

R56TB

Robot Teaching Box

The convenient operating terminal
for mobile teaching tasks



**MORE
FLEXIBILITY**

Ergonomic operation with high-resolution 6.5" touchscreen display

**SIMPLER
OPERATION**

Comprehensive program creation options and clear presentation of monitoring functions

**USB ↔ PC
COMMUNICATION**

Programs and positions can be saved on a USB memory storage device

**INTELLIGENT
DESIGN**

Robust twin-walled housing for reliable protection in heavy-duty environments in accordance with EN61131

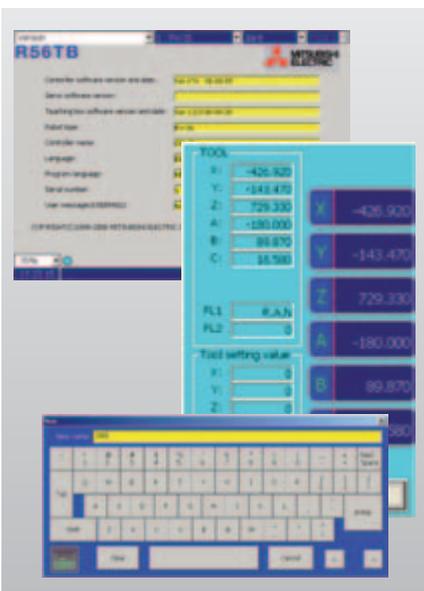
Putting more control at your finger tips



With the R56TB you can set up your Mitsubishi robots quickly and easily



Mobility: The R56TB in use with a robot



The R56TB menu display and the virtual on-screen keyboard

The R56TB is a powerful operating panel for carrying out all tasks directly at the robot, from controlling the robot and displaying the loads by means of the input/output display to complete program creation and parameterisation.

The comprehensive functions ensure optimum utilisation of the robot system and thus reduce setup times. In combination with the RS 232 interface, the fast Ethernet connection supports interference-free and fast communication in real time.

Multifunctional

The R56TB with its full range of functions is available for all Mitsubishi Electric robots as a multifunctional operating and programming unit. Its intuitive user interface makes it easy to control robot movements and perform extensive diagnostics and monitoring functions for users of all levels. All safety-critical functions such as robot movements are assigned to keys. Programming and monitoring functions are accessed and adjusted quickly and easily via the bright 6.5" touchscreen display.

New standards for mobile operation

In addition to controlling robot movements the terminal has many other functions: For example, you can write programs with a virtual on-screen keyboard and monitor all system status parameters, inputs and outputs, including those accessed via the network.

The R56TB flexible monitoring function enables the display of all important system parameters. Access to production data like the number of work cycles, the average cycle time and many other parameters make it easy to get a quick overview of the production situation.

Extensive analysis functions for displaying the utilised capacity of the robot afford an excellent way of optimising the robot application for the shortest cycle times and optimum production sequences.

All parameters can be set up on a function-by-function basis using pre-configured input screens in order to configure and optimise the system for your application in the shortest possible time.

Integrated USB port

The integrated USB port makes it possible to back up individual programs or all of the controller data to a standard USB memory storage device. Programs and system data can therefore be transferred to another robot system quickly and straightforwardly. This of course includes the import and export of data from an external PC.



Easy access to the USB port

Tough design

The round shape and the twin-walled housing, which can resiliently withstand being dropped from a height of 1.5 metres and therefore continue to operate reliably, is a result of elaborate computer simulations and ensures greater operational reliability and resistance to failure.

The operating terminal can withstand vibration, shock and sustained shock in accordance with EN61131 without limitations. As a result of the high IP65 protection and its resistance to oil, grease, alcohol and condensates containing hydrochloric acid, it can be used in any harsh environment of this kind without any problems.

Safety first

All the safety-critical circuits in the R56TB are doubly redundant and meet the full requirements for single-fault tolerance. The three-stage confirmation key system provides maximum safety for the operator, combined with excellent ergonomics.

Light and easy to use, all that is needed to start is to press the pushbutton to confirm operation. Continuing to hold the key in the „confirm“ position then requires absolutely no effort. The third stage of the confirmation key, also known as the panic position, in turn guarantees that the emergency stop will be triggered in the event of an emergency.

