



FANUC Robot CRX-10iA/L

# FANUC CRX-10iA Series

The next generation in collaborative

# CRX-10iA

Easy Gripper Connection

Manual Guided Teaching

Lightweight at <40KG

Easy Operation

Ergonomic Design

Easy to Install



## Flexible and Capable



1,000mm/sec  
collaborative speed  
2,000mm/sec  
high speed mode

Through-arm cabling:  
I/O + vision or force

IP67 rating for arm &  
IP54 for vertical  
controller

Flexible mounting:  
floor, angle, invert

## Standard and Long Arm Variants



### CRX-10*i*A

- 10kg payload
- 1,249mm reach

Longer J2 arm

### CRX-10*i*A/L

- 10kg payload
- 1,418mm reach

# Specifications

Model		CRX-10i A	CRX-10i A/L
Type	6 axes (J1, J2, J3, J4, J5, J6)		
Reach	1249 mm		1418 mm
Installation (Note 1)	Floor, Upside-down, Angle mount		
Motion range (Maximum speed) (Note 2)	J1 axis	380° (120°/s) 6.63 rad (2.09 rad/s)	360° (120°/s) 6.28 rad (2.09 rad/s)
	J2 axis	360° (120°/s) 6.28 rad (2.09 rad/s)	
	J3 axis	570° (180°/s) 9.95 rad (3.14 rad/s)	540° (180°/s) 9.42 rad (3.14 rad/s)
	J4 axis	380° (180°/s) 6.63 rad (3.14 rad/s)	
	J5 axis	360° (180°/s) 6.28 rad (3.14 rad/s)	
	J6 axis	380° (180°/s) 6.63 rad (3.14 rad/s)	
Maximum speed (Note 2, 3)	Collaborative mode	1000 mm/s	
	High speed mode	2000 mm/s	
Max. load capacity at wrist	10 kg		
Allowable load moment at wrist	J4 axis	34.8 Nm	
	J5 axis	26.0 Nm	
	J6 axis	11.0 Nm	
Allowable load inertia at wrist	J4 axis	1.28 kg·m <sup>2</sup>	
	J5 axis	0.90 kg·m <sup>2</sup>	
	J6 axis	0.30 kg·m <sup>2</sup>	
Repeatability (Note 4)	±0.04 mm		
Mass (Note 5)	40 kg		
Noise (Note 6)	70 dB or less		
Degree of protection	IP67		
Installation environment	Ambient temperature : 0 to 45°C		
	Ambient humidity :Normally 75% or less (No dew nor frost allowed) :Short term 95%RH or less (within one month)		
	Vibration acceleration : 4.9m/s <sup>2</sup> (0.5G) or less		
Matching controller R-30i B Mini Plus	Rated Voltage	AC 100-120V, AC200-240V Single phase , 50/60Hz	
	Input power source capacity	1.5KVA	
	Mass of controller	20 kg	
	Dimensions(WxDxH)	410x277x370 mm	
	Degree of protection	IP54	

High Collaborative speed  
(High Speed Mode available)

Strong Wrist Performance

Lightweight and Precise

Lightweight Industrial Controller  
(Supports 100~120VAC)



