

Panasonic

# 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 Smart Factory Solutions India has set-up its state-of-the-art 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.

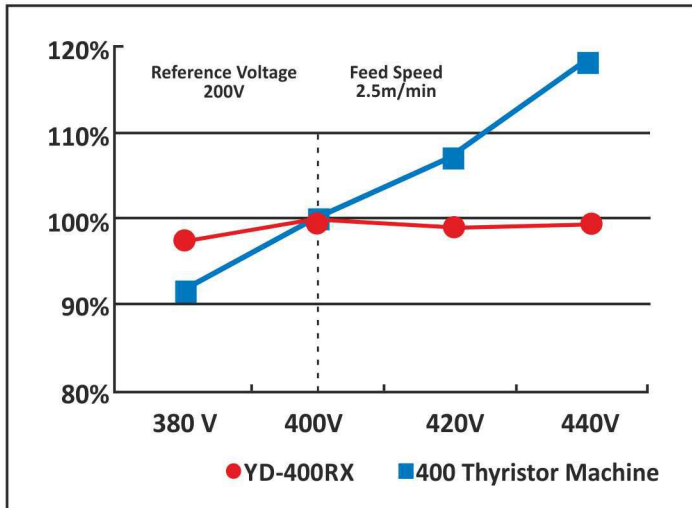
RoHS

Restriction of Hazardous Substances

[www.panasonic.com/in/welding](http://www.panasonic.com/in/welding)

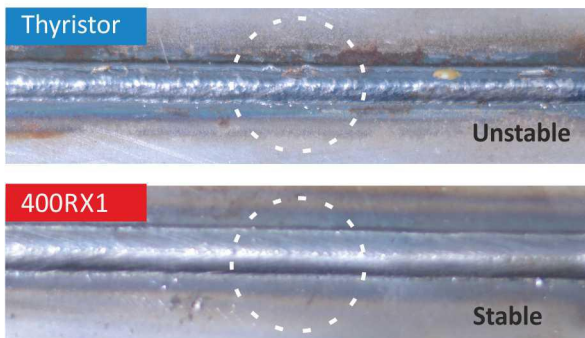
## The Digital Inverter Advantage

### High Quality Welding

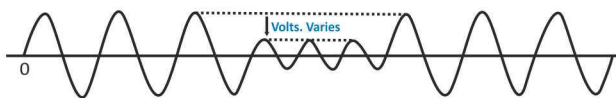


Input voltage and wire consumption

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



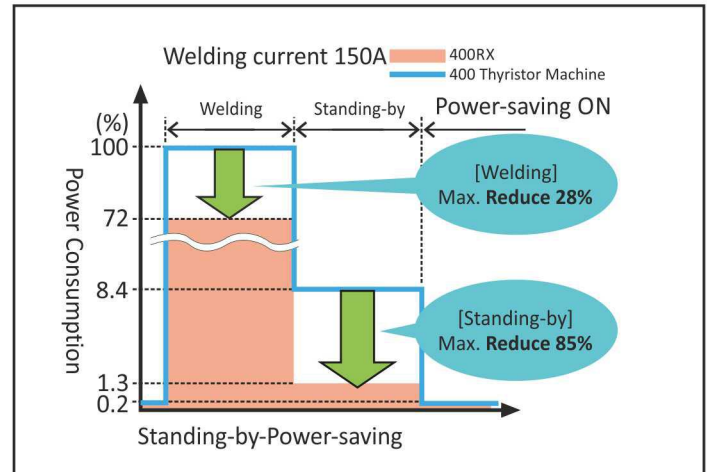
Welding seam comparison as input voltage varies



Input voltage waveform

The welding seam is more uniform as compared to thyristor-controlled 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.

