



Programming box

HPB/HPB-D


▼Applicable controllers	
LCC140	P.508
ERCD	P.534
SR1-X SR1-P	P.540

All operations can be performed from this device including manual robot operation, programming entry and editing, teaching and setting parameters. The display works interactively with the operator so even an absolute beginner can easily learn how to use programming box.

■ HPB / HPB-D basic specifications


Name	HPB	HPB-D
External view		
Model	Using with ERCD, SR1-X, SR1-P Using with ERCX, SRCP30, DRCX	KBB-M5110-01 (without a conversion adaptor) KBB-M5110-0A (with a conversion adaptor) KBB-M5110-21 (without a conversion adaptor) KBB-M5110-2A (with a conversion adaptor)
Display	LCD (20characters × 4 lines)	
Emergency stop button	Normally closed contact point (with lock function)	
Enable switch	-	3-position
CE marking	Not supported	Applicable
Memory back-up device	SD Memory card	
Operating temperature	0°C to 40°C	
Operating humidity	35% to 85%RH (non-condensing)	
Dimensions	W107 × H230 × D53mm (Strap holder, emergency stop button not included.)	
Weight	650g	
Cable length	3.5m	

■ Part names and function



- Emergency stop button**
Performs a robot emergency stop when pressed during robot operation. Release the button lock (locks when pressed) by turning the button in the CW direction. After releasing the button, a servo recovery must be performed from the HPB (or by I/O operation) in order to recover from the emergency stop status.
- Liquid crystal display**
This is a 20-character, 4-line LCD screen. The operation menu and other information are displayed here.
- Connector cable**
Connects the HPB to the controller. A D-Sub 9-pin connector (male) is provided at one end of the cable.
- Strap hole**
Attaching a short strap or necklace strap here prevents dropping the HPB while operating it or installing it onto equipment.
- SD memory card connector**
An SD memory card can be inserted here. SD memory cards are provided by the customer.
- Operation keys**
These keys are used to operate the robot and to enter programs and data, etc. The keys are divided into 2 main groups: function keys and data entry/operation keys. (For operation key details, see Chapter 3, "Basic operations".)


■ HPB-D rear side



- Safety connector (HPB-D only)**
Use this connector with the emergency stop or enable switch to configure an external safety circuit. Attaching the supplied 15-pin D-sub connector (KS9-M532A-01 female) directly to this safety connector enables the emergency stop button only.
- 3-position enable switch (HPB-D only)**
This switch is effective for use with an external safety circuit. This switch opens (cuts off) the circuit when pressed or released. Pressing it to mid-position connects the circuit. Use this switch as the enable switch in Service mode, so that the external safety circuit triggers emergency stop on the robot when this switch is pressed or released.

■ A conversion adapter for HPB

The adapter converts from 25 pins to 9 pins. If the HPB was ordered along with a converter adapter then this adapter comes packed along with the unit.



Model	KBB-M657E-01
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Note. It is unnecessary when using ERCD or SR1-X, SR1-P.

Articulated robots
YA
Linear conveyor modules
LCM100
Motor-less single axis actuator
Robonity
Compact single-axis robots
TRANSEURO
Single-axis robots
FLIP-X
Linear motor single-axis robots
PHASER
Cartesian robots
XY-X
SCARA robots
YK-X
Pick & place robots
YP-X
CLEAN
CONTROLLER
INFORMATION
Robot positioner
Pulse string driver
Robot controller
IVZ Electric gripper
Option