RX1 Series

"On Demand"
Arc Length
Control Software for
Spatter Free Optimum
Weld Bead.

The World's Most Preferred and Reliable

Digital + Inverter IGBT - Controlled MIG/MAG Welding Machine



Remote Management System for Setting and Locking Welding Parameters

World-Class Welding Quality at Your Doorstep



- Panasonic Welding Systems India has set-up its state-of-theart manufacturing facility in Jhajjar, Haryana, India. So our globally proven range of welding equipment including MMAW, MIG/MAG, TIG, Plasma Cutting, Welding Accessories and Welding Robots are now available at your doorstep.
- Assured commitment to long-term product support in terms of Sales, Service and Spares.
- All-India Sales and Service network.

Key Features of RX1 Series

- Inverter-based digital wave control GMAW and FCAW welding outfit.
- Higher efficiency and higher power factor results in greater power saving.
- Designed to work even under high ambient temperatures up to 50°C.
- Lightweight and compact MIG/MAG/FCAW welding outfit.
- Unique design of three layer and four room dust-free structure.
- RX1 Series is manufactured as per Std. IEC 60974-1:2000/GB 15579.1:2004.
- Fresh tip treatment and burn-back time control are adjustable.
- Works on 50/60 Hz frequency in power supply.
- Equipped with Synergic Mode (Unitary Function) in which welding voltage is set based on the welding current value automatically. The voltage can be adjusted finely to fit the best current values.
- Digitally controlled waveform enables superior arc characteristics.

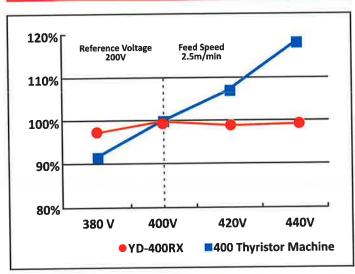
Important Safety Features

- Over-voltage and under-voltage protection.
- Overheating protection.
- Single-phasing protection.
- Protective 8 Amps fuse for protection of wire feed motor.



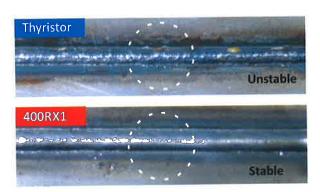
The Digital Inverter Advantage

High Quality Welding

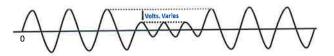


Input voltage and wire consumption

The wire feed remains constant over a wide range of input voltage variations resulting in higher quality of welding.



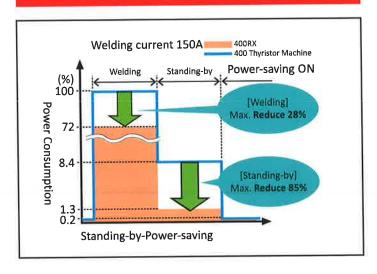
Welding seam comparison as input voltage varies



Input voltage waveform

The welding seam is more uniform as compared to thyristorcontrolled welding even during variation of input voltage.

Higher Energy Savings



During Welding

- More energy saving than conventional machines.
- High-speed CPU ensure more stable wire feed & intensive arc, thus improves the capability of energy saving.

At No-load

- When welding stops, the power supplied to the transformer is cut, so it costs no energy at no load state.
- Energy-saving circuit is activated 7 minutes after the end of welding.

Ideal for Diverse Industries

- Automotive
- Shipbuilding & Offshore
- Heavy Construction Equipment
- Railways
- Repair & Maintenance
- General Fabrication
- **■** Civil/Project Construction
- Process Industry

High Reliability and Easy Operation

7-segment display



Selector switch

Arc control offers soft setting to reduce

spatter and hard setting to ensure more

stable arc in high speed welding.

- Designed for high temperature and humidity resistance.
- Can work even under high ambient temperature of 50°C.
- Extremely easy operation.

Indicative panel is of 400RX1 Model

Other Significant Features

- Digital display of current and voltage control.
- Equipped with Synergic mode (Unitary function) in which welding voltage is set based on the welding current value automatically. The voltage can be adjusted finely to fit the best current values.
- Low power consumption than conventional machines.
- Powerfactor > 0.9
- Crater voltage and crater current adjustment through front panel.
- Arc force adjustment for better arc characteristics.
- Digitally controlled waveform enables superior arc characteristics.
- Gas check, wire diameter selection and gas selection switch on the front panel.

Wire Feeder and Torch Features

- Printed circuit wire feeder motor for better resolution and accuracy
- Cable-less remote controller mounted on wire feeder as well as lightweight cables enable better mobility.
- Maximum wire feed speed up to 20.1 m/min.
- Standard 2-Roll Drive and optional 4-Roll Drive available.
- Ergonomically designed MIG torches reduces fatigue.
- Lightweight, durable and long lasting.



