【Intelligent digital/light column display control instrument】

➢ Product outline

Intelligent digital/light column display control instrument adopts advanced microprocessors for intelligent control, and it is suitable for display and control for various physical quantity check signals, such as temperature, humidity, pressure, liquid level, instantaneous flow, speed and so on, as well as can carry out the linear calibration with high accuracy for various non-linear input signals.

Adoption of up-to-day non-jumper technique makes the input port to gain universal signal input function. Users can realize light switching between multi-input-signals (various thermocouples, thermo-resistance, standard voltage / current signal) only need by changing internal parameters, so has improved the universality and reliability of instrument.

Instruments adopt high brightness LED digital display and high-resolution light column display (proportion display) make measurement/control value display more clear and visual.

Input and output loops all adopt photoelectric isolation; its anti-interference ability is strong. It may with serial communication interface, can carry out both-way communication between it and every device with serial interface, and constitute network control system.

➢ Outline dimension and open hole dimension

Outline dimension：96×48×115mm

72×72×115mm

Open hole dimension：$92_{-0}^{+0.7} \times 45_{-0}^{+0.7}$ mm

$68_{-0}^{+0.7} \times 68_{-0}^{+0.7}$ mm

Outline dimension：48×96×115mm

Open hole dimension：$45_{-0}^{+0.7} \times 92_{-0}^{+0.7}$ mm

Outline dimension：

Open hole dimension：

Outline dimension：48×48×115mm
Openhole dimension：$45_{-0}^{+0.6} \times 45_{-0}^{+0.6}$ mm

Outline dimension：160×80×115mm

96×96×115mm

Open hole dimension：$152_{-0}^{+0.7} \times 76_{-0}^{+0.7}$ mm

$92_{-0}^{+0.7} \times 92_{-0}^{+0.7}$ mm

Outline dimension：80×160×115mm

Open hole dimension：$76_{-0}^{+0.7} \times 152_{-0}^{+0.7}$ mm

Outline dimension：

Open hole dimension：

> **Type spectrum table of intelligent digital/light column display control instrument**

Model											Explanation
WP-	□□	□	□□	-□	□	-□□	-□	□	-□	-□	
Outline feature	C										Single –screen horizontal type display
	S										Single –screen vertical type display
	D										Double screen horizontal type display
	DS										Double screen vertical type display
	T										Single–screen single light column vertical type display
	TX										Single–screen single light column horizontal type display
Outline dimension		3									48×48 mm
		4									96×48 mm, 48×96 mm
		7									72×72mm
		8									160×80 mm, 80×160 mm (optional column)
		9									96×96 mm
Control action			01								Measurement display
			03								Measurement display with upper/lower limitation control/alarm
			04								Display with four limitation control/alarm (arbitrarily combination).
Communication mode				0							No communication interface
				1							RS-232C communication interface, Modbus protocol
				2							RS-232C communication interface, WP protocol
				7							RS-485 communication interface, Modbus protocol
				8							RS-485 communication interface, WP protocol
Output mode					0						No output
					1						Relay output
					2						(4～20)mA output
					3						(0～10) mA output
					4						(1～5) V output
					5						(0～5)V output
					6						SCR zero-across trigger pulse output
					7						SSR controlled signal output
					8						Special specification transmission output
					9						Two ways transmission output (when ordering note the output signal, please.)
Input type						-□□					See "input type table"
The first alarm							N				No control / alarm
							H				First alarm is high limitation alarm
							L				First alarm is lower limitation alarm
The second alarm								N			No control / alarm (can be omitted)
								H			Second alarm is high limitation alarm
								L			Second alarm is lower limitation alarm
Feed output									P		DC 24V feed output

			AC 220 V linear power (may be omitted)
Power supply mode			
		T	AC (90~265)V switch power supply
		W	DC 24V power supply

★ Model example: WP-C801-00-08-N; WP-C403-01-12-HL; WP-T804-81-08-2H2L; WP-C805-01-23-4H4L (This series have only 80 outline that can output eight alarm points at most).

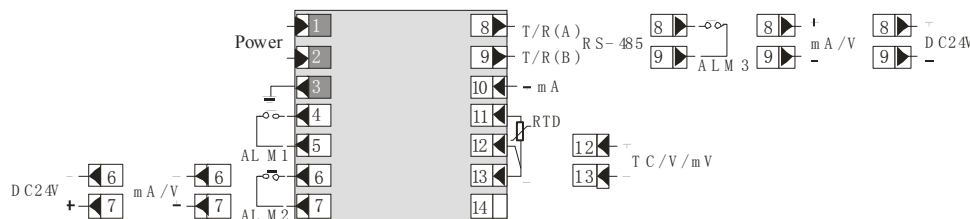> **Wiring diagram**

>> 48×48 instrument wiring diagram

30 series universal type different function combination and wiring terminal arrange

Table 1

Instrument functional combination	**Output function located terminal**	
	3、4	**6、7**
Display	×	×
Display +communication	×	communication
Display +communication +transmission	transmission	communication
Display +communication +control	AL1	communication
Display +communication +P	P	communication
Display +2control	AL1	AL2
Display +control + transmission	AL1	transmission
Display +control +P	AL1	P
Display +transmission +P	P	transmission
Display +P	×	P

>> 72×72 instrument wiring diagram

★ Note: when have communication the transmission output locate 6、7 terminal; no communication the output locate 8、9 terminal.

