

Paint Marking System

Paint Jet Printer

PJ-1B



CLEAR MARKING is PJ-1B

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.

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.

• High-speed marking

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

• Easy and stabilized start-up

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



Controller



Pump Unit

• Low running cost

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

• 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.

• Light & small marking machine

The weight of PJ-1 is only 1/5 that of our former machine. Put and use the machine at line side without installation. Setting and handling of the marking machine is simple and easy, therefore simple support or movement device can be utilized.

• Independently or with FA system

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



Printing Machine

from MARKTEC



Machine Component

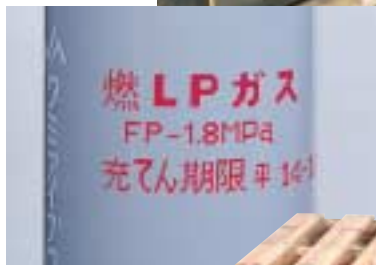
PJ-1B is composed of Marking Machine, Controller, Pump Unit and Special Tubes/Cables for components' interconnection.

• 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.



Handy Terminal



※The marking has made with special marking equipment for LPG cylinder.

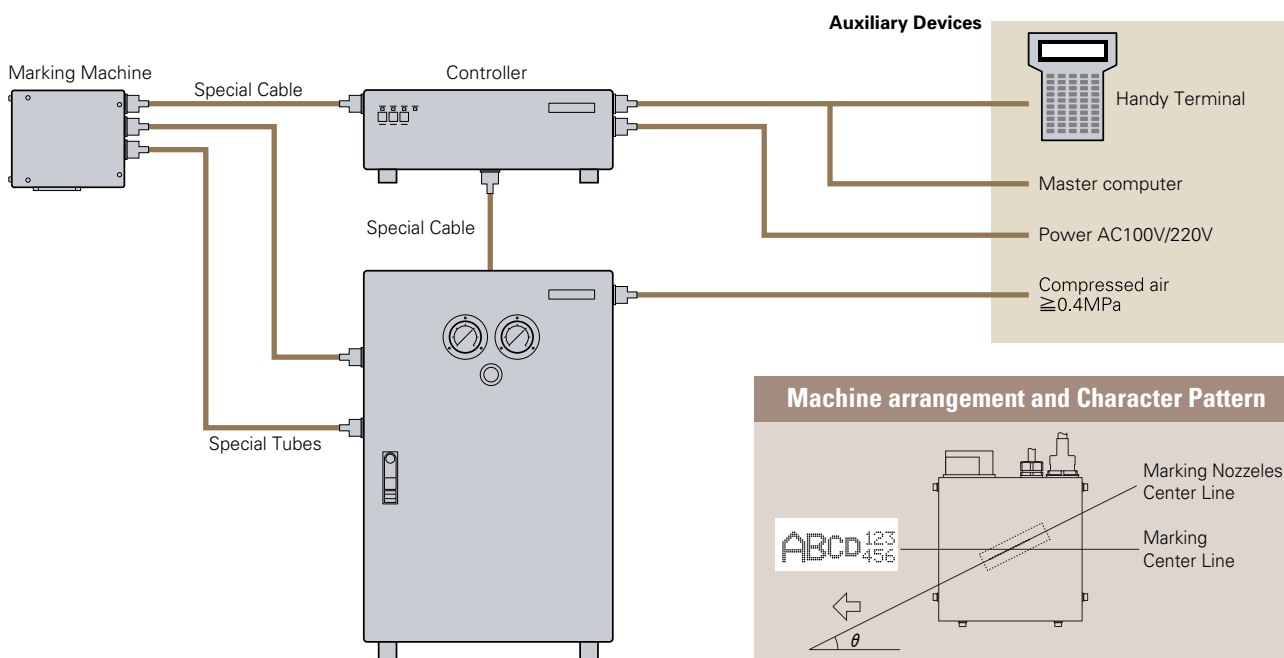


• Controller

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.

• Pump Unit

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



Type-0 : 90° Type-1 : 45° Type-2 : 26°

■ Specification

Type	PJ-1B-0, PJ-1B-1, PJ-1B-2											
Type of character	• Numerals : 10 • Alphabets : 26 • Symbols : 27 kinds • 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	
Medium 1	10 × 8	30×24	21×17	13×11	30×36	21×26	13×17	30×48	21×34	13×22		
Medium 2	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 (mpm)		138	97	80	207	145	120	276	194	160	
Marking function	• Auto repeat • Numbering • Tow lines • Time codes • Character size selection • Inverse character • Long space • Reverse (PIO specify) • The maximum text data shall be within 512 digits (including control codes).											
Marking head	3mm pitch/16 nozzles (Actual dot pitch: Type-0= 3.0mm, Type-1= 2.1mm, Type-2= 1.3mm)											
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 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) 4 points : Marking start, Wash, Test shot, Reverse marking • 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) 0.5KVA or AC220V (50 • 60Hz) 0.23KVA											
Air	> 0.4Mpa (Recommend : 0.6MPa), 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 Coating : Stainless steel without coating For type-1 : 2HG5B001-116 Measurement : 150H×150W×150D (about 2.6kg) For type-2 : 2HG5B001-216										
	Controller	Type : IC4-1016 (AC100V) / IC4-2216 (AC220V) Coating : Munsell 5Y7/1 Measurement : 150H × 450W × 380D (about 10kg)										
	Pump Unit	Type : IU43-PCBA-S Coating : Munsell 5Y7/1 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	(5 tubes banded : 3m or 10m)										
Standard accessory	• Paint / Remover filter : 1pc for each • Special tools • 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

		Alcohol type	Non-inflammable type
TECMARKER PAINT 4L(canned)	Type	PSA75	PSE75
	Major solvent	Ethyl alcohol	Tetrachloroethylene
	Color	White, Black, Red	White, Blue, Red
TECMARKER REMOVER 4L(canned)	Type	Remover A	Remover E
	Major solvent	Ethyl alcohol	Tetrachloroethylene

Non-Destructive testing materials & system / Marking equipment & system



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