IAI
Quality and Innovation

Touch Panel Teaching Pendant TB-02

www.IntelligentActuator.com

With the 7-inch touch panel equipped, it is easier to see, and with new functions equipped, it is easier to use. Anyone can operate it easily.

TB-02-SC-SWR

TB-02-SC

Features

1 By equipping a 7" full color touch panel, the buttons and letters became easier to see, and operability improved.

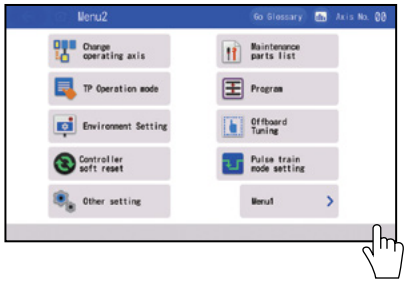
2 Ones used for program controllers have functions equivalent to the previous model. Ones used for the position controllers are equipped with new functions such as a guide function, and it is easy to set each model with the interactive method.

3 It can be used for both position controllers and program controllers. (Excludes models prior to RCP2 for the CON series and models prior to SEL-E/G)

4 For the standard specification, a thinness of 25mm has been realized.

5 Saving program/data into SD memory card.

6 Screen shot function convenient for procedure manual creation and recording conditions has been equipped.



Pressing and holding the bottom right section of the screen allows you to take screen shots.

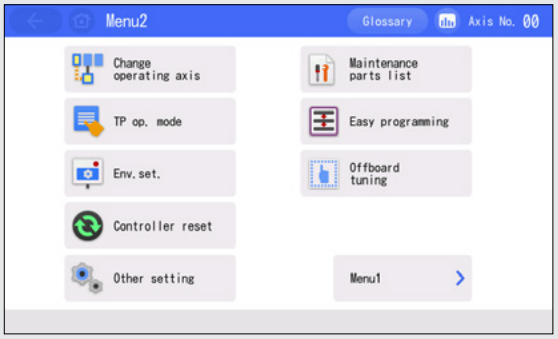
Various new functions for easy operation and enhanced support functions

(1~13 are functions for position controllers)

1	Main Menu	A menu screen that is easy to select visually with the use of icons.
2	Position Editing Guide	A function that guides through position data setting method using an interactive method.
3	I/O Control Guide	A function that guides through the I/O operation method of the position controller using an interactive method.
4	Simple Program Setting	A function that the operation method, position, and speed can be input using an interactive method.
5	Trouble Shooting	A function that displays detailed alarm information when trouble occurs and the steps to deal with the trouble using an interactive method.
6	Maintenance Parts List	A function that displays the time for regular maintenance and the maintenance parts list for parts exchange at the time of malfunction.
7	Pulse-train Control Setting	A function that makes input easy by putting together the setting of pulse-train control related parameters on a special screen.
8	Glossary of Terms	A function that displays the explanation of terms in the catalog and terms related to position controller operation.
9	Gateway Setting/Monitoring	A function for setting and monitoring the gateway unit in a gateway system for MCON/MSEP-C/RCP6S.
10	Simple Program Function	A function for performing easy program operation such as repeating position and setting stopping time.
11	Off-board Tuning	A function for calculating the setting of the optimal control parameter (each type of gain) and cycle time by inputting the operation conditions.
12	Servo Monitoring	A monitoring function to check the actual operation condition with displays of waveforms.
13	Startup Screen Setting	A function for selecting the startup screen and hiding the guide function icon of the main menu.
14	Teaching Update	A function that lets you update software.
15	Screen shot	A function for saving a bmp file of the screen shot into SD card by pressing and holding the bottom right section of the screen.
16	Large Monitor	By equipping a 7" full color touch panel, the buttons and letters became easier to see, and operability improved.
17	Multi-language Compatible	Compatible with Japanese, English, and Chinese.

