FUJITEC

INSTRUCTION MANUAL

Controller

DO-1390BX Ver. 1.5

Thank you very much for your purchasing. Controller (DO-1390BX)
Please study this instruction manual for the correct use of the unit and preserve it so that you may refer to it when you come across anything unfamiliar.

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1. Outline

Controller of a automatic screwfastener driver (MO-1330A～D, MO-1350A・1350E) driver model change and the output 100 fractions, voltage and torgue lever of desplay it with 16 kind of torque lever and change it from the out. When an overcurrent spreads by the sortstop of the motor, an overcurrent protection function protects a work controller.

2. Specifications

【Name】

Name	:	Screw controller (Digital set multipoint pre-set method)

【Driver connected】

Part NO.	:	MO－1330A～D・MO－1350A・1350E

【Driver model display function】

Driver model display	:	Didigatl indication (7 segments) 3 figure indication(Output display and sharing)

【Driver select function】

Pre-set(PRI.)No.display	:	Didigatl indication (7 segments) 1 figure indication
Pre-set(PRI.)No.input	:	It input with the SEL button,and F is selected from NO.0. (F d. from NO.0 in addition. Return to 0 when pushing again.)
Setup date display	:	Didigatl indication (7 segments) 3 figure indication(Output display and sharing)
Set input	:	△ (UP)・▽ (DOWN) input button (model indication change push it 33A～D(1330A～D)・35A(1350A)・35E(1350E) if the model of the connection model is different from an input , a driver but, be damaged.

【Output indcation function】

【Output indcation	:	Didigatl indication (7 segments) 3 figure indication (Driver model indication and common use) The torque conversion is instruction manual P-7 for exclusive use of the driver

【Pre-set torque function】

Pre-set(PRI.)No.display	:	Didigatl indication (7 segments) 1 figure indication
Pre-set(PRI.)No.input	:	It input with the SEL button,and F is selected from NO.0. (F d. from NO.0 in addition. Return to 0 when pushing again.)
Setup date display	:	Didigatl indication (7 segments) 3 figure indication (Driver model indication and common use)
Set input	:	△ (UP)・▽ (DOWN)Button the voltage(with 23V-76V variableness 1V unit) or variableness at a precentage (1% unit) Change the output mode by indication of next 『d.』 of NO. 0～F to pre-set with SEL key.

3figure display	Function
001	Torque indication output
002	Percentage indication output
003	Output indication output(23V～76V)

【Pre-set torque change input】

Input singal	:	Binary(BCD) signal (dry point of contact) pre-set NO.0-F is input.
Input capacity	:	DC12～24V 12mA (One input)

【Start signal input】

Input signal	:	Input by dry point of contact
Input capacity	:	DC24V 12mA

【Completion signal output】

Output signal	:	Dry point of contact (a point of contact and b point of contact) output.
Output capacity	:	AC100V 0. 1A

【Driver output】

Output signal	:	DC23～76V **＊Attention** Driver other than MO-1330,MO-1350 cannot use it.

【Primary side power supply】

Rating input voltage	:	AC100V
Number of the aspects	:	Signal phase
Frequency	:	50／60Hz
Voltage regulation	:	±10%
Consumption voltage	:	Presumption 11VA (Excluding the driver))

