**Technical Information**

**UTAdvanced Quick Setting (pH Control)**

**TI 04L01L01-01EN**

**Foreword**
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**Overview**
This is an example of wiring and settings using the UTAdvanced Quick Setting function for "pH Control." For more details, see the user's manual.

**Relevant models**
Standard models of the UT52A and UT55A (if there are 2 types of pharmaceuticals, select the heating/cooling model)

**System**

![System Diagram]

- **Overview**
  - Sampling can be controlled to interpolate dead time
- **Nonlinear type**
  - Control gain is switched by the Gap Gain Control function
- **Sampling control**
  - Sampling can be controlled to interpolate dead time

**Wiring**

![Wiring Diagram]

- Current output 4–20 mA
- Power supply
- UT52A, UT55A Standard Models

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Settings
To set the sample PID control, input type (4 to 20 mA), and current control output (4 to 20 mA), set the parameters below.

1. Select the desired parameter with the UP or DOWN key
2. Press SET/ENTER (the setting value blinks)
3. Change the setting with the UP or DOWN key
4. Press SET/ENTER to set the new value (the setting value stops blinking but remains bright)

Redoing the Quick Setting
Once functions are configured with the Quick Setting, the Quick Setting function will not appear after you restart. However, you can redo the Quick Setting by following the procedure below.

1. Set the Quick Setting parameter QSM to ON, and re-engage power
2. Set the PV input type parameter IN to OFF, and re-engage power

Press SET/ENTER to accept the "YES" option.
Quick Setting starts

First, the control type parameter CNT appears.
Set the CNT (control type) to S-PI (sample PI control).

OFF is displayed for IN (the PV input type).

Set IN (PV input type) to current signal: 4–20
(4–20 = 4.00 to 20.00 mA).

Set UNIT (PV input unit) to – (none). If necessary, use the unit label "pH."
6. **MAXIMUM VALUE OF PV INPUT RANGE**
   
   **RH**  20.00

   Set RH (maximum value of PV input range) to 20.00 mA (the initial value).

7. **MINIMUM VALUE OF PV INPUT RANGE**
   
   **RL**  4.00

   Set RL (minimum value of PV input range) to 4.00 mA (the initial value).

8. **PV INPUT SCALE DECIMAL POINT POSITION**
   
   **SdP**  2

   Set SDP (PV input scale decimal point position) to 2.

9. **MAXIMUM VALUE OF PV INPUT SCALE**
   
   **SH**  14.00

   Set SH (maximum value of PV input scale) to 14.00 (pH).

10. **MINIMUM VALUE OF PV INPUT SCALE**
    
    **SL**  0.00

    Set SL (minimum value of PV input scale) to 0.00 (pH).

11. **OUTPUT TYPE SELECTION**
    
    **Ot**  00.02

    Set OT (output type selection) to 00.02: OUT terminal (current 4 to 20 mA).

12. **CONTROL OUTPUT CYCLE TIME**
    
    **Ct**  30.0

    Skip this parameter (not relevant).

13. **FINISH**
    
    **EXIT YES**

    Finally, EXIT is displayed. Select YES and press SET/ENTER to complete the basic function setup and return to the operating screen. Or, you can select NO to continue with the Quick Setting.
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