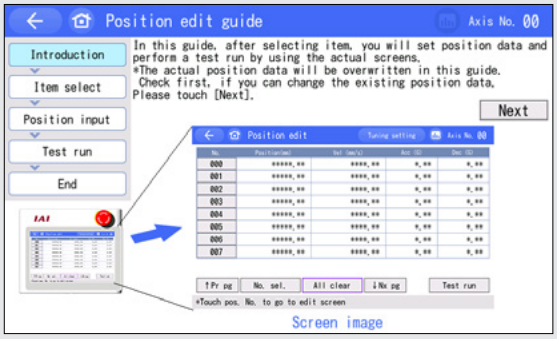
1 Main Menu

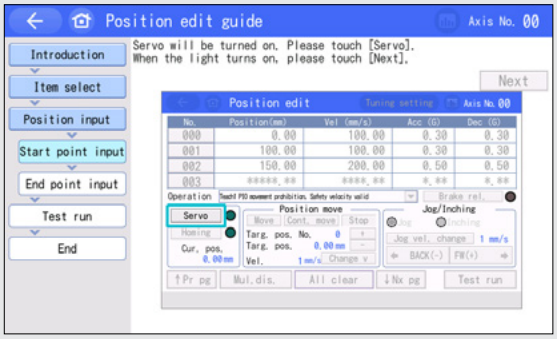
By using an icon for each menu, we made menu selection easier.



2 Position Editing Guide

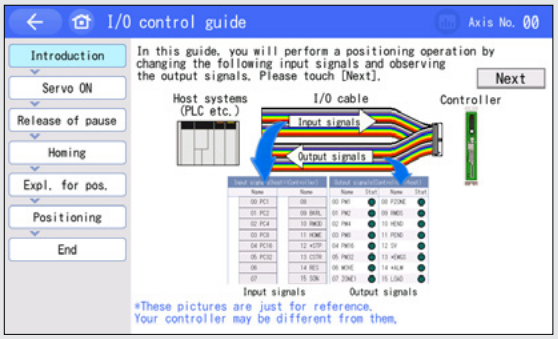
A function that guides through position data setting method using an interactive method.

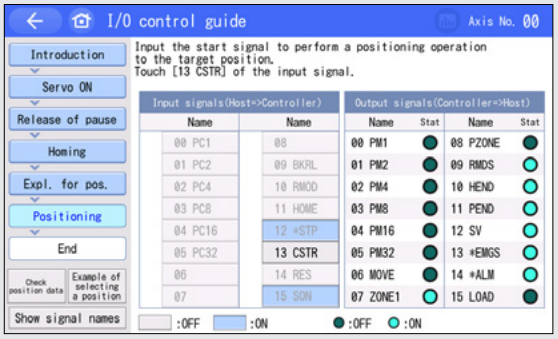




3 I/O Control Guide

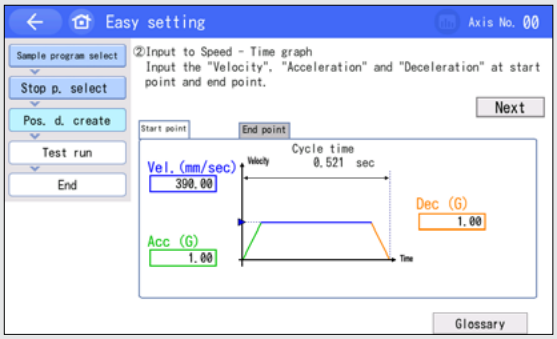
A function that guides through the I/O operation method of the position controller using an interactive method.

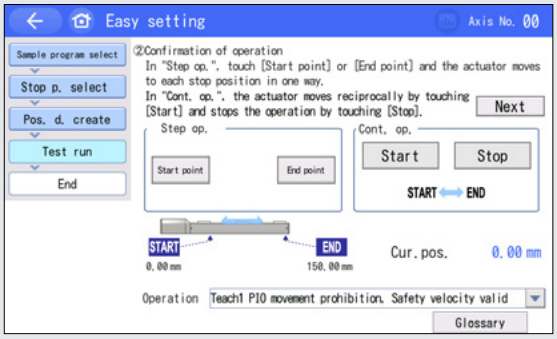




4 Simple Program Setting

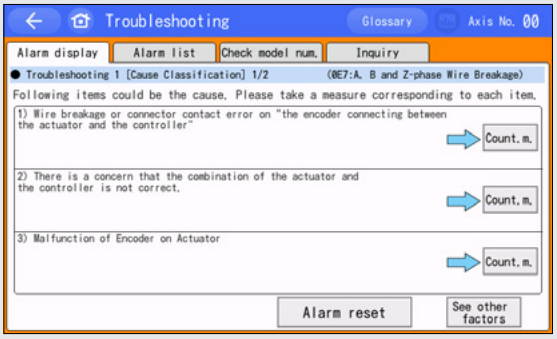
This is a guide screen that allows easy position setting for even those operating for the rst time.

