

A.3.1 Parameter (PAR) Mode 1 Parameter Setting <Controller Mode> (English display)

It is possible to set and edit parameters, and to initialize all data.
[] indicates the name of a key.

First screen

No. selection 1	1 0 0 0
PAR Select	
SHIF T, F2 / F3 / F4	
Mode I / O Mtr. Hmp	

[F1] [F2] [F3] [F4]
 |
 | To the home parameter screen
 | To the motor parameter screen
 | To the I/O parameter screen
 | To the TST mode screen



No. selection 2 See PAR mode 2
 Displayed when [SHIFT] is pressed in the screen for item selection 1.
 Returns to the screen for item selection 1 when [SHIFT] is released

[F1] [F2] [F3] [F4]
 |
 | To the common parameter screen
 | To the speed parameter screen
 | To the screen for initializing parameters
 | To the TST mode screen

[ESC] To the first screen of the PRG mode

I/O parameters

Stop action
 PAR-I/O STOP Act
 Act = Dec stop
 Mode
 [F1] To the TST mode screen

[F1] Move to the last line
 [] Move down
 [] and [] Select
 [ENT] Set and move to the next item
 • Stop Act display
 Ind stop: Immediate stop
 Dec stop: Deceleration stop
 Ind stop + MB + C.OFF: Immediate stop + MB control + Current off
 Dec stop + MB + C.OFF: Deceleration stop + MB control + Current off

Stop logic
 PAR-I/O STOP LGC
 STOP LGC=NO set
 Mode
 [F1] To the TST mode screen

[F1] Move to the last line
 [] Move down
 [] and [] Select
 [ENT] Set
 • STOP LGC display
 NO set (Normally-open set); Contact A
 NC set (Normally-closed set); Contact B

HOME/PRESET switching

PAR-I/O HO/PR Set
 HO/PR Set=PRESET
 Mode
 [F1] To the TST mode screen

[F1] and [] Move
 [] and [] Select
 [ENT] Set and move to the next item
 • HO/PR Set display
 For HOME operation: HOME
 For PRESET operation: PRESET

PRESET position setting

PAR-I/O PRESET
 PRES= 0.0000, 0.00mm
 10 keys ENT: Set
 Mode
 [F1] To the TST mode screen

[F1] and [] Move
 [] and [] Select
 [ENT] Set and move to the next item

LS detection enable/disable

PAR-I/O LS Detect
 LS Detect=Off
 Mode
 [F1] To the TST mode screen

[F1] and [] Move
 [] and [] Select
 [ENT] Set and move to the next item
 • LS Detect display
 On: Enabled
 Off: Disabled

LS logic

PAR-I/O LS LGC
 LS LGC=NO set
 Mode
 [F1] To the TST mode screen

[F1] and [] Move
 [] and [] Select
 [ENT] Set and move to the next item
 • LS LGC display
 NO set (Normally-open set); Contact A
 NC set (Normally-closed set); Contact B

Motor parameters

Operating current
 PAR-Mtr Run Cur.
 Run Cur.=100%
 10 keys ENT: Set
 Mode
 [F1] To the TST mode screen

[F1] Move to the last line
 [] Move down
 [] and [] Select
 [ENT] Set and move to the next item

Standstill current

PAR-Mtr Stop Cur.
 Stop Cur.=50%
 10 keys ENT: Set
 Mode
 [F1] To the TST mode screen

[F1] Move to the last line
 [] Move down
 [] and [] Select
 [ENT] Set and move to the next item
 [ESC] To the first screen

Home parameters

Return direction
 PAR-Hmp HomeDir
 HomeDir=To Motor
 Mode
 [F1] To the TST mode screen

[F1] Move to the last line
 [] Move down
 [] and [] Select
 [ENT] Set and move to the next item
 Opp Motor: Opposite the motor side
 To Motor: Motor side

Home offset

PAR-Hmp Off set
 Pos= 0.0000, 0.00mm
 10 keys ENT: Set
 Mode
 [F1] To the TST mode screen

[F1] Move to the last line
 [] Move down
 [] and [] Select
 [ENT] Set and move to the next item

Return mode

PAR-Hmp Home Type
 Home=Push
 Mode
 [F1] To the TST mode screen

[F1] and [] Move
 [] and [] Select
 [ENT] Set and move to the next item
 • Home display
 Push: Push-motion
 2: 2-sensor
 3: 3-sensor

Starting speed of return

PAR-Hmp Start Spd
 HVr=0.0006, 0.00mm/s
 10 keys ENT: Set
 Mode
 [F1] To the TST mode screen

[F1] and [] Move
 [] and [] Select
 [ENT] Set and move to the next item

Operating speed of return

PAR-Hmp Run Spd
 HVr=0.0006, 0.00mm/s
 10 keys ENT: Set
 Mode
 [F1] To the TST mode screen

[F1] Move up
 [] Move to the first line
 [ENT] Set and move to the next item

HOME logic

PAR-I/O HOME LGC
 HOME LGC=NO set
 Mode
 [F1] To the TST mode screen

[F1] and [] Move
 [] and [] Select
 [ENT] Set and move to the next item
 • HOME LGC display
 NO set (Normally-open set); Contact A
 NC set (Normally-closed set); Contact B

Overtravel action

PAR-I/O LS Action
 LS Act=Ind stop
 Mode
 [F1] To the TST mode screen

[F1] Move up
 [] Move to the first line
 [ENT] Set and move to the next item
 • LS Act display
 Ind stop: Immediate stop
 Dec stop: Deceleration stop
 [ESC] To the first screen

A.3.2 Parameter (PAR) Mode 2 Parameter Setting <Controller Mode> (English display)

It is possible to set and edit parameters, and to initialize all data.
 [] indicates the name of a key.

First screen

No. selection 1 See PAR Mode 1

PAR Select	ID00
SHIFT, F2/F3/F4	
Mode I/O Mtr Hmp	

[F1] [F2] [F3] [F4]
 |
 | To the home parameter screen
 | To the motor parameter screen
 | To the I/O parameter screen
 | To the TST mode screen



No. selection 2

PAR Select	ID00
F2/F3/F4	
Mode I n i S p d C o m	

[F1] [F2] [F3] [F4]
 |
 | To the common parameter screen
 | To the speed parameter screen
 | To the screen for initializing parameters
 | To the TST mode screen

[ESC] To the first screen of the PRG mode

Displayed when [SHIFT] is pressed in the screen for item selection 1.
 Returns to the screen for item selection 1 when [SHIFT] is released.