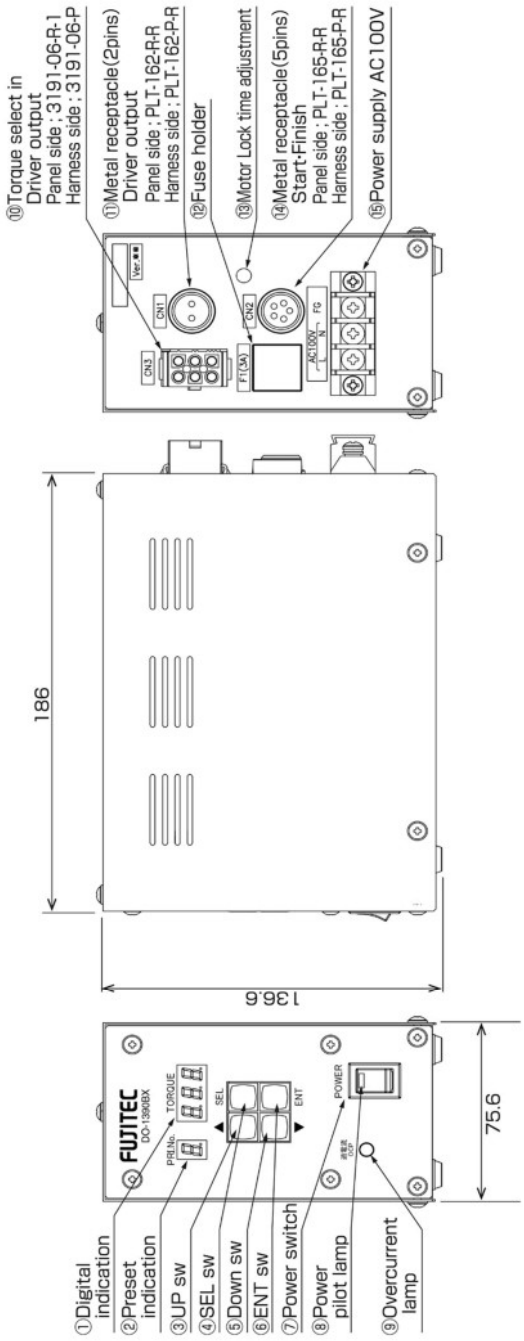
【Externals specification】

External form dimensions	:	Width 75. 6mm Depth 186mm Height 136. 6mm (Screw head and the rubber foot are contained.) (It does not contain an umbo)
Weight	:	Presumption 1. 5kg
Use environment temperature	:	0～40℃ Dewfall
Colored painting	:	Cream color (2. 5Y 9/2)

3. Explanation operation

【Explanation operation】

Externals chart



4. Explanation operation panel

【External explanation】

①	Digital indication departmer	:	Display to torque.
②	Display NO.pre-set	:	Display select NO.to pre-set digitally now. Display to pre-set NO..
③	△ SW	:	Driver select and the torque use it to set pre-set it.
④	SEL SW	:	Select to pre-set NO. It is moved F more sequentially to d.by NO. 0 whenever push it do it and return to 0 when push it once again. Whenevr continue pushing it or push it, a set point goes up.
⑤	▽ SW	:	Driver select and the torque to set pre-seting it. Whenever continue pushing it or push it, a set point falls down.
⑥	ENT SW	:	Establish driver select and a set point to pre-set of the torque. Use it to do it.
⑦	Power supply SW	:	Power supply ON/OFF.
⑧	Power lamp	:	LED turns on when ON. Power supply.
⑨	Overcurrent indication	:	An overcurrent spreads in the drivers the output When I cut it off,overcurrent OCP turns on when overcurrent OCP lamp turns on power supply OFF turn on power supply after three seconds or more.
⑩	Pre-set torque and change input	:	Connect a torque an outside change input signal of pre-seting it.
⑪	Driver output	:	Connect a driver cord. **＊Attention** Please do not connect drivers other than MO-1330A～D, MO-1350A, 1350E
⑫	Fuse holder	:	Protection of the fuse.(Exchangeable) **＊Attention** Please do not put it excluding the fuse of 3A.
⑬	Adjustment at motor lock time	:	Can it tighten and the following maintenance officer be adjusted.
⑭	Start/completion input output	:	Connect a start input signal and completion output signal.
⑮	Power supply	:	AC100V 50/60Hz Connect a power supply **＊Attention** Please do not connect power supplies other than AC100V 50/60Hz.