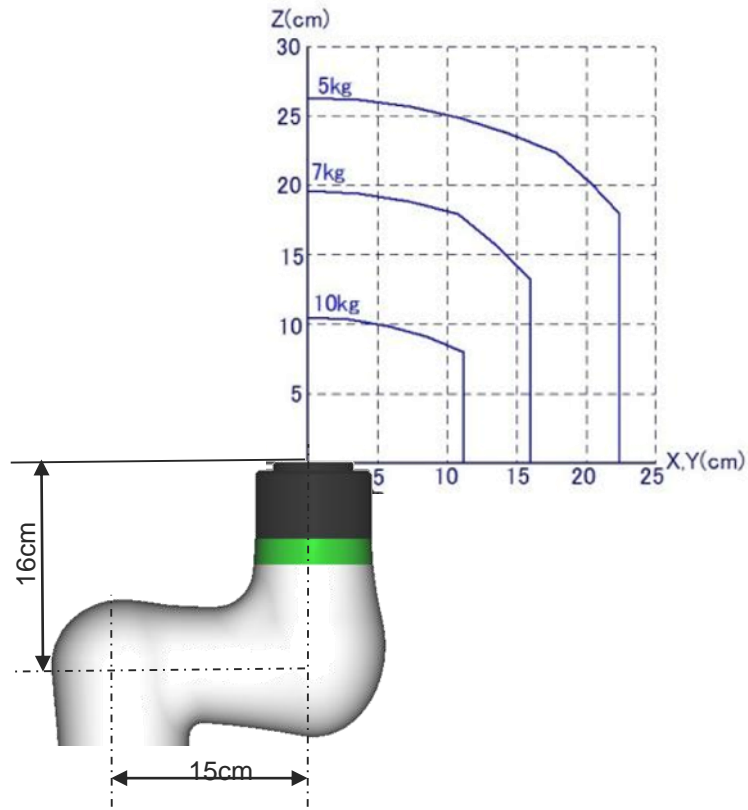
## CRX-10iA/L Flip Under

- Reduced interference area by utilizing under flip motion
- Higher productivity and improved efficiency

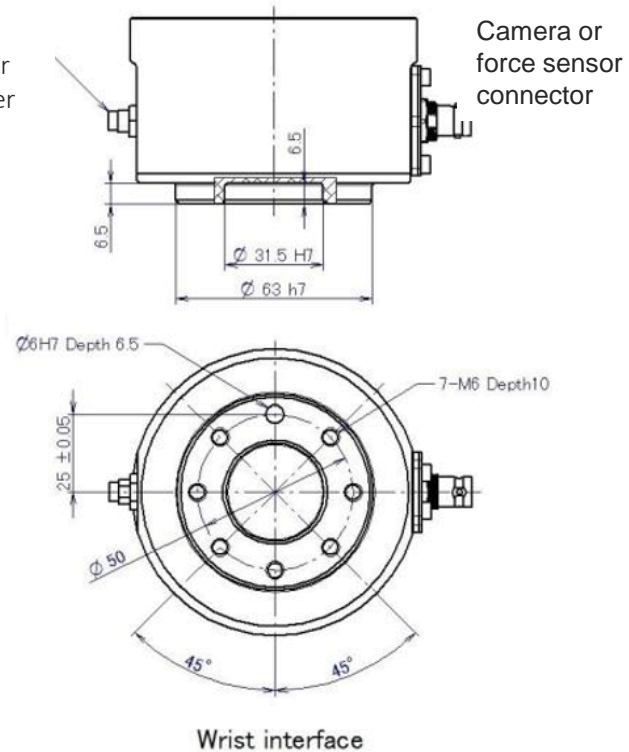


Flip Under Motion

# Wrist Interface and Wrist Load Diagram

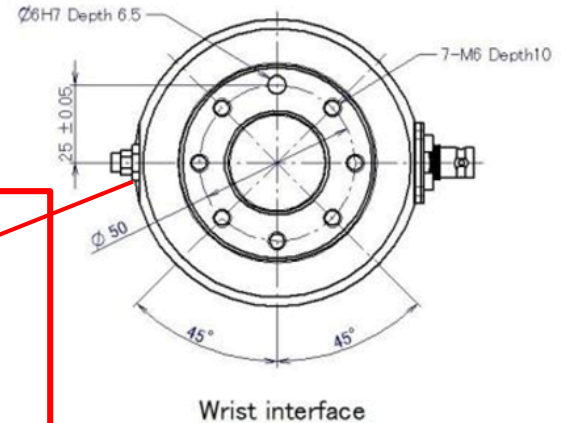
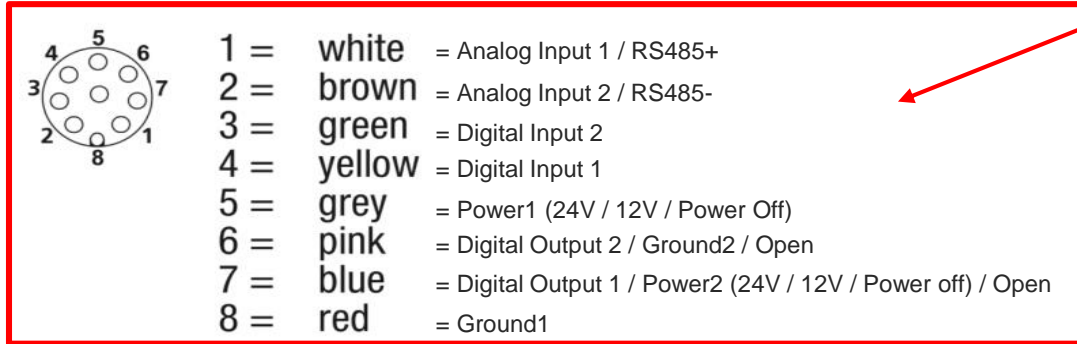


