



Quality and Innovation

# Teaching Pendant IA-T-X, IA-T-XD First Step Guide Second Edition

Thank you for purchasing our product.  
Make sure to read the Safety Guide and detailed Instruction Manual as well as this First Step Guide to ensure correct use.  
This Instruction Manual is original.

**Warning :** Read the instruction manual carefully and follow the instruction manual when handling this equipment.  
Please download the user's manual from our website.  
You can download it free of charge. User registration is required for first time users.  
URL:www.iai-robot.co.jp/data\_dl/CAD\_MANUAL/  
Keep a printout of the introduction manual near the equipment in which this product is installed so that it can be checked at all times, or display it on your computer, tablet terminal, etc. so that you can check it immediately.  
If you need a bound copy of the instruction manual, order it from the nearest sales office listed in the First Step Guide or at the end of the instruction manual. It will be provided for a fee.

- Using or copying all or part of this Instruction Manual without permission is prohibited.
- The company names, names of products and trademarks of each company shown in the sentences are registered trademarks.

## Product Check

This product is comprised of the following parts if it is of standard configuration.  
If you find any fault in the contained model or any missing parts, contact us or our distributor.

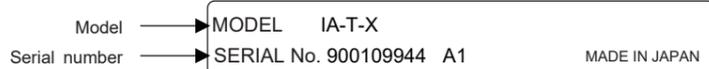
### 1. Parts (The option is excluded.)

No.	Part Name	Model	Reference
1	Main Body	Refer to "How to read the model plate", "How to read the model"	
Accessories			
2	First Step Guide	ME0281	
3	Safety Guide	M0194	

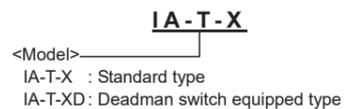
### 2. Instruction Manuals related to this product

No.	Name	Manual No.
1	XSEL Teaching Pendant IA-T-X, IA-T-XD Instruction Manual	ME0160
2	XSEL-J/K Controller Instruction Manual	ME0116
3	XSEL-JX/KX Controller Instruction Manual	ME0119
4	XSEL-P/Q Controller Instruction Manual	ME0148
5	XSEL-PX/QX Controller Instruction Manual	ME0154
6	Table Top Type Robot TT Instruction Manual	ME0149
7	SSEL Controller Instruction Manual	ME0157
8	ASEL Controller Instruction Manual	ME0165
9	PSEL Controller Instruction Manual	ME0172

### 3. How to read the model plate



### 4. How to read the model



## Support Models

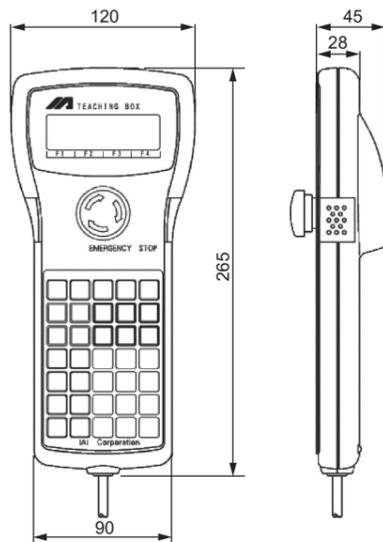
List of Support Models

Model No.	Support Started Version
X-SEL-J/K	V0.01
X-SEL-JX/KX	V1.08
X-SEL-P/Q	V1.13
TT	V1.14
X-SEL-PX/QX	V1.20
SSEL	V1.30
ASEL	V1.40
PSEL	V1.40

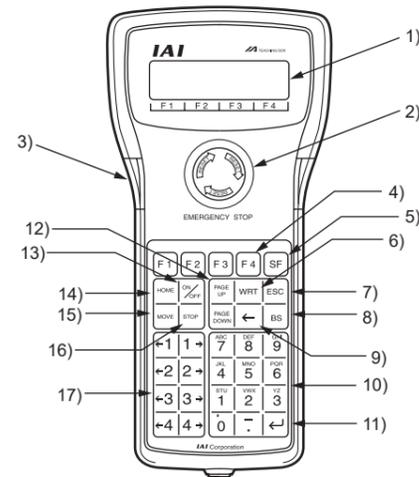
## Basic Specifications

Item	Specification
Surrounding Air Temperature & Humidity	Temperature : 0 to 40°C Humidity : 85% RH or less (non-condensing)
Surrounding Environment	There should be no corrosive gas or extremely heavy dust.
Weight	Approx. 650g
Cable Length	4m

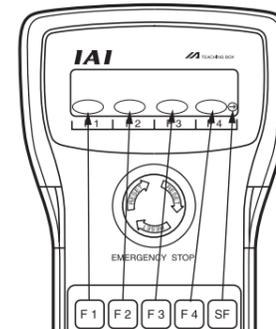
## External Dimensions



## Operation Panel



- 1) LCD Screen
- 2) Emergency Stop Button  
Executes emergency stop.
- 3) Deadman Switch (Option)  
When performing an operation to turn the servo from OFF to ON, press and hold down both of these switches (ON) before starting the key operations.  
The key operation would not be accepted if only one or none of these switches is pressed while in a key operation to turn the servo from OFF to ON.  
Also, both switches should be pressed while the servo is ON. The operation will be finished once these switches are released and the panel window 7-segment LED will show 'def'.  
For P/Q and PX/QX types, 'def' would not be shown.
- 4) [F1] [F2] [F3] [F4] keys (Function keys)  
Correspond to each item in the LCD Screen (function key section).