Initialize parameters

Initialize parameters

PAR-Ini	PAR Clear
PAR reset	
OK?: No ENT: Set	
Mode ... Yes No	

[F1] [F3] [F4]
 |
 | To the first screen
 | To the TST mode screen

Screen displayed during the processing

PAR-Ini	PAR Clear
PAR reset	
Wait for a moment	
... ..	

The display switches to the language setting screen (1) after completion.

Language setting screen (1)

EXT-Lang	ID00
Language=Japanese	
... ENT: Set	
... ..	

Select the language, either Japanese or English, with [←] and [→].
 [ENT] Set the selected language

Speed parameters

Starting speed

PAR-Spd	Start Spd
Vs = 00060.00mm/s	
10keys ENT: Set	
Mode	

[F1] To the TST mode screen

[F3] Move to the last line
 [↓] Move down
 [0] to [9] Enter a numerical value
 [ENT] Set and move to the next item

To the TST mode screen

Acceleration

PAR-Spd	Acc Rate
Acc=00000.45m/s ²	
10keys ENT: Set	
Mode	

[F1] To the TST mode screen

[F3] and [↓] Move
 [0] to [9] Enter a numerical value
 [ENT] Set and move to the next item

To the TST mode screen

Deceleration

PAR-Spd	Dec Rate
Dec=00000.45m/s ²	
10keys ENT: Set	
Mode	

[F1] To the TST mode screen

[F3] and [↓] Move
 [0] to [9] Enter a numerical value
 [ENT] Set and move to the next item

To the TST mode screen

Common operating speed

PAR-Spd	Rmt Spd
Vr = 00060.00mm/s	
10keys ENT: Set	
Mode	

[F1] To the TST mode screen

[F3] Move up
 [0] to [9] Enter a numerical value
 [ENT] Set and return to the starting-speed setting screen

※ Note
 Press [↓] to move to the first screen of this row.

Common parameters

Softlimit

PAR-Com	Soft Lim
Soft Lim=On	
+/- ENT: Set	
Mode	

[F1] To the TST mode screen

On: Enabled
 Off: Disabled

To the area 2 setting screen

Coordinate setting

PAR-Com	Pos Dir
+Dir=Opp Motor	
+/- ENT: Set	
Mode	

[F1] To the TST mode screen

[←] key direction

PAR-Com	-key Dir
-Dir=To Motor	
+/- ENT: Set	
Mode	

[F1] To the TST mode screen

[F3] Move up
 [↓] Move to the first line
 [←] and [→] Select
 [ENT] Set and return to the push-distance setting screen

To Motor: Opposite the motor side
 To Motor: Motor side

To the TST mode screen

[ESC] To the first screen

Area 1

PAR-Com	Area1
Area1= 00000.00mm	
10keys ENT: Set	
Mode	

[F1] To the TST mode screen

[F3] and [↓] Move
 [0] to [9] Enter a numerical value
 [ENT] Set and move to the next item

To the coordinate setting screen

Area 2

PAR-Com	Area2
Area2= 00000.00mm	
10keys ENT: Set	
Mode	

[F1] To the TST mode screen

[F3] and [↓] Move
 [0] to [9] Enter a numerical value
 [ENT] Set and move to the next item

A.4 Test (TST) Mode Manual Drive and I/O Checking <Controller mode> (English display)

[] indicates the name of a key.

First screen	
I/O checking Operation of I/O is checked. I/O selection TST Select Mode I/O F2/F3/F4 In Out Enc 1 0 0 0 Mnu Opr [F1] [F2] [F3] [F4] To the positioning operation screen To the manual operation screen To the I/O checking screen To the EXT mode screen [ESC] To the first screen of the PAR mode	Manual operation Operate the slider/cylinder using [←] and [→]. TST-Mnu Pos= Mnu-Opr 0000.00mm ←/→, F3/F4 Mode ... PRE HOME [F1] [F3] [F4] Execute return to mechanical home operation Execute preset operation To the EXT mode screen Press [←] to move to the motor side at low speed. Press [→] to move to the counter-motor side at low speed. The operating direction is the default setting. Press [SHIFT] during operation to accelerate to high speed. Release [SHIFT] to decelerate to low speed. Press [ESC] to exit and return to the first screen.
Encoder pulse output check TST-I/O-Enc ASG BSG Out1 F4: ON Mode ... Push [F4] Execute encoder pulse output # is displayed during pulse output. [ESC] To the I/O selection screen Output check TST-I/O-Out ALM Out1 F4: ON/OFF Mode ... Push [↑] Move to the last line [↓] Move down [F4] Switch ALM between ON/OFF [F1] To the EXT mode screen TST-I/O-Out Out 2 MOVE F4: ON/OFF Mode ... Push [↑] and [↓] Move [F4] Switch MOVE between ON/OFF [F1] To the EXT mode screen TST-I/O-Out Out 3 T-UP/OUT1 F4: ON/OFF Mode ... Push [↑] and [↓] Move [F4] Switch T-UP/OUT1 between ON/OFF [F1] To the EXT mode screen TST-I/O-Out Out 4 AREA/OUT 0 F4: ON/OFF Mode ... Push [↑] and [↓] Move [F4] Switch AREA/OUT0 between ON/OFF [F1] To the EXT mode screen TST-I/O-Out Out 5 END/OUTR F4: ON/OFF Mode ... Push [↑] and [↓] Move [F4] Switch END/OUTR between ON/OFF [F1] To the EXT mode screen TST-I/O-Out All OUT: ... 98765 Mode ... [↑] Move up [↓] Move to the first line [5] to [9] Switch between ON/OFF for the corresponding output [F1] To the EXT mode screen [ESC] To the I/O selection screen Key assignment (from the left): [9] ALM, [8] MOVE, [7] T-UP/OUT1, [6] AREA/OUT0, [5] END/OUTR	Positioning operation Perform the slider/cylinder positioning operation. TST-Opr Pos= Opr 0000.00mm 10 key, START/F3/F4 Mode ... PRE HOME [F1] [F3] [F4] Execute return to mechanical home operation Execute preset operation To the EXT mode screen Select operation data number to be executed [↑]: No. + 10 [↓]: No. - 10 [→]: No. + 1 [←]: No. - 1 Can also be selected using [0] to [9] Press [START] to start the positioning operation. Press [STOP] to stop the operation in the middle. Press [ESC] to exit and return to the first screen

A.5 External (EXT) Mode Operation Monitor <Driver Mode> (English display)

Display of error-occurrence changes with the conditions.
[] indicates the name of a key.

