Technical Information

Operation Display Panel PC100G3
Function Guide
Introduction

Overview of This Manual

This manual provides information about Operation Display Panel **PC100G3**, a direct drive servo motor. Make sure to refer to this manual when you use the motor.

Trademark

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Conventions

Symbol Marks

Throughout this manual, the following symbol marks are used to distinguish explained information.

⚠️ **DANGER** : Describes cautions for avoiding danger in potentially hazardous situations that may put operators’ lives and bodies in danger such as electric shock accident.

⚠️ **WARNING** : Describes points to be noted in situations that may cause damages to software and/or hardware or system troubles.

⚠️ **CAUTION** : Describes important points when understanding operations and functions.

⚠️ **TIP** : Describes supplementary information about descriptions.

⚠️ **SEE ALSO** : Describes items and pages that should be referenced.
Precautions

Precautions Regarding this Manual

- Please make sure this manual is made available to all end users.
- Do not operate the product before reading this manual and thoroughly understanding its contents.
- This manual was created to provide detailed explanations of the functions offered by the product. It is not guaranteed that it will suit any particular purpose a customer might have.
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- The information provided in this manual is subject to change without notice.
- If you have any questions or find any errors and/or omissions in the information provided in this manual, please contact our Sales Department or the dealer from whom the product was purchased.

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- To ensure your protection and that of the product, as well as the systems that use the product, please observe all safety instructions and other precautions listed in this manual.
- If you operate the product in a manner contrary to the instructions provided in this manual, the safety protection may be lost. In such an event, we make no warranties for the quality, performance, functions and safety of the product.
- If you install protection/safety circuits for the product or systems that use this product, make sure to install them on the product separately and externally. Do not install them inside the product, nor should any internal parts of the product be modified in order to do so.
- Be sure to replace any parts and consumables of the product with parts specified by us.
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- Modification of the product is strictly prohibited.

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- We make no warranty for the product except as prescribed by the guarantees.
- We assume no responsibility for damages any user or third party may incur through use of the product, nor for any direct or indirect damages that the user or a third party may incur due to product defects that cannot be predicted by us, etc.
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◆ Revision Record
A. Operation Display Panel

This section describes the PC100G3 operation display panel that is connected to the intelligent drive DrvGIII series to be used for drive maintenance and parameter setting.

A.1 Overview

The operation display panel is used by connecting to the <CN1> serial interface connector (RS232C/RS485) of the DrvGIII drive. It is in the RS232C single channel communication state, regardless of the <RS-ID> rotary switch setting state on the front panel. Moreover, it can be connected or disconnected even when the drive is in the current-carrying state.

The following screens are provided on the operation display panel:

- [Error status screen] The current error status and past history recorded in the drive can be checked.
- [#parameter/#monitor display screen] The contents of #parameter and #monitor are displayed repeatedly.
- [#parameter setup screen] #parameters can be changed.
- [Special Command Setup screen] Frequently used commands can be issued using a simple operation.
- [Table data setup screen] The table data that describes the operation of the built-in controller can be edited, copied and deleted.
- [I/O monitor screen] The contact status of hard I/O and logic I/O are displayed repeatedly.
- [I/O setup confirmation screen] Hard I/O logic settings, initial values of software contact inputs not assigned to hard I/O, and hard I/O pin assignment status can be checked.
- [Version display screen] Drive firmware codes and partial product (drive) model names are displayed.

The setting and registration of #parameters, the registration (edit, setup, copy, delete) of table data and the registration of an absolute encoder skew value can only be performed in the setup/registration enable state. Perform setup and registration after issuing an enable setup/registration command using the special command setup screen after turning on the power to the panel. The setup/registration enable state is stored in the panel while electricity is flowing into the panel.
A.2 Names of Components

When "▲," "▼," and "▼" are pressed continuously for one second or more, the same processing is performed repeatedly.
- "▲": Use to move the screen upward, or to increase the numeric value pointed by the cursor.
- "▼": Use to move the screen downward, or to decrease the numeric value pointed by the cursor.
- "▼": Use to move the screen in the right direction, or to move the cursor to the right.

Regarding "SET" and "MODE," their functions vary with how long they are pressed continuously.
In this manual, when these buttons are released within one second, their functions are expressed as "S" and "M." When these buttons are kept pressed down continuously for more than one second, their functions are expressed as "S"-LP and "M"-LP.
- "SET": Set button
- "MODE": Mode button. When this button is held down continuously on each screen, the display returns to the screen transition screen.
A.3 Transition of Screens

Individual screens make transition as shown below. Also, the error status screen appears as the initial screen when the power is turned on and the operation display panel is mounted while powering on.