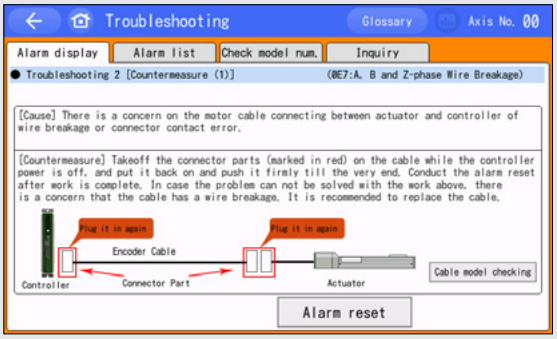




5 Trouble Shooting

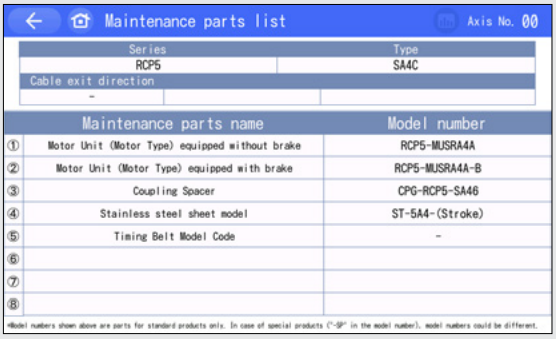
Simply selecting YES/NO for trouble circumstances allows it to guide through the steps for dealing with the problem.

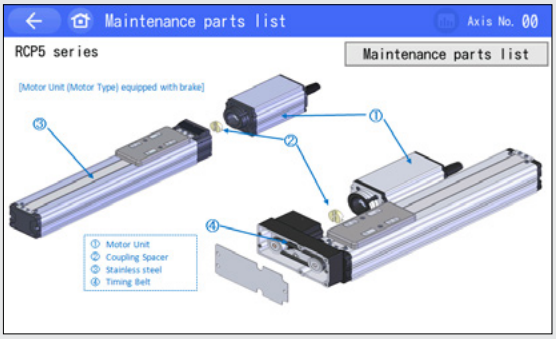




6 Maintenance Parts List

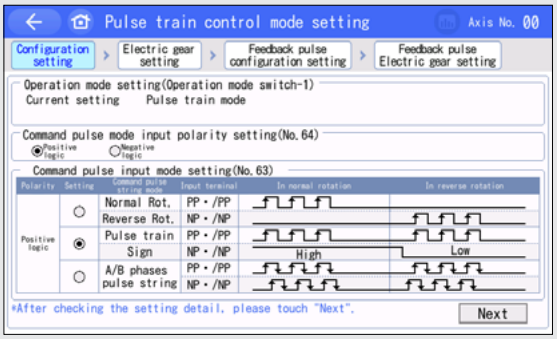
The maintenance parts list can be checked by inputting the model.

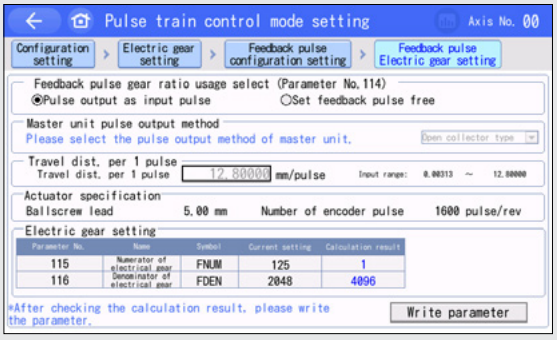




7 Pulse-train Control Setting

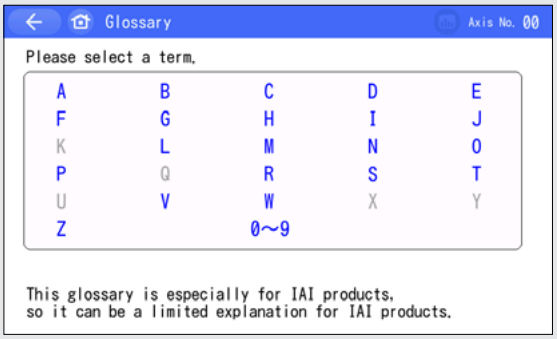
A function that makes input easy by putting the setting of pulse-train control related parameters on a special screen.