First screen

EXT Driver Mode Pos= 00000.00mm Mode I/O Al m	[SHIFT] To the language setting screen
[F1] [F2] [F3]	To alarm monitor screen To I/O monitor screen To the PAR mode screen

Display at error occurrence

Error 10 Pos Over Flow Exit ACL	The backlight turns red if an error occurs.
[F1] [F4]	Cancel alarm and return the backlight to green. To the first screen of the EXT mode with the backlight still red [ESC] To the ID checking screen

I/O monitor

The status of I/O is indicated by * and .

※1. ※2 EXT-I/O In1 ACL . . . FREE . C.OFF . . PRESET . Mode	[↑] Move to the last line [↓] Move down *: Active .: Non-active [ESC] To the first screen
※1. ※2 EXT-I/O In1 CK . . . FREE . C.OFF . . PRESET . Mode	[↑] and [↓] Move *: Active .: Non-active [ESC] To the first screen
※1. ※2 EXT-I/O In2 REQ . . . /EMG . RP Mode	[↑] and [↓] Move *: Active .: Non-active [ESC] To the first screen
※1. ※2 EXT-I/O Out1 /ALM Mode	[↑] and [↓] Move *: Active .: Non-active [ESC] To the first screen
※1. ※2 EXT-I/O Out2 OUT1 . . TIM . END Mode	[↑] and [↓] Move *: Active .: Non-active [ESC] To the first screen
※1. ※2 EXT-I/O Al1 IN OUT Mode	Display all I/O bits. [↑] Move up [↓] Move to the first line *: Active .: Non-active [ESC] To the first screen

The inputs (IN) are, from the left,
ACL/CK, FREE, C.OFF, PRESET,
REQ./EMG, FP and RP

The outputs (OUT) are, from the left,
/ALM, OUT1, TIM/OUT0 and END/OUTR

Alarm monitor

It is possible to display the current alarm and alarm history, as well as to cancel alarms.

Current alarm information EXT-Alm Now Error 00 No Error Mode Clr Hist	ACL is displayed only upon the occurrence of an alarm that can be canceled by selecting ACL. [ESC] To the first screen
[F1] [F2] [F3]	To the alarm history screen To the clear alarm history screen To the PAR mode screen
Clear alarm history EXT-Alm-Clr Clear alarm hist. OK? No ENT: Set Mode Yes No	[F3] Select Yes [F4] Select No [ENT] Set
[F1] [F3] [F4]	No: To the first screen Yes: Clear and go to the first screen To the PAR mode screen [ESC] To the current alarm information screen

Alarm history

EXT-Alm-Hist0 Error 61 LS Rev Error Mode	[↑] Move to the last line [↓] Move down
[F1] To the PAR mode screen	[↑] and [↓] Move
EXT-Alm-Hist1 Error 68 EMG Error Mode	[F1] To the PAR mode screen
[F1] To the PAR mode screen	(Omitted)
EXT-Alm-Hist9 Error 00 No Error Mode	[↑] and [↓] Move (History of alarms 0 to 9) Up to 10 alarms
[F1] To the PAR mode screen	[ESC] To the current alarm information screen

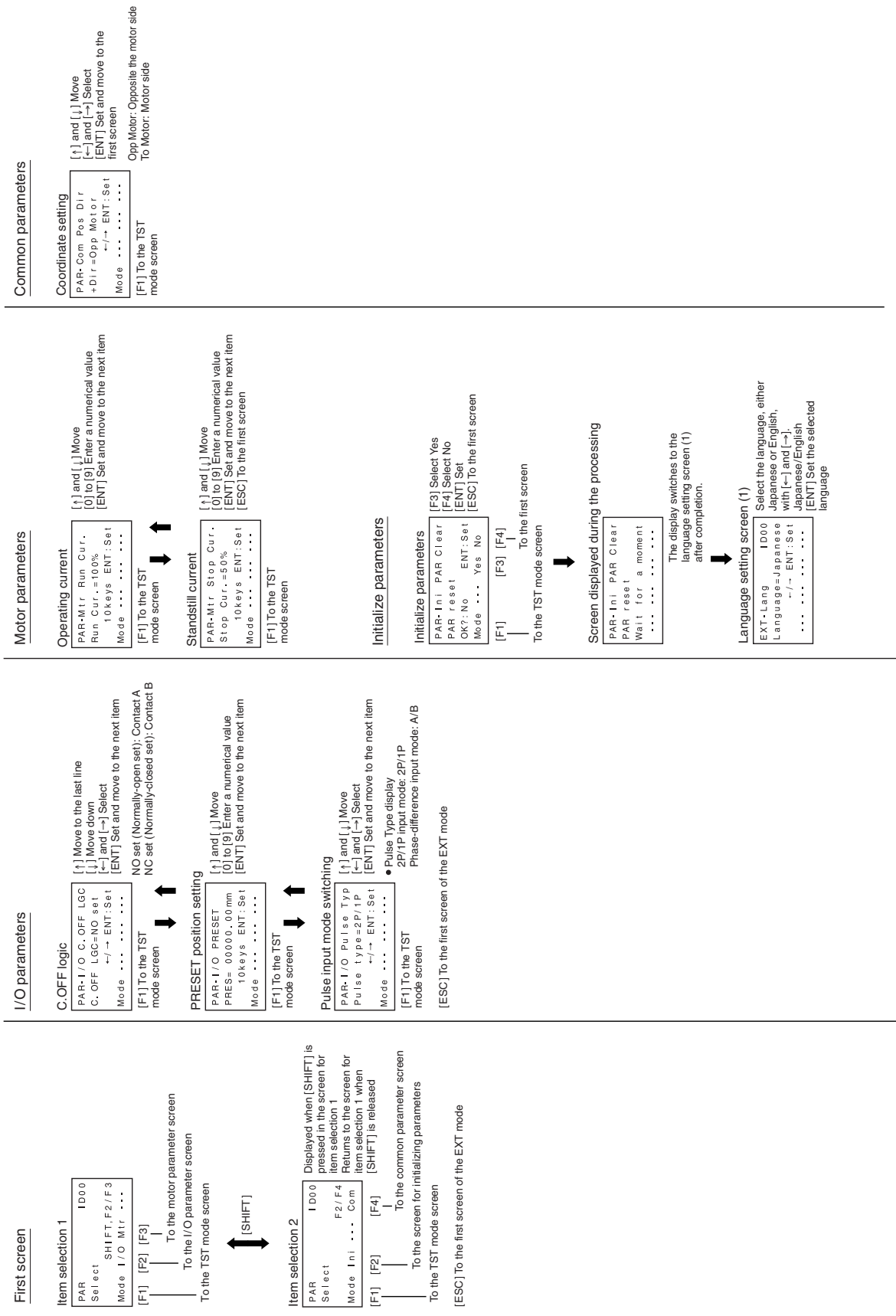
Language setting

The display language can be changed.