"S": Enters the current screen.
"▲": The screen moves upward.
"▼": The screen moves downward.
"►": The screen moves in the right direction.
"M": (Does not function.)

* An INC type does not have this screen.
A.4 Error Status Screen

A.4.1 Status

An error status is obtained from the drive periodically (at approximately 200 msec) and then displayed repeatedly. There are 16 error status buffers; nothing is stored in them when there is no error. The buffer numbers are assigned to errors in the ascending order. The error status buffers are cleared by an error reset.

'S': (Does not function.)

'▲': Increases the numeric value pointed by the cursor.

'▼': Decreases the numeric value pointed by the cursor.

'►': Moves the cursor on a buffer number to the right.

If this is pressed while the cursor is at the number of units, the cursor moves to the number of tens.

'M' - LP: Displays the screen transition screen.

Note: The error code consists of a main code in the integer part and a subcode in the decimal part.

The screen above shows the following contents:

- The total number of errors being generated is 12. The screen shows the third error occurred among them, the error code is 20.4, and the error message is "PwrMdIE."

[Display when no error is being generated]
A.4.2 Records

History is obtained from the drive periodically (at approximately 200 msec) and is displayed repeatedly. There are 16 history buffers. The content of the oldest error is erased every time an error occurs, and the content of a newly occurred error is stored. Buffer numbers are assigned to errors in the ascending order of error occurrence. The history buffers are not cleared even if errors are reset.

'S': (Does not function.)
'▲': Increases the numeric value pointed by the cursor.
'▼': Decreases the numeric value pointed by the cursor.
'→': Moves the cursor on a buffer number to the right.
If this is pressed while the cursor is at the number of units, the cursor moves to the number of tens.
'M' -LP: Displays the screen transition screen.

Note: The error code consists of a main code in the integer part and a subcode in the decimal part.

The screen above shows the following contents:
The total number of errors stored in the history buffers is 12. The display shows the third error occurred among them, the error code is 20.4, and the error message is "PwrMdlE."

[Display when nothing is stored in the history buffers]
#parameter/#monitor Display Screen

The current values of the #parameter/#monitor having the specified number is obtained from the drive periodically (at approximately 200 msec) and is displayed repeatedly.

"S": (Does not function.)
"▲": Increases the numeric value pointed by the cursor if this button is pressed when the cursor is on a number.
"▼": Decreases the numeric value pointed by the cursor if this button is pressed when the cursor is on a number.
"►": Moves the cursor on a #parameter/#monitor number to the right.
"M": Switches between data display and prompt display.
"M" -LP: Displays the screen transition screen.

## Displaying data

The display above shows the following contents:

The registered value of parameter 0 is displayed, and its value is "100" in decimal notation.

## Display in hexadecimal notation

The display above shows the following contents:

The registered value of parameter 0 is displayed, and its value is "100" in hexadecimal notation.

## Displaying a prompt

The display above shows the following contents:

The prompt of parameter 0 is displayed, and that prompt is "LoadJ_or_M."
A.6 #parameter Setup Screen

This screen is provided to change the #parameters of the drive. The setup and registration of #parameters in the drive can be performed by holding down the “SET” button. Note that #parameters cannot be set while in the prompt display state. In such a case, switch to data display and then perform the setup/registration of #parameters. Furthermore, perform setup/registration by enabling setup/registration after issuing an enable setup/registration command on the special command setup screen after powering on.

"S" -LP: Performs setup/registration using the data displayed on the screen.
Setup is performed if the category is "set value," and registration is performed if the category is "registered value."

"▲": Increases the numeric value pointed by the cursor if this button is pressed when the cursor is on a number or value.
Switches the category/sign if this button is pressed when the cursor is on a category or sign.

"▼": Decreases the numeric value pointed by the cursor if this button is pressed when the cursor is on a number or value.
Switches the category/sign if this button is pressed when the cursor is on a category or sign.

"►": Moves the cursor on a #parameter number or value to the right.

"M": Switches between data display and prompt display.
"M" -LP: Displays the screen transition screen.

[Displaying data]

Category: #: Set value
##: Registered value

Number of a #parameter being set
Value being set
(The current value is obtained when a #parameter number is changed.)