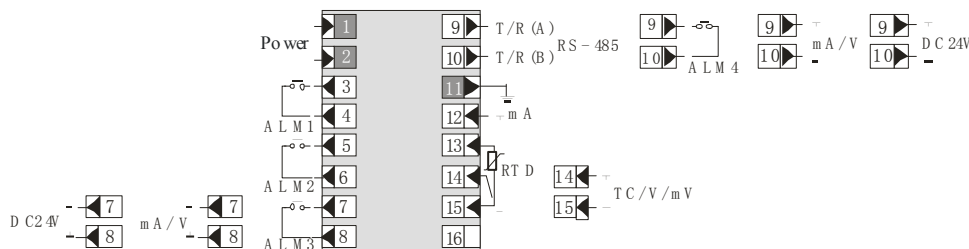**70 series universal type different function combination and wiring terminal arrange**

Table 2

Instrument functional combination	**Output function located terminal**

	4、5	6、7	8、9
Display	×	×	×
Display +communication	×	×	communication
Display +communication +transmission	×	transmission	communication
Display +communication +transmission +control	AL1	transmission	communication
Display +communication +2 control	AL1	AL2	communication
Display +transmission	×	×	transmission
Display +transmission +2 control	AL1	AL2	transmission
Display +2 control	AL1	AL2	×
Display +3 control	AL1	AL2	AL3
Display +P	×	P	×
Display +communication +P	×	P	communication
Display +communication + control +P	AL1	P	communication
Display + 2 control +P	AL1	AL2	P
Display +transmission + control +P	AL1	P	transmission

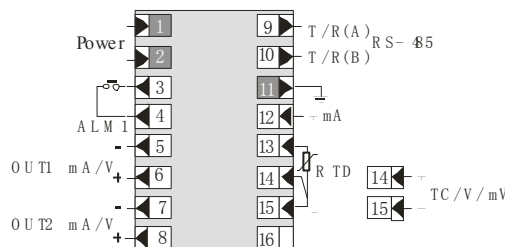>> **96×48、48×96 instrument wiring diagram**

Universal type

★ Note1: when have communication the transmission output locate 7、8 terminal; no communication the output locate 9、10 terminal.

Note2: 40 series universal type different function combination and wiring terminal arrange see table 3.
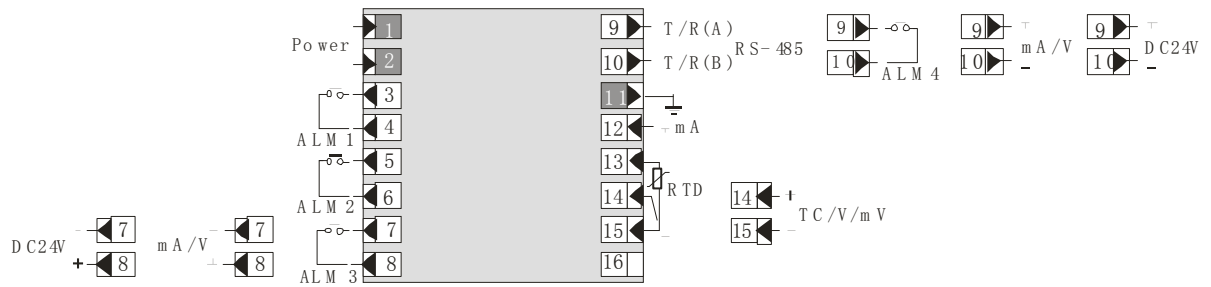
Double transmission type

★ Note: take the vertical wiring diagram to rotate clockwise 90° immediately is 96×48 horizontal table wiring diagram.
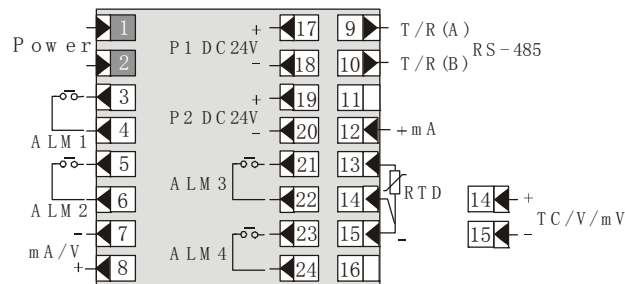
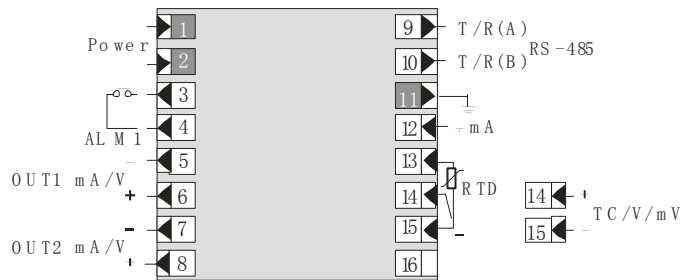>> **96×96 instrument wiring diagram**

