
**Technical
Information**

UTAdvanced UM33A
Digital Indicator with Alarms
Parameter Maps and Lists

UTAdvanced.

UTAdvanced UM33A

Introduction

Brief Description of Sheets

This sheet provides a brief description of the following sheets entitled "Names and Functions of Display Parts," "Operation Parameter Map," "Setup Parameter Map," and "List of Parameters."

"Names and Functions of Display Parts"

This sheet describes the names and functions of display parts, function of parameter display level, meaning of parameter map symbol and numeric value, parameter display transition and setup operation, and display symbol list.

"Operation Map (PRO)"

This sheet describes the operation parameter map, which can be used as an operation guide.

"Setup Map (PRO)"

This sheet describes the setup parameter map, which can be used as an operation guide.

"List of Parameters (PRO)"

This sheet describes the setting range and initial value of operation parameters and setup parameters. There is a column for user settings.

Parameters in the sheets are displayed when the parameter display level is set to professional setting mode (LEVL=PRO). Some parameters are not displayed according to model and suffix codes. For details, refer to the User's Manual.

Operation Parameters: Parameters for setting the functions necessary for the operation.

Setup Parameters: Parameters for setting the basic functions of the indicator.

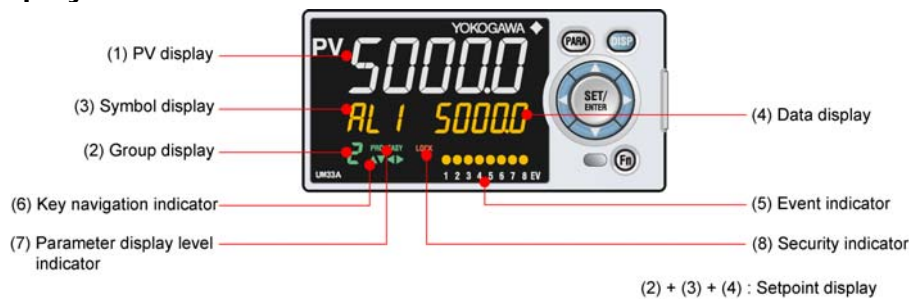
Notice

The contents of this manual are subject to change without notice as a result of continuing improvements to the instrument's performance and functions.

UTAdvanced UM33A

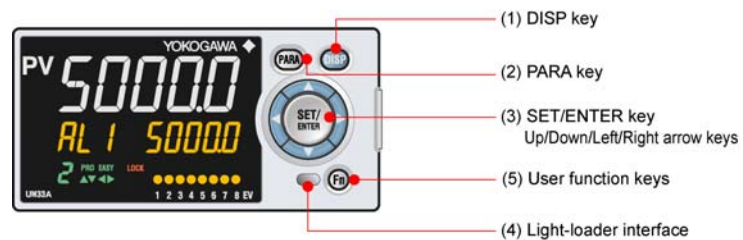
Names and Functions of Display Parts

UM33A Display Parts



No. in figure	Name	Description
(1)	PV display (white or red)	Displays PV. Displays an error code if an error occurs. Displays the scrolling guide in the Menu Display and Parameter Setting Display when the guide display ON/OFF is set to ON.
(2)	Group display (green)	Displays a group number.
(3)	Symbol display (orange)	Displays a parameter symbol.
(4)	Data display (orange)	Displays a parameter setpoint and menu symbol.
(5)	Event indicator (orange)	Lit when the alarms 1 to 8 occur. Event displays other than alarms can be set by the parameter.
(6)	Key navigation indicator (green)	Lit or blinks when the Up/Down or Left/Right arrow key operation is possible.
(7)	Parameter display level indicator (green)	Displays the setting conditions of the parameter display level function. Parameter display level EASY PRO Easy setting mode Lit Unlit Standard setting mode Unlit Unlit Professional setting mode Unlit Lit
(8)	Security indicator (red)	Lit if a password is set. The setup parameter settings are locked.

UM33A Key Parts



No. in figure	Name	Description
(1)	DISP key	Used to switch the Operation Displays. Press the key in the Operation Display to switch the provided Select Displays. Press the key in the Menu Display or Parameter Setting Display to return to the Operation Display.
(2)	PARA key	Hold down the key for 3 seconds to move to the Operation Parameter Setting Display. Hold down the key and the Left arrow key simultaneously for 3 seconds to move to the Setup Parameter Setting Display. Press the key in the Parameter Setting Display to return to the Menu Display. Press the key once to cancel the parameter setting (setpoint is blinking).
(3)	SET/ENTER key Up/Down/ Left/Right arrow keys	SET/ENTER key Press the key in the Menu Display to move to the Parameter Setting Display of the Menu. Press the key in the Parameter Setting Display to transfer to the parameter setting mode (setpoint is blinking), and the parameter can be changed. Press the key during parameter setting mode to register the setpoint. Up/Down/Left/Right arrow keys Press the Left/Right arrow keys in the Menu Display to switch the Displays. Press the Up/Down arrow keys in the Parameter Setting Display to switch the Displays. Press the Up/Down arrow keys during parameter setting mode (setpoint is blinking) to change a setpoint. Press the Left/Right arrow keys during parameter setting mode (setpoint is blinking) to move between digits according to the parameter.
(4)	Light-loader interface	It is the communication interface to the adapter cable when setting and storing parameter: via PC. The LL50A Parameter Setting Software (sold separately) is required.
(5)	User function keys	The UM33A has Fn key. The user can assign a function to the key. The function is set by the parameter.

Brief Description of Parameter Map

The parameter display level is a function to control the parameters to be displayed. The factory setting is LEVL=STD.

The control prevents unintentional change of the function.

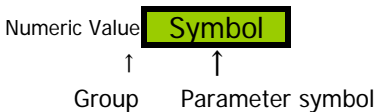
The parameter display level is just a function to hide the display so the set function works.

Changing of parameter display level

The parameters to be displayed can be controlled by changing the setting value for setup parameter LEVL.