Image of cursor move

Display format
D: Decimal notation
H: Hexadecimal notation

[Operating] with "S" -LP

[Operation complete]

Set- # 000 Complete!
Go to the original screen by pressing "S" or after 1 second elapses

[Operation failed]

Set- # 000 Incomplete!
Go to the original screen by pressing "S"
The display above shows the following contents:

The prompt of parameter 0 is displayed, and that prompt is "LoadJ_or_M."
A.7 Special Command Setup Screen

This screen is used to instruct selected commands to the drive. After a command is selected, an instruction is issued to the drive by pressing the "SET" button.

The setup/registration enable state by the enable setup/registration command is stored in the panel while electricity is flowing to the panel.

[In the cases other than "Start"]

<table>
<thead>
<tr>
<th>Command content</th>
<th>Screen display</th>
<th>Corresponding @command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abort command</td>
<td>&quot;Abort&quot;</td>
<td>@1</td>
</tr>
<tr>
<td>Stop command</td>
<td>&quot;Stop&quot;</td>
<td>@2</td>
</tr>
<tr>
<td>Start command</td>
<td>&quot;Start&quot;</td>
<td>@3: Table number</td>
</tr>
<tr>
<td>Reset Error</td>
<td>&quot;RstEn&quot;</td>
<td>@4</td>
</tr>
<tr>
<td>Switch Operation Privilege (to serial communication side)</td>
<td>&quot;toRS&quot;</td>
<td>@5: 0</td>
</tr>
<tr>
<td>Switch Operation Privilege (CN4 side)</td>
<td>&quot;toIF&quot;</td>
<td>@5: 1</td>
</tr>
<tr>
<td>Servo On</td>
<td>&quot;SrvOn&quot;</td>
<td>@8: 1</td>
</tr>
<tr>
<td>Servo Off</td>
<td>&quot;SrvOff&quot;</td>
<td>@8: 0</td>
</tr>
<tr>
<td>Set Origin Offset (home proximity direction)</td>
<td>&quot;OrgOffN&quot;</td>
<td>@10: 0</td>
</tr>
<tr>
<td>Set Origin Offset (+ direction)</td>
<td>&quot;OrgOff+&quot;</td>
<td>@10: 1</td>
</tr>
<tr>
<td>Set Origin Offset (- direction)</td>
<td>&quot;OrgOff-&quot;</td>
<td>@10: -1</td>
</tr>
<tr>
<td>Jog Up command</td>
<td>&quot;JogUp&quot;</td>
<td>@11: 1</td>
</tr>
<tr>
<td>Jog Down command</td>
<td>&quot;JogDown&quot;</td>
<td>@11: -1</td>
</tr>
<tr>
<td>Jog Stop command</td>
<td>&quot;JogStop&quot;</td>
<td>@11: 0</td>
</tr>
<tr>
<td>Clear Coordinate System</td>
<td>&quot;CirCoord&quot;</td>
<td>@13: 0</td>
</tr>
<tr>
<td>Set Integral Limiter Automatically</td>
<td>&quot;AutoIlim&quot;</td>
<td>@14</td>
</tr>
<tr>
<td>Register All Parameters</td>
<td>&quot;RgstPrm&quot;</td>
<td>@16</td>
</tr>
<tr>
<td>Reset Error (with clear history)</td>
<td>&quot;RstErrH&quot;</td>
<td>@19</td>
</tr>
<tr>
<td>Reset Drive</td>
<td>&quot;RstDrv&quot;</td>
<td>@96</td>
</tr>
<tr>
<td>Enable Setup/Registration</td>
<td>&quot;SetRgsiE&quot;</td>
<td>(No instruction to the drive)</td>
</tr>
</tbody>
</table>

"S" : Instructs the command selected to the drive.

"▲" : The command content is switched in the upward direction if this button is pressed when the cursor is on the command selected.

"▼" : The command content is switched in the downward direction if this button is pressed when the cursor is on the command selected.

"►" : Moves the cursor on the command selected or on a table number to the right only if "Start" is selected. If this button is pressed when the cursor is on the command selected, the cursor moves to the number of tens of the table number.

"M" -LP: Displays the screen transition screen.

If the "S" button is pressed:

[Operating]

Cmd- Operating!

[Operation completed within one second] [Operation not completed within one second]

Cmd- <00>

Go to the original screen (Registration screen)

Reply message

Go to the original screen by pressing "S" or after 1 second elapses. (After an error is resolved, go to the original screen by pressing the "S" button.)
A.8 Table Data Setup Screen

A.8.1 Editing and Setting Up

The table data setup screen edits and sets the table data registered in the drive. When the "SET" button is pressed, the setup screen keeps switching. Perform necessary settings on each screen, and proceed to the registration screen. Hold down the "SET" button on the registration screen to register the settings in the drive.

