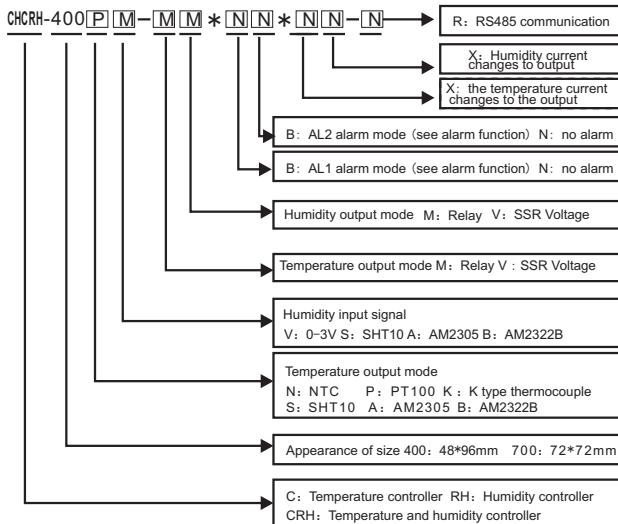


# CHCRH Series intelligent temperature and humidity controller using instruction manual

First of all, thank you for using this company's quality products. Please read this manual carefully before use so that you can fully understand and properly use the instrument

## 1. Description and meaning of model

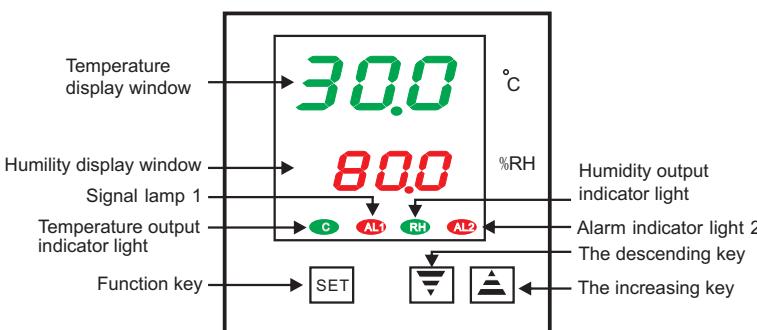
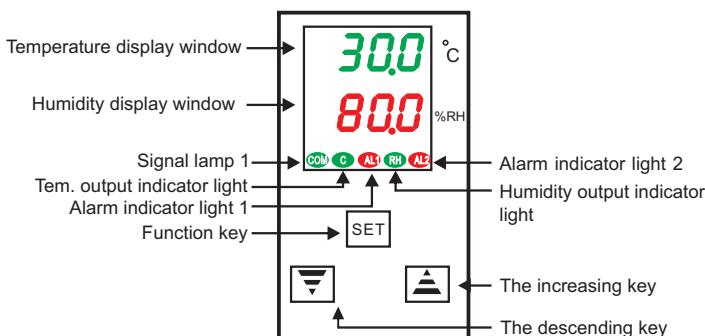


## 2. Instrument technical indicators:

This instrument has the many kinds of temperature/humidity sensor signal input, the convenient user to select different types, and a variety of combination control mode (heating/humidification and cooling dehumidification, heating/dehumidification, cooling, humidifying) output, convenient to users. The two auxiliary outputs are freely defined as temperature or humidity assisted output. Multiple output options are available.

1. Temperature/humidity display resolution: 0.1 or 1 optional.
2. Temperature and humidity measurement accuracy:  
K type thermocouple:  $\pm 1^\circ\text{C}$ ; Pt100 platinum resistance:  $\pm 0.5^\circ\text{C}$ ; NTC thermal resistor:  $\pm 1^\circ\text{C}$   
0-3v senor:  $\pm 5\%$ (10%-90%RH)  
AM2305:Humity  $\pm 2\%$ (10%-90%RH)/Temp. $\pm 0.3^\circ\text{C}$   
SHT10:Humity  $\pm 4.5\%$ (10%-90%RH)/Temp. $\pm 0.5^\circ\text{C}$   
AM2322B:Humity  $\pm 2\%$ (10%-90%RH)/Temp. $\pm 0.3^\circ\text{C}$
4. Control mode: ON/OFF switch control mode.
5. Output of relay contact: AC250V/3A(drag) or AC250V/0.3A(inductive load)
6. Drive solid state relay signal output: 12VDC/ 30mA.
7. Working voltage: 85-265vac.
8. working environment: 0~50 °C, temperature humidity <85% RH no corrosion, no condensation
9. External dimensions (mm) : 48\*96\*96/72\*72\* 96; Installation opening: 45\*92/68\*68