Parameter Display Level	Setting value
EASY	EASY Symbol
Corresponding parameters are displayed in all modes.	
	STD Symbol Symbol
Corresponding parameters are displayed only in Standard setting mode and Professional setting mode. Parameter display level indicators "EASY" and "PRO" are unlit in Standard setting mode.	
PRO	PRO Symbol Symbol Symbol
Corresponding parameters are displayed only in Professional setting mode.	

Meaning of Parameter Symbol and Numeric Value



Group E1: indicates the parameter in E1-terminal area
1 to 2: indicate the group numbers

Display may be controlled according to the setting value of the setup parameter and operation status.

Parameter Display Transition and Setup Operation

To move to the Operation Parameter Setting Display



Press the key
for 3 seconds.

To move to the Setup Parameter Setting Display



+



Press the key
for 3 seconds.

To move to the Operation Display

If you cannot remember how to carry out an operation during setting, press the DISP key once. This brings you to the display (Operation Display) that appears at power-on.



<Operation for Setting>

To select the parameter setting displayed as the initial value, press the Down arrow key to move to the next parameter.

To change and set the parameter setting, press the SET/ENTER key to start the setpoint blinking. The blinking state allows you to make changes (setting mode). Use the Up/Down/Left/Right arrow keys to change the setpoint. Press the SET/ENTER key to register the setting.

The following operating procedure describes an example of setting alarm setpoint (A2).

1. Hold down the PARA key for 3 seconds in the Operation Display to call up the [AL]Menu Display.



2. Press the SET/ENTER key to display the [A1] Parameter Setting Display.



3. Press the Down arrow key to display the [A2] Parameter Setting Display.



4. Press the SET/ENTER key to blink the setpoint.



5. Press the Up or Down arrow key to change the setpoint.
(Change the setpoint using the Up/Down arrow keys to increase and decrease the value and the Left/Right arrow keys to move between digits.)



6. Press the SET/ENTER key to register the setpoint (the setpoint stops blinking).



7. Press the SET/ENTER key to register the setpoint (the setpoint stops blinking).

This completes the setting procedure.

How to Cancel Parameter Setting

To cancel parameter setting when a parameter is being set (setpoint is blinking), press the PARA key once.

How to Set Parameter Setpoint

Numeric Value Setting



1. Display the Parameter Setting Display.



2. Press the SET/ENTER key to move to the setting mode (the setpoint blinks).



3. Press the Left arrow key to move one digit to the left. (Press the Right arrow key to move one digit to the right.)



4. Press the Up or Down arrow key to change the setpoint. Press the Up arrow key when 9 is displayed to move one digit to the left. Press the Down arrow key when 0 is displayed to move one digit to the right.



5. Press the SET/ENTER key to register the setpoint.

Selection Data Setting



1. Display the Parameter Setting Display.



2. Press the SET/ENTER key to move to the setting mode (the setpoint blinks).



3. Press the Up arrow key to change the setpoint (press the Down arrow key to change the setpoint).



4. Press the SET/ENTER key to register the setpoint.

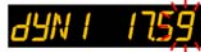
Time (minute.second) Setting



Example of 17 minutes 59 seconds



1. Display the Parameter Setting Display.



2. Press the SET/ENTER key to move to the setting mode (the setpoint blinks).



3. Press the Left arrow key to move one digit to the left. (press the Right arrow key to move one digit to the right.)



4. Press the Up or Down arrow key to change the setpoint. Press the Up arrow key when 5 is displayed to move one digit to the left. Press the Down arrow key when 0 is displayed to move one digit to the right.

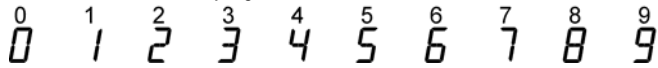


5. Press the SET/ENTER key to register the setpoint.

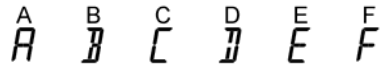

List of Display Symbols

The following shows the parameter symbols, menu symbols, alphanumeric of guide, and symbols which are displayed on the UM33A.


Figure (common to all display area)

0 1 2 3 4 5 6 7 8 9


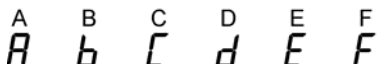
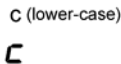
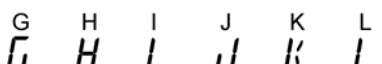
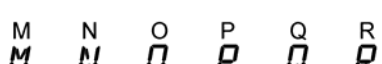
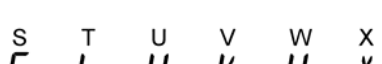

PV display (14 segments): Alphabet

A B C D E F

 G H I J K L

 M N O P Q R

 S T U V W X

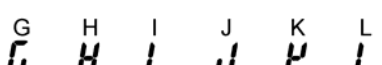
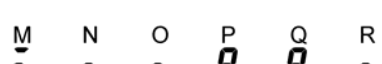
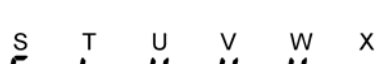

 Y Z


Symbol display and Data display (11 segments): Alphabet

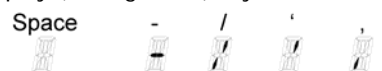
A B C D E F

 C (lower-case)