Upon powering on, issue an enable setup/registration command on the special command setup screen, and then register table data after entering the setup/registration enable state. To cancel a registration operation, go to the screen transition screen by pressing the "MODE" button. The entire registration operation up to that point will be cancelled.

Also use this screen to verify the table data registered in the drive. Press the "SET" button while verifying the contents of settings on each screen without changing them. When the verification of required items is complete, hold down the "MODE" button and go to the screen transition screen. No registration of table data in the drive is performed.

[Screen flow]

The operation codes for table data with table numbers 60 to 63 cannot be changed.

TIP

The operation codes for table data with table numbers 60 to 63 cannot be changed.
(1) Initial Setting Screen

Screen title

Table number being selected

Operation code of the table selected

"S": Moves to the next screen (Operation code selection screen).

"^": Increases the numeric value pointed by the cursor.

"_": Decreases the numeric value pointed by the cursor.

"_": Moves the cursor on a table number to the right. If this button is pressed when the cursor is at the number of units, the cursor moves to the number of tens.

"M"-LP: Displays the screen transition screen.

(2) Operation Code Selection Screen

Screen title

Table number being processed

Operation code prompt being selected

[Operation code]

- Test
- Test operation
- A-Tune
- Auto tuning
- Homing
- Return to the home position
- AbsMov
- ABS move
- IncMov
- INC move
- Dwell
- Dwell
- PrmChg
- Parameter change
- Branch
- Conditional branching
- Cmd
- Command

"S": Moves to the next screen (the beginning of the setup screen group corresponding to the operation code).

"^": The operation code changes in the direction where its number increases.

"_": The operation code changes in the direction where its number decreases.

"_": (Does not function.)

"M"-LP: Displays the screen transition screen.

There is no setup screen group corresponding to the operation code for test operation and auto tuning. If the "SET" button is pressed, the screen display moves to the beginning of the Setup Screen group common to the operation code.

(3) Setup Screen Group Corresponding to Operation Code

There is no setup screen group corresponding to the operation code for test operation and auto tuning.

Screen title

Table number being processed

Code being selected or set value

"S": Moves to the next screen.

"^": Changes in the direction where the digit pointed by on the cursor increases or the digit of the code selected increases.

"_": Changes in the direction where the digit pointed by the cursor decreases or the digit of the code selected decreases.

"_": Moves the cursor to the right. This button may or may not function depending on the screen content.

"M"-LP: Displays the screen transition screen.
Homing (in the Case of INC Type)

[Homing direction selection]
- Tbl-Dir 00
  - 0.-Dir: Count down direction
  - 1.+Dir: Count up direction

[Acceleration type selection]
- Tbl-AccTp 00
  - 0. Constant: Constant velocity
  - 1. S-Curved: S-curved

[Acceleration time selection]
- Tbl-AccTm 00
  - Displays the numeric value of the parameter selected

[Deceleration type selection]
- Tbl-DecTp 00
  - 0. Constant: Constant velocity
  - 1. S-Curved: S-curved

[Deceleration time selection]
- Tbl-DecTm 00
  - Displays the numeric value of the parameter selected

[Hardware EOT signal use selection]
- Tbl-OrgOT 00
  - 0. NoUse: Do not use
  - 1. Use: Use

[Home proximity signal use selection]
- Tbl-OrgOrg00
  - 0. NoUse: Do not use
  - 1. Use: Use

[Home proximity signal enable/disable selection during EOT search]
- Tbl-IninOTS00
  - 0. Disable: Disable
  - 1. Enable: Enable

[Origin selection]
- Tbl-OrgSel00
  - 0. OutSide: Outside
  - 1. InSide: Inside

[Coin window selection]
- Tbl-CoinW 00
  - Displays the numeric value of the parameter selected

Go to the first screen of the setup screen group common to the operation code.
Homing (in the Case of ABS Type)

[Homing direction selection]

Tbl-Dir 00

<table>
<thead>
<tr>
<th>^</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.-Dir Count down direction</td>
<td></td>
</tr>
<tr>
<td>1.+Dir Count up direction</td>
<td></td>
</tr>
</tbody>
</table>

"^", "V": does not function.