Current position display EXT ID00 Driver Mode Pos= 00000.00mm Mode Lang	Continue pressing [SHIFT]. Release [SHIFT] to return to the first screen.
[F1] To the PAR mode screen	Press [F4] while holding down [SHIFT]. Select the language, either Japanese or English, with [←] and [→]. [ENT] Set the selected language
Language setting EXT-Lang ID00 Language=Japanese --> ENT: Set Mode	[F1] To the PAR mode screen [ESC] To the first screen

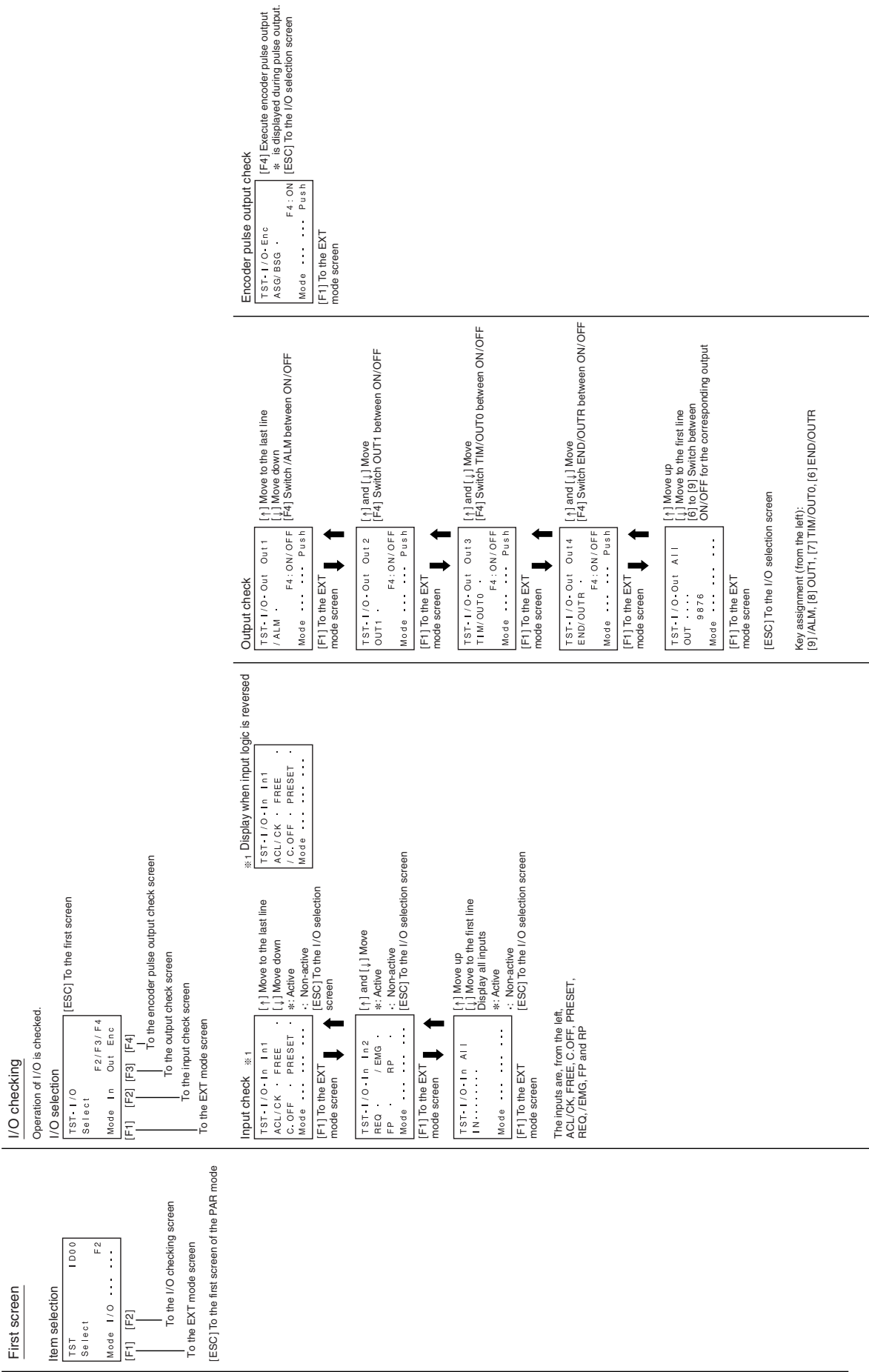
A.6 Parameter (PAR) Mode 1 Parameter Setting <Driver Mode> (English display)

It is possible to set parameters.
[] indicates the name of a key.



A.7 Test (TST) Mode I/O Checking <Driver Mode> (English display)

[] indicates the name of a key.



A.8 External (EXT) Mode Operation Monitor <Controller Mode> (Japanese display)

[] indicates the name of a key.

First screen

The status of I/O is indicated by * and .

Current position display

EXT I D00
Sel=No.00 Act=No.00
Pos= 00000.00mm
Mode I/O Al m Data

[F1] [F2] [F3] [F4]

↑ To the language setting screen
↑ To the data checking screen
↑ To the alarm monitor screen
↑ To the I/O monitor screen
↑ To the PRG mode screen

Display for return-to-home operation

EXT H o m e
Pos= 00000.00mm
Mode I/O Al m Data

[F1] [F2] [F3] [F4]

↑ To the data checking screen
↑ To the alarm monitor screen
↑ To the I/O monitor screen
↑ To the PRG mode screen

Display for push-motion operation

EXT I D00
Sel=No.00 Act=No.01
Pos= 00000.00mm
Mode I/O Al m Data

[F1] [F2] [F3] [F4]

↑ To the data checking screen
↑ To the alarm monitor screen
↑ To the I/O monitor screen
↑ To the PRG mode screen

Display for error occurrence

Error 10
Pos Over Flow
Exit ... ACL

[F1]

↑ Cancel alarm and return the backlight to green
↑ To the first screen of the EXT mode with the backlight still red
↑ [ESC] To the ID checking screen

I/O monitor

The status of I/O is indicated by * and .

