

Multipurpose Portable Robot

# **Automatic welding machine**

Multipurpose portable robot for automatic welding by touch sensing

#### Features

- 1 Compact and lightweight, it is easy to carry, and settings are simple.
  - Total weight of the robot main unit and traveling rail is 14.2kg. In addition, an installation and removal mechanism is included, so operations can be carried out by a single person Weight of the control panel is Approx.5kg with excellent portability.
  - Easy rotation at a welding site and work conditions were considered, and easy handling by the operator has been achieved by making the pendant wireless.
- 2 Welding work conditions are generated by calculations based on data from the automatic touch sensing.
  - Correction operations are carried out based on the continuous end root gap and groove angle. High quality welding is possible even for materials with tapered gaps
- 3 Change, correction and saving the shape of the welding parts material.
  - The shape of the welding parts material measured by automatic measurement are edited and saved from the control panel screen.
- 4 Yawing mechanism can be used for ceramic tabs.



### Standard Specifications

#### Welding robot main unit

Axis composition 4 axes Stroke front and back axes 80mm top andbottom axis 90mm 500mm traveling axis vawing axis ±28° External dimensions(mm) 100(W)×450(L)×340(H) Weight(excluding rail) 7.7kg Weight(rail) 6.5kg

Weaving pattern Straight line simple vibration

## Control panel

Input voltage AC100V±10% 50/60Hz
Instruction points 2 points
Measurement mode type Automatic, Full automatic, Manual
Welding Conditions Automatic Calculation Process
External dimensions(mm) 320(W)×350(L)×140(H)
Weight(excluding pendant, table) 5kg

#### No line pendant

External dimensions(mm) 150(W)×200(L)×50(H)
Display Organic EL display(2 lines)
Weight 1kg

\*\*For welding of architectural steel joints (9-40mm plate thickness, 35° downward bevel groove, 4-10mm gap)