[Acceleration type selection]

Tbl-AccTp 00

<table>
<thead>
<tr>
<th>^</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. Constant Constant velocity</td>
<td></td>
</tr>
<tr>
<td>1. S-Curved S-curved</td>
<td></td>
</tr>
</tbody>
</table>

"^", "V": does not function.

[Acceleration time selection]

Tbl-AccTm 00

<table>
<thead>
<tr>
<th>^</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. #72 Acceleration time 0</td>
<td></td>
</tr>
<tr>
<td>1. #73 Acceleration time 1</td>
<td></td>
</tr>
<tr>
<td>2. #74 Acceleration time 2</td>
<td></td>
</tr>
<tr>
<td>3. #75 Acceleration time 3</td>
<td></td>
</tr>
</tbody>
</table>

"^", "V": does not function.

Displays the numeric value of the parameter selected

[Deceleration type selection]

Tbl-DecTp 00

<table>
<thead>
<tr>
<th>^</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. Constant Constant velocity</td>
<td></td>
</tr>
<tr>
<td>1. S-Curved S-curved</td>
<td></td>
</tr>
</tbody>
</table>

"^", "V": does not function.

[Deceleration time selection]

Tbl-DecTm 00

<table>
<thead>
<tr>
<th>^</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. #77 Deceleration time 1</td>
<td></td>
</tr>
<tr>
<td>1. #78 Deceleration time 2</td>
<td></td>
</tr>
<tr>
<td>2. #79 Deceleration time 3</td>
<td></td>
</tr>
</tbody>
</table>

"^", "V": does not function.

Displays the numeric value of the parameter selected

[Move direction selection for rotation coordinates]

Tbl-DirOp 00

<table>
<thead>
<tr>
<th>^</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. Type0 Shortcut</td>
<td></td>
</tr>
<tr>
<td>1. Type1 Do not cross over the origin.</td>
<td></td>
</tr>
<tr>
<td>2. Type2 Data dependent</td>
<td></td>
</tr>
<tr>
<td>3. Type3 Fixes the rotation direction to +</td>
<td></td>
</tr>
<tr>
<td>4. Type4 Fixes the rotation direction to -</td>
<td></td>
</tr>
</tbody>
</table>

"^", "V": does not function.

* A different screen is displayed for an INC type.

[Coin window selection]

Tbl-CoinW 00

<table>
<thead>
<tr>
<th>^</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. #90 Coin window 0</td>
<td></td>
</tr>
<tr>
<td>1. #91 Coin window 1</td>
<td></td>
</tr>
<tr>
<td>2. #92 Coin window 2</td>
<td></td>
</tr>
<tr>
<td>3. #93 Coin window 3</td>
<td></td>
</tr>
<tr>
<td>4. #94 Coin window 4</td>
<td></td>
</tr>
<tr>
<td>5. #95 Coin window 5</td>
<td></td>
</tr>
<tr>
<td>6. #96 Coin window 6</td>
<td></td>
</tr>
<tr>
<td>7. #97 Coin window 7</td>
<td></td>
</tr>
</tbody>
</table>

"^", "V": does not function.

Displays the numeric value of the parameter selected

Go to the first screen of the setup screen group common to the operation code
ABS move, INC move

[Acceleration type selection]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tbl-AccTp 00</td>
<td>0: Constant, 1: S-Curved</td>
</tr>
</tbody>
</table>

"▲", "▼":
0. Constant, 1. S-Curved

"▲", "▼":
"▲", "▼":

Go to the first screen of the setup screen group common to the operation code.
Dwell

[Dwell time setting]

Parameter change

[Type selection]

[Operator selection]

[Substituted parameter number selection]

[Substitution equation setting]

Go to the first screen of the setup screen group common to the operation code
### Conditional Branching