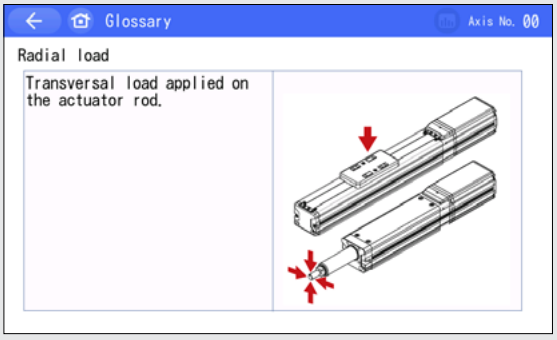




8 Explanation of Terms

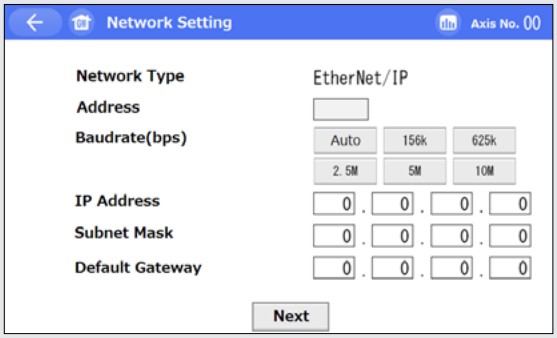
A function that displays the explanation of terms in the catalog and terms related to position controller operation.

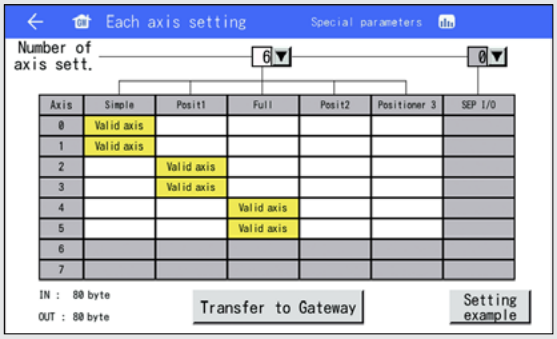




9 Gateway Setting/Monitoring

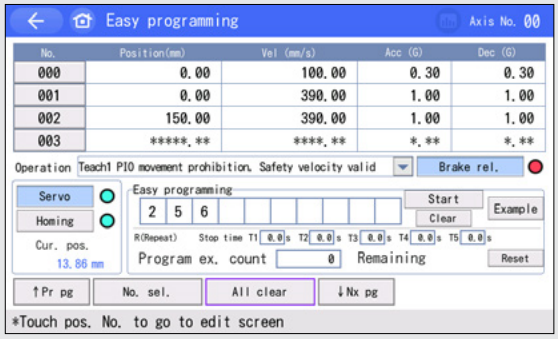
A function for setting and monitoring the gateway unit for MCON/MSEP-C/RCP6S.

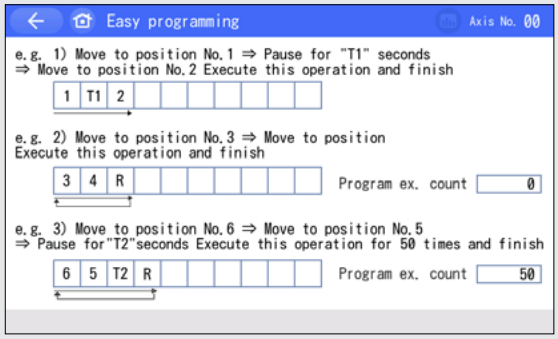




10 Simple Program Function

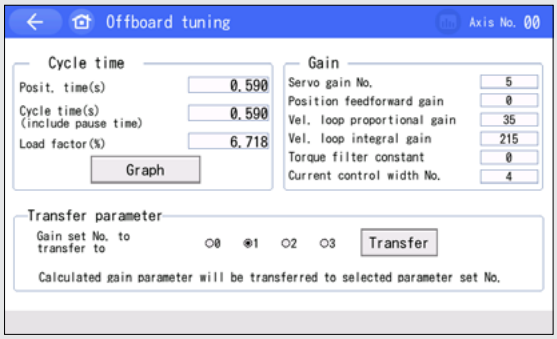
A function for performing easy program operation such as repeating position and setting stopping time.