Remote Management Controller (Optional)

With this device these parameters can be set :

- Limit welding current
- Set users' password
- Lock welding parameters
- Display wire feed speed
- Set gas pre-flow and post-flow time
- Set Burnback time
- Penetration depth control
- Recalibrate current and voltage meter



Euro Connector MIG Torch Available

 High Performance Euro Connector MIG Torch also available on demand.



Wire Feeder Available in Various Lengths

Wire feeder available in standard lenghts of 1.8 mtrs, 5 mtrs, 10 mtrs, 15 mtrs and 20 mtrs.

| Technical Specifications | Unit | YD-350RX1xxx | | | | YD-400RX1xxx | | | | YD-500RX1xxx | |
|---------------------------------|-------------------------|--|------------------------------|-----------------------|-------------------------------|---|----------|------------|-------------------------------|---|-------------------|
| | | DG1 | DG2 | D | J1 | DG1 | DG2 | | DJ1 | DG2 | DJ2 |
| INPUT | | | | | | | | | | | |
| Input Supply | | | | | | | | | | | |
| Voltage | Volts. | 380, -20% | , +10% | 415, -20 |)%, +10% | 380, -209 | %, +10% | 415, -2 | 0%, +10% | | % 415, -20%, +10% |
| Phase/Freq. | No./Hz | 3ph/50-60 | | | | 3ph/50-60 | | | | 3ph/50-60 | |
| Max. Input KVA | | | | | | | | | | | |
| @60% Duty Cycle | KVA/KW | 13.1/12.6 | | | | 16.2/15.6 | | | | | |
| @100% Duty Cycle | KVA/KW | | | | | | | | | 23,1/22.2 | |
| OUTPUT | | | | | | | | | | | |
| Rated Current Range | Amps | 50-430 | | | | 50-430 | | | | 60-550 | |
| Rated Output Range | Volts | 16.5-35,5 | | | | 16,5-35.5 | | | | 17-41.5 | |
| Welding Current (40 °C) | | | | | | | | | | | |
| @60% Duty Cycle | Amps | 350 | 350 | | | 400 | | | | | |
| @100% Duty Cycle | Amps | 270 | | | | 310 | | | | 500 | |
| GENERAL | | | | | | | | | | | |
| Power Control Method | | IGBT Inve | rter Cor | ntrolled | | IGBT Inv | erter Co | ntrolled | | IGBT Inverter (| Controlled |
| Digital Display | | 4 Digit-7 segment LED Display | | | 4 Digit-7 Segment LED Display | | | | 4 Digit-7 Segment LED Display | | |
| Wave from Control | | Digitally Controlled Waveform | | | | Digitally Controlled Waveform | | | | Digitally Controlled Waveform | |
| Welding Sequence | | a. Main welding | | | a. Main welding | | | | a. Main Welding | | |
| weluing sequence | | b. Main welding-crater | | | b. Main welding-crater | | | | b. Main welding-crater | | |
| | | (Crater repeat is available) | | | (Crater repeat is available) | | | | (Crater repeat is available) | | |
| | | c. Main welding-crater | | | c. Main welding-crater | | | | c. Main welding-crater | | |
| | | 131 | (Crater repeat is available) | | | (Crater repeat is available) | | |) | (Crater repeat is available) | |
| 147 Discussion Colombon Cuditab | ma ma | 0.8,1.0,1.2 0.8,0.9,1.2 0.8, | | | | 0.8,1.0,1.2 0.8,0.9,1.2 0.8,1.0,1.2 | | | | 1.2,1.4,1.6 | , |
| Wire Diameter Selector Switch | mm Class | IP 23 | | | 0,1.0,1,2 | IP 23 | | | ,,0,1,0,112 | IP 23 | |
| Ingress Protection | | | | | | H | | | | Н | |
| Insulation | Туре | H Forced air cooling | | | | Forced air cooling | | | | Forced air Cooling | |
| Cooling | | Forced air cooling | | | | > 0.9 | | | | > 0.9 | |
