

Paint Marking System

Paint Jet Printer

PJ-1B



CLEAR MARKING is P

PJ-1B the new Paint Marking Machine of MARKTEC offers a high quality marking at reasonable price.

Optimum type can be selected from 3-types (0.1 and 2) of PJ-1B corresponding to the character size requirement.



Pump Unit



Controller

Every unsatisfactory result of the IJP marking as **less contrast**, **less weather/light resistance**, **low visibility** of the character, **hypersensitivity to the dusty condition** of the machine, **too much consumables** and **high maintenance costs** can be solved with PJ-1B.

Features

Distinct dot-matrix marking

Distinct dot-matrix marking with special paint which has good hiding power shows excellent contrast to the surface to be marked. The marking lasts for a long time even in outdoor condition. Standard paint colors are White, Black and Red.

Easy and stabilized start-up

Not only Monday start-up but also the start-up after one week holidays, PJ-1B can be started up with simple operation.

Low running cost

Drop-On-Demand does not need excess paint nor thinner for proper adjustment, means low running cost.

High-speed marking

Marking speed 276mpm with type-0 and 160mpm with type-2 can be realized, with wide character.

Light & small marking machine

The weight (about 2.6kg) of PJ-1B is only 1/5 that of our former machine. Setting and handling of the Marking Machine is simple and easy.

Independently or with FA system

For automated line, use it with Line Computer. For individual use, utilize the Handy-Terminal or PC.

Safety and health considered

Special paint uses ethyl-alcohol as base solvent, and no need of thinner reduces vapor diffusion and stench generation. As a consequence, a good work condition can be kept up.

* Non-inflammable (chlorinated) special paint can also be utilized.



Marking Machine

J-1B from MARKTEC

Machine Component

PJ-1B is composed of Marking Machine, Controller, Pump Unit and Special Tubes/Cables for components' interconnection.

Marking Machine

Marking Machine is the device which actually discharges paint from 16 nozzles to indicate characters. Its weight is only 2.6kg, and is easy to adapt to the line facility. Connecting cables/tubes can be easily adapted and removed beside the machine case with one-touch connectors.

Controller

It performs marking condition setting and controls Marking Machine and Pump Unit in accordance with the marking data transmitted from master computer or Handy-Terminal.



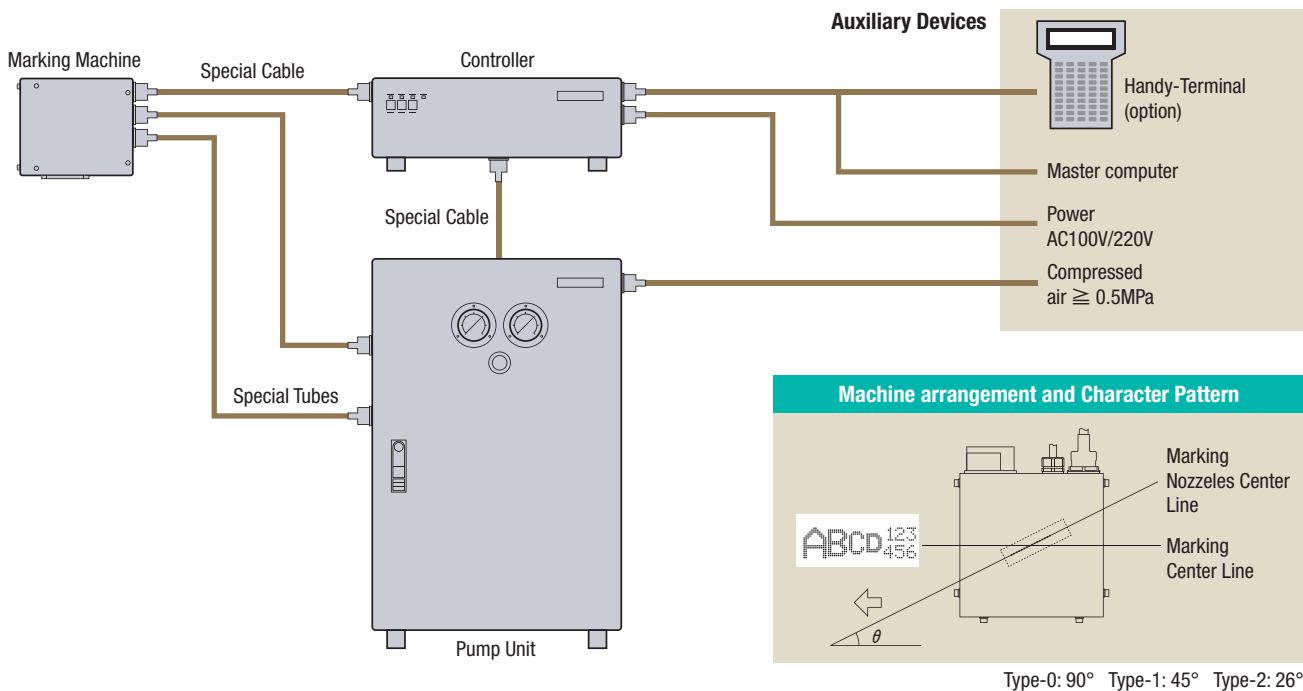
Handy-Terminal (option)

Pump Unit

It pressurizes and supplies paint, remover and supplies air to Marking Machine.