5. Date input

① On power

Initialization	
PRI.No.	TORQUE
0	33A

② 「SEL」 repeats with the button←

Initialization	
PRI.No.	TORQUE
0～F	33A
d.	0 0 1

「SEL」repeats with the button.
Channel is 16 in all.
16 kinds of memories of the torque and the driver can be done.
△▽ driver selection →「ENT」 button.

PR.No.	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f	d.
TORQUE	【1】Torque・driver setting																【2】⇔

【1】Driver torque value

TORQUE	Torque value
33A	0.73～3.20
33B	0.48～2.33
33C	0.16～0.90
33D	0.27～1.55
35A	1.19～4.80
35E	1.50～6.70

【2】 ⇔Tightening torque function can be selected

TORQUE	Function
0 0 1	Driver torque display
0 0 2	Parcent displya(0%～100%)
0 0 3	Output voltage display(23V～76V)

③ △▽ driver selection

TORQUE	Driver model
33A	MO-1330A
33B	MO-1330B
33C	MO-1330C
33D	MO-1330D
35A	MO-1350A
35E	MO-1350E

④ Torque is display with 「ENT」→Customer specification torque is set △▽.

Troque value
0.73～3.20
0.48～2.33
0.16～0.90
0.27～1.55
1.19～4.80
1.50～6.70

⑤ Torque selection is completed with ENT.