| Power Factor | D 6 | > 0.9 | | | -10 to 50 | | | | -10 to 50 | | |
| Operating Temperature | Degree C | _1 | -10 to 50 | | | 0.8, 1.0, 1.2 | | | | 1.0, 1.2, 1.6 | |
| Applicable Wire Diameter | mm | 0.8, 1.0, 1.2 | | | | 545x380x570 | | | | 545x380x635 | |
| Dimensions (LxBxH) | mm | | 545x380x570 | | | | | | | 60 | |
| Weight | Kg | | 52 | | | 52 (YW-40KB3xxx) | | | | (YW-50KB3DR0) | |
| WIRE FEEDER | | (YW-35KI | | | DAE | | (взххх) | DA1 | DAF | (TW-SUKBSUK | U) |
| | | DAE | D | A1 | DAE | DAE | | DA1 | DAE | r00 | |
| Rated Welding Current | Amps | 400 | | | | 400 | | 20.42 | 1012 | 500 | |
| Applicable wire diameter | mm | 1,0, 1.2 | | , 1,2 | 1.0, 1.2 | 1.0, 1.2 | _ | 0.9, 1.2 | 1.0, 1.2 | 1.2, 1.6 | 4.0) |
| Cable Length | Meter | 1.8 m (ga | s hose 4 | 4.8m) | | 1.8 m (g | as hose | 4.8m) | | 1,8 m (gas hos | e 4.8m) |
| Weight | Kg | 10.5 | | | 10.5 | | | | 10.5 | | |
| Wire Feed Speed | Meter/ Minute | | 5.3-20.1 | | | 5.3-20.1 | | | | 5,3-20,1 | |
| Duty Cycle | % | 60 vailable in standard lenghts of 1.8 mtrs, 5 | | | 60 | | | | 60 | | |
| | Wire feeder a | vailable in sta | ndard l | enghts of | 1.8 mtrs, 5 | mtrs, 10 | mtrs, 15 | mtrs and a | 20 mtrs. | | |
| WELDING TORCH | | | | | | | | | | | |
| Rated welding current | Amps | 350 | | | | 400 | | | | 500 | |
| Duty Cycle | 10 Min. Cycle | 350 Amp | | | | 350 Amps, 60% (CO₂) | | | | 500 Amps, 60% (CO ₂) | |
| | 10 Willi Cycle | 350 Amps, 35% (20%CO ₂ + 80% Ar) | | | | 400 Amps, 25% (20%CO ₂ + 80% Ar) | | | | 500 Amps, 25% (20%CO ₂ + 80% Ar) | |
| | Continuous | 270 Amps, 100% (CO ₂) | | | | 270 Amps, 100% (CO ₂) | | | | 350 Amps, 100% (CO ₂) | |
| | Continuous | 200 Amp | s, 100% | 6 (20%CO ₂ | + 80%Ar) | | | | | 270 Amps, 100% (20%CO ₂ + 80% Ar | |
| Applicable Wire Diameter | mm | 0.8, 0.9, | 0.8, 0.9, 1.0, 1.2 | | | 0.8, 0.9, 1.0, 1.2 | | | | 0.8, 1,2, 1.6 | |
| Cable Length | Meter | 3 | | | . 3 | | | | 3 | | |
| Weight (Incl. Cable) | Kg | 2.8 | | | | 2.8 | | | | 3.6 | |
| Ordering Information | Model No. | | YD-3 | 350RX1 | | | YE | 0-400RX1 | | Y | D-500RX1 |
| Power Source | 1 - | DG1 | D | G2 | DJ1 | DG1 | L | DG2 | DJ1 | DG2 | DJ2 |
| Wire Feeder | - | | AE YW-3 | SKB3DA1: Y | W35KB3DAE | YW-40KB3 | BDAE YW | -40KB3DA1 | YW40KB3DAE | YW- | 50KB3DR0 |
| Welding Torch | - | YT-35CS4 | 1DA1 | | | YT-40C | S4DAF | | | YT-50CS4DAF | |
| Remote Management Controller | - | | | | | | TS | MYU290 | | | |
| Application Country | | | | /p) | 101 | /// | | 1.5-07 | 101 | (A) & (B) | (C) |
| | nailand / (C) - Malaysi | (A) | . (| (B) | (C) | (A) | | (B) | (C) | (A) & (D) | (C) |

Range of Welding Equipment: MMAW | MIG/MAG | TIG | Plasma Cutting | Welding Accessories | Welding Robots Panasonic has set-up its own state-of-the-art welding equipment manufacturing facility at Jhajjar near Gurgaon, Haryana, India.

Factory, Head Office and Northern Regional Office

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Email: welding.north@in.panasonic.com

Japan Factory: 1-1, 3-chome, Inazu-cho, Toyonaka, Osaka 561 0854, Japan China Factory: No. 9 Qingnan Rd, Tangshan New & Hi-tech Industrial Park, Hebei, China

Authorised Sales & Service Provider

PWSI / RX1 / 0318 / EXPORT