 G H I J K L

 M N O P Q R

 S T U V W X

 Y Z


Group display (7 segments): Alphabet

A B C D E F

 G H I J K L

 M N O P Q R

 S T U V W X

 Y Z


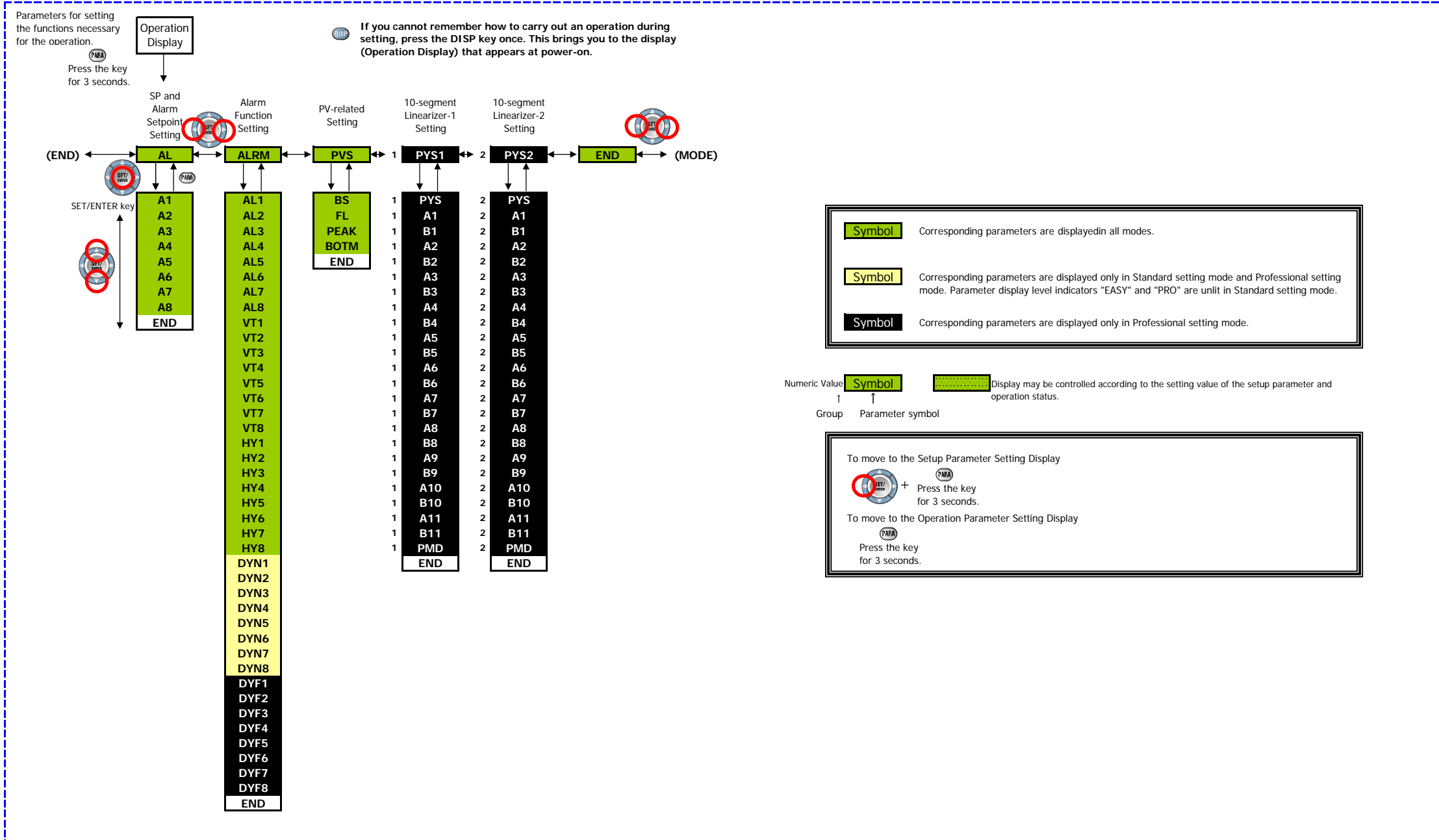
PV display (14 segments): Symbol

Space - / ' .


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Operation Parameter Map

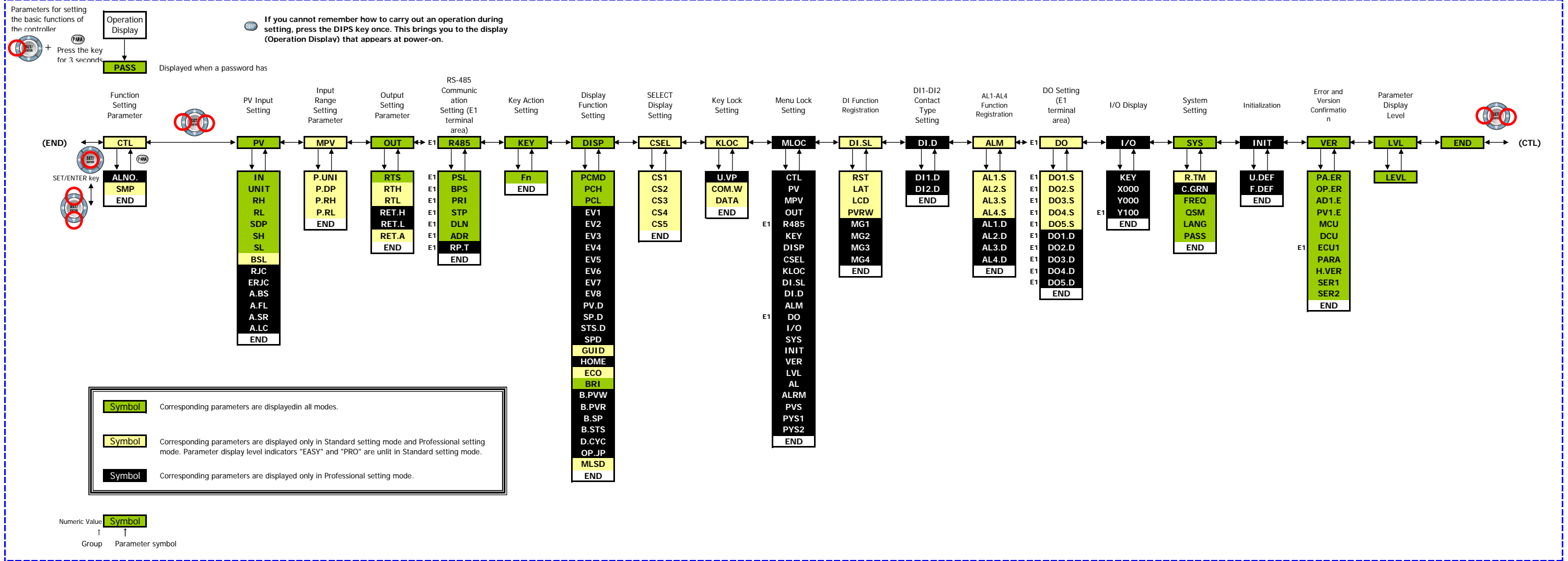
* Some parameters are not displayed according to model and suffix codes. For details, refer to the User's Manual.



