

AG500 Operation Manual

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IMR02F07-E2

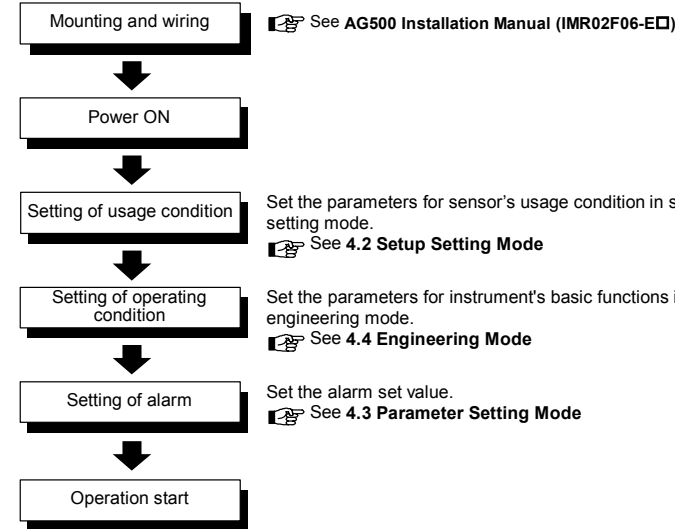
Thank you for purchasing this RKC product. In order to achieve maximum performance and ensure proper operation of your new instrument, carefully read all the instructions in this manual. Please place this manual in a convenient location for easy reference.

This manual describes the operation method of the AG500. For the installation, the parts description, the specifications and the communication function (Optional), please read if necessary the following separate manuals.

- AG500 Installation Manual (IMR02F06-E0): Enclosed with AG500
- AG500 Communication Instruction Manual (IMR02F08-E0): Enclosed with AG500*
- * Only AG500 provided with the communication function

The above manuals can be downloaded from our website:
URL: http://www.rkcinst.com/english/manual_load.htm

1. HANDLING PROCEDURES

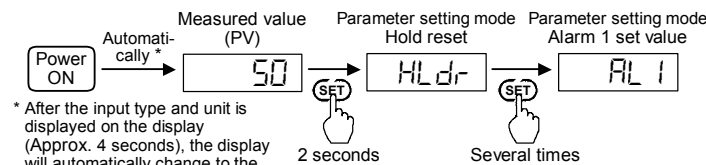


2. CHANGING DATA SETTINGS

- To store a new value for the parameter, always press the SET key.
- After a new value is displayed on the display by using UP and DOWN keys, if no key operation is performed for more than 1 minute without pressing SET key, this instrument returns to the Measured value (PV) screen and the set value will not be changed.

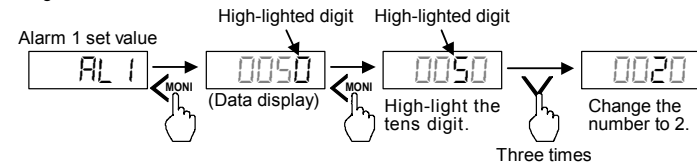
Example: Changing the alarm 1 set value (AL1) to 20 °C

1. Select the alarm 1 set value (AL1) of parameter setting mode

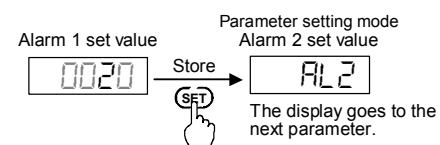


2. Change the alarm 1 set value (AL1) to 20 °C

Pressing the MONI key displays the data display. The high-lighted digit indicates which digit can be set.