#### Comparison operator selection

<table>
<thead>
<tr>
<th>Example</th>
<th>Type</th>
<th>Operator code</th>
<th>Substituted parameter number</th>
<th>Operated value</th>
<th>Operated parameter/monitor number 1</th>
<th>Operated parameter/monitor number 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>#12 = 34</td>
<td>Direct substitution</td>
<td>0</td>
<td>don't care</td>
<td>0</td>
<td>12</td>
<td>34</td>
</tr>
<tr>
<td>#12 = #34</td>
<td>Indirect substitution</td>
<td>1</td>
<td></td>
<td>0</td>
<td>12</td>
<td>-</td>
</tr>
<tr>
<td>#12 = '34</td>
<td>Monomial calculation substitution</td>
<td>2</td>
<td>Required setting (Monomial operator)</td>
<td>8</td>
<td>12</td>
<td>34</td>
</tr>
<tr>
<td>#12 = -#34</td>
<td></td>
<td>3</td>
<td></td>
<td>1</td>
<td>12</td>
<td>-</td>
</tr>
<tr>
<td>#12 = 34 + #56</td>
<td>Binomial calculation substitution</td>
<td>4</td>
<td>Required setting (Binomial operator)</td>
<td>0</td>
<td>12</td>
<td>34</td>
</tr>
<tr>
<td>#12 = #34 &amp; 56</td>
<td></td>
<td>5</td>
<td></td>
<td>5</td>
<td>12</td>
<td>56</td>
</tr>
<tr>
<td>#12 = #34/#56</td>
<td>Binomial calculation substitution</td>
<td>6</td>
<td></td>
<td>3</td>
<td>12</td>
<td>-</td>
</tr>
</tbody>
</table>

- **A**: Increases/decreases a table number.
- **a**: Moves the cursor to the right.

#### Number selection when conditions are satisfied

#### Compared parameter/monitor number selection

- **A**: Increases/decreases a parameter/monitor number.
- **a**: Moves the cursor to the right.

#### Reference parameter/monitor number selection

- **A**: Increases/decreases a parameter/monitor number.
- **a**: Moves the cursor to the right.

Go to the first screen of the setup screen group common to the operation code.
### Command

[Command selection]

- **Tbl-CmdCd 00**
  - **0. OrgOffset**
    - "S" does not function.
  - **1. CoordiSet**
    - "S" does not function.
  - **2. IlimSet**
    - "S" does not function.

- **Tbl-OrgOff 00**
  - **0. Near**
    - Sets closer to the origin.
    - 1. + Sets so that the offset value is positive.
    - 2. - Sets so that the offset value is negative.

- **Tbl-CoTyp 00**
  - **0. Direct**
    - Unique values are set without regard to these settings when the linear coordinate system is used.
  - **1. Indirect**

- **Tbl-CoVal 00**
  - Sign Value
  - "S" does not function.

- **Tbl-CoPrm 00**
  - Parameter/monitor number
  - "S" moves the cursor to the right.

Go to the first screen of the setup screen group common to the operation code.
(4) Setup Screen Group Common to the Operation Code

"S": Moves to the next screen.
"▲": Changes in the direction where the digit pointed by the cursor increases or the digit of the code selected increases.
"▼": Changes in the direction where the digit pointed by the cursor decreases or the digit of the code selected decreases.
"►": Moves the cursor to the right. This button may or may not function depending on the screen content.
"M"-LP: Displays the screen transition screen.

[Coin wait selection]

[Tbl-CoinE 00]

[0. Disable]

[1. Enable]

"S" ! The "S" button functions only when the operation code is "homing," "ABS move" or "INC move." For other codes, there is no coin wait function in operation itself.

[M function enable/disable selection]

[Tbl-MFunc 00]

[0. Disable]

[1. Enable]

"S" ! The "S" button functions only when the operation code is "homing," "ABS move" or "INC move." For other codes, there is no coin wait function in operation itself.

[M function type selection]

[Tbl-MPara 00]

[0. After]

[1. Para]

"S" ! The "S" button functions only when the operation code is "homing," "ABS move" or "INC move." For other codes, there is no coin wait function in operation itself.

[Post-execution continuation selection]

[Tbl-Conti 00]

[0. Disable]

[1. Enable]

"S" ! The "S" button functions only when the operation code is "homing," "ABS move" or "INC move." For other codes, there is no coin wait function in operation itself.

[Next table number selection]

[Tbl-NxtTb 00]

[0. Branch]

Go to the registration screen

Next table number

Operation code of the next table number selected

"▲", "▼": Execute after operation

0. After
1. Para

Parallel execution

"►": Does not function.

When post-execution continuation is enabled

When post-execution continuation is not enabled

"S": Increases/decreases a table number.

"►": Moves the cursor to the left.
(5) Registration Screen

"S" -LP: Registers the content being edited in the drive.
"►": Returns to the first screen of the setup screen group corresponding to the operation code.
The content being edited is retained as edited data.
"▲": (Does not function.)
"▼": (Does not function.)
"M" -LP: Displays the screen transition screen.

[Tbl-Rgst 00]
Regist OK?

Screen title
Number of the table being processed

[Operating] with "S" -LP

[Tbl-Rgst 00]
Operating!