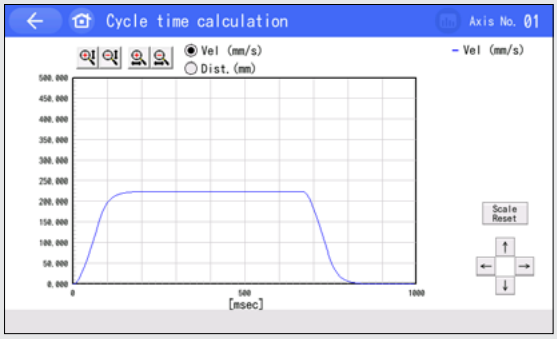




11 Off-board Tuning

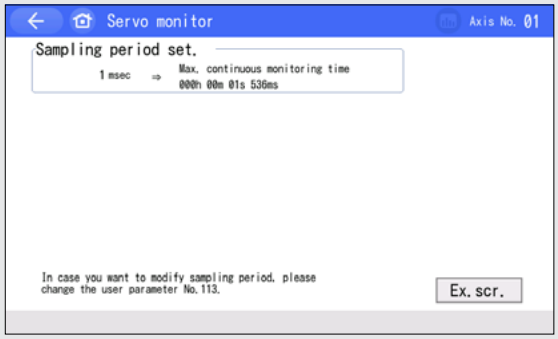
A function for calculating the setting of the optimal gain and cycle time by inputting the operation conditions.

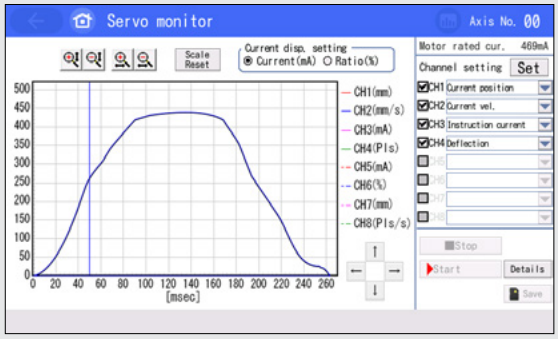




12 Servo Monitor

It is possible to display the graphs of the current position of the actuator, speed, electric current value variation, etc.

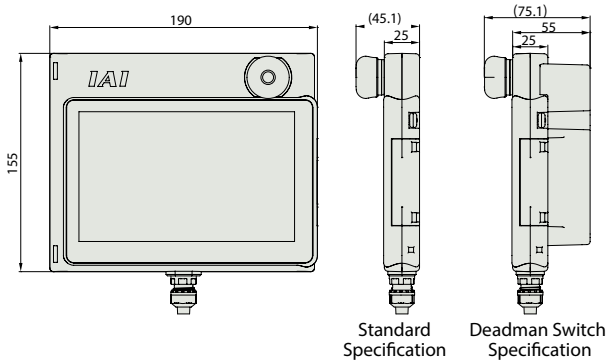




Specifications

Rated voltage	24VDC
Power consumption	3.6W or less (150mA or less)
Ambient operating temp.	0 ~ 40°C
Ambient operating humidity	20 ~ 80%RH (Non-condensing)
Environmental resistance	IP20
Overseas standard	CE
Mass	470g (TB-02 box only) + 330g (5m cable)
	600g (TB-02D box only) + 330g (5m cable)
Cable length	5m (Standard cable is fixed to the box)

External Dimensions



Models

The teaching pendant is compatible with every controller on P. 6, but please select the cable according to the controller.

* The recommended color of the emergency stop switch is gray when the controller is a standard specification, and is red (model: -SWR) when the controller is a safety category compliant specification. (Note) Please contact us if you are using XSEL-J/K/JX/KX.