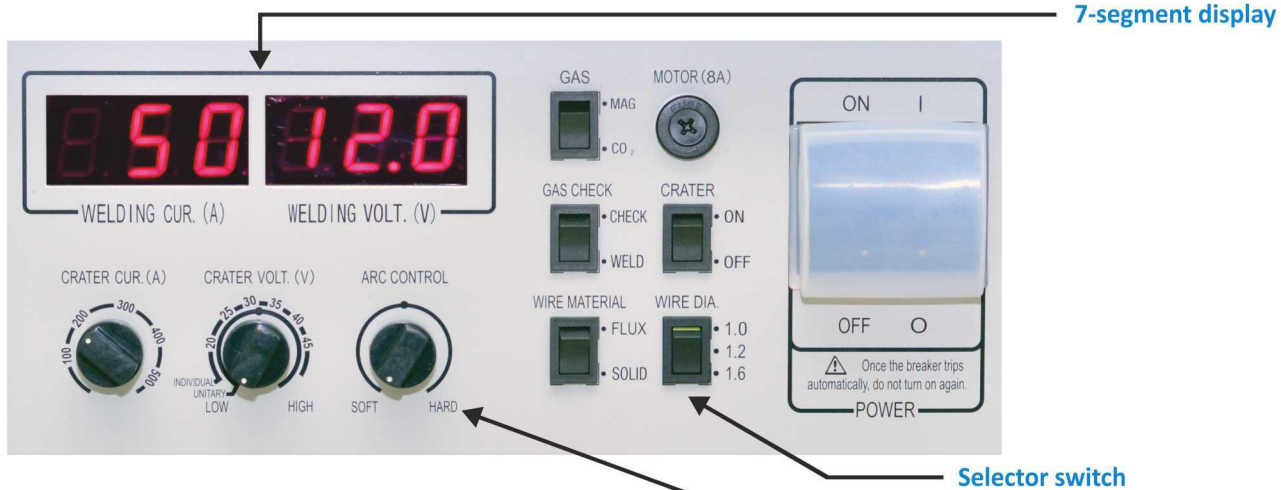
#### At No-load

- 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



- 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

Arc control offers soft setting to reduce spatter and hard setting to ensure more stable arc in high speed welding.

### 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.
- Power factor > 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 lengths of 1.8 mtrs, 5 mtrs, 10 mtrs, 15 mtrs and 20 mtrs.



## Technical Specifications

Technical Specifications	Unit	YD-250RX1	YD-400RX1	YD-500RX1
<b>INPUT</b>				
Input Supply				
Voltage	Volts.	415,+15%, -20%	415, +10%, -20%	415, +10%, -20%
Phase/Freq.	No./Hz	3ph/50-60	3ph/50-60	3ph/50-60
Max. Input KVA@415Vac				
@60% Duty Cycle	KVA/KW	8/7.7	16.2/15.6	
@100% Duty Cycle	KVA/KW			23.1/22.2
<b>OUTPUT</b>				
Rated Current Range	Amps	50-250	50-400	60-550
Rated Output Range	Volts	12-26.5	16.5-35.5	17-41.5
Welding Current (40 °C)				
@60% Duty Cycle	Amps	250	400	
@100% Duty Cycle	Amps	193	310	500
<b>GENERAL</b>				
Power Control Method		IGBT Inverter Controlled	IGBT Inverter Controlled	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 b. Main welding-crater (Crater repeat is available)	a. Main welding b. Main welding-crater (Crater repeat is available)	a. Main Welding b. Main welding-crater (Crater repeat is available)
Ingress Protection	Class	IP 21S	IP 23	IP 23
Insulation	Type	H	H	H
Cooling		Forced air cooling	Forced air cooling	Forced air Cooling
Power Factor	Degree C	> 0.9	> 0.9	> 0.9
Operating Temperature		-10 to 50	-10 to 50	-10 to 50
Dimensions (LxBxH)	mm	545x380x570	545x380x570	545x380x635
Weight	Kg	44	52	60
<b>WIRE FEEDER</b>				
Rated Welding Current	Amps	250	400	500
Applicable wire diameter	mm	0.8, 1.0	0.8, 1.0, 1.2	1.2, 1.6
Cable Length	Meter	1.8 m (gas hose 4.8m)	1.8 m (gas hose 4.8m)	1.8 m (gas hose 4.8m)
Weight	Kg	10	10.5	10.5
Wire Feed Speed	Meter/ Minute	5-20.1	5.3-20.1	5.3-20.1
Duty Cycle	%	60	60	60
Wire feeder available in standard lengths of 1.8 mtrs, 5 mtrs, 10 mtrs, 15 mtrs and 20 mtrs.				
<b>WELDING TORCH</b>				
Rated welding current	Amps	350	350	450
Duty Cycle		350 Amps, 60% (CO <sub>2</sub> )	350 Amps, 60% (CO <sub>2</sub> )	450 Amps, 60% (CO <sub>2</sub> )
	10 Min. Cycle	350 Amps, 35% (CO <sub>2</sub> + Ar)	350 Amps, 35% (CO <sub>2</sub> + Ar)	450 Amps, 35% (CO <sub>2</sub> + Ar)
	Continuous	270 Amps, 100% (CO <sub>2</sub> ) 200 Amps, 100% (CO <sub>2</sub> + Ar)	270 Amps, 100% (CO <sub>2</sub> ) 200 Amps, 100% (CO <sub>2</sub> + Ar)	350 Amps, 100% (CO <sub>2</sub> ) 270 Amps, 100% (CO <sub>2</sub> + Ar)
Applicable Wire Diameter	mm	0.8, 1.0, 1.2	0.8, 1.0, 1.2	1.2, 1.6
Cable Length	Meter	3	3	3
Weight (Incl. Cable)	Kg	2.8	2.8	3.6
<b>ORDERING INFORMATION</b>				
Power Source	-	YD-250RX1DJE	YD-400RX1DJF	YD-500RX1DJF
Wire Feeder	-	YW-25KB3DTE	YW-40KB3DAL	YW-50KB3DR0
Welding Torch	-	YT-35CS4DAF	YT-40CS4DAF	YT-50CS4HDAF
Remote Management Controller	-		TSMYU290	
<b>FOR STAINLESS STEEL MIG/MAG WELDING FOLLOWING CONFIGURATION</b>				
Power Source	-	YD-250RX1DJS - Stainless steel welding model, 0.8 mm/1.0 mm dia wire Solid SS wire & Solid MS wire	YD-400RX1DJS - Stainless steel welding model, 0.8 mm/1.2 mm dia wire Solid SS wire, Solid MS wire, FCAW	YD-500RX1DJS - Stainless steel welding model, 1.2 mm dia wire solid SS, 1.2 mm/1.6 mm solid MS wire & FCAW
Wire Feeder	-	YW-25KB3DTE	YW-40KB3DAE	YW-50KB3DR0
Welding Torch	-	YT-35CS4DAF	YT-40CS4DAF	YT-50CS4HDAF