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Setup Parameter Map

* Some parameters are not displayed according to model and suffix codes. For details, refer to the User's Manual.



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List of Parameters

* Some parameters are not displayed according to model and suffix codes. For details, refer to the User's Manual.

Operation Parameters

Alarm Setpoint Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
AL	A1	Alarm-1 setpoint	EASY		0	
	A2	Alarm-2 setpoint	EASY		0	
	A3	Alarm-3 setpoint	EASY		0	
	A4	Alarm-4 setpoint	EASY	Set a display value of setpoint of PV alarm or velocity alarm. -19999 to 30000 (Set a value within the input range.) Decimal point position depends on the input type.	0	
	A5	Alarm-5 setpoint	EASY		0	
	A6	Alarm-6 setpoint	EASY		0	
	A7	Alarm-7 setpoint	EASY		0	
	A8	Alarm-8 setpoint	EASY		0	

Alarm Function Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting	
ALRM	AL1	Alarm-1 type	EASY		PV high limit (01) Without Standby action (0) Energized (0) Latch action (0)		
	AL2	Alarm-2 type	EASY		PV low limit (02) Without Standby action (0) Energized (0) Latch action (0)		
	AL3	Alarm-3 type	EASY		PV high limit (01) Without Standby action (0) Energized (0) Latch action (0)		
	AL4	Alarm-4 type	EASY	Set a 5-digit value in the following order. [Alarm type: 2 digits (see below)] + [Without (0) or With (1) Stand-by action] + [Energized (0) or De-energized (1)] + [Latch action (0/1/2/3/4)] Alarm type: 2 digits 00: Disable 01: PV high limit 02: PV low limit 29: PV velocity 30: Fault diagnosis 31: FAIL	PV low limit (02) Without Standby action (0) Energized (0) Latch action (0)		
	AL5	Alarm-5 type	EASY		PV high limit (01) Without Standby action (0) Energized (0) Latch action (0)		
	AL6	Alarm-6 type	EASY		PV low limit (02) Without Standby action (0) Energized (0) Latch action (0)		
	AL7	Alarm-7 type	EASY		PV high limit (01) Without Standby action (0) Energized (0) Latch action (0)		
	AL8	Alarm-8 type	EASY		PV low limit (02) Without Standby action (0) Energized (0) Latch action (0)		
	VT1	PV velocity alarm time setpoint 1	EASY		0.01 to 99.59 (minute.second)	1.00	
	VT2	PV velocity alarm time setpoint 2	EASY			1.00	
	VT3	PV velocity alarm time setpoint 3	EASY			1.00	
	VT4	PV velocity alarm time setpoint 4	EASY	1.00			
	VT5	PV velocity alarm time setpoint 5	EASY	1.00			
	VT6	PV velocity alarm time setpoint 6	EASY	1.00			
	VT7	PV velocity alarm time setpoint 7	EASY	1.00			
	VT8	PV velocity alarm time setpoint 8	EASY	1.00			
	HY1	Alarm-1 hysteresis	EASY	Set a display value of setpoint of hysteresis. -19999 to 30000 (Set a value within the input range.) Decimal point position depends on the input type. When the decimal point position for the input type is set to "1", the initial value of the hysteresis is "1.0".	10		
	HY2	Alarm-2 hysteresis	EASY		10		
	HY3	Alarm-3 hysteresis	EASY		10		
	HY4	Alarm-4 hysteresis	EASY		10		
	HY5	Alarm-5 hysteresis	EASY		10		
	HY6	Alarm-6 hysteresis	EASY		10		
	HY7	Alarm-7 hysteresis	EASY		10		
	HY8	Alarm-8 hysteresis	EASY		10		
	DYN1	Alarm-1 On-delay timer	STD	0.00 to 99.59 (minute.second)	0.00		
	DYN2	Alarm-2 On-delay timer	STD		0.00		
	DYN3	Alarm-3 On-delay timer	STD		0.00		
	DYN4	Alarm-4 On-delay timer	STD		0.00		
DYN5	Alarm-5 On-delay timer	STD	0.00				
DYN6	Alarm-6 On-delay timer	STD	0.00				
DYN7	Alarm-7 On-delay timer	STD	0.00				
DYN8	Alarm-8 On-delay timer	STD	0.00				
DYF1	Alarm-1 Off-delay timer	PRO	0.00 to 99.59 (minute.second)	0.00			
DYF2	Alarm-2 Off-delay timer	PRO		0.00			
DYF3	Alarm-3 Off-delay timer	PRO		0.00			
DYF4	Alarm-4 Off-delay timer	PRO		0.00			
DYF5	Alarm-5 Off-delay timer	PRO		0.00			
DYF6	Alarm-6 Off-delay timer	PRO		0.00			
DYF7	Alarm-7 Off-delay timer	PRO		0.00			
DYF8	Alarm-8 Off-delay timer	PRO		0.00			

PV-related Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
PVS	BS	PV input bias	EASY	-100.0 to 100.0% of PV input range span (EUS)	0.0 % of PV input range span	
	FL	PV input filter	EASY	OFF, 1 to 120 s	OFF	
	PEAK	PV peak value	EASY	Read only	-	
	BOTM	PV bottom value	EASY	-5.0 to 105.0% of PV input range (EU)	-	