System Configuration



Specification

Type	PJ-1B-0, PJ-1B-1, PJ-1B-2											
Type of character	•Numerals: 10 •Alphabets: 26 •Symbols: 27kinds •Special letters: 100 kinds (can be registered)											
Size of character	size	Dot Constitution H×W	Size of character (Height×Width mm)									
			Tall character			Standard character			Wide character			
				Type-0	Type-1	Type-2	Type-0	Type-1	Type-2	Type-0	Type-1	Type-2
	Small	7 × 5 dot	21×15	15×11	9 × 7	21×23	15×17	9 × 11	21×30	15×22	9 × 14	
	Medium1	10 × 8	30×24	21×17	13×11	30×36	21×26	13×17	30×48	21×34	13×22	
Medium2	12 × 8	36×24	26×17	16×11	36×36	26×26	16×17	36×48	26×34	16×22		
Large	14 × 10	42×30	30×21	18×14	42×45	30×32	18×21	42×60	30×42	18×28		
Ext. large	16 × 12	48×36	34×25	21×16	48×54	34×38	21×24	48×72	34×50	21×32		
	Width/height ratio of dot pitch		1.0			1.5			2.0			
Marking speed	Maximum		138mpm	97mpm	80mpm	207mpm	145mpm	120mpm	276mpm	194mpm	160mpm	
Marking function	•Auto repeat •Numbering •Tow lines •Time codes •Character size selection •Inverse character •Long space •Reverse (PIO specify) •Black marking											
Number of Marking character	The maximum text data shall be within 2048 digits (including control codes)											
Capability	Can be marked with Extra large characters with 4L paint (approximately) Type-0: 250,000 Type-1: 350,000 Type-2: 500,000											
Marking head	3mm pitch/16 nozzles (Actual dot pitch: Type-0=3.0mm, Type-1=2.1mm, Type-2=1.3mm)											
Marking distance	Distance between head face and objective surface. (Type-0 and Type-1: <20mm Type-2: <10mm)											
Alarm function	Paint/Remover shortage, Air pressure, Memory error, Communication error, Voltage abnormal, Fuse breaking shall be indicated with single LED indicator on the front panel. Substance of Error shall be confirmed with Handy-Terminal or output signal receiving.											
Operation I/F	•Input (photo isolated 24V) 6 points: Marking start , Wash, Test shot, Reverse marking, Auto, Reset (Alarm reset and marking reset) •Output (open collector) 5 points: On auto, Alarm, On marking, Paint shortage, Remover shortage											
Comm. I/F	RS232C serial interface (within 19,200 bps)											
Encoder input	DC24V, For open collector. (For external synchronization, Dual phase/Single phase)											
Power	AC100V (50・60Hz) 5A or AC220V (50・60Hz) 2.3A											
Air	>0.4MPa (Recommend: 0.5MPa), 0.2Nm ³ /min											
Temperature	Service condition shall be within normal temperature (10-40°C) and dry condition.											
Standard Composition	Marking Machine	For type-0: 2HG5B001-016 For type-1: 2HG5B001-116 For type-2: 2HG5B001-216	Coating: Stainless steel without coating Measurement: 150H×150W×150D (about 2.6kg)									
	Controller	Type: IC4-1016-□ (AC100V) Type: IC4-2216-□ (AC220V)	Coating: Stainless steel without coating Measurement: 150H×450W×380D (about 10kg)									
	Pump Unit	Type: IU43-PCBA-S	Coating: Stainless steel without coating Measurement: 650H×450W×400D (about 25kg)									
	Special cables	1. Pump Unit – Controller (0.5m) 2. Marking Machine – Controller (3m or 10m) 3. Marking Machine – Pump Unit (3m or 10m)										
	Special tubes	Marking Machine—Pump Unit (5 tubes banded: 3m or 10m)										
Standard accessory	•Paint / Remover filter: 1pc for each •Special tools											
Option	Handy-Terminal: For marking data preparation / transmission, text data storage up to 100 items, controller status confirmation, operation parameter setting and transmission											

* At maximum marking speed, Auto-repeat function and Duty cycle shall be regulated.

* Combination of marking function shall be regulated.

Special paint and remover for PJ-1B

	Type	Alcohol type	Eco type
Paint	Type	PSA75	PSG
	Major solvent	Ethyl alcohol	Ethyl alcohol, Ethylene glycol di-alkyl ether
	Color	White, Black, Red, Green	White, Black, Red, Green, Orange
Remover	Type	Remover A	Remover G
	Major solvent	Ethyl alcohol	Ethyl alcohol, Ethylene glycol di-alkyl ether

Integrated supplier of Non-Destructive Testing and Marking



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☞ All specifications and designing are subject to change without notice.