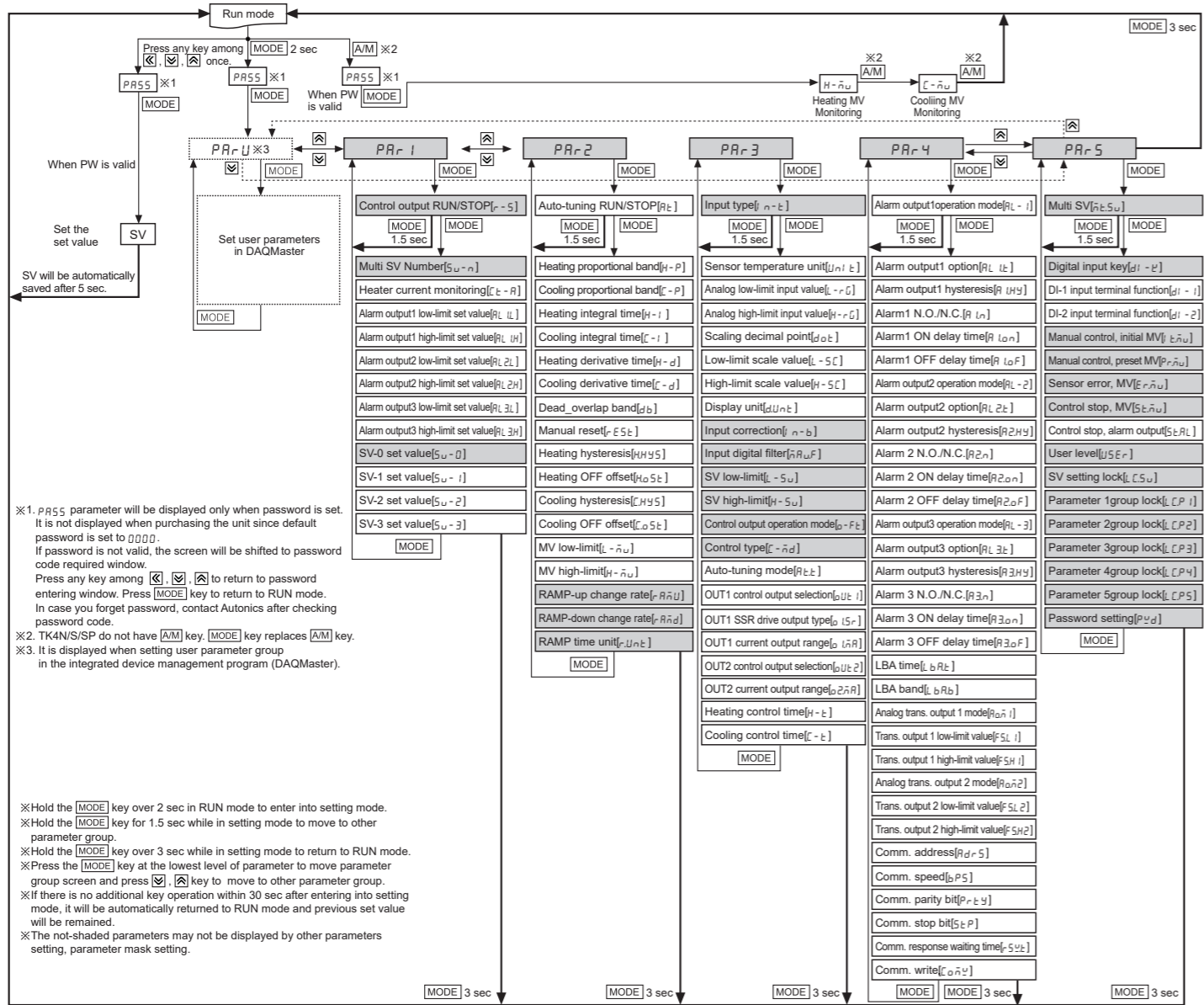


Flow Chart for Setting Group



※1. PR55 parameter will be displayed only when password is set. It is not displayed when purchasing the unit since default password is set to 0000. If password is not valid, the screen will be shifted to password code required window. Press any key among [OK], [MODE], [ENTER] to return to password entering window. Press [MODE] key to return to RUN mode. In case you forget password, contact Autonics after checking password code.