10-segment Linearizer-1 Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
PYS1	A1	10-segment linearizer-1 input 1	PRO		0.0%	
	B1	10-segment linearizer-1 output 1	PRO		0.0%	
	A2	10-segment linearizer-1 input 2	PRO		0.0%	
	B2	10-segment linearizer-1 output 2	PRO		0.0%	
	A3	10-segment linearizer-1 input 3	PRO		0.0%	
	B3	10-segment linearizer-1 output 3	PRO		0.0%	
	A4	10-segment linearizer-1 input 4	PRO		0.0%	
	B4	10-segment linearizer-1 output 4	PRO		0.0%	
	A5	10-segment linearizer-1 input 5	PRO	10-segment linearizer input -66.7 to 105.0% of input range (EU) Output linearizer: -5.0 to 105.0%	0.0%	
	B5	10-segment linearizer-1 output 5	PRO		0.0%	
	A6	10-segment linearizer-1 input 6	PRO		0.0%	
	B6	10-segment linearizer-1 output 6	PRO		0.0%	
	A7	10-segment linearizer-1 input 7	PRO	10-segment linearizer output 10-segment linearizer bias: -66.7 to 105.0% of input range span (EUS) 10-segment linearizer approximation: -66.7 to 105.0% of input range (EU) Output linearizer: -5.0 to 105.0%	0.0%	
	B7	10-segment linearizer-1 output 7	PRO		0.0%	
	A8	10-segment linearizer-1 input 8	PRO		0.0%	
	B8	10-segment linearizer-1 output 8	PRO		0.0%	
	A9	10-segment linearizer-1 input 9	PRO		0.0%	
B9	10-segment linearizer-1 output 9	PRO	0.0%			
A10	10-segment linearizer-1 input 10	PRO	0.0%			
B10	10-segment linearizer-1 output 10	PRO	0.0%			
A11	10-segment linearizer-1 input 11	PRO	0.0%			
B11	10-segment linearizer-1 output 11	PRO	0.0%			
PMD	10-segment linearizer mode	PRO	0: 10-segment linearizer bias 1: 10-segment linearizer approximation	0		

10-segment Linearizer-2 Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
PYS2	A1	10-segment linearizer-2 input 1	PRO		0.0%	
	B1	10-segment linearizer-2 output 1	PRO		0.0%	
	A2	10-segment linearizer-2 input 2	PRO		0.0%	
	B2	10-segment linearizer-2 output 2	PRO		0.0%	
	A3	10-segment linearizer-2 input 3	PRO		0.0%	
	B3	10-segment linearizer-2 output 3	PRO		0.0%	
	A4	10-segment linearizer-2 input 4	PRO		0.0%	
	B4	10-segment linearizer-2 output 4	PRO		0.0%	
	A5	10-segment linearizer-2 input 5	PRO	10-segment linearizer input -66.7 to 105.0% of input range (EU) Output linearizer: -5.0 to 105.0%	0.0%	
	B5	10-segment linearizer-2 output 5	PRO		0.0%	
	A6	10-segment linearizer-2 input 6	PRO		0.0%	
	B6	10-segment linearizer-2 output 6	PRO		0.0%	
	A7	10-segment linearizer-2 input 7	PRO	10-segment linearizer output 10-segment linearizer bias: -66.7 to 105.0% of input range span (EUS) 10-segment linearizer approximation: -66.7 to 105.0% of input range (EU) Output linearizer: -5.0 to 105.0%	0.0%	
	B7	10-segment linearizer-2 output 7	PRO		0.0%	
	A8	10-segment linearizer-2 input 8	PRO		0.0%	
	B8	10-segment linearizer-2 output 8	PRO		0.0%	
	A9	10-segment linearizer-2 input 9	PRO		0.0%	
B9	10-segment linearizer-2 output 9	PRO	0.0%			
A10	10-segment linearizer-2 input 10	PRO	0.0%			
B10	10-segment linearizer-2 output 10	PRO	0.0%			
A11	10-segment linearizer-2 input 11	PRO	0.0%			
B11	10-segment linearizer-2 output 11	PRO	0.0%			
PMD	10-segment linearizer mode	PRO	0: 10-segment linearizer bias 1: 10-segment linearizer approximation	0		

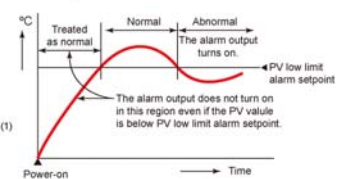
Alarm Type (Alarm Setpoint)	Alarm Action (Energized)	Alarm Action (De-energized)
No alarm (00)	-	-
PV high limit (01)		
PV low limit (02)		
PV velocity (29)		
Fault diagnosis alarm (30)	Burnout of PV input, ADC failure, RJC error.	
FAIL (31)	For the factory default, the contact output is turned ON in normal operation, OFF at the time of FAIL. Alarm output: OFF	

Note 1: "Open/closed" shows status of relay contact, and "lit/unlit" shows status of EV (event) lamp.

Setting Display of Alarm Type



Stand-by Action



Setup Parameters

Function Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
CTL	ALNO.	Number of alarms	PRO	1 to 8	8	
	SMP	Input sampling period (control period)	STD	50: 50 ms 100: 100 ms 200: 200 ms	50	