M8  
connector  
for gripper



# Wrist Interface and Wrist Load Diagram

## User-side EOAT connector M8 (female)

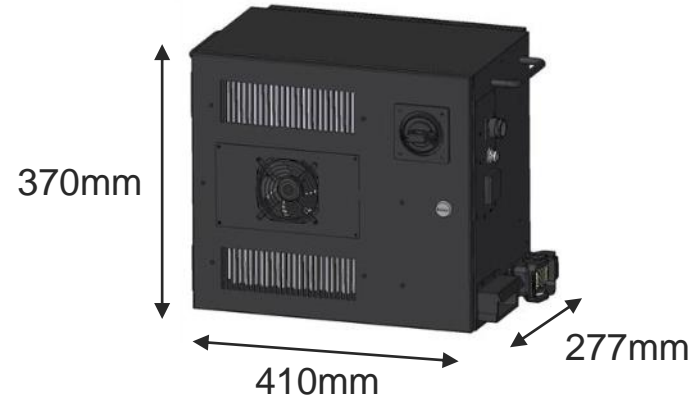


- Connector for EOAT : M8 connector for signal (female)
- Digital Output : default PNP, switchable to NPN
- Power1/2 , Ground1/2 : 1A max each
- Power1 , Ground1 : 2A max (when 6 and 7 pins are not used(Open))
- Digital Output1/2 : 0.5A max each



# New Lightweight Controller: R-30iB Mini Plus

- Compact controller weighs at <20kg
- Support two input power:
  - AC100-120V (single phase)
  - AC200-240V (single phase)
- **Intelligent Features:**
  - *iR*vision, *iR*PickTool and
  - Force Sensing



# New Tablet Teach Pendant

- Combines base, tablet and apps for easy programming and operation
- Tough tablet comes dust/liquid proof and impact resistant



# New Intuitive Touch Panel User Interface

## Menu and Status Bar

- Dropdown menu
- Status icons

## 3D View Area

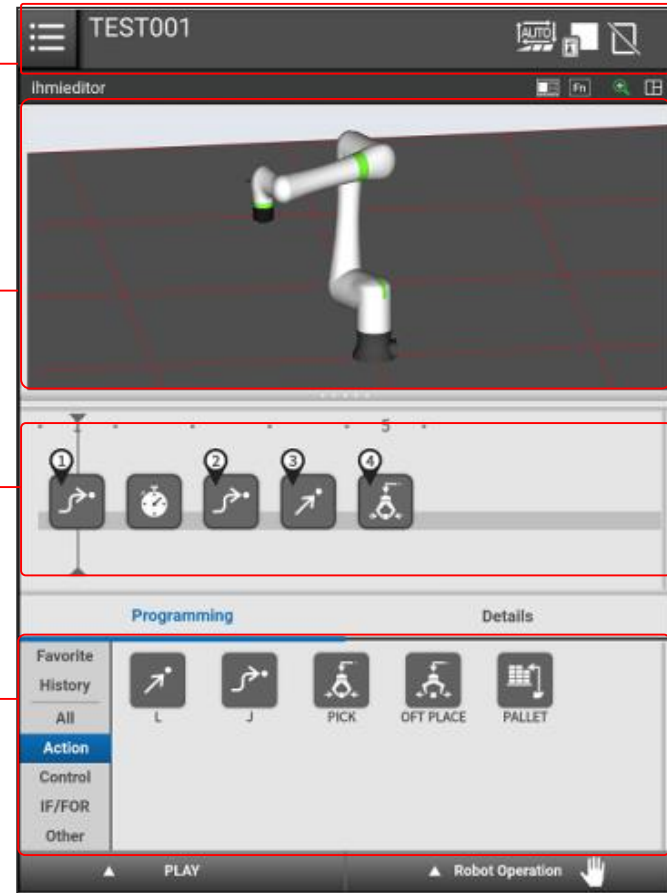
- Robot status graphics
- Displays teaching points

## Timeline Program View

- Intuitive program representation
- Simple program navigation

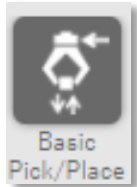
## Programming

- Drag & drop icons to the timeline
- Parameters adjustable in details



# Easy Application Setup

- Setup real applications easily with Advanced Icon Instructions!