[Operation complete]

[Tbl-Rgst 00]
Complete!
Go to the initial setting screen by pressing "S" or after one second elapses

[Operation failed]

[Tbl-Rgst 00]
Incomplete!
Go to the original screen (registration screen) by pressing "S"
A.8.2 Copy

The copy screen is used to copy the table data registered in the drive. If the "SET" button is held down, table data is copied. To stop copying, hold down the "MODE" button and go to the screen transition screen. Upon powering on, issue an enable setup/registration command on the special command setup screen, and then copy table data after entering the setup/registration enable state.

"S"-LP: Copies using the screen content.
"▲": Increases the numeric value pointed by the cursor.
"▼": Decreases the numeric value pointed by the cursor.
"▶": Moves the cursor to the right.
"M"-LP: Displays the screen transition screen.

Screen title
Number of the copy source table
Number of the copy destination table
Operation code of the copy source table
Image of cursor move

[Operating] with "S"-LP

[Tbl-Cpy 00 Operating!]

[Operation complete]

[Tbl-Cpy 00 Complete!]

Go to the original screen by pressing "S" or after 1 second elapses

[Operation failed]

[Tbl-Cpy 00 Incomplete!]

Go to the original screen by pressing "S"
A.8.3 Delete

The delete screen is used to delete the table data that is registered in the drive. If the "SET" button is pressed, table data is deleted. The deleted table is registered by the dwell (0 msec wait time). Upon powering on, issue an enable setup/registration command on the special command setup screen, and then delete table data after entering the setup/registration enable state. To stop deleting, hold down the "MODE" button and go to the screen transition screen.

"S" -LP: Deletes the table selected.
"▲": Increases the numeric value pointed by the cursor.
"▼": Decreases the numeric value pointed by the cursor.
"▶": Moves the cursor on a table number to the left. If this button is pressed when the cursor is at the number of units, the cursor moves to the number of tens.
"M" -LP: Displays the screen transition screen.

[Operating] with "S" -LP

[Tbl-Del 00 Operating!]

[Operation complete]

[Tbl-Del 00 Complete!]

Go to the original screen by pressing "S" or after 1 second elapses

[Operation failed]

[Tbl-Del 00 Incomplete!]

Go to the original screen by pressing "S"
A.9 I/O Monitor Screen

A.9.1 Physical (Hard) I/O

The physical (hard) I/O screen is used to obtain the current status of the hard I/O with the block number specified from the drive periodically (at approximately 200 msec), and display the status repeatedly.

"S": (Does not function.)
"▲": Increases the numeric value pointed by the cursor if this button is pressed when the cursor is on a block number.
"▼": Decreases the numeric value pointed by the cursor if this button is pressed when the cursor is on a block number.
"►": The category changes if this button is pressed when the cursor is on a category.
"◄": The category changes if this button is pressed when the cursor is on a category.
"M" -LP: Displays the screen transition screen.

The screen shown above displays the following contents:
It is monitoring the status of hardware input block 0, bits 0, 2, 3 and 5 are on, and others are off.

A.9.2 Logic (Soft) I/O

The logic (soft) I/O screen is used to obtain the current status of logic I/O with the block number specified from the drive periodically (at approximately 200 msec), and display the status repeatedly.

"S": (Does not function.)
"▲": Increases the numeric value pointed by the cursor if this button is pressed when the cursor is on a block number.
"▼": Decreases the numeric value pointed by the cursor if this button is pressed when the cursor is on a block number.
"►": The category changes if this button is pressed when the cursor is on a category.
"◄": The category changes if this button is pressed when the cursor is on a category.
"M" -LP: Displays the screen transition screen.

The screen shown above displays the following contents:
It is monitoring the status of software output block 1, bits 0, 1, 2 and 3 are on, and others are off.
A.10 I/O Setup Confirmation Screen

A.10.1 Physical (Hard) I/O Logic Confirmation Screen

The physical (hard) I/O logic confirmation screen is used to verify the logic settings of hard I/O of the drive. Hard I/O logic setting cannot be performed on the operation display panel. To perform hard I/O logic setting, use utility software and operation display pendant (optional).

"S": (Does not function.)

"▲": Increases the numeric value pointed by the cursor if this button is pressed when the cursor is on a block number. The category or value changes if this button is pressed when the cursor is on a category or value.

"▼": Decreases the numeric value pointed by the cursor if this button is pressed when the cursor is on a block number.

"►": The category or value changes if this button is pressed when the cursor is on a category or value. Move the cursor on a category, block number or value to the right.

