

# HY02B05 Thermostat Manual



## Technical Data

- ❖ Power Supply: 220V AC
- ❖ Load Current: 16A
- ❖ Accuracy:  $\pm 0.5^{\circ}\text{C}$
- ❖ Set-point Temperature Range:  $5^{\circ}\text{C} - 35^{\circ}\text{C}$
- ❖ Limit Temperature Range:  $5-99^{\circ}\text{C}$
- ❖ Consumption:  $<0.3\text{W}$
- ❖ Temperature Sensor: NTC
- ❖ Size:  $86*86*17\text{mm}$  (H\*W\*D)

## Features

- ❖ Large LCD screen with blue backlight display and double temperature display mode
- ❖ Time display (minutes, hours, weeks)
- ❖ 6 period programmable controlling temperature setting
- ❖ Internal and external temperature sensor for choice
- ❖ Room temperature display precision is 0.5, inner precision is 0.1
- ❖ Setting temperature meet user's demand of room temperature
- ❖ Memory function when power failure, protect your setting from power failure
- ❖ Room temperature automatically calibration function

## Button description

NO	signal	Description
1		on / off
2	<b>M</b>	Mode key: switch over auto/manual time interval control and temporary manual, long press enter into time interval setting function
3		Time setting: hours, minutes, weeks setting.
4		Increase temperature, cooperate <b>M</b> and  to setting
5		Decrease temperature, cooperate <b>M</b> and  to setting

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## Function and display

- “” manual control (temporary manual control when flashing, auto control when no this sign display);
- “” it is heating;
- “” open anti-freezing function;
- “” get up in morning, the first time interval; “” go out in morning, the second time interval;
- “” back home at noon, the third time interval; “” go out at noon, the fourth time interval;
- “” back home at night, the fifth time interval; “” sleep at night, the sixth time interval;

## Operation

### 1) Setting hour, min and week

Under power on state, press , then press or to adjust. next press to pass next step

### 2) Programmable

Under power on state, long press **M** to program. then press or to choose 5+2 days programmable, 6+1 days programmable or 7 days programmable

Under power on state, long press **M** to program. then press **M** to setting temperature, time. press or to adjust

## Time interval programming

Period		Icon	Default Period Time	Default Period Temperature
Working Day	1		06:00	20°C
	2		08:00	15°C
	3		11:30	15°C
	4		12:30	15°C
	5		17:30	22°C
	6		22:00	15°C
Weekend	1		08:00	22°C
	2		23:00	15°C

## Advanced Setting (suggestion: operated by technician)

At the same time, Press and key to enter advanced setting

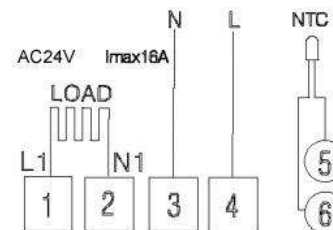
No	Symbols	Setting Item	Parameter Setting Function	Factory Default
1	SEN	Sensor control option	0:internal sensor 1:external sensor 2:internal temperature, external temperature control limit	0:internal sensor
2	OSV	Limit temperature value of external sensor	5-99℃	42℃
3	dIF	Return difference of limit temperature value of external sensor	1-9℃	2℃
4	SVH	Set upper limit temperature value	5-99℃	35℃
5	SVL	Set lower limit temperature value	5-99℃	5℃
6	AdJ	Measure temperature	Measure temperature,check and calibration	0.1℃ precision Calibration (actual temperature)
7	FrE	Anti-freezing function	00:anti-freezing function shut down 01:anti-freezing function open	00:anti-freezing function shut down
8	POn	Power memory on	00:Power on no need memory 01:Power on need memory	00:Power on no need memory
9	FAC	Factory default	08:just display,no other meaning 00:Restore factory default	08

**Note:** hysteresis (return temperature) description: the factory default of external sensor limit temperature(OSV) set as 42℃, external sensor limit temperature hysteresis(dIF) set as 2, when temperature up to 44℃, relay stop output, when temperature drops to 40℃, relay output again and heating. (operation when room temperature lower than setting temperature)

### Sensor fault hint



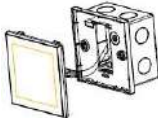

Please select internal, external sensor working mode correctly. If it is chosen wrong or sensor is fault (breakdown), LCD interface will display "Err", temperature controller stops heating until fault is eliminated. Special Hint: installation cable  
Please select: water heating selects 1.5-2.5mm<sup>2</sup> rigid line; electric heating select above 2.5mm<sup>2</sup> rigid line.

### Power wiring diagram



### Installation

Warning: please wire right strictly according to the wiring diagram, do not make water, mud and other debris into the thermostat, otherwise it will cause thermostat damage!

			
1, open main control panel, with 3.5mm slotted point screwdriver along the inclined plane until to card depths of 4mm, pry up slightly to open the card hook	2, connect back panel and power, wire as per wiring diagram, fasten back panel on cassette with M4 screw	3, connect winding displacement of back panel and upper panel	4, Hang up with 30° to 2 hooks, press on the 2 bottom corners, stuck on the upper shell, installation finished.