*1: *2

EXT I/O I n1
START . ACL .
FREE . /STOP .
Mode

↑ [F1] To the PRG mode screen
↑ [F2] To the language setting screen
↑ [F3] To the data checking screen
↑ [F4] To the alarm monitor screen
↑ [ESC] To the first screen

*: Active
.: Non-active

*3

EXT I/O I n2
M=00 (Bit : 000000)
M5 . M4 . M3 .
Mode

↑ [F1] To the PRG mode screen
↑ [F2] To the language setting screen
↑ [F3] To the data checking screen
↑ [F4] To the alarm monitor screen
↑ [ESC] To the first screen

*: Active
.: Non-active

*4

EXT I/O I n3
M2 . M1 . M0 .
HOME . REQ .
Mode

↑ [F1] To the PRG mode screen
↑ [F2] To the language setting screen
↑ [F3] To the data checking screen
↑ [F4] To the alarm monitor screen
↑ [ESC] To the first screen

*: Active
.: Non-active

*5

EXT I/O I n4
FWD . RVS .
Mode

↑ [F1] To the PRG mode screen
↑ [F2] To the language setting screen
↑ [F3] To the data checking screen
↑ [F4] To the alarm monitor screen
↑ [ESC] To the first screen

*: Active
.: Non-active

*6

EXT I/O S-I N
+LS . -LS .
/HOME .
Mode

↑ [F1] To the PRG mode screen
↑ [F2] To the language setting screen
↑ [F3] To the data checking screen
↑ [F4] To the alarm monitor screen
↑ [ESC] To the first screen

*: Active
.: Non-active

*7

EXT I/O Out 1
ALM . MOVE .
Mode

↑ [F1] To the PRG mode screen
↑ [F2] To the language setting screen
↑ [F3] To the data checking screen
↑ [F4] To the alarm monitor screen
↑ [ESC] To the first screen

*: Active
.: Non-active

*8

EXT I/O Out 2
T-UP . AREA .
END .
Mode

↑ [F1] To the PRG mode screen
↑ [F2] To the language setting screen
↑ [F3] To the data checking screen
↑ [F4] To the alarm monitor screen
↑ [ESC] To the first screen

*: Active
.: Non-active

*9

EXT I/O Al I
IN
OUT ... S-IN ...
Mode

↑ [F1] To the PRG mode screen
↑ [F2] To the language setting screen
↑ [F3] To the data checking screen
↑ [F4] To the alarm monitor screen
↑ [ESC] To the first screen

*: Active
.: Non-active

I/O monitor

It is possible to display the current alarm and alarm history, as well as to cancel alarms.

Current alarm information

EXT Al m Now
Error 00
Mode Cl r 000000

[F1] [F2] [F3] [F4]

↑ Cancel alarm (and return the backlight to green.)
↑ To the alarm history screen
↑ To the clear alarm history screen
↑ To the PRG mode screen

Clear alarm history

EXT Al m Cl r
75-000000 0 000000
OK? : (Y) ENT: 000000

[F1] [F2] [F3] [F4]

↑ Yes: Clear and go to the first screen
↑ No: To the first screen
↑ To the PRG mode screen
↑ [ESC] To the current alarm information screen

Alarm history

EXT Al m 000000 000000
Error 01
LS 000000 000000

[F1] [F2] [F3] [F4]

↑ [F1] To the PRG mode screen
↑ [F2] To the language setting screen
↑ [F3] To the data checking screen
↑ [F4] To the alarm monitor screen
↑ [ESC] To the first screen

Language setting

The display language can be changed.

Current position display

EXT I D00
Sel=No.00 Act=No.00
Pos= 00000.00mm
Mode Lang

[F1] To the PRG mode screen

Language setting

EXT Lang
Lang=Japanese
Lang=English
Mode

[F1] To the PRG mode screen
↑ [ESC] To the first screen

Data checking

Operation data can be checked.

EXT Data No.01
Abs/I nc=I nc
Pos= 00000.00mm
Mode

[F1] To the PRG mode screen
↑ [F2] To the language setting screen
↑ [F3] To the data checking screen
↑ [F4] To the alarm monitor screen
↑ [ESC] To the first screen

*: Active
.: Non-active

*9

EXT Data No.01
75-000000 000000
OK? : (Y) ENT: 000000

[F1] To the PRG mode screen
↑ [F2] To the language setting screen
↑ [F3] To the data checking screen
↑ [F4] To the alarm monitor screen
↑ [ESC] To the first screen

*: Active
.: Non-active

Alarm monitor

It is possible to display the current alarm and alarm history, as well as to cancel alarms.

Current alarm information

EXT Al m Now
Error 00
Mode Cl r 000000

[F1] [F2] [F3] [F4]

↑ Cancel alarm (and return the backlight to green.)
↑ To the alarm history screen
↑ To the clear alarm history screen
↑ To the PRG mode screen

Clear alarm history

EXT Al m Cl r
75-000000 0 000000
OK? : (Y) ENT: 000000

[F1] [F2] [F3] [F4]

↑ Yes: Clear and go to the first screen
↑ No: To the first screen
↑ To the PRG mode screen
↑ [ESC] To the current alarm information screen

Alarm history

EXT Al m 000000 000000
Error 01
LS 000000 000000

[F1] [F2] [F3] [F4]

↑ [F1] To the PRG mode screen
↑ [F2] To the language setting screen
↑ [F3] To the data checking screen
↑ [F4] To the alarm monitor screen
↑ [ESC] To the first screen

Language setting

The display language can be changed.

Current position display

EXT I D00
Sel=No.00 Act=No.00
Pos= 00000.00mm
Mode Lang

[F1] To the PRG mode screen

Language setting

EXT Lang
Lang=Japanese
Lang=English
Mode

[F1] To the PRG mode screen
↑ [ESC] To the first screen

Data checking

Operation data can be checked.

EXT Data No.01
Abs/I nc=I nc
Pos= 00000.00mm
Mode

[F1] To the PRG mode screen
↑ [F2] To the language setting screen
↑ [F3] To the data checking screen
↑ [F4] To the alarm monitor screen
↑ [ESC] To the first screen

*: Active
.: Non-active

*9

EXT Data No.01
75-000000 000000
OK? : (Y) ENT: 000000

[F1] To the PRG mode screen
↑ [F2] To the language setting screen
↑ [F3] To the data checking screen
↑ [F4] To the alarm monitor screen
↑ [ESC] To the first screen

*: Active
.: Non-active

A.9 Program (PRG) Mode Operation Data Setting <Controller Mode> (Japanese display)

In this mode it is possible to enter and edit operation data, and to clear all operation data.
 [] indicates the name of a key.