## 3. Instrument panel and character description (example) :



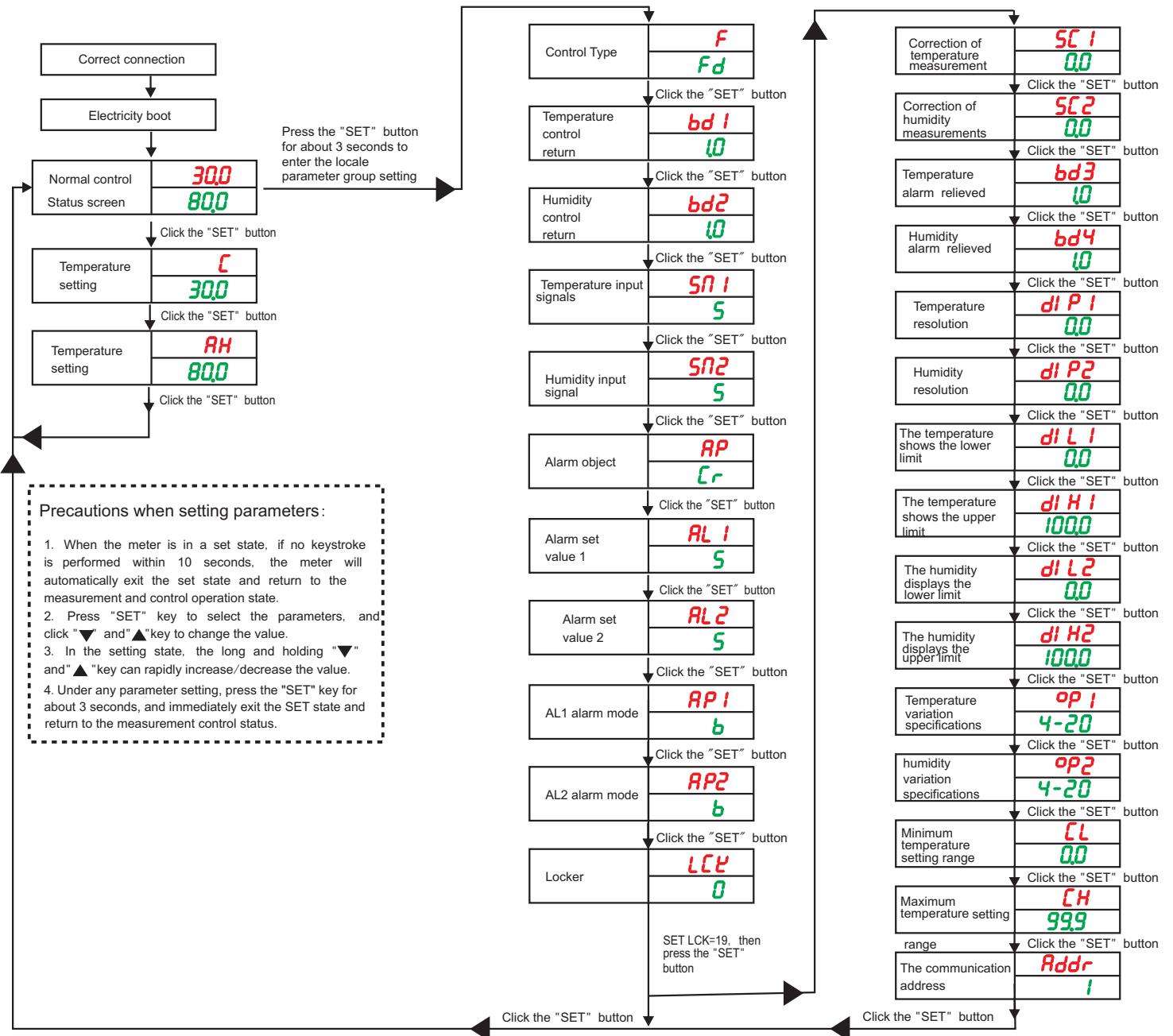
4. Instrument parameter description: (non-engineering technical personnel, do not change the engineering parameter value easily)