PV Input Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting	
PV	IN	PV input type	EASY	OFF: Disable K1: -270.0 to 1370.0 (°C) / -450.0 to 2500.0 (°F) K2: -270.0 to 1000.0 (°C) / -450.0 to 2300.0 (°F) K3: -200.0 to 500.0 (°C) / -200.0 to 1000.0 (°F) J: -200.0 to 1200.0 (°C) / -300.0 to 2300.0 (°F) T1: -270.0 to 400.0 (°C) / -450.0 to 750.0 (°F) T2: 0.0 to 400.0 (°C) / -200.0 to 750.0 (°F) B: 0.0 to 1800.0 (°C) / 32 to 3300 (°F) S: 0.0 to 1700.0 (°C) / 32 to 3100 (°F) R: 0.0 to 1700.0 (°C) / 32 to 3100 (°F) N: -200.0 to 1300.0 (°C) / -300.0 to 2400.0 (°F) E: -270.0 to 1000.0 (°C) / -450.0 to 1800.0 (°F) L: -200.0 to 900.0 (°C) / -300.0 to 1600.0 (°F) U1: -200.0 to 400.0 (°C) / -300.0 to 750.0 (°F) U2: 0.0 to 400.0 (°C) / -200.0 to 1000.0 (°F) W: 0.0 to 2300.0 (°C) / 32 to 4200 (°F) PL2: 0.0 to 1390.0 (°C) / 32.0 to 2500.0 (°F) P2040: 0.0 to 1900.0 (°C) / 32 to 3400 (°F) WRE: 0.0 to 2000.0 (°C) / 32 to 3600 (°F) JPT1: -200.0 to 500.0 (°C) / -300.0 to 1000.0 (°F) JPT2: -150.00 to 150.00 (°C) / -200.0 to 300.0 (°F) PT1: -200.0 to 850.0 (°C) / -300.0 to 1560.0 (°F) PT2: -200.0 to 500.0 (°C) / -300.0 to 1000.0 (°F) PT3: -150.00 to 150.00 (°C) / -200.0 to 300.0 (°F) 0.4-2V: 0.400 to 2.000 V 1-5V: 1.000 to 5.000 V 4-20: 4.00 to 20.00 mA 0-2V: 0.000 to 2.000 V 0-10V: 0.00 to 10.00 V 0-20: 0.00 to 20.00 mA -1020: -10.00 to 20.00 mV 0-100: 0.0 to 100.0 mV Note: W: W-5% Re/W-26% Re (Hoskins Mfg. Co.), ASTM E988 WRE: W97Re3-W75Re25	OFF		
		UNIT	PV input unit	EASY	-: No unit C: Degree Celsius -: No unit --: No unit ---: No unit F: Degree Fahrenheit	C	
		RH	Maximum value of PV input range	EASY	Depends on the input type. - For temperature input - Set the temperature range that is actually controlled. (RL < RH) - For voltage / current input - Set the range of a voltage / current signal that is applied.	Depends on the input type	
		RL	Minimum value of PV input range	EASY	The scale across which the voltage / current signal is actually controlled should be set using the maximum value of input scale (SH) and minimum value of input scale (SL). (Input is always 0% when RL = RH.)	Depends on the input type	
		SDP	PV input scale decimal point position	EASY	0: No decimal place 1: One decimal place 2: Two decimal places 3: Three decimal places 4: Four decimal places	Depends on the input type	
		SH	Maximum value of PV input scale	EASY		Depends on the input type	
		SL	Minimum value of PV input scale	EASY	-19999 to 30000, (SL < SH), SH - SL ≤ 30000	Depends on the input type	
		BSL	PV input burnout action	STD	OFF: Disable UP: Upscale DOWN: Downscale	Depends on the input type	
		RJC	PV input reference junction compensation	PRO	OFF: RJC OFF ON: RJC ON	ON	
		ERJC	PV input external RJC setpoint	PRO	-10.0 to 60.0 (°C)	0.0	
		A.BS	PV analog input bias	STD	-100.0 to 100.0% of PV input range span (EUS)	0.0 % of PV input range span	
		A.FL	PV analog input filter	STD	OFF, 1 to 120 s	OFF	
		A.SR	PV analog input square root extraction	PRO	OFF: No square root extraction. 1: Compute the square root. (The slope equals "1.") 2: Compute the square root. (The slope equals "0.")	OFF	
		A.LC	PV analog input low signal cutoff	PRO	0.0 to 5.0%	1.0%	

Input Range Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
MPV	P.UNI	Display PV input unit	STD	-: No unit C: Degree Celsius -: No unit --: No unit ---: No unit F: Degree Fahrenheit	Same as PV input unit	
	P.DP	Display PV input decimal point position	STD	0: No decimal place 1: One decimal place 2: Two decimal places 3: Three decimal places 4: Four decimal places	Depends on the input type	
	P.RH	Maximum value of display PV input range	STD		Depends on the input type	
	P.RL	Minimum value of display PV input range	STD	-19999 to 30000, (P.RL < P.RH), P.RH - P.RL ≤ 30000	Depends on the input type	

Output Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
OUT	RTS	Retransmission output type of RET	EASY	OFF: Disable PV1: PV LPS: 15 V DC loop power supply	PV1	
	RTH	Maximum value of retransmission output scale of RET	STD	When RTS = PV1 RTL + 1 digit to 30000 -19999 to RTH - 1 digit	100 % of PV input range	
	RTL	Minimum value of retransmission output scale of RET	STD	Decimal point position: When RTS = PV1, decimal point position is same as that of PV input.	0 % of PV input range	
	RET.H	100% segmental point of RET current output	PRO		100.0%	
	RET.L	0% segmental point of RET current output	PRO		0.0%	
	RET.A	RET current output range	STD	4-20: 4 to 20 mA 0-20: 0 to 20 mA 20-4: 20 to 4 mA 20-0: 20 to 0 mA	4-20	

RS-485 Communication Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
R485	PSL	Protocol selection	EASY	PCL: PC link communication PCLSM: PC link communication (with checksum) LADR: Ladder communication MBASC: Modbus (ASCII) MBRTU: Modbus (RTU)	MBRTU	
	BPS	Baud rate	EASY	600: 600 bps 1200: 1200 bps 2400: 2400 bps 4800: 4800 bps 9600: 9600 bps 19200: 19.2k bps 38400: 38.4k bps	19200	
	PRI	Parity	EASY	NONE: None EVEN: Even ODD: Odd	EVEN	
	STP	Stop bit	EASY	1: 1 bit, 2: 2 bits	1	
	DLN	Data length	EASY	7: 7 bits, 8: 8 bits	8	
	ADR	Address	EASY	1 to 99	1	
	RP.T	Minimum response time	PRO	0 to 10 (x10ms)	0	

When each parameter is displayed, the terminal area (E1) is displayed on Group display.