※Hold the [MODE] key over 2 sec in RUN mode to enter into setting mode. ※Hold the [MODE] key for 1.5 sec while in setting mode to move to other parameter group. ※Hold the [MODE] key over 3 sec while in setting mode to return to RUN mode. ※Press the [MODE] key at the lowest level of parameter to move parameter group screen and press [ENTER] key to move to other parameter group. ※If there is no additional key operation within 30 sec after entering into setting mode, it will be automatically returned to RUN mode and previous set value will be remained. ※The not-shaded parameters may not be displayed by other parameters setting, parameter mask setting.

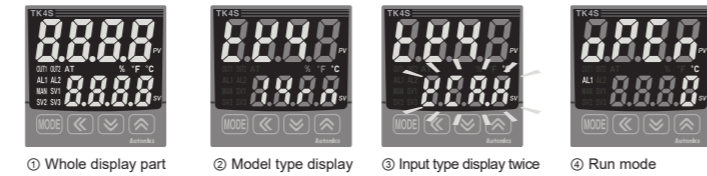
Input Types and Range

Table with columns: Input type, Decimal point, Display, Input range (°C), Input range (°F). Rows include Thermocouple (K, J, E, T, B, R, S, N, C, G), RTD (L, U, Platine II, Cu 50Ω, Cu 100Ω, JPt 100Ω, DPT 50Ω, DPT 100Ω, Nickel 120Ω), and Analog (Voltage, Current).

※1: C (TT): Same temperature sensor as former W5 (TT)
※2: G (TT): Same temperature sensor as former W (TT)

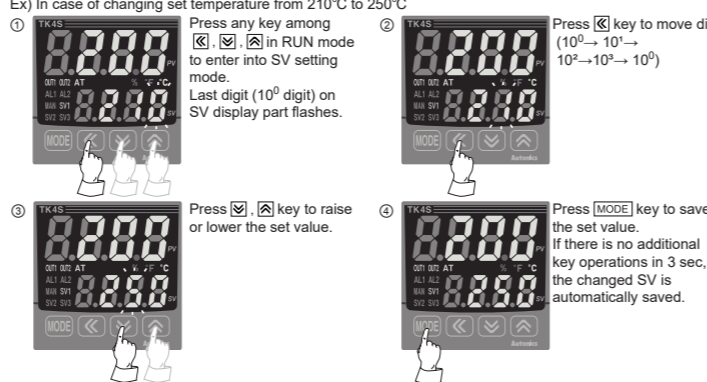
Initial Display When Power ON

When power is supplied, whole display parts flash for 1 sec. Afterwards, model name and input sensor type will be flash twice and then it enters into RUN mode.



Set Value (SV) Setting

You can set the temperature to control with [OK], [MODE], [ENTER] keys. Set range is within SV low-limit value [L - 5u] to SV high-limit value [H - 5u].

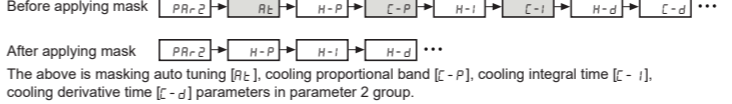


Parameter Reset

Press [OK] + [MODE] + [ENTER] to reset all parameters in memory to default value. Set [n1 t] parameter to '4E5' to reset all parameters. In case password function is on, it is required to enter valid password to reset parameters. Password is also reset.

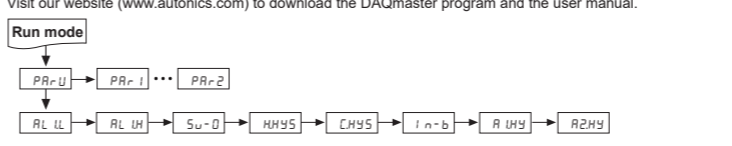
Parameter Mask

This function is able to hide unnecessary parameters to user environment or less frequently used parameters in parameter group. You can set this in the integrated device management program (DAQMaster). Masked parameters are not only displayed. The set value of masked parameters are applied. For more information, refer to the DAQMaster user manual.



User Parameter Group [PR-U] Setting

This function is able to set the frequently used parameters to the user parameter group. You can quickly and easily set parameter settings. User parameter group can have up to 30 parameters in the integrated device management program (DAQMaster). For more information, refer to the DAQMaster user manual.



The above is setting user parameter group in the DAQMaster with alarm output 1 low-limit value [RL 1], alarm output 1 high-limit value [RL 1H], SV-0 set value [Sv-0] parameter of parameter 1 group, heating hysteresis [HY5], cooling hysteresis [HY5] parameters of parameter 2 group, input correction [n-b] parameter of parameter 3 group, alarm output 1 hysteresis [RH5], alarm output 2 hysteresis [RH2H] parameters of parameter 4 group.