# Panasonic

**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 Gurugram, Haryana, India.**

For more information and service related queries please write to:  
[welding.info@in.panasonic.com](mailto:welding.info@in.panasonic.com), [Psfsin.enquiry@in.panasonic.com](mailto:Psfsin.enquiry@in.panasonic.com)

**Panasonic India Pvt. Ltd.**  
 (Division Company: Panasonic Smart Factory Solutions India)

**Head Office:** 12th Floor, Ambience Tower, Ambience Island,  
 NH-8, Gurugram - 122002, Haryana, India. **Phone:** +91-124-4871300, **Fax:** +91-124-4871333

**Factory:** Village Bid Dadri, Tehsil and District: Jhajjar - 124103, Haryana, India.  
**Phone:** +91-9729900200

Authorised Sales & Service Provider

**Eastern Regional Office:** No 1, Vikash Towers, Dr. UN Brahmachari Street, 3rd Floor, Opp. ITC Fortune Hotel, Kolkata - 700016, West Bengal. **Phone:** +91-9729900200

**Western Regional Office:** 5th Floor, Unit No. 502 & 503, Windfall Building, Sahar Plaza Complex, Survey No. 179A to 179H, J. B. Nagar, Andheri East, Mumbai - 400058, Maharashtra.  
**Phone:** +91-9729900200

**Southern Regional Office:** 6th Floor, SPIC Building Annexe, No. 88, Mount Road, Guindy, Chennai - 600032, Tamilnadu. **Phone:** +91-9729900200

**Central Regional Office:** Ayodhya, 119, 2nd Floor, Bajaj Nagar, Nagpur - 440010, Maharashtra. **Phone:** +91-9729900200

**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.

**Sales Offices at Ahmedabad, Bengaluru, Bhubaneswar, Mumbai and Hyderabad.**

PSFSIN / RX1 / 022021

[www.panasonic.com/in/welding](http://www.panasonic.com/in/welding)

Panasonic reserves the right to alter the specifications without notice.