"M" -LP: Displays the screen transition screen.
A.10.2 Logic (Soft) I/O Input Initial Value Confirmation Screen

The logic (soft) I/O input initial value confirmation screen is used to verify the initial value settings of the logic I/O of the drive. Logic I/O input initial value setting cannot be performed on the operation display panel. To perform Logic I/O input initial value setting, use utility software and operation display pendant (optional).

**Screen title**

<table>
<thead>
<tr>
<th>Display value</th>
<th>x: Off</th>
<th>O: On</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block number being displayed or operated</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Image of cursor move

"S": (Does not function.)

"▲": Increases the numeric value pointed by the cursor if this button is pressed when the cursor is on a block number. The value changes if this button is pressed when the cursor is on a value.

"▼": Decreases the numeric value pointed by the cursor if this button is pressed when the cursor is on a block number.

"►": The value changes if this button is pressed when the cursor is on a value. Moves the cursor on a block number or value to the right.

"M" -LP: Displays the screen transition screen.
A.10.3 Pin Assignment Confirmation Screen

The pin assignment confirmation screen is used to verify the pin assignment settings of the drive. Pin assignment setting cannot be performed on the operation display panel. To perform pin assignment setting, use utility software and operation display pendant (optional).

"S": (Does not function.)

"▲": Increases the numeric value pointed by the cursor if this button is pressed when the cursor is on a hard I/O block number or hard I/O bit number. The category changes if this button is pressed when the cursor is on a category.

"▼": Decreases the numeric value pointed by the cursor if this button is pressed when the cursor is on a hard I/O block number or hard I/O bit number. The category changes if this button is pressed when the cursor is on a category.

"►": Moves the cursor on a category, hard I/O block or hard I/O bit number to the right.

"M" -LP: Displays the screen transition screen.

The screen shown above displays the following contents:

Bit 0 of hard I/O input block 0 is assigned to bit 4 of Logic I/O input block 1.
A.11 Absolute Encoder Maintenance Screen

The absolute encoder skew value is data that does not require changing by the customer. Do not change this data.

* This screen does not exist for an increment type.

WARNING

Do not change the data. Registering wrong data may cause malfunctions such as the motor being unable to move or the position being recognized incorrectly.

The maintenance targets are absolute encoder skew values of an absolute position detector. This screen, when activated, displays the value currently registered in the drive. The value is registered in the drive by keeping the S button pressed for a while. Setting and registration are allowed only in the setup/registration enabled state.

*S*-LP: Performs registration using the data displayed on the screen.  
*▲*: Increases the numeric value pointed by the cursor if this button is pressed when the cursor is on a value. Switches the sign if this button is pressed when the cursor is on a sign.  
*▼*: Decreases the numeric value pointed by the cursor if this button is pressed when the cursor is on a value. Switches the sign if this button is pressed when the cursor is on a sign.  
*►*: Moves the cursor on a #parameter number or value to the right.  
*M*-LP: Displays the screen transition screen.
A.12 Version Display Screen

The version display screen displays the design version and model name of the drive.

```
Ver: R7040CA
MS: UR5CG3-0
```

"S": (Does not function.)
"▲": (Does not function.)
"▼": (Does not function.)
"►": Scrolls the firmware code and model name display to the left.
---------------------
Returns to the first display if this button is pressed while up to the end is displayed (displaying "*" at the end).
"M" -LP: Displays the screen transition screen.

The screen shown above displays the following contents:

First eight characters of the firmware code: "R7040CA."
First eight characters of the model name: "UR5CG3-0"
Revision Record

Document name: Operation Display Panel PC100G3 Function Guide
Document number: TI 71M07B00-01E

October, 2003 1st Edition
New issuance

May, 2004 2nd Edition
Formats and wording of the entire manual were modified.
A-1 Description of ABS was added.
A-2 The external appearance drawing was updated.
A-3 Description of ABS was added.
A-11 The title of (2) "Operation Code Selection Screen" was corrected.
A-12 Description of INC was corrected.
A-13 A page for ABS description was added, the page numbers of previous
A-13 and onward were changed accordingly.
A-21 "copy" on the first line was corrected to "delete."
A-26 A page for "A.11 Absolute Encoder Maintenance Screen" was added.
The page numbers and header numbers of previous A-26 and onward
were changed accordingly.

December, 2012 3rd Edition
A-28 Changed section name at Copyright
Changed Document (language) code TI 71M07B00-01E > TI 71M07B00-01EN

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