First screen

No. selection 1
 PRG No. 1 0 0 0
 No.01 No. data
 ENT: 0 0 0 0
 Mode Clr Ins Del

[F1] [F2] [F3] [F4]
 To the data deletion screen
 To the data insertion screen
 To the data clear screen
 To the PAR mode screen

Select from No. 01 to No. 63
 [1]: No. + 10
 [2]: No. - 10
 [3]: No. + 1
 [4]: No. - 1
 Can also be selected using [0] to [9].

No. selection 2
 PRG No. 1 0 0 0
 No.01 No. data
 Mode Acl r

[F1] [F2]
 To the screen for clearing all operation data
 To the PAR mode screen

[ESC] To the first screen of the EXT mode

Data creation

Operation method
 PRG: No.01 0 0 0 0
 Abs./Inc: 0 0 0 0
 Mode

[F1] To the PAR mode screen
 [F3] To the remote teaching screen
 [F4] To the remote teaching screen

Position (numerical value entry)

PRG: No.01 1 0 0 0
 Pos: 0 0 0 0 0 0 0 0
 Mode

[F1] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

[F1] [F2] [F3] [F4]
 To the remote teaching screen
 To the remote teaching screen

Data clear, insertion and deletion

Data clear
 PRG: Cl r No.01
 Pos: 0 0 0 0 0 0 0 0
 Mode

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

All operation data clear

All operation data clear
 PRG: Acl r
 Mode

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

[F1] [F3] [F4]
 To the first screen
 To the first screen

A.10.1 Parameter (PAR) Mode 1 Parameter Setting <Controller Mode> (Japanese display)

It is possible to set and edit parameters, and to initialize all data.
[] indicates the name of a key.

First screen

No. selection 1
PAR 1000
F2/F3/F4
Mode I/O Mtr Hmp

[F1] [F2] [F3] [F4]
To the I/O parameter screen
To the motor parameter screen
To the home parameter screen
To the TST mode screen



No. selection 2 See PAR mode 2
PAR 1000
F2/F3/F4
Mode I n t Spd Com
[F1] [F2] [F3] [F4]
Displayed when [SHIFT] is pressed in the screen for item selection 1
Returns to the screen for item selection 1 when [SHIFT] is released

[F1] [F2] [F3] [F4]
To the common parameter screen
To the speed parameter screen
To the screen for initializing parameters
To the TST mode screen

[ESC] To the first screen of the PRG mode

I/O parameters

Stop action
PAR- I/O STOP: 0
LS: 0
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

Stop logic
PAR- I/O STOP: 0
LS: 0
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

HOME/PRESET switching

PAR- I/O HOI/PR: 1
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

PRESET position setting

PAR- I/O PRESET: 0
PRES= 0.0000, 0.00mm
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

LS detection enable/disable

PAR- I/O LS: 0
LS: 0
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

LS logic

PAR- I/O LSL: 0
LSL: 0
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

Motor parameters

Operating current
PAR- Mtr Cur: 100.0
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

Standstill current

PAR- Mtr Cur: 50.0
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

Home parameters

Return direction
PAR- Hmp: 0
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

Home offset

PAR- Hmp: 0.0000, 0.00mm
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

Return mode

PAR- Hmp: 0
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

Starting speed of return

PAR- Hmp: 0.0000, 0.00mm/s
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

Operating speed of return

PAR- Hmp: 0.0000, 0.00mm/s
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

Motor parameters

Operating current
PAR- Mtr Cur: 100.0
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

Standstill current

PAR- Mtr Cur: 50.0
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

HOME logic

PAR- I/O HOME: 0
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

Overtravel action

PAR- I/O OverTrav: 0
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

HOME logic

PAR- I/O HOME: 0
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

Overtravel action

PAR- I/O OverTrav: 0
Mode I/O Mtr Hmp

[F1] To the TST mode screen
[F2] To the TST mode screen
[F3] To the TST mode screen
[F4] To the TST mode screen

It is possible to set and edit parameters, and to initialize all data.
] indicates the name of a key.

No. selection 1 See PAR Mode 1

[F1] [F2] [F3] [F4]

— To the home parameter screen

— To the motor parameter screen

— To the I/O parameter screen

— To the TST mode screen

No. selection 2

[F1] [F2] [F3] [F4] [SHIFT] is released

—————|—————|—————|—————|—————|

To the TST mode screen

To the screen for initializing parameters

To the speed parameter screen

To the common parameter screen

EXT • Lang	ID00
Language=Japanese	
←/→	ENT : Set
...	...
...	...
...	...

Select the language, either Japanese or English, with [←] and [→].
Japanese/English
[ENT] Set the selected language

Initialize parameters

[F1] ————— To the TST mode screen
[F3] [F4] ————— To the first screen

PAR-Ini PAR クリア
シヨキカチュウ デース
シハ-ラク オマチクタ-サイ

Language setting screen (1)

EXT · Lang	ID00
Language=Japanese	
← / →	ENT : Set
...	...
...	...

Select the language, either Japanese or English, with [←] and [→].

[ENT] Set the selected language

Starting speed

Acceleration

[F1] To the TST mode screen

next item

Acc = 00000.45m/ s2	[0] to [9] Enter a numerical value
テンキ - ENT: カクティ	[ENT] Set and move to the next item
Mode	

mode screen

Deceleration

↑ ↓

テンキ	ENT	： カクティ
Mode	...	...

Common operating speed

[F1] To the TST

Mode	...	...	...	...
------	-----	-----	-----	-----

アノキ・ ENI : カグアノ

[ENT] Set and return to the starting-speed setting screen

[ESC] To the first screen

Softlimit

[F1] To the TST mode screen

PAR-Com ヴットリミット
Lim+= 00501.00mm
テンキ- ENT: カクティ

[F1] To the TST mode screen

PAR-Com ヲフトリミット・
Lim. = 0.0001, 0.0 mm
テンキ・ ENT: カクティ

Area 1

エリヤ1 = 00000.00mm
 テンキ・ ENT : カクティ
 Mode

mode screen

PAR- Com Iリヲ2
Iリヲ2 = 0000. 00mm
テンキ- ENT: カクテイ
Mode

↓ [F1] to the |S| mode screen

To the coordinate setting screen

A.11 Test (TST) Mode Manual Drive and I/O Checking <Controller mode> (Japanese display)

[] Indicates the name of a key.