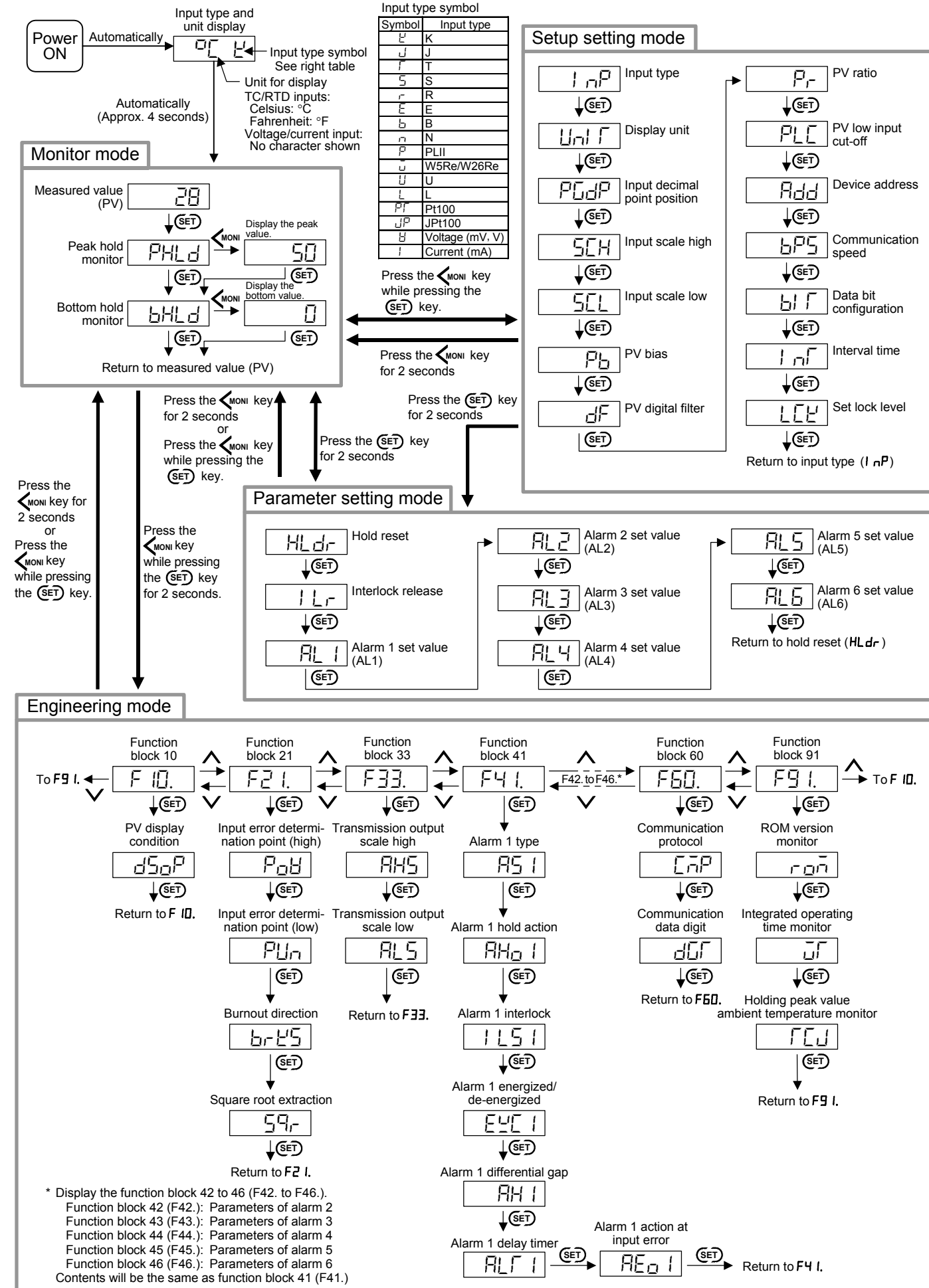
3. Store the alarm 1 set value (AL1)



Other data can also be set by the same procedures as described in steps 1 to 3.

3. TRANSFER TO EACH MODE AND PARAMETER

- This instrument return to Measured value (PV) screen, if key operation for more than 1 minute is not performed.
- Any parameter which is not used in the controller will not be displayed except for parameters in engineering mode.