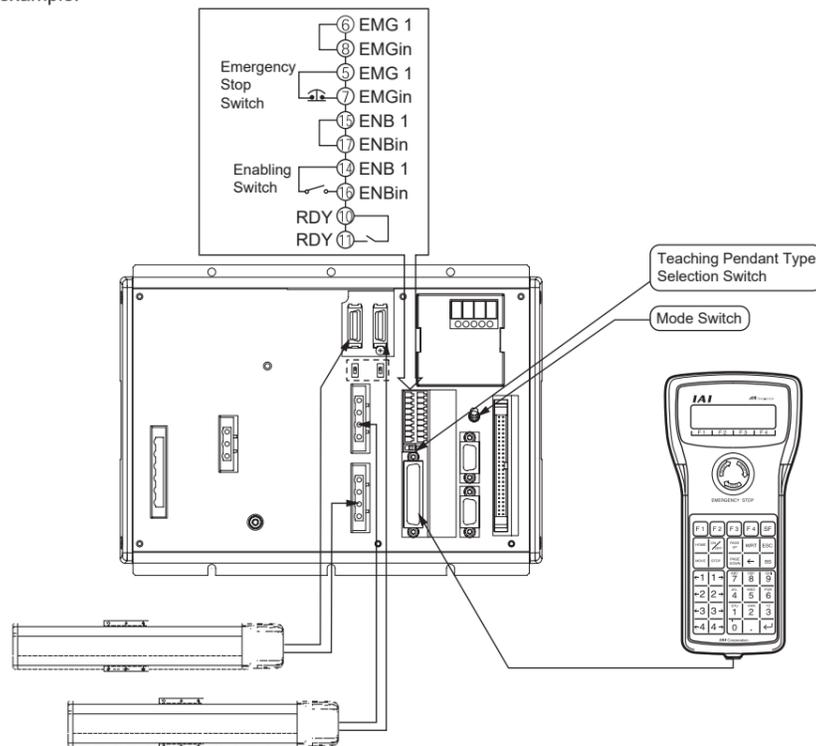


- 5) [SF] key (Shift key)  
If there are more than 5 selectable functions ('->' will be displayed at right side of the function key area), it will change the display items in the function key area.
- 6) [WRT] key (Write key)  
Transmits edit data to the controller. (Data will be saved in the memory of the controller.)  
Only the data shows on the LCD Screen will be transmitted. (Plural Position No., Program Step No., etc., can't be transmitted all together at the same time.)
- 7) [ESC] key (Escape key)  
Returns to the previous status from the current status.  
If you press this key during data input, the data will be cancelled.
- 8) [BS] key (Backspace key)  
If you press this key during data input, clear one letter before.  
At other time, clear the data where the cursor is placed.
- 9) [←] (Cursor backward key)  
This key moves the cursor in the back order to the return key.
- 10) Numeral keys  
You can input numeric, alphabet, and sign.  
When the cursor is at any item requiring the input of characters other than "0" to "9" (such as hexadecimal and character strings), the input mode selection is displayed in the function key area. (Alph: alphabet symbol input, Num: numerical value input)
- 11) [↵] key (Return key)  
This key is used to confirm the input data and to forward the cursor.
- 12) [PAGE UP] [PAGE DOWN] key (PAGE UP · PAGE DOWN key)  
Increment or decrement edit and display item No. (Position No., Program No., Step No., etc.)
- 13) [ON/OFF] key  
This key is used to switch ON/OFF the axis servo. (It is valid in the Teac (teach) mode area.)

## Connection Diagram

[SEL-T]

Connect to the teaching connector. Shown below is a connection to XSEL-P type for an example.



(Note) Set the teaching pendant type selection switch of the XSEL-P type to the right.



**Data Input to Program Table**

The chart below shows how to input 'HOME 11' to Program No.0 for example.