First screen

Item selection

TST 3777 7777 1000
F2/F3/F4
Mode I/O Mnu 7777

[F1] [F2] [F3] [F4]

To the positioning operation screen
To the manual operation screen
To the I/O checking screen
To the EXT mode screen

[ESC] To the first screen of the PAR mode

I/O checking

Operation of I/O is checked.

I/O selection

TST-I/O 3777 7777
F2/F3/F4
Mode In Out Enc

[F1] [F2] [F3] [F4]

To the first screen
To the encoder pulse output check screen
To the output check screen
To the input check screen
To the EXT mode screen

Input check ※1

TST-I/O-In In1
START · ACL/CK ·
FREE · STOP ·
Mode · · · · ·

[F1] To the EXT mode screen

※2

TST-I/O-In In2
M=00 (Bit: 0000000)
M5 · M4 · M3 ·
Mode · · · · ·

[F1] To the EXT mode screen

※3

TST-I/O-In In3
M2 · M1 · M0 ·
HOME · REQ ·
Mode · · · · ·

[F1] To the EXT mode screen

※4

TST-I/O-In In4
FWD · RVS ·
Mode · · · · ·

[F1] To the EXT mode screen

※5

TST-I/O-In In S-IN
+LS · -LS ·
HOME ·
Mode · · · · ·

[F1] To the EXT mode screen

※6

TST-I/O-In In All
S-IN · · · · ·
Mode · · · · ·

[F1] To the EXT mode screen

The inputs are from the left.
START, ACL/CK, FREE, STOP, M5, M4, M3, M2, M1, M0,
HOME/PRESET, REQ, FWD, RVS and HOME.

The S-IN are from the left.
+LS, -LS and HOME.

Encoder pulse output check

TST-I/O-Out Out1
ASG/BSG · F4: ON
Mode · · · · · Push

[F1] To the EXT mode screen

※7

TST-I/O-Out Out1
/ALM · F4: ON/OFF
Mode · · · · · Push

[F1] To the EXT mode screen

※8

TST-I/O-Out Out2
MOVE · F4: ON/OFF
Mode · · · · · Push

[F1] To the EXT mode screen

※9

TST-I/O-Out Out3
T-UP/OUT1 · F4: ON/OFF
Mode · · · · · Push

[F1] To the EXT mode screen

※10

TST-I/O-Out Out4
AREA/OUT0 · F4: ON/OFF
Mode · · · · · Push

[F1] To the EXT mode screen

※11

TST-I/O-Out Out5
END/OUTR · F4: ON/OFF
Mode · · · · · Push

[F1] To the EXT mode screen

※12

TST-I/O-Out All
OUT · · · · ·
98765
Mode · · · · ·

[F1] To the EXT mode screen

※13

[ESC] To the I/O selection screen

Key assignment (from the left):
[9] /ALM, [8] MOVE, [7] T-UP/OUT1,
[6] AREA/OUT0, [5] END/OUTR

Manual operation

Operate the slider/cylinder using [+/-] and [→].

TST-Mnu 7777 7777
Pos= 00000.00mm
+/-, F3/F4
Mode · · · · · PRE HOME

[F1] [F3] [F4]

Execute return to mechanical home operation
Execute preset operation
To the EXT mode screen

Press [←] to move to the motor side at low speed.
Press [→] to move to the counter-motor side at low speed.
The operating direction is the default setting.

Press [SHIFT] during operation to accelerate to high speed.
Release [SHIFT] to decelerate to low speed.

Press [ESC] to exit and return to the first screen.

Positioning operation

Perform the slider/cylinder positioning operation.

TST-7777 No.01
Pos= 00000.00mm
7777 START/F3/F4
Mode · · · · · PRE HOME

[F1] [F3] [F4]

Execute return to mechanical home operation
Execute preset operation
To the EXT mode screen

Select operation data number to be executed
[1]: No. +10
[2]: No. -10
[3]: No. +1
[4]: No. -1
Can also be selected using [0] to [9]

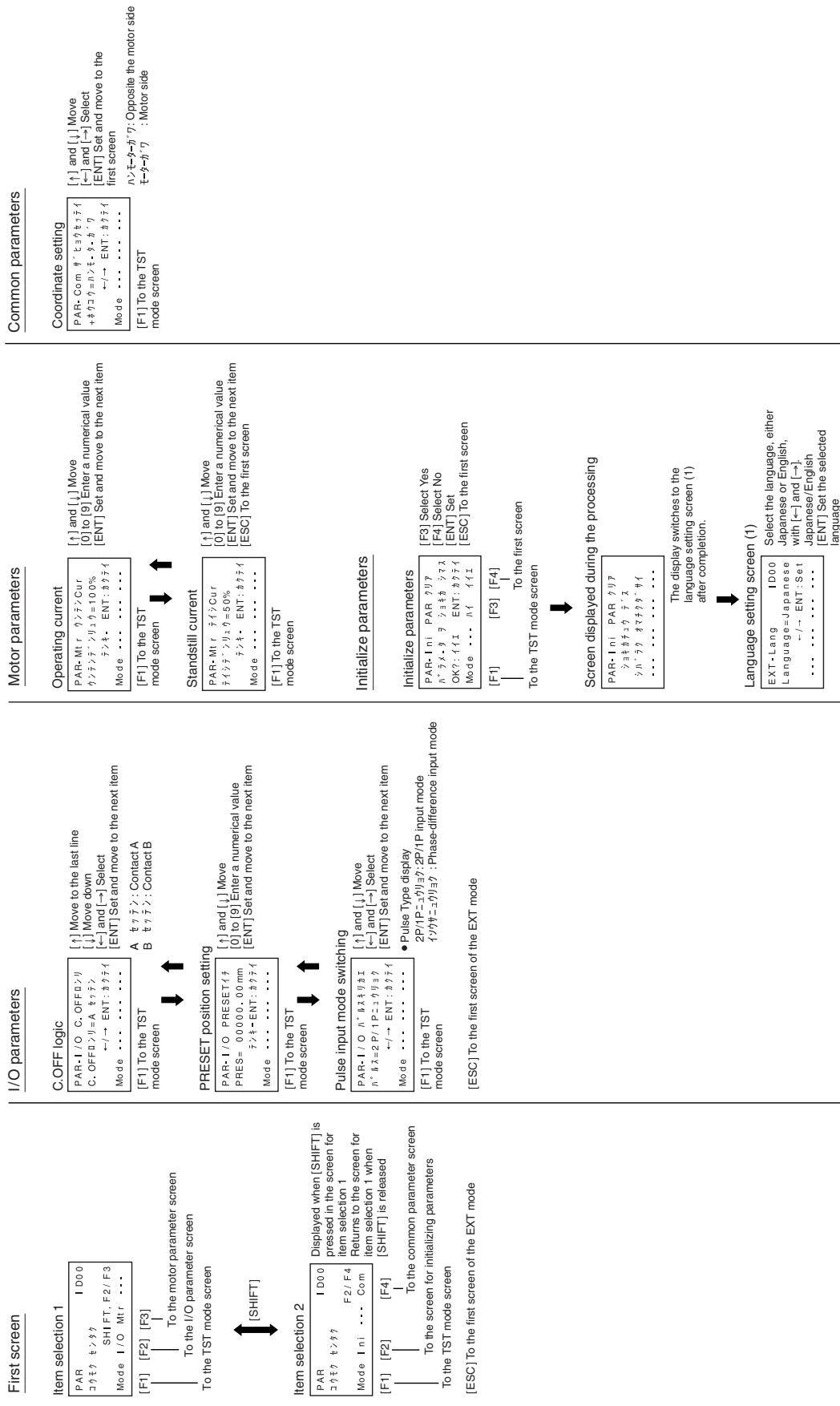
Press [START] to start the positioning operation.
Press [STOP] to stop the operation in the middle.