• Teaching Pendant + Cable as a Set

Type	Model Number	Specification	Attached Cable	
			For Position Controller	For Program Controller
Models common to position and program controllers	TB-02-SC	Standard specification (Gray stop switch)	①CB-TB1-C002	②CB-TB1-X002 + ③CB-SEL-SJS002
	TB-02-SC-SWR	Standard specification (Red stop switch)		
	TB-02D-SC	Deadman switch specification (Gray stop switch)		
	TB-02D-SC-SWR	Deadman switch specification (Red stop switch)		
Models dedicated to position controllers	TB-02-C	Standard specification (Gray stop switch)	①CB-TB1-C002	
	TB-02-C-SWR	Standard specification (Red stop switch)		
	TB-02D-C	Deadman switch specification (Gray stop switch)		
	TB-02D-C-SWR	Deadman switch specification (Red stop switch)		
Models dedicated to program controllers	TB-02-S	Standard specification (Gray stop switch)	②CB-TB1-X002 + ③CB-SEL-SJS002	
	TB-02-S-SWR	Standard specification (Red stop switch)		
	TB-02D-S	Deadman switch specification (Gray stop switch)		
	TB-02D-S-SWR	Deadman switch specification (Red stop switch)		

• Teaching Pendant Only (No Cable Attached)

Type	Model Number	Specification
Models common to position and program controllers	TB-02-SCN	Standard specification (Gray stop switch)
	TB-02-SCN-SWR	Standard specification (Red stop switch)
	TB-02D-SCN	Deadman switch specification (Gray stop switch)
	TB-02D-SCN-SWR	Deadman switch specification (Red stop switch)

• Individual Cable Only

Type	Model Number
Position controller connection cable	①CB-TB1-C002
Program controller connection cable	②CB-TB1-X002
	③CB-SEL-SJS002 (Adapter cable)*
TP adapter connection cable	④CB-TB1-GC002

* Use with CB-TB1-X002 when connecting to ASEL, PSEL, SSEL, and MSEL.

• Options

Name	Option Code	Description
Strap	STR-1	Connected to the lower left part of the box.
Grip belt	GRP-1	Safety belt to hold the box by left hand.
Spiral cord	SIC-1	A cord which connects the box and the furnished stylus.

Applicable Controllers

* The recommended color of the emergency stop switch is gray when the controller is a standard specification, and is red (model: -SWR) when the controller is a safety category compliant specification.

Cable length
5m

8-pin
Mini DIN
①

Half pitch
D-sub 26-pin
② ③

Half pitch
D-sub 26-pin
② ③

D-sub 25-pin
②

Half pitch
D-sub 26-pin
④

Position Controllers

PSEP	PCON-CB/CFB/CGB/CGFB
ASEP	ACON-CB/CGB
DSEP	DCON-CB/CGB
ERC3	SCON-CB/CGB *2
ERC2	SCON-CAL/CGAL
RCP6S *1	PCON-CYB/PLB/POB
MSEP-C/LC	ACON-CYB/PLB/POB
MCON-C/CG	DCON-CYB/PLB/POB
MSCON	

* A gateway unit or a PLC connection unit is necessary to operate RCP6S.
** SCON-CB/CGB-☐F is not compatible. The wattage goes in ☐.

Program controllers
ASEL
PSEL
SSEL
MSEL

Safety category compliant

0.5m — Program controller

TP adapter for program controllers
IA-LB-TGS

Program controllers
XSEL-P/Q/PX/QX/
PCT/QCT
XSEL-R/S/RX/SX/
RXD8/SXD8

Tabletop robot
TTA

(Note) Please contact us if you are using XSEL-J/K/JX/KX.