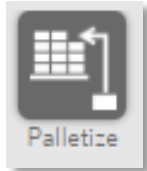


Height :  mm

Speed :  mm/sec

Control buttons: [Down Arrow] [Up Arrow] [Down Arrow] [Up Arrow] [Robot Arm]

Pick/Place with single icon



Pallet Data

Rows:  [Down Arrow] [Up Arrow]

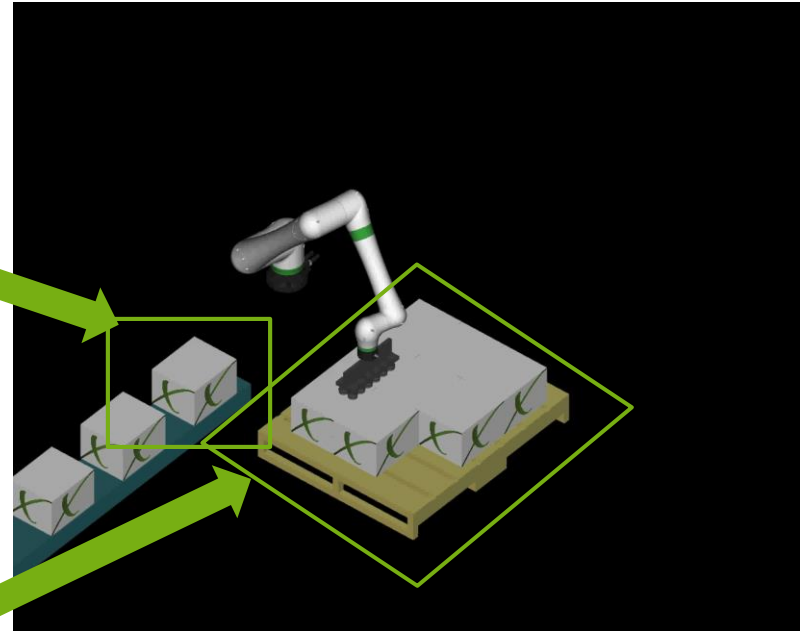
Columns:  [Down Arrow] [Up Arrow]

Pallet Pattern: [Grid Icon] [Cross Icon]

Pallet Type: [Pallet Icon] [Stack Icon]

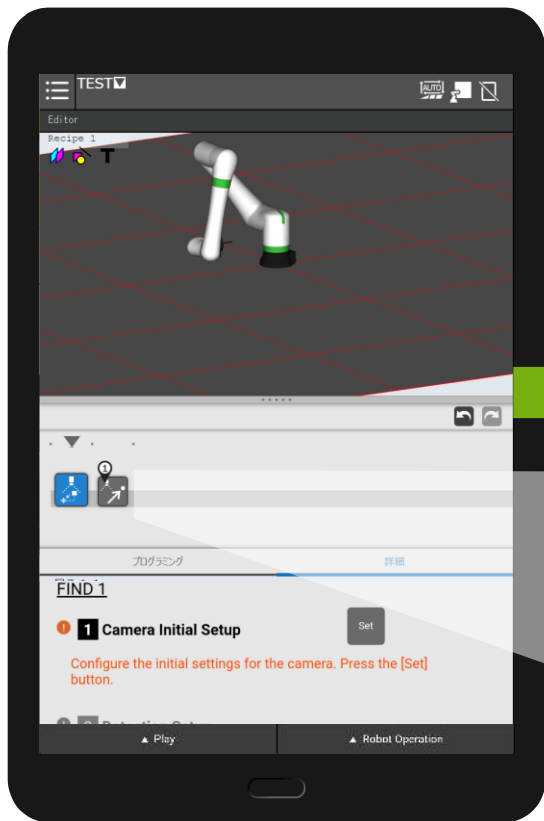
Diagram: A 3x3 grid of cylinders with numbered arrows (1, 2, 3) indicating movement paths.