Parameter name	characters	Ranges	initial value	Statement
Press the "SET" button briefly				
Temperature setting	<i>L</i>	CL-CH	30.0	Temperature control target (set value)
Humidity setting value	<i>RH</i>	0.0-99.9%RH	80.0	Humidity control target value (set value)
Press the "SET" key for about 3 seconds to enter the field control parameter group setting				
Control mode	<i>F</i>	<i>FF-dd</i> <i>Fd-dF</i>	<i>Fd</i>	FF: heating/humidifying control mode dd: cooling/pumping control mode Fd: heating/pumping control mode dF: cooling/humidifying control mode
Temperature control return	<i>bd1</i>	0.0~50.0	1.0	Temperature control return value
Temperature control return	<i>bd2</i>	0.0~50.0	1.0	Temperature control return value
Temperature input specification	<i>SN1</i>	<i>A-S-N-Y-P</i>	<i>S</i>	A: AM2305/AM2322B digital sensor S: SHT10 digital sensor N: 50K NTC thermal resistance K: K type thermocouple P: PT100 platinum resistance
Humidity input specification	<i>SN2</i>	<i>A-S-U</i>	<i>S</i>	A: AM2305/AM2322B digital sensor S: SHT10 digital sensor U: 0-3v voltage signal humidity sensor
Alarm object	<i>RP</i>	<i>C-r-Cr</i>	<i>Cr</i>	Cr: AL1 is the temperature alarm, AL2 is the humidity alarm. C: AL1/AL2 is all temperature alarm. R: AL1/AL2 is all humidity alarm.
AL1 alarm value	<i>RL1</i>	0.0~99.9	5.0	AL1 alarm value
AL2 alarm value	<i>RL2</i>	0.0~99.9	5.0	AL2 alarm value
AL1 alarm mode	<i>RP1</i>	<i>A-b-H-L-n</i>	<i>b</i>	A: lower deviation alarm. B: Upper deviation alarm H: upper limit alarm L: lower limit alarm N: no alarm
AL2 alarm mode	<i>RP2</i>	<i>A-b-H-L-n</i>	<i>b</i>	LCK=0: field parameter values can be modified. LCK=1: field parameter values cannot be modified. LCK=2-18: SV and field parameter values cannot be modified. LCK=19: enter engineering parameter group
When LCK= 19, press the "SET" key to enter the engineering parameter group setting				
Temperature correction	<i>SC1</i>	-20.0~+50.0	0.0	Correction of measurement errors caused by temperature sensor problems
Humidity correction	<i>SC2</i>	-20.0~+50.0	0.0	Correction of measurement errors caused by humidity sensor problems
Temperature alarm return	<i>bd3</i>	0~+50.0	1.0	Temperature alarm to cancel the return value
Humidity alarm return	<i>bd4</i>	0~+50.0	1.0	Humidity alarm to cancel the return value
Temperature value	<i>dIP1</i>	0~0.0	0.0	Temperature display and resolution
Humidity value	<i>dIP2</i>	0~0.0	0.0	Humidity display and set value resolution
Temperature limit	<i>DL1</i>	0.0~99.9	0.0	Temperature as the minimum range value when the output is changed
Upper temperature display limit	<i>DL1</i>	0.0~400.0	100.0	Temperature as the maximum range value when the output is changed
Humidity display lower limit	<i>DL2</i>	0.0~99.9	0.0	Humidity as the minimum range value when the output is changed
Humidity display upper limit	<i>DL2</i>	0.0~99.9	100.0	Humidity as the maximum range value when the output is changed
Temperature transmitting output	<i>OP1</i>	0~20/4~20	4~20	The temperature current (mA) changes delivery specification
Humidity transmitting output	<i>OP2</i>	0~20/4~20	4~20	Humidity current (mA) change delivery specification
Minimum temperature setting range	<i>CL</i>	-20.0~100.0	0	The limit temperature SV set the minimum value
Maximum temperature setting range	<i>CH</i>	-20~400.0	99.9	The limit temperature SV set the maximum value
Correspondence address	<i>Raddr</i>	0~80	1	Set up the instrument communication address

## 5. Precautions for use and order:

1. The type and specification of the input signal of the instrument before use, and the requirements of the installation control system shall be met in accordance with the requirements of the installation control system.
2. Please contact the distributor or manufacturer according to the correct wiring drawings or instructions.
3. K type thermocouple, if you want to extend the sensor lead, please use thermocouple compensation wire, using internal automatic compensation models, compensation conductor should be directly to the instrument of the terminal,middle can't into conventional wire, otherwise it will produce error of measurement.
4. When receiving the Pt100 platinum resistance, when using the compensation wire, please use the same specification of low resistance wire, and the three-wire resistance value is as much as possible to avoid measurement errors.
5. If the instrument sensor is connected to the wrong line or the input signal is abnormal, the digital tube will display the fault code Err. Is the sensor damaged?
6. The instrument power line and the signal line should be separated from the large current transmission line to reduce the influence of the electromagnetic radiation on the instrument. In case of unavoidable, please use the shielded wire as far as possible.
7. The instrument can be energized only when the wiring is correct, especially the power supply and output power line, which may damage the internal circuit of the instrument.
8. when ordering, please specify the instrument specific models (see the instruction of "model meaning and expression" column) can also be note details of instrument input signal types, specifications, measuring range, output method, instrument power supply or other special technical requirements.
9. Accessories attached to the factory instrument:a set of mounting bracket, one copy, and one set of temperature and humidity sensors. If there is any abnormality in the use of instrument, please check the instruction manual or the after-sales service hot-line email:cynthia-leung@qq.com for technical support
10. During the use of failure and unsealed, the manufacturer shall maintain free maintenance within one year.

## 6. Procedure diagram of instrument parameter setting:



## 7. Instrument wiring reference diagram:

