## **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.

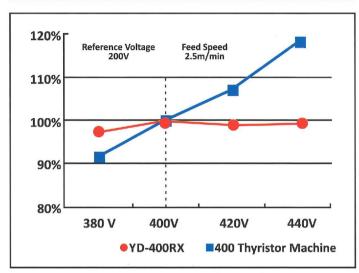
#### **Important Safety Features**

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



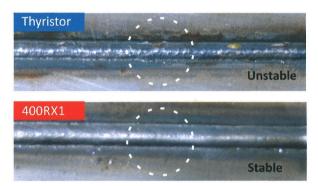
## The Digital Inverter Advantage

#### **High Quality Welding**

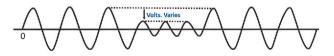


Input voltage and wire consumption

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



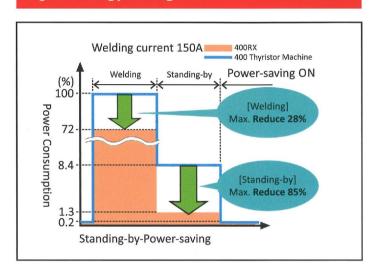
Welding seam comparison as input voltage varies



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

Wire Feeder and Torch Features

as lightweight cables enable better mobility.

Maximum wire feed speed up to 20.1 m/min.

Standard 2-Roll Drive and optional 4-Roll

Ergonomically designed MIG torches

Lightweight, durable and long lasting.

■ Printed circuit wire feeder motor for better resolution and

Cable-less remote controller mounted on wire feeder as well

stable arc in high speed welding.

accuracy

Drive available.

reduces fatigue.

- 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.
- 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.

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.

#### **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



Technical Specifications	Unit	YD-250RX1	YD-400RX1	YD-500RX1
INPUT				
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
OUTPUT				t.
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
GENERAL				
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	a. Main welding	a. Main Welding
		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
		(Crater repeat is available)	(Crater repeat is available)	(Crater repeat is available)
Ingress Protection	Class	IP 21S	IP 23	IP 23
Insulation	Туре	Н	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
WIRE FEEDER				
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 av	ailable in standard lenghts of 1.8 mtrs,	5 mtrs, 10 mtrs, 15 mtrs and 20 mtrs.	
WELDING TORCH				
Rated welding current	Amps	350	350	450
Duty Cycle		350 Amps, 60% (CO₂)	350 Amps, 60% (CO <sub>2</sub> )	450 Amps, 60% (CO₂)
	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> )	270 Amps, 100% (CO <sub>2</sub> )	350 Amps, 100% (CO₂)
	Continuous	200 Amps, 100% (CO <sub>2</sub> + Ar)	200 Amps, 100% (CO <sub>2</sub> + Ar)	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
Ordering Information				
Power Source	-	YD-250RX1DJE	YD-400RX1DJF	YD-500RX1DJF
Wire Feeder	-	YW-25KB3DTE	YW-40KB3DAL	YW-50KB3DR0
Welding Torch	-	YT-35CS4DAF	YT-35CS4DAF	YT-50CS4HDAF
Remote Management Controller	·   -		TSMYU290	

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.

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Authorised Sales & Service Provider