow down, the circulation of 1->2->3->4->5->4->3->2->1 stands for automatic swing.

Up/Down swing will be changed in sequence as follows: angle 1->angle 2->angle 3->angle 4->angle 5->automatic swing->angle 1.



Left/Right swing:

Left/right swing can be adjusted as per the user's requirement. The circulation of 1->2->3->4->5->4->3->2->1 stands for automatic swing.



8. The default angle in different modes is as follows: Up/Down swing:

	Intelligent	Heating	Cooling	Dry	Fan
Angle	Angle 1	Angle 5	Angle 1	Angle 1	Angle 1

Left/Right swing:

	Intelligent	Heating	Cooling	Dry	Fan
Angle	Angle 1	Angle 1	Angle 1	Angle 1	Angle 1

Four-way cassette:

	Intelligent	Heating	Cooling	Dry	Fan
Deflector	Four deflectors	Four deflectors	Four deflectors	Four deflectors	Four deflectors
Angle	Angle 1	Angle 5	Angle 1	Angle 1	Angle 1

#### **Humidity Control**

Press the enter key to enter the humidity control interface when the icon is flashing in the menu. The function is not available for some models. When it is not availble, the icon is gray.



- 1. Current humidity is controlled by the indoor unit and can not be adjusted through wired controller.
- 2. Target humidity can be adjusted. Press enter key to make arrows static, then adjust the humidity with the Left/Right key. Press enter key to confirm.

#### **Display** Setting

Press the enter key to go to the next interface when the icon is flashing in the menu.

#### 1. Screen saving

There are five screen saving time options. The time indicates how long the screen light stays on after no operation."Cancel" means that the screen light will never go off.

#### 2. Brightness

The function is used for controlling the light intensity.

Dis	splay Set	Thursday 10:30 AM	
Screen saving	0 <b>15s</b>	0 <b>30s</b>	01min
	0 3mins	O Cance	1
Bright	○ <b>30%</b>	○ <b>50%</b>	○ <b>60%</b>
-ness	○ <b>80%</b>	0 <b>100%</b>	
Return	i	Enter	Main

#### Language

Only valid for some models.

#### Temp. unit

Celsius or Fahrenheit can be selected through this function.

#### Schedule

Segmented timing or Random timing can be set.

Dis	play Set	ting	Thursday 01.01.2015 <b>10:30</b> ам
Language	English	O Spanis	sh O French
	0 Italian	O Chine	se O Russian
Temp. unit	<b>0°C</b>	●°F	
Schedule	O Segmente	ed timing (	O Random timing
Return	E	inter	Main

Indoor temperature display

If the function is turned on, the main interface will display the indoor temperature. In off, the main interface will not display indoor temperature.

Indoor humidity display It is only available for some models.

Outdoor temperature display It is only available for some models.

Outdoor humidity display It is only available for some models.

Display Settin	g Thursday 01.01.2015	10:30am
Indoor temp display	O ON	● OFF
Indoor humidity display	0 <b>ON</b>	● OFF
Outdoor temp display	0 <b>ON</b>	● OFF
Outdoor humidity display	0 <b>ON</b>	• OFF
PM2.5 display	0 <b>ON</b>	● OFF
Return Ente	r	Main

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#### **Installer Setting**

Press the enter key to enter the function when the icon is flashing in the menu.

#### Details

The corresponding parameter information will be displayed in this function. Up/ Down key to adjust unit number, Left/Right key to turn page. Some information is gray that can not be inquired.





#### Address setting

The default password is 841226. The communication address can be set two ways. One way is the wired controller. The other way is the wired controller with automatic competing set. Central address and communication address between indoor and outdoor can both be adjusted according to the individual situation.

	Address S	Setting	Thursday 01.01.2015 <b>10:30</b> AM
	Comm. Add. setting	○ wired c ○ wired c	ontroller ontroller + auto
unit 6	Central address		<b>∢68</b> ►
▼	Communication a between indoor and outdoo	ddress or unit:	<b>∢</b> 4 ►
	Return	Enter	Main

#### **Basic setting**

The information of model is controlled by the indoor unit and can not be changedas is the same to capacity information.

#### Normal fan

The default information is controlled by the indoor unit.

	Basic Setting			<b>10:30</b> AM
		Auto fan 🛛 🔍 1	02	03
	Normal	Auto fan	● ON	OOFF
unit	<sup>nit</sup> fan	Quiet fan	ON	OOFF
► ▼		Breeze	ON	OOFF
		High speed fan	ON	OOFF
		Super fan	● ON	OOFF
	Return	Enter		Main

#### Mode selection

Different mode combinations can be set according to each application.

Ba	sic Setting	Thursday <b>10:30</b> ам 01.01.2015
Mode selection	Auto Heat Dry Coo     Dry Cool Fan     O Heat Dry Cool Fan     Cool Heat Try Cool Fan     O Auto Bypass Rec     O Heat only     O Hot water	ol Fan n overy
Return	Enter	Main

#### New/old protocol

Self-adaption is default. The function is used for basic settings. Do not reset it, or the controller may not work normally.

#### Power off memory

If the function is set on, the wired controller will maintain the previous state in temperature, fan speed ,etc from in outage to power up again.