Returns ②

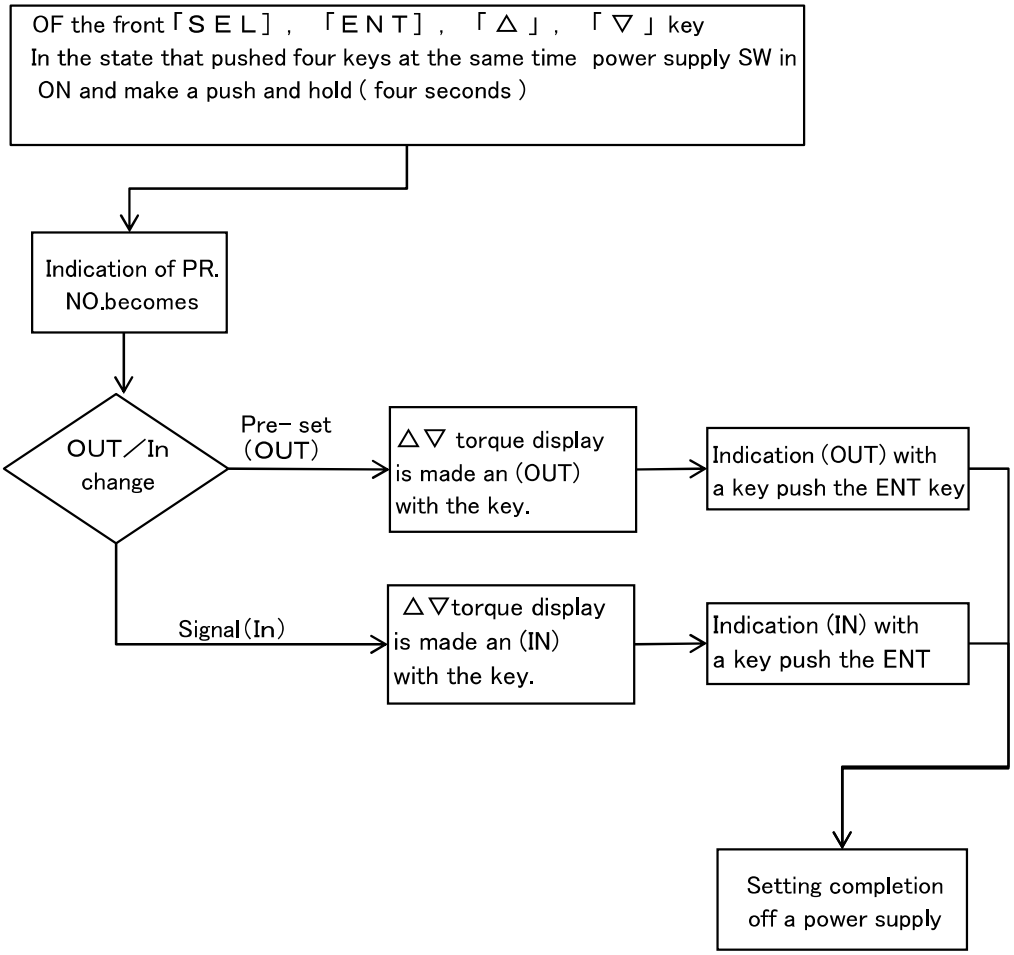
⑥ Shift to the following PRI:←

⑦ d. 1 Setting PR.No. TORQUE

a)001→ENT→	0	33A	→ENT	Torque display.	※ The torque display figure is changed by the driver seliction.
b)002→ENT→	0	33A	→ENT	Percent display. △▽000～100%	
c)003→ENT→	0	33A	→ENT	Voltage display. △▽23～76(V)	

6. Movement flow

6-1. OUT(Pre-et)／IN(Only)Switch of specification



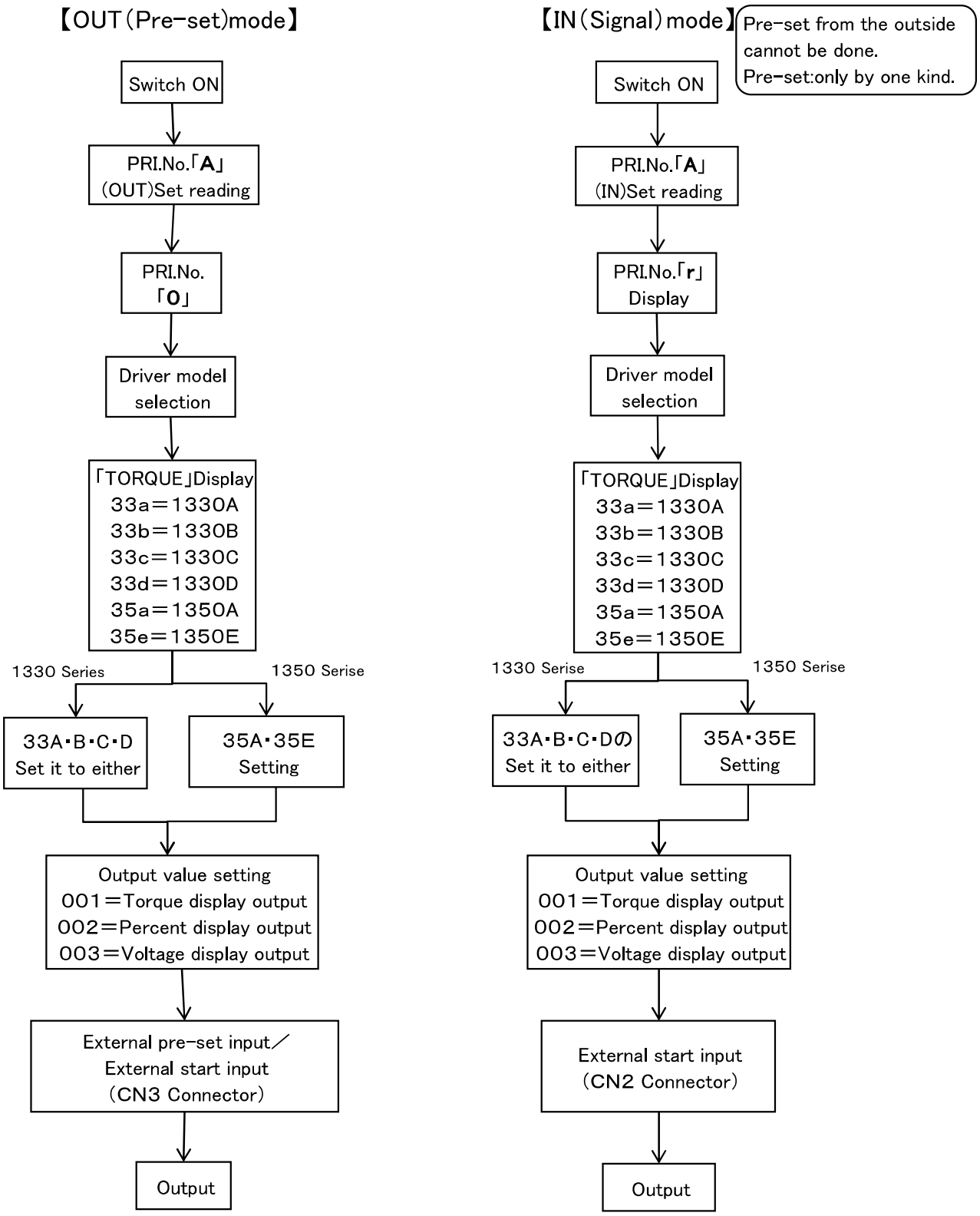
＊Change use or the use only to pre-set by theoperation mentioned above, and it is memorized by a controller.