No.	Operation	Screen	Reference
1	Press <b>[F1]</b> key (Edit).	<p>Mode Selection</p> <p><b>(Edit)</b> Play Moni Ctl</p> <p>F1 F2 F3 F4</p>	
2	Press <b>[F1]</b> key (Prog).	<p>Prog</p> <p>Posi <b>(Prog)</b> Sym Para</p> <p>F1 F2 F3 F4</p>	
3	Press <b>[F1]</b> key (Mdfy).	<p>Edit-Prog</p> <p><b>(Mdfy)</b> Copy Clr</p> <p>F1 F2 F3 F4</p>	
4	The display switches to the Program No. input mode window. You will be able to see the cursor on the Program No.. Press the return key to move the cursor to the Step No..	<p>Program No. Step No.</p> <p>Mdf 1 - 1 :</p> <p>F1 F2 F3 F4</p> <p>No. of steps stored in the controller</p>	<p>If program data is already input, you should either overwrite (the original data will be erased) the data or select another Program No. with no data being written. The Program No. or the Step No. which the cursor is on can be changed with <b>[PAGE UP]</b> and <b>[PAGE DOWN]</b> keys. Also, the Program No. and the Step No. can be changed by an input of numeral keys and pressing the return key.</p>
5	The cursor moves to the Step No.. Press the return key.	<p>Mdf 1- 1 :</p> <p>Ins Del Cmnt / 0</p> <p>F1 F2 F3 F4</p>	
6	<p>Input the command. The command is displayed in the function key line.</p> <p><b>How to Search Command</b></p> <p>1) Press <b>[SF]</b> key when the cursor is on the command input line to show the commands in the function line in the alphabetical order. Press <b>[.]</b> key to show them in the back order.</p> <p>2) Alphabets are allocated to each numeral key. (e.g. For '9', G,H and I are allocated.) Press a numeral key when the cursor is on the command input line, and the first command that starts with an alphabet allocated to the pressed numeral key is displayed in the function key line. Display the command to input on the function line with the methods 1) and 2), and press the corresponding function key</p> <p><b>How to Search HOME Command</b></p> <p>Press the 9 key to show a command start with either of G, H or I. (Some of the commands cannot be displayed only with the numeral keys. For those, combine the numeral key with <b>[SF]</b> key to display.)</p> <p>Show "HOME" on the function key line, and then press <b>[F4]</b> (HOME) key. (Press <b>[BS]</b> key if desired to turn the command input line to blank.) Press the return key.</p>	<p>Mdf 1 - 1 :</p> <p>ABPG ACC ACHZ ADD→</p> <p>F1 F2 F3 F4</p> <p>Command starting with "G"</p> <p>Mdf 1 - 1 :</p> <p>GACC GDCL GOTO GRP→</p> <p>F1 F2 F3 F4</p> <p>Command starting with "H"</p> <p>Mdf 1 - 1 :</p> <p>GTTM GVEL HOLD HOME→</p> <p>F1 F2 F3 F4</p> <p>Command starting with "I"</p> <p>Mdf 1 - 1 :</p> <p>IFEG IFGE IFGT IFLE→</p> <p>F1 F2 F3 F4</p> <p>Mdf 1 - 1 :</p> <p>HOME</p> <p>GTTM GVEL HOLD <b>(HOME)</b>→</p> <p>F1 F2 F3 F4</p>	

No.	Operation	Screen	Reference
7	The cursor moves to Operation 1. Input "11" and press the return key.	<p>Mdf 1 - 1 :</p> <p>HOME -</p> <p>Sym *</p> <p>F1 F2 F3 F4</p>	
8	Press <b>[WRT]</b> key to transfer the data key to the controller. The Step No. goes forward to 2.	<p>Mdf 1 - 1 :</p> <p>HOME 11</p> <p>-</p> <p>F1 F2 F3 F4</p>	
9	Press <b>[ESC]</b> key.	<p>Step No.</p> <p>Mdf 1 - 2 :</p> <p>-</p> <p>ABPG ACC ACHZ ADD→</p> <p>F1 F2 F3 F4</p>	
10	Press <b>[ESC]</b> key. (The cursor moves to the Program No..)	<p>Mdf 1 - 2 :</p> <p>Ins Del Cmnt / 1</p> <p>F1 F2 F3 F4</p>	
11	Press <b>[ESC]</b> key. The display goes back to the program edit window.	<p>Mdf 1 - 2 :</p> <p>/ 1</p> <p>F1 F2 F3 F4</p>	
12	Press <b>[ESC]</b> key. The display goes back to the edit window.	<p>Edit-Prog</p> <p>Mdfy Copy Clr</p> <p>F1 F2 F3 F4</p>	
13	Press <b>[ESC]</b> key.	<p>Edit</p> <p>Posi Prog Sym Para</p> <p>F1 F2 F3 F4</p>	
14	Press <b>[F1]</b> (Yes) key if you desire to write the data to the flash ROM.	<p>Flsh</p> <p>Flash Write?</p> <p>Yes No</p> <p>F1 F2 F3 F4</p>	Press <b>[F2]</b> (No) key if you do not desire a writing.
15	"Please wait..." blinks while in the flash ROM writing process.	<p>Flsh</p> <p>Writing Flash ROM</p> <p>Please wait...</p> <p>F1 F2 F3 F4</p>	* Do not turn off the controller during this process.
16	Now, it is completed to write the flash ROM. Return to the edit window by pressing <b>[ESC]</b> key.	<p>Flsh</p> <p>Complete!</p> <p>F1 F2 F3 F4</p>	

**Troubleshooting**

If the connection does not work properly, check the following item.

Description	Measure
Communication connection with the controller is disabled.	Set the mode switch on the controller to "MANU" if it is on "AUTO" side.
"enb" is displayed on the LED.	For XSEL-P and PX controllers, set the teaching pendant changeover switch to the "right side" if it is on the "left side".



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