Universal type

★ Note: 90 series universal type different function combination and wiring terminal arrange see table 3.
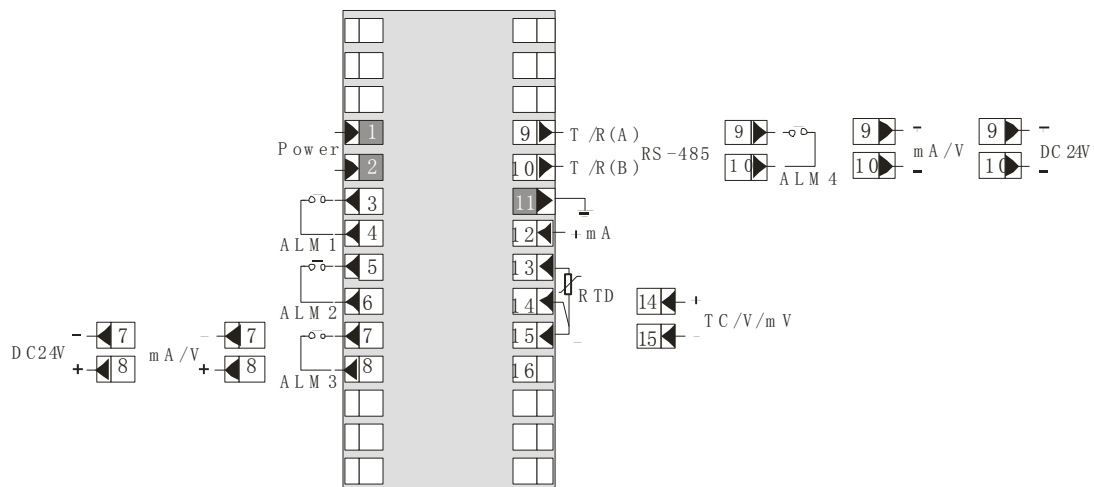
Multiple function type

Double transmission type

>> 160×80, 80×160 instrument wiring diagram
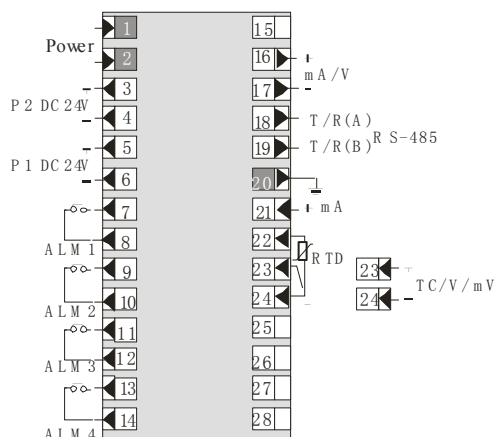
Universal type

40、80、90 series universal type different function combination and wiring terminal arrange
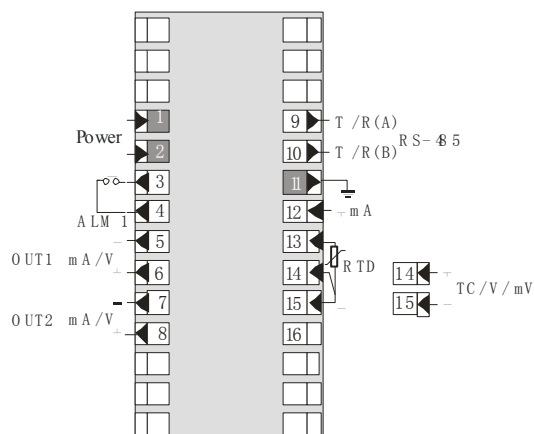
Table 3

Instrument functional combination	Output function located terminal			
	3, 4	5, 6	7, 8	9, 10
Display	×	×	×	×
Display +communication	×	×	×	communication
Display +communication +transmission	×	×	transmission	communication
Display +communication+transmission+2 control	AL1	AL2	transmission	communication
Display +communication+2 control	AL1	AL2	×	communication
Display +communication+3 control	AL1	AL2	AL3	communication
Display +transmission	×	×	×	transmission
Display +transmission+2 control	AL1	AL2	×	transmission
Display+transmission+3 control	AL1	AL2	AL3	transmission
Display +2 control	AL1	AL2	×	×
Display +3 control	AL1	AL2	AL3	×
Display +4 control	AL1	AL2	AL3	AL3
Display +P	×	×	P	×
Display +communication +P	×	×	P	communication
Display +communication +2 control +P	AL1	AL2	P	communication
Display +2 control +P	AL1	AL2	P	×
Display +3 control +P	AL1	AL2	AL3	P

★ Note: Terminal 3, 4 is fixed AL1 output; terminal 5, 6 is fixed AL2 output.

Multiple function type　　　　　　　　　　**Double transmission type**

★ Note: takes the vertical wiring diagram to rotate contra-clockwise 90° immediately is 160×80 horizontal table wiring diagram.