＊When you change it, please repeat the operation mentioned above again.

＊Push ENT at PRNO.A setting change time and set it and am settled. Please switch it off by all means after doing it.

＊Please set fix and do the following change pushing ENT at the setting change after it does.

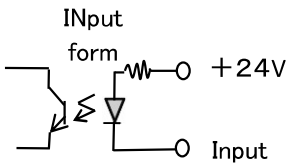
6-2. OUT(Pse-set)／IN(Only)movement setting



7. External connection

1.Circuit diagram start input CN3

【Torgue pre-set switch input】



CN3 (Molex)

Signal name	1391P PIN No.
DC24V input	1
Torque pre-set switch input (16 kidns of torque selection)	2
	3
	4
	5
Start input	6

Signal name		
DC24V output		
1	OUTPUT BCD	PLC
2		
4		
8		
Start		

【CN1】

CN1(2P)

Signal name	PIN No.
Moter output	1
	2

Moter 1330A・1350

【CN2】

CN2(5P)

Signal name		1391P PIN No.
Start input		1
		5
Completion signal	COM	2
	a	3
	b	4

Signal name	
0V output	PLC
input	
input	

2.Circuit diagram start input CN2

【Torgue pre-set switch input】

CN3 (Molex)

Signal name	1391P PIN No.
DC24V input	1
Torque pre-set switch input	2
	3
	4
	5
Start input	6

Signal name		
DC24V output		
1	OBUTCD	PLC
2		
4		
8		

【CN1】

CN1(2P)

Signal name	PIN No.	
Moter output	1	→ Moter 1330A・1350
	2	→ Moter 1330A・1350

【CN2】

CN2(5P)

Singal name		1391P PIN No.	Singal name	
Start input		1		
		5	← Relay	
Completion signal	COM	2	→ 0V output	PLC
	a	3	→ input	
	b	4	→ input	

8. Instructions maintenance check

・Please do not take apart or do not remodel the device.
It causes the breakdown and the electric shock.

・Please do not input it excluding the regulated input power-supply voltage the device.It causes the breakdown.

・Please work after turning off power without fail for the electric shock prevention and confirming the voltage when the connector and the output relation, etc.are felt by the device.

・When the device is built into hearing etc. and the wiring work is done.
Please note that a metallic thing and no garbage and no wiring rubbish,etc.enter the inside.

【Asking】

Electronic parts used for the controller have longevity.
Especially internal electrobath is resolvoed to the electrolytic capacitor mounted on the printed wiring board.
The electric circuit is [doraiappu] (Evaporate by the leak etc.) and is recommended, and the exchange of subsstrates that will destory corrosion or electronic parts will recommend seven years from five years and we recommend the standard the exchange.

Item No.	
Dated purchased	年　　月　　日
Dealer	TEL:

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