

# Portable MPG

Hand-held Pendant(Manual Pulse Generator)





### **Ergonomic & Convenient**

- Ergonomic design
  - Worker can hold Portable MPG with one hand
- STD' & Waterproof Type
  - Closed design to prevent Oil, Water & rust
  - Waterproof(IP 65 grade) Case Design & use O-ring and rubber sealing
- Various Line-up
  - Axis selection S/W, Multiplation S/W and Dial(MPG)
  - JOG button
  - Emergency S/W
  - Enable S/W
- Customized design
  - STD' & Waterproof type
  - “OR” & “AND” type Enable S/W
  - Print customer's LOGO
  - Various fixing method(magnet, holder)
  - Cable length (1.8m & 2.1m)
- Reliable Quality
  - Knowhow from rotary encoder and MPG for last 12 years
  - 100% test with exclusive tester
  - Fix cable and body with cap

## Model Codes

**SPM - Model - IP grade - Output - Magnet - Cable Length**

S01 : Axis & Multiple Switch  
S02 : S01 + Emergency + Enable  
S03 : S01 + Emergency  
S04 : S01 + Enable  
M01 : S01 + Jog Button

1 : 4.1m  
2 : 5.3m

M : With Magnets  
0 : Without Magnet

L : Line Driver

A : IP 50  
B : IP 65

## Model Lineup

STD'



S01



S02



S03



S04



M01

Waterproof



S01



S02



S03



S04



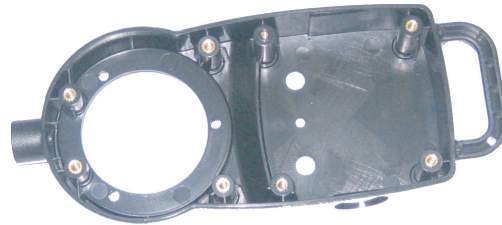
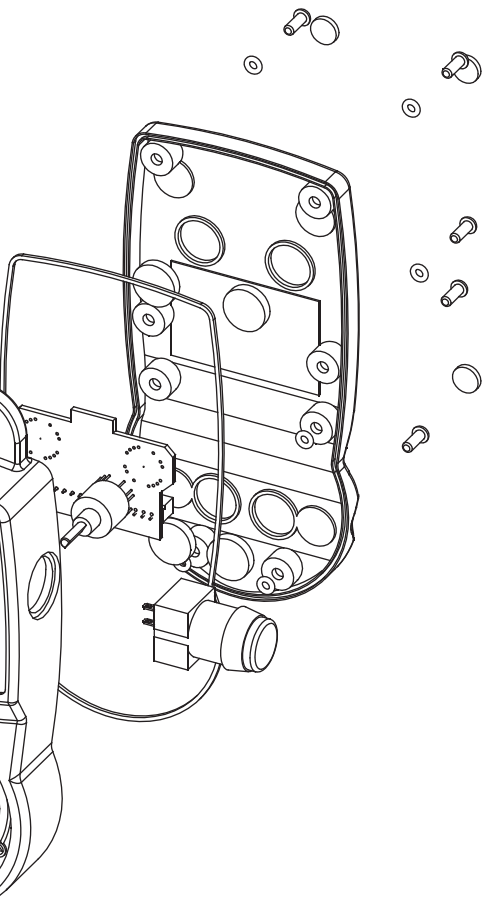
M01

## Emergency & Enable Switch

With the needs of working safety in developed countries, Emergency switch and Enable switch has been required by market. As followed these kinds of market needs, Mecapion can provide various option with switch existence and non-existence. And Enable switch is “OR” contacts type for customer’s convenience. (“And” contacts also available)

## Waterproof Design

Mecapion has two type one Portable MPG. Waterproof type can be operated in hard working condition which has much Oil, Water and Rust. And the Std’ model is also designed to protect the touch of oil, water and rust. All of component of waterproof model has over IP60 grade

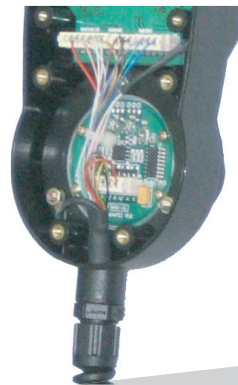


## Insert & O-ring

To improve reability of maintenance, Mecapion use bolt with insert type and O-ring to prevent oil and water. and inserting rubber sealing between body, Mecapion can protect any of external material during frequency repairing

## Cable Tab and Connector

To prevent broken body and dis-connected cable with big load to cable and body. Mecapion use cable cap to realize more safe use. And With connector type cable end part, easily can replace the cable



### Waterproof Switch

Because Rotary switch and Jog switch is important component to processing basic function of MPG, we are using Waterproof switch for all of STD' type and Waterproof type MPG. For Waterproof type, to improve waterproof ability, we insert gasket to case and use high waterproof grade(IP65) of Emergency S/W and Enable S/W.