Press [ESC] to exit and return to the first screen

Pos= 00000.00 mm blinks during push-motion operation.
The HOME display blinks during mechanical home operation.

A.13 Parameter (PAR) Mode 1 Parameter Setting <Driver Mode> (Japanese display)

It is possible to set parameters.
[] indicates the name of a key.



A.14 Test (TST) Mode I/O Checking <Driver Mode> (Japanese display)

[] indicates the name of a key.

First screen

Item selection

TST	1 0 0 0
コリキリ ちぎり	
Mode I/O	...
	F2

[F1] [F2]

To the I/O checking screen

To the EXT mode screen

[ESC] To the first screen of the PAR mode

I/O checking

Operation of I/O is checked.

I/O selection [ESC] To the first screen

TST-I/O	F2/F3/F4
コリキリ ちぎり	
Mode In Out Enc	

[F1] [F2] [F3] [F4]

To the encoder pulse output check screen

To the output check screen

To the input check screen

To the EXT mode screen

Input check ※1 Display when input logic is reversed

TST-I/O-In In1	In1
ACL/CK	FREE
C.OFF	PRESET
Mode	...

[F1] To the EXT mode screen

[ESC] To the I/O selection screen

TST-I/O-In In2	In2
REQ	/ENG
FP	RP
Mode	...

[F1] To the EXT mode screen

[ESC] To the I/O selection screen

TST-I/O-In All	All
IN	...
Mode	...

[F1] To the EXT mode screen

[ESC] To the I/O selection screen

The inputs are from the left
ACL/CK FREE C.OFF PRESET,
REQ/ENG FP and RP

Output check

TST-I/O-Out Out1	Out1
/ALM	F4: ON/OFF
Mode	...

[F1] To the EXT mode screen

[ESC] To the I/O selection screen

TST-I/O-Out Out2	Out2
OUT1	F4: ON/OFF
Mode	...

[F1] To the EXT mode screen

[ESC] To the I/O selection screen

TST-I/O-Out Out3	Out3
TIM/OUT0	F4: ON/OFF
Mode	...

[F1] To the EXT mode screen

[ESC] To the I/O selection screen

TST-I/O-Out Out4	Out4
END/OUTR	F4: ON/OFF
Mode	...

[F1] To the EXT mode screen

[ESC] To the I/O selection screen

TST-I/O-Out All	All
OUT	...
Mode	...

[F1] To the EXT mode screen

[ESC] To the I/O selection screen

Key assignment (from the left):
[9]/ALM, [8] OUT1, [7] TIM/OUT0, [6] END/OUTR

Encoder pulse output check

TST-I/O-Enc	
ASG/BSG	F4: ON
Mode	...

[F1] To the EXT mode screen

[ESC] To the I/O selection screen

TST-I/O-Enc	
ASG/BSG	F4: ON
Mode	...

[F1] To the EXT mode screen

[ESC] To the I/O selection screen

TST-I/O-Enc	
ASG/BSG	F4: ON
Mode	...

[F1] To the EXT mode screen

[ESC] To the I/O selection screen

TST-I/O-Enc	
ASG/BSG	F4: ON
Mode	...

[F1] To the EXT mode screen

[ESC] To the I/O selection screen

TST-I/O-Enc	
ASG/BSG	F4: ON
Mode	...

[F1] To the EXT mode screen

[ESC] To the I/O selection screen

Key assignment (from the left):
[9]/ALM, [8] OUT1, [7] TIM/OUT0, [6] END/OUTR

• Please contact your nearest ORIENTAL MOTOR office for further information.

ORIENTAL MOTOR U.S.A. CORP.

Technical Support Line Tel: (800) 468-3982
Available from 7:30 AM to 5:00 PM, P.S.T.
E-mail: techsupport@orientalmotor.com
www.orientalmotor.com

ORIENTAL MOTOR (EUROPA) GmbH

Headquarters and Düsseldorf Office
Tel: 0211-5206700 Fax: 0211-52067099
Munich Office
Tel: 08131-59880 Fax: 08131-598888
Hamburg Office
Tel: 040-76910443 Fax: 040-76910445

ORIENTAL MOTOR (UK) LTD.

Tel: 01252-519809 Fax: 01252-547086

ORIENTAL MOTOR (FRANCE) SARL

Tel: 01 47 86 97 50 Fax: 01 47 82 45 16

ORIENTAL MOTOR ITALIA s.r.l.

Tel: 02-3390541 Fax: 02-33910033

TAIWAN ORIENTAL MOTOR CO., LTD.

Tel: (02) 8228-0707 Fax: (02) 8228-0708

SINGAPORE ORIENTAL MOTOR PTE LTD.

Tel: (6745) 7344 Fax: (6745) 9405

ORIENTAL MOTOR (MALAYSIA) SDN BHD

Tel: (03) 79545778 Fax: (03) 79541528

**INA OM LTD.
KOREA**

Tel: (032) 822-2042~3 Fax: (032) 819-8745

ORIENTAL MOTOR CO., LTD.

Headquarters Tokyo, Japan
Tel: (03) 3835-0684 Fax: (03) 3835-1890