Key Action Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
KEY	Fn	User function key-n action setting	EASY	OFF: Disable LTUP: LCD brightness UP LTDN: LCD brightness DOWN BRI: Adjust LCD brightness LCD: LCD backlight ON/OFF switch LAT: Latch release AL: Alarm Setpoint Setting RST: PV peak and bottom values reset	RST	

Display Function Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
DISP	PCMD	Active color PV display switch	EASY	0: Fixed in white 1: Fixed in red 2: Link to alarm 1 (Alarm OFF: white, Alarm ON: red) 3: Link to alarm 1 (Alarm OFF: red, Alarm ON: white) 4: Link to alarm 1 or 2 (Alarm OFF: white, Alarm ON: red) 5: Link to alarm 1 or 2 (Alarm OFF: red, Alarm ON: white) 6: PV limit (Within range: white, Out of range: red) 7: PV limit (Within range: red, Out of range: white) 8: SP deviation (Within deviation: white, Out of deviation: red) 9: SP deviation (Within deviation: red, Out of deviation: white) 10: Link to DI (ON: red, OFF: white)	0	
	PCH	PV color change high limit	EASY	Set a display value when in PV limit. -19999 to 30000 (Set a value within the input range.)	0	
	PCL	PV color change low limit	EASY	Decimal point position depends on the input type.	0	
	EV1	EV1 display condition registration	PRO	Setting range: 4001 to 5344 OFF: Disable	4321	
	EV2	EV2 display condition registration	PRO	4321: Link to alarm 1 (Lit when the alarm occurs) 4322: Link to alarm 2 (Lit when the alarm occurs)	4322	
	EV3	EV3 display condition registration	PRO	4323: Link to alarm 3 (Lit when the alarm occurs) 4325: Link to alarm 4 (Lit when the alarm occurs)	4323	
	EV4	EV4 display condition registration	PRO	4326: Link to alarm 5 (Lit when the alarm occurs) 4327: Link to alarm 6 (Lit when the alarm occurs) 4329: Link to alarm 7 (Lit when the alarm occurs)	4325	
	EV5	EV5 display condition registration	PRO	4330: Link to alarm 8 (Lit when the alarm occurs)	4326	
	EV6	EV6 display condition registration	PRO	5025 to 5026: Link to DI1-DI2 (Lit when the contact is closed) 5153 to 5155: Link to AL1-AL3 (Lit when the contact is closed) 5156: Link to alarm 4 (Lit when the contact is closed)	4327	
	EV7	EV7 display condition registration	PRO	5169 to 5173: Link to DO11-DO15 (E1-terminal area) (Lit when the contact is closed)	4329	
	EV8	EV8 display condition registration	PRO	For other functions, see the UTAdvanced Series Communication Interface User's Manual.	4330	
	PV.D	PV display area ON/OFF	PRO	OFF: Nondisplay, ON: Display	ON	
	SP.D	Setpoint display area ON/OFF	PRO	OFF: Nondisplay, ON: Display	ON	
	STS.D	Status display area ON/OFF	PRO	OFF: Nondisplay, ON: Display	ON	
	SPD	Scroll speed	PRO	(Slow) 1 to 8 (Quick)	4	
	GUID	Guide display ON/OFF	STD	OFF: Nondisplay ON: Display	ON	
	HOME	Home Operation Display setting	PRO	PV: PV Analog Input Display CS1 to CS5: SELECT Display 1 to 5	PV	
	ECO	Economy mode	STD	OFF: Disable 1: Economy mode ON (All indications except PV display OFF) 2: Economy mode ON (All indications OFF) 3: Brightness 10 % (All indications)	OFF	
	BRI	Brightness	EASY	(Dark) 1 to 5 (Bright)	3	
	B.PVW	White brightness adjustment of PV display	PRO	Adjusts the white brightness of PV display. (Dark) -4 to 4 (Bright)	0	
	B.PVR	Red brightness adjustment of PV display	PRO	Adjusts the red brightness of PV display. (Dark) -4 to 4 (Bright)	0	
	B.SP	Brightness adjustment of Setpoint display	PRO	Adjusts the brightness of SP display. (Dark) -4 to 4 (Bright)	0	
	B.BAR	Brightness adjustment of Bargraph display	PRO	Adjusts the brightness of Bargraph display. (Dark) -4 to 4 (Bright)	0	
B.STS	Brightness adjustment of Status indicator	PRO	Adjusts the brightness of Status indicator. (Dark) -4 to 4 (Bright)	0		
D.CYC	Display update cycle	PRO	1: 100 ms 2: 200 ms 3: 500 ms 4: 1 s 5: 2 s	2		
OP.JP	Autoreturn to operation display	PRO	Automatically returned to the Operation Display when there has been no keystroke operation for 5 minutes. OFF, ON	ON		
MILSD	Least significant digital mask of PV display	STD	OFF: With least significant digit ON: Without least significant digit	OFF		

SELECT Display Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
CSEL	CS1	SELECT Display-1 registration	STD		OFF	
	CS2	SELECT Display-2 registration	STD		OFF	
	CS3	SELECT Display-3 registration	STD		OFF	
	CS4	SELECT Display-4 registration	STD	For the D register number, see the UTAdvanced Series Communication Interface User's Manual	OFF	
	CS5	SELECT Display-5 registration	STD		OFF	

Key Lock Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
KLOC	U.PV	PV Analog Input Display lock	PRO	OFF: Display ON: Nondisplay	OFF	
	COM.W	Communication write enable/disable	STD	OFF: Enable, ON: Disable	OFF	
	DATA	Front panel parameter data key lock	STD	OFF: Unlock ON: Lock (when Operation Display only)	OFF	