Safety category compliant

0.5m — Position controller

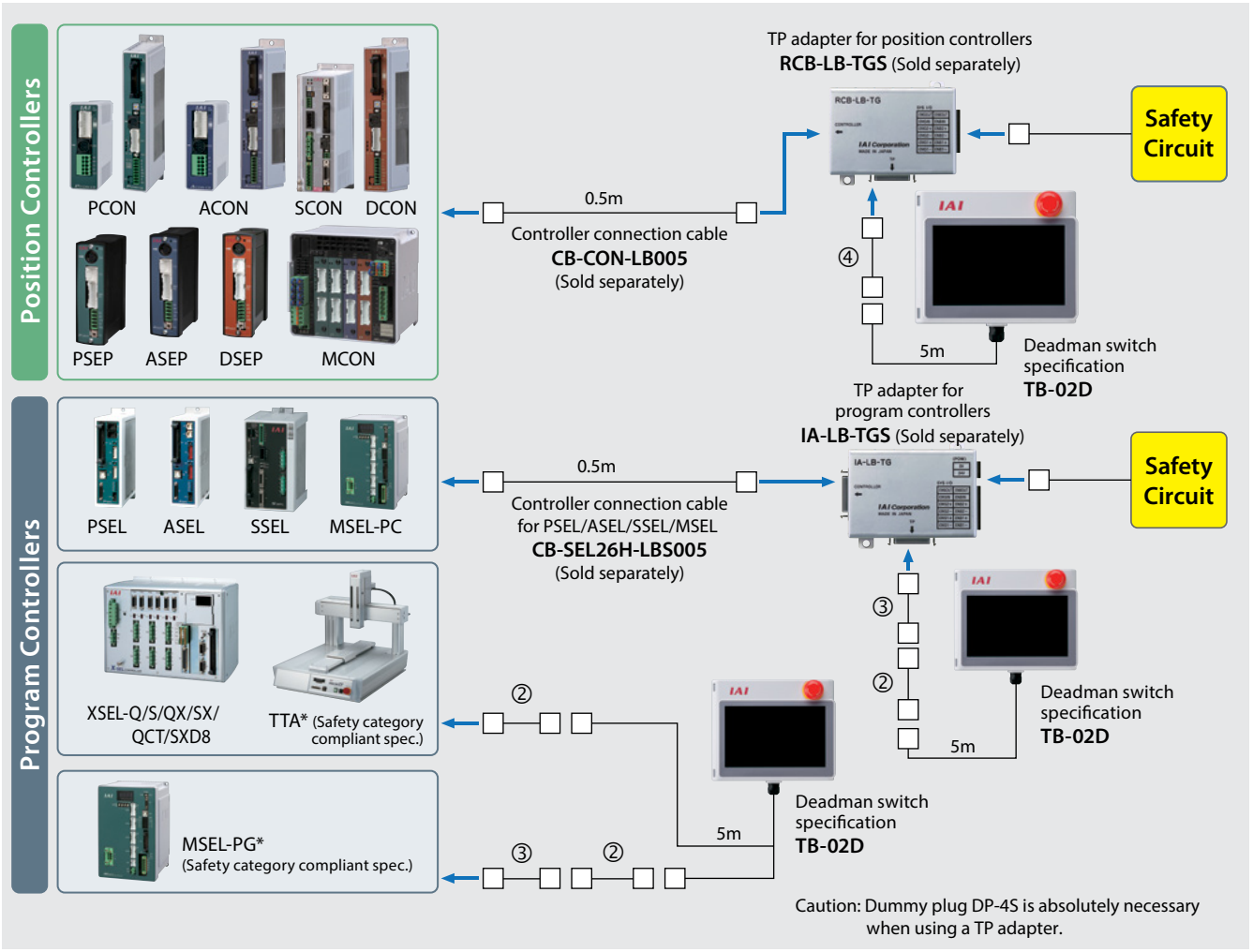
TP adapter for position controllers
RCB-LB-TGS

The version of the PC software that is compatible differs with each controller. Please contact us for details:
www.intelligentactuator.com

Safety Category Compliant

- Compatibility with safety category will be constituted as below. Compatible with safety categories B to 4*.

* Up to category 3 for MSEL and TTA.



* Please refer to P. 5 for more information about ①~④.

IAI America, Inc.
USA Headquarters & Western Region (Los Angeles): 2690 W. 237th Street, Torrance, CA 90505 (800) 736-1712
Midwest Branch Office (Chicago) : 110 E. State Pkwy, Schaumburg, IL 60173 (800) 944-0333
Southeast Branch Office (Atlanta): 1220 Kennestone Circle, Suite 108, Marietta, GA 30066 (678) 354-9470
www.intelligentactuator.com

JAPAN Headquarters: 577-1 Obane, Shimizu-ku, Shizuoka-shi, Shizuoka, 424-0103, JAPAN

IAI Industrieroboter GmbH
Ober der Röth 4, D-65824 Schwalbach am Taunus, Germany

IAI (Shanghai) Co., Ltd.
Shanghai Jiahua Business Center A8-303, 808, Hongqiao Rd., Shanghai 200030, China

IAI Robot (Thailand) Co., Ltd.
825 Phairojkijja Tower 7th Floor, Debaratana Rd., Bangna Nuea, Bangna, Bangkok 10260, Thailand