4. PARAMETER LIST

4.1 Monitor Mode

Symbol	Name	Data range	Description
—	Measured value (PV)	Input scale low to Input scale high	Display the measured value (PV).
PHLd (PHLd)	Peak hold monitor ¹	Input scale low to Input scale high	Display the maximum value of measured value (PV).
bHLd (bHLd)	Bottom hold monitor ¹	At input break: Display range limit ²	Display the minimum value of measured value (PV).

¹ The hold reset function can be executed by hold reset (HLdr) in parameter setting mode and digital input 1 (DI1, terminal Nos. 13 and 14). Reset also takes place when the power is turned off, or when the set value of Input type (InP), Display unit (UnIT) or Input decimal point position (PGdP) is changed.
² This item is invalid when using voltage (high) input (0 to 10 V DC, 0 to 5 V DC, 1 to 5 V DC, ±1 V DC) and current input.

4.2 Setup Setting Mode

Symbol	Name	Data range	Description	Factory set value
InP (InP)	Input type	0 to 26 See Input type number table	Use to select the input type.	Depends on model code. When not specifying: 0
UnIT (UnIT)	Display unit	0: °C 1: °F	Use to select the display unit for TC/RTD inputs.	0
PGdP (PGdP)	Input decimal point position ^a	0: No decimal place 1: One decimal place 2: Two decimal places 3: Three decimal places 4: Four decimal places	Use to select the decimal point position of the input display value.	Depends on model code. When not specifying: 0
SCH (SCH)	Input scale high	TC/RTD inputs: Input scale low to Maximum value of the input range Voltage (V)/current (I) inputs: -19999 to +19999 ^b	Use to set the high limit of the input scale range.	TC/RTD inputs: Maximum value of the input range V/I inputs: 100.0
SCL (SCL)	Input scale low	TC/RTD inputs: Minimum value of the input range to Input scale high Voltage (V)/current (I) inputs: -19999 to +19999 ^b	Use to set the low limit of the input scale range.	TC/RTD inputs: Minimum value of the input range V/I inputs: 0.0
Pb (Pb)	PV bias	-Input span to +Input span	PV bias adds bias to the measured value (PV).	0
dF (dF)	PV digital filter	0.1 to 100.0 seconds oFF: Unused	This item is the time of the first-order lag filter eliminate noise against the measured input.	oFF

^a Data range of input decimal point position

	Input type	
	Input type	Data range
TC input RTD input	Input range without decimal points	0
	Input range with one decimal place	0, 1
	Input range with two decimal place	0 to 2
Voltage (V)/current (I) inputs	[For communication data 6 digits: 0 to 3]	0 to 4

For the input range, see the AG500 Installation Manual (IMR02F06-E0).

^b Varies with the setting of the input decimal point position.

Input type number table

Set value	Input type	Hardware	Set value	Input type	Hardware	
0	TC input K	Voltage (low) input group	13	RTD input JPt100	Voltage (low) input group	
1	TC input J		14	Current input 0 to 20 mA DC		
2	TC input R		15	Current input 4 to 20 mA DC		
3	TC input S		19	Voltage (low) input 0 to 1 V DC		
4	TC input B		20	Voltage (low) input 0 to 100 mV DC		
5	TC input E		21	Voltage (low) input 0 to 10 mV DC		
6	TC input N		25	Voltage (low) input ±100 mV DC		
7	TC input T		26	Voltage (low) input ±10 mV DC		
8	TC input W5Re/W26Re		16	Voltage (high) input 0 to 10 V DC		Voltage (high) input group
9	TC input PLII		17	Voltage (high) input 0 to 5 V DC		
10	TC input U		18	Voltage (high) input 1 to 5 V DC		
11	TC input L		24	Voltage (high) input ±1 V DC		
12	RTD input Pt100	22, 23	Don't set this one			

As the input decimal point position, input scale high and input scale low are initialized if the input type is changed, it is necessary to conduct the re-setting.

When the input type is changed to the voltage (low) or voltage (high) input group, it is necessary to transfer the input select switch. Turn the measured value input switch (left side) by a small screwdriver.