Menu Lock Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
MLOC	CTL	[CTL] menu lock	PRO		OFF	
	PV	[PV] menu lock	PRO		OFF	
	MPV	[MPV] menu lock	PRO		OFF	
	OUT	[OUT] menu lock	PRO		OFF	
	R485	[R485] menu lock	PRO		OFF	
	KEY	[KEY] menu lock	PRO		OFF	
	DISP	[DISP] menu lock	PRO		OFF	
	CSEL	[CSEL] menu lock	PRO		OFF	
	KLOC	[KLOC] menu lock	PRO	OFF: Display ON: Nondisplay	OFF	
	DI.SL	[DI.SL] menu lock	PRO		OFF	
	DI.D	[DI.D] menu lock	PRO		OFF	
	ALM	[ALM] menu lock	PRO		OFF	
	DO	[DO] menu lock	PRO		OFF	
	I/O	[I/O] menu lock	PRO		OFF	
	SYS	[SYS] menu lock	PRO		OFF	
	INIT	[INIT] menu lock	PRO		OFF	
	VER	[VER] menu lock	PRO		OFF	
	LVL	[LVL] menu lock	PRO		OFF	
	AL	[AL] menu lock	PRO		OFF	
	ALRM	[ALRM] menu lock	PRO		OFF	
	PVS	[PVS] menu lock	PRO	OFF: Display ON: Nondisplay	OFF	
	PYS1	[PYS1] menu lock	PRO		OFF	
	PYS2	[PYS2] menu lock	PRO		OFF	

DI Function Registration

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
DI.SL	RST	PV peak and bottom values reset	STD		5025	
	LAT	Latch release	STD		5026	
	LCD	LCD backlight ON/OFF switch	STD	Set an I relay number of contact input.	OFF	
	PVRW	PV red/white switch	STD	Set "OFF" to disable the function.	OFF	
	MG1	Message display interruption 1	PRO	Standard terminals	OFF	
	MG2	Message display interruption 2	PRO	D11: 5025, D12: 5026	OFF	
	MG3	Message display interruption 3	PRO		OFF	
	MG4	Message display interruption 4	PRO		OFF	

DI1-DI2 Contact Type Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
DI.D	DI1.D	DI1 contact type	PRO	0: The assigned function is enabled when the contact input is closed.	0	
	DI2.D	DI2 contact type	PRO	1: The assigned function is enabled when the contact input is opened.	0	

AL1-AL4 Function Registration

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
ALM	AL1.S	AL1 function selection	STD	Set an I relay number. Setting range: 4001 to 5344 No function: OFF	4353	
	AL2.S	AL2 function selection	STD	Alarm 1: 4353 Alarm 2: 4354 Alarm 3: 4355	4354	
	AL3.S	AL3 function selection	STD	Alarm 4: 4357 Alarm 5: 4358 Alarm 6: 4359	4355	
	AL4.S	AL4 function selection	STD	Alarm 7: 4361 Alarm 8: 4352 FAIL (Normally ON) output: 4256	4357	
	AL1.D	AL1 contact type	PRO		0	
	AL2.D	AL2 contact type	PRO	0: When the event of assigned function occurs, the contact output is closed.	0	
	AL3.D	AL3 contact type	PRO	1: When the event of assigned function occurs, the contact output is opened.	0	
	AL4.D	AL4 contact type	PRO		0	

DO Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
DO	DO1.S	DOn1 function selection	STD	Same as AL1.S. Set "OFF" to disable the function.	4358	
	DO2.S	DOn2 function selection	STD		4359	
	DO3.S	DOn3 function selection	STD		4361	
	DO4.S	DOn4 function selection	STD		4362	
	DO5.S	DOn5 function selection	STD		4256	
	DO1.D	DOn1 contact type	PRO	0: When the event of assigned function occurs, the contact output is closed. 1: When the event of assigned function occurs, the contact output is opened.	0	
	DO2.D	DOn2 contact type	PRO		0	
	DO3.D	DOn3 contact type	PRO		0	
	DO4.D	DOn4 contact type	PRO		0	
	DO5.D	DOn5 contact type	PRO		0	

n: Terminal area number (1)

I/O Display

Menu	Symbol	Name	Display level	Setting range
I/O	KEY	Key status	PRO	Read only See User's Manual.
	X000	D11-D12 status (equipped as standard)	PRO	
	Y000	AL1-AL4 status (equipped as standard)	PRO	
	Y100	DO11-DO15 status (E1-terminal area)	PRO	

System Setting

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
SYS	R.TM	Restart timer	STD	0 to 10 s	0	
	C.GRN	Response as GREEN Series	PRO	OFF: Works as UM33A in communication of device information response or broadcasting. ON: Works as GREEN Series in communication of device information response or broadcasting.	OFF	
	FREQ	Power frequency	EASY	AUTO, 60: 60 Hz, 50: 50 Hz	AUTO	
	QSM	Quick setting mode	EASY	OFF: Disable ON: Enable	ON	
	LANG	Guide display language	EASY	ENG: English FRA: French GER: German SPA: Spanish	Depends on the Model and Suffix Codes	
	PASS	Password setting	EASY	0 (No password) to 65535 Once a password is set, you can no longer choose not to set a password.	0	

Initialization

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
INIT	U.DEF	Initialization to user default value	PRO	12345: Initialization, automatically returned to "0" after initialization.	0	
	F.DEF	Initialization to factory default value	PRO	-12345: Initialization, automatically returned to "0" after initialization.	0	

Error and Version Confirmation

Menu	Symbol	Name	Display level	Setting range
VER	PA.ER	Parameter error status	EASY	Read only See User's Manual
	OP.ER	Option error status	EASY	
	AD1.E	A/D converter error status 1	EASY	
	PV1.E	PV input error status	EASY	
	MCU	MCU version	EASY	
	DCU	DCU version	EASY	
	ECU1	ECU-1 version	EASY	
	PARA	Parameter version	EASY	
	H.VER	Product version	EASY	
	SER1	Serial number 1	EASY	
SER2	Serial number 2	EASY		

Parameter Display Level

Menu	Symbol	Name	Display level	Setting range	Initial value	User setting
LVL	LEVL	Parameter display level	EASY	EASY: Easy setting mode STD: Standard setting mode PRO: Professional setting mode	STD	