Auto-tuning

Auto-tuning measures the control subject's thermal characteristics and thermal response rate, and then determines the necessary PID time constant. Application of the PID time constant realizes fast response and high precision temperature control. (When setting control type [C - d] is set as P, d, it is displayed.) Set [n1 t] parameter to [on] in parameter 2 group to start auto-tuning. To stop auto-tuning, change the set as [off]. (It maintains P, I, D values of before auto-tuning.) If sensor break error [bPEr] occurs during auto-tuning, it stops this operation. If the measured temperature is over or below the input range, it operates continuously. During auto-tuning operation, whole parameters are only available to check.

Alarm

Alarm operation

Table with columns: Mode, Name, Alarm operation, Description. Rows include Deviation high-limit alarm, Deviation low-limit alarm, Deviation high/low-limit alarm, Deviation high/low-limit alarm, Absolute value high-limit alarm, Absolute value low-limit alarm, Loop break alarm, Sensor break alarm, Heater break alarm.

※H: Alarm output [] hysteresis [RH] HY

Alarm option

Table with columns: Mode, Name, Description. Rows include Standard alarm, Alarm latch, Standby sequence 1, Alarm latch and standby sequence 1, Standby sequence 2, Alarm latch and standby sequence 2.

※Condition of re-applied standby sequence for standby sequence 1, alarm latch and standby sequence 1: Power ON
Condition of re-applied standby sequence for standby sequence 2, alarm latch and standby sequence 2: Power ON, changing set temperature, alarm temperature [RL 1, RL 2] or alarm operation [RL - 1, RL - 2], switching STOP mode to RUN mode.

Factory Default

Tables showing factory default values for SV setting group, Password input parameter, Parameter 1 group, Parameter 2 group, Parameter 3 group, and Parameter 4 group.

Parameter 5 group [PR-5]

Table showing factory default values for Parameter 5 group parameters.

Parameter 3 group [PR-3]

Table showing factory default values for Parameter 3 group parameters.

Parameter 4 group [PR-4]

Table showing factory default values for Parameter 4 group parameters.

Parameter 5 group [PR-5]

Table showing factory default values for Parameter 5 group parameters.

User Manual

For the detail information and instructions, please refer to user manual and user manual for communication, and be sure to follow cautions written in the technical descriptions (catalog, homepage). Visit our homepage (www.autonics.com) to download manuals.

Comprehensive Device Management Program[DAQMaster]

DAQMaster is a comprehensive device management software for setting parameters and monitoring processes. DAQMaster can be downloaded from our website at www.autonics.com.

Table with columns: Item, Minimum specifications. Rows include System, Operations, Memory, Hard disk, VGA, Others.

Cautions during Use

- 1. Follow instructions in 'Cautions during Use'. Otherwise, it may cause unexpected accidents.
2. Check the polarity of the terminals before wiring the temperature sensor.
3. For RTD temperature sensor, wire it as 3-wire type, using cables in same thickness and length.
4. For thermocouple (CT) temperature sensor, use the designated compensation wire for extending wire.
5. Keep away from high voltage lines or power lines to prevent inductive noise.
6. Do not use the unit for other purpose (e.g. voltmeter, ammeter), but temperature controller.
7. When changing the input sensor, turn off the power first before changing.
8. 24VAC, 24-48VDC power supply should be insulated and limited voltage/current or Class 2, SELV power supply device.
9. Do not overlapping communication line and power line.
10. Make a required space around the unit for radiation of heat.
11. Make sure that power supply voltage reaches to the rated voltage within 2 sec after supplying power.
12. Do not wire to terminals which are not used.
13. This unit may be used in the following environments.
①Indoors (in the environment condition rated in 'Specifications')
②Altitude max. 2,000m
③Pollution degree 2

Major Products

List of major products including Photovoltaic Sensors, Temperature Controllers, Fiber Optic Sensors, Temperature/Humidity Transducers, Door Sensors, SSRs/Power Controllers, Door Side Sensors, Counters, Area Sensors, Timers, Proximity Sensors, Panel Meters, Pressure Sensors, Tachometer/Pulse (Rate) Meters, Rotary Encoders, Display Units, Connector/Socket, Sensor Controllers, Switching Mode Power Supplies, Control Switches/Lamps/Buzzers, I/O Terminal Blocks & Cables, Stepper Motors/Drivers/Motion Controllers, Graphic/Logic Panels, Field Network Devices, Laser Marking System (Fiber, CO2, Nd: YAG), Laser Welding/Cutting System.

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