Easy to hold and use

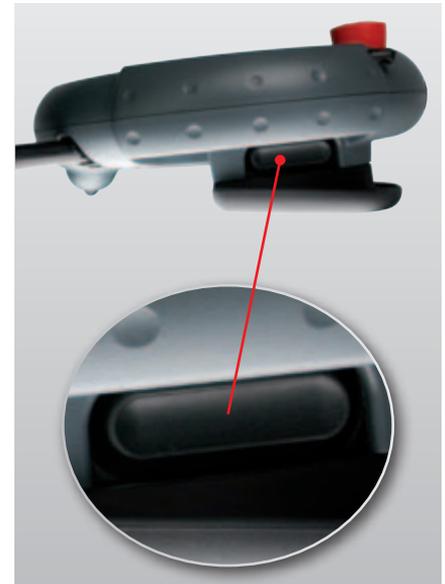
The R56TB teach panel is designed to be equally comfortable for both right and left handed users. It can be held comfortably in a number of different ways for easy use without tiring, even over longer periods of time. Users can hold the unit and operate the confirmation key with one hand. The ergonomically designed handle on the underside doubles as a practical base when the unit is placed on a console. An optional wall mount is also available for installing the Teach Panel securely in an easily-accessible position.

Simply good

Many special functions, which simplify the setting up of the robot in the application and are otherwise only found with PC software, are now included on the R56TB operating panel.

For example, the tool settings for the tool coordinate system can be made using three to eight of the same teaching points. This enables settings for the tool currently in use to be made very easily without calculating additional values.

All in all, the R56TB will help you in every respect to quickly and straightforwardly configure the robot in your system..



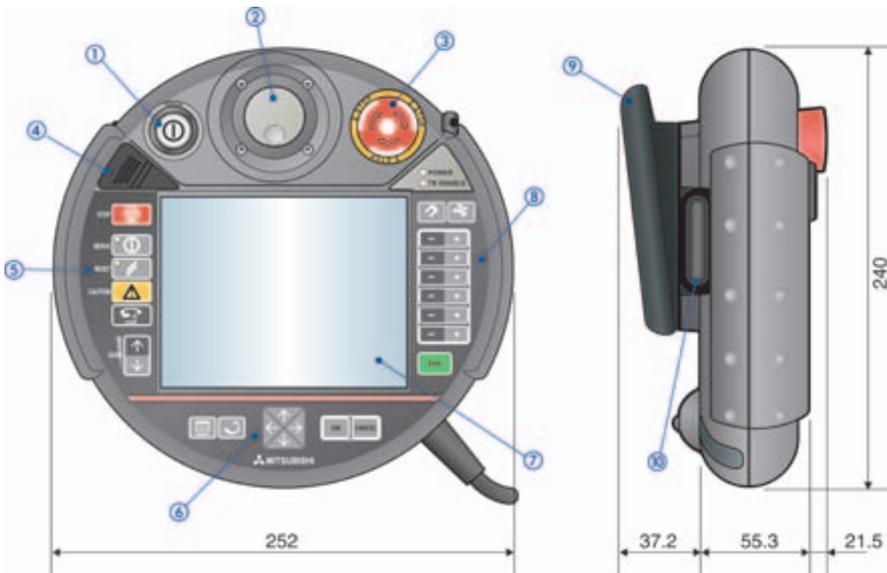
The confirmation key for one-handed operation



The R56TB is easy to be hold and can be used without tiring, even for longer periods.

Specifications

Teach Panel		R56TB
Compatibility	All Mitsubishi Electric F series, SD series and ADH series robots	
Functions	Operation, programming and monitoring of all robot functions	
Programming and Monitoring	Read out information, also during operation; program editing with virtual keyboard; display up to 14 lines of program code; I/O monitoring for up to 256 inputs and 256 outputs; service display with information on maintenance intervals; error display with details of the last 128 alarms .	
Software	Integrated operating system software with menu-based user interface	
Display	Type/Dimensions	6.5" TFT display (640x480 pixels), 65536 colors
	Technology	Touchscreen with backlight
Interfaces	USB, combined RS 232 and Ethernet port	
Connection	Direct connection to the robot controller, cable length 7 m	
Protection Rating	IP65	
Ambient Conditions	Ambient Temperature	Operation: 0–50 °C (non-condensing); Storage: -25–70 °C (non-condensing)
	Relative Humidity	Operation: 90 % max. (non-condensing); Storage: 90 % max. (non-condensing)
Weight [kg]	1.5	



Description	
①	TEACH key (On/Off)
②	Log shuttle wheel for menu access
③	Emergency OFF switch
④	USB connector (under cover)
⑤	Operating keys
⑥	Menu/navigation keys
⑦	Colour display
⑧	Keys for robot movements
⑨	Hand grip
⑩	Confirmation key

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