#### Master/Slave set

Wired controller can be set as master controller or slave controller through this function. Slave controller can only control some of the functions.

Basic	: Setting	Thursday 01.01.2015 <b>10:30</b> ам
Outdoor fan fixed speed	● grade	O rotational speed
Power off memory	● ON	OOFF
Master/Slave set	<ul> <li>Master</li> </ul>	⊖ Slave
Return	Enter	Main

#### Ambient temperature revision

The revision value is only valid for wired controller ambient temperature. Press enter key to make the arrows static and adjust the temperature using the Left/Right key.

Basic	Basic Setting		
Ambient temp. revision	◀ -3.	5°F►	
Twin energy	● ON	O OFF	
judgement condition	<ul> <li>1 group</li> <li>O 3 group</li> </ul>	O 2 group O 4 group	
Return	Enter	Main	

#### Indoor temperature collection

The ambient temperature may be read from the wired controller or the indoor unit through this setting. The same for indoor humidity reading.

	Basic	Thursday 01.01.2015 <b>10:30</b> АМ	
	Indoor hum. collection	Wired controller	O Indoor unit
unit 6	Indoor temp. collection	Wired controller	O Indoor unit
	Wifi module	Available	O Unavailable
	Return	Enter	Main

In basic setting interface, press Up/Down key to adjust unit number; press Left/Right key to move the cursor. Some functions are not available for some models and the information is gray.

#### ECO

ECO function is default set to OFF. The default highest temperature is 78°F in heating and the default lowest temperature is 74°F in cooling/dry mode. It is default set to no exceeding of limit. Four direction keys can move the cursor, when the arrows flash, press enter key to stop the flashing and press Left/Right key to adjust the value, then press the enter key again to confirm. After setting ECO function, the temp. adjustment will be limited. If overrun is set, the temp. can be adjust out of ECO range in allowable time.

	ECO	Thu 01.01	rsday 1.2015 <b>10:30</b> ам	
Temp. ECO	Setting	• ON	O OFF	
	Range of te	Range of temp.		
	The highest of heating	t limit	<b>⊲</b> 26.0°F►	
	The lowest of cooling/d	limit Iry	<b>⊲</b> 26.5°F►	
Return	Enter		Main	

	ECO	Thursday 01.01.2015 <b>10:30</b> АМ
	Туре	
Temp. ECO	No overrun ON	OOFF
	4 2 ► 15 hour min	<b>permitted</b>
Return	Enter	Main

#### **Running time**

The function records both continuous running time and total running time. When the bottom color of "Clear" changes to white, press enter key to clear the accumulative running time.

Running	Time	Thursday 01.01.2015	10:30AM
Continuous Runnin Time	g 0014:	:22:53	Clear
Total Running Time	0037:	:10:26	Clear
Return	Enter		Main

#### Vip priority choice

The function is only available for some models.

#### **Special setting**

ESP grade can be set, the setting method is same to the instructions mentioned above .

#### **Parameter setting**

The function is only available for some models.

#### **EEPROM** setting

The function is only available for some models.

#### **Motion sensing**

The function is available for some models. When motion sensing follow or evade is set, the angle of the deflector will be decided by the person's current location, the setting swing angle in the main interface is invalid at this time. When the function of automatic power off is set, indoor unit will power off after sensing nobody in the room for the setting time. All the functions in the interface are "OFF" by default.

Motion sensin	g Thursda 01.01.201	Thursday 01.01.2015 <b>10:30</b> AM	
Power off when sensing nobody in	<ul> <li>10 mins</li> <li>30 mins</li> </ul>	O 15 mins O <b>OFF</b>	
Motion sensing follow	● ON	O OFF	
Motion sensing evade	● ON	O OFF	
Return Ente	r	Main	

#### **Wired Controller Wiring**

- 1. First put the communication wire through the hole in the back cover.
- 2. Connect the communication wire to CON4 port of the wired controller. Finally, put the front cover of wired controller on to the back cover to complete the installation.



#### Wiring connection methods

There are three methods connect the wired controller to the indoor units.

A. One wired controller controls one indoor unit; the indoor unit connects with the wired controller through a 3 conductor shielded cable



B. One wired controller can control up to 16 sets of indoor units (max); A 3 conductor shielded cable must connect the wired controller and the master unit (the indoor unit connected to the wire controller directly). The others connect to the master unit also through a 3 conductor shielded cable.



Note: The wiring method is used for the below unit

Cassette	AB09/12/18SC2VHA
Slim duct	AD07/09/12/18SL2VHB
	AW07/09/12/18LC2VHB
	AW09/12/18/24ES2VHB
High wall	AW09/12/18EH2VHA
	AW09/12TE1VHA
	AW18/24TE2VHA

Notice:

For wired controller connection with cassette and slim duct indoor unit,please do follow the corresponding indoor unit installation manual's instruction while WK-B kit installation manual for high wall indoor unit.

C. Two wired controllers control one indoor unit. The wired controller that connects with the indoor unit is called the master controller, the other is called the slave controller. The master wired controller and the indoor unit (as well as the master controller and the slave controller) are all connected through 3 conductor shielded cables.



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