Easy Pallet Setup

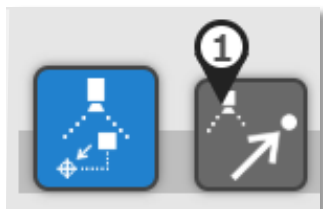


# Easy Vision Setup

- Easily setup iRVision applications with new Tablet TP UI!

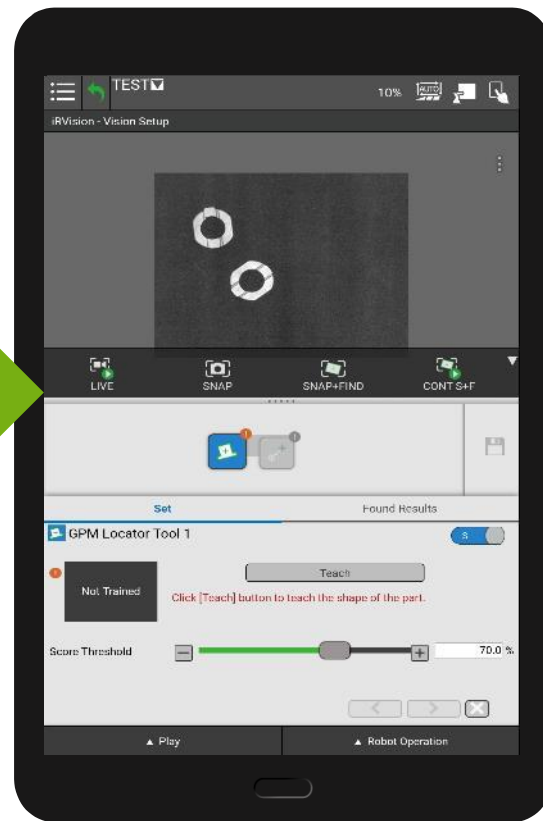


Integrated  
Vision Setup



FIND

Offset  
Motion



Easy  
Calibration

Parameter  
Auto-tuning

# New Peripheral Software Interface

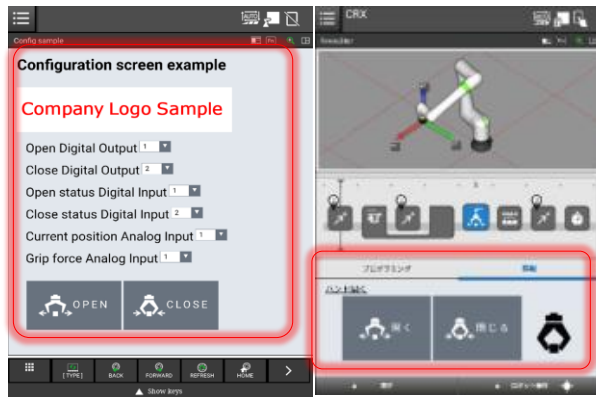


Main menu (example)

Custom command/details screen (example)

- Display custom menus and execute custom commands for peripheral devices by adding plug-ins
- Peripherals plug-ins development tool is available. For more information, contact

<https://www.fanuc.co.jp/contact/form/index.html> to request “CRX Plug-ins Development Tool.”



- The list of plug-ins for the CRX-ready peripherals will be made available on the FANUC website along with reference to each company’s website.
- Plug-in software will be obtained through the peripheral device company

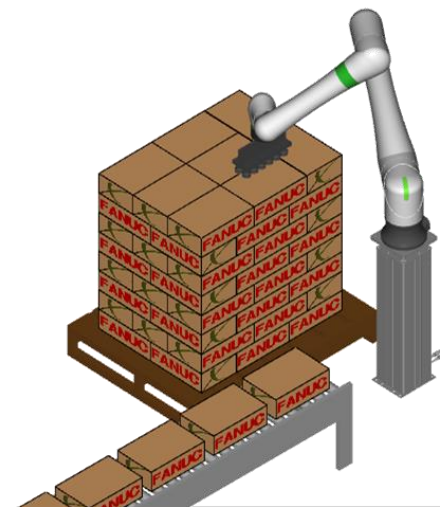
# CRX Application Examples



QSSR – Machine Tending



Intelligent – Visual Tracking



Palletizing

**AND MANY MORE!!!!**