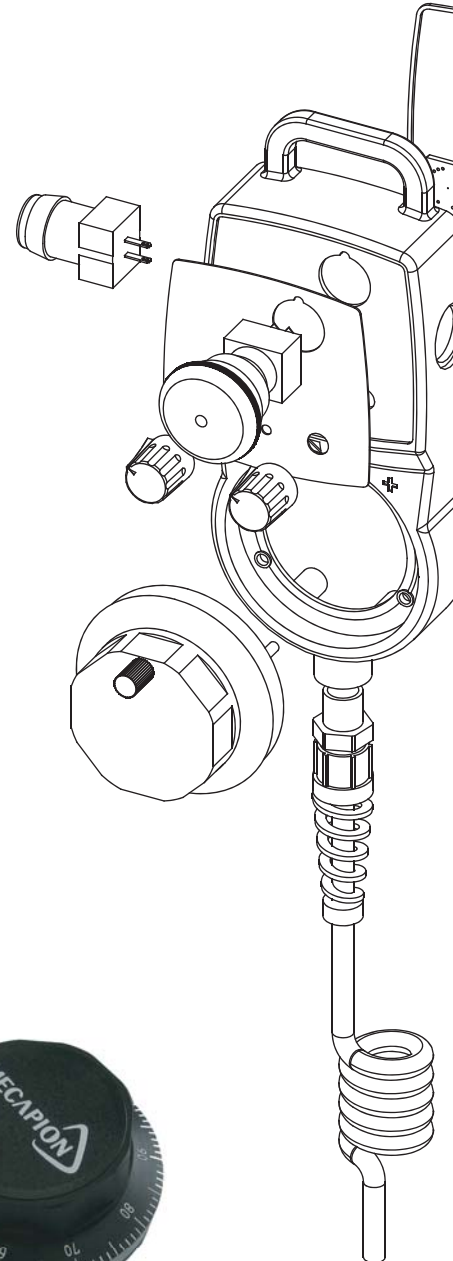
### LOGO Printing

To improve user's convenience, all model(5types) can be printed Customer's Logo. The location of Logo is above rotary switch on front cover pad (S01, S04) and on MPG wheel cover(other models). Especially, the Log on front cover is printed under the pad, so, it can not be removed by oil and water.

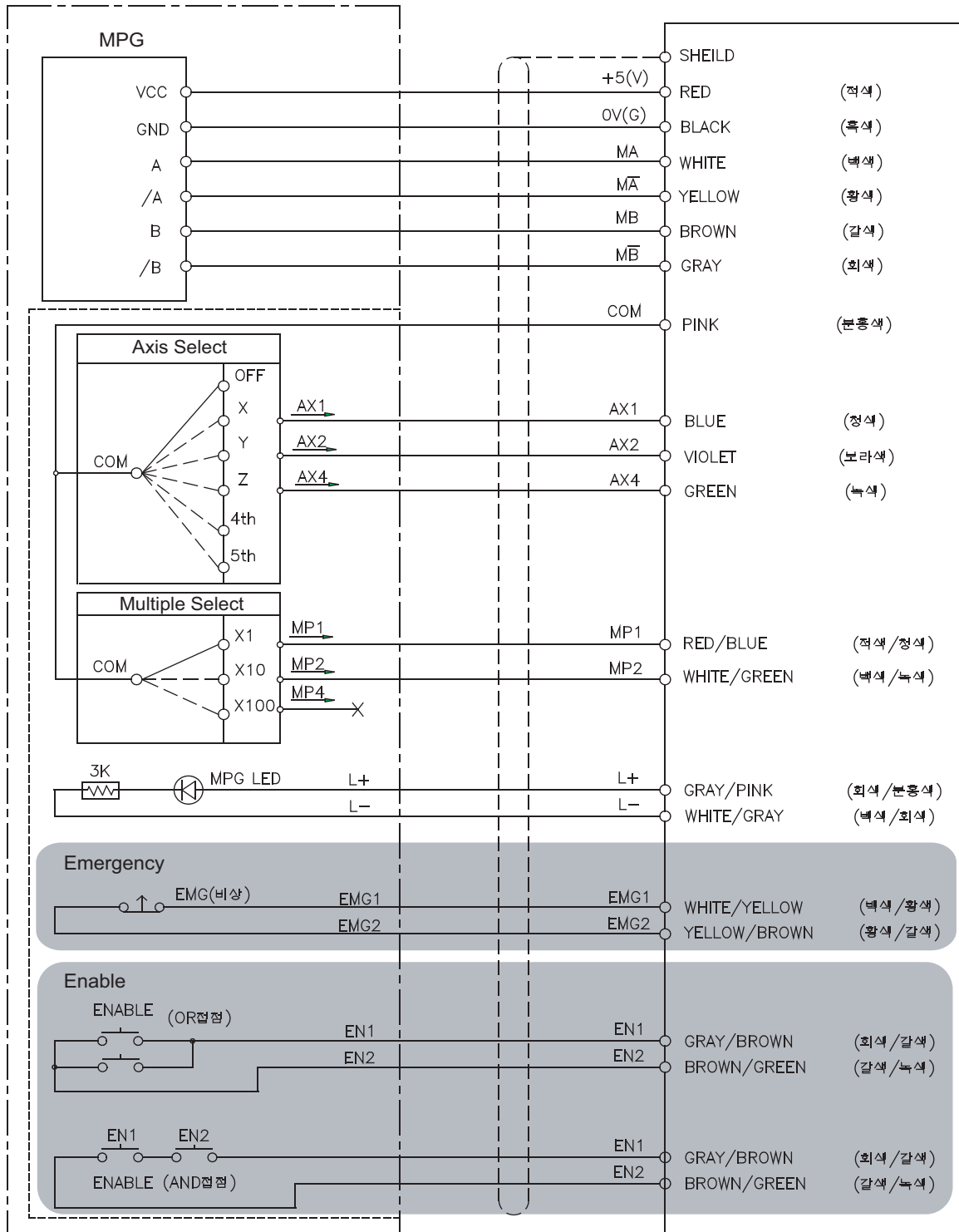


### Higher Function & Stability

We, Mecapion has been produced from Rotary encoder, AC servo motor/drive to Motion controller to provide total solution for various customer needs. with technology and experience of rotary encoder , Mecapion developed MPG(manual pulse generator). 100 pulse of signal is created by 1 rotation. 2 channel of A, B Pulse is transmitted by Line driver IC. With precised production line and excellent Quality control system, Mecapion can provide Portable MPG with High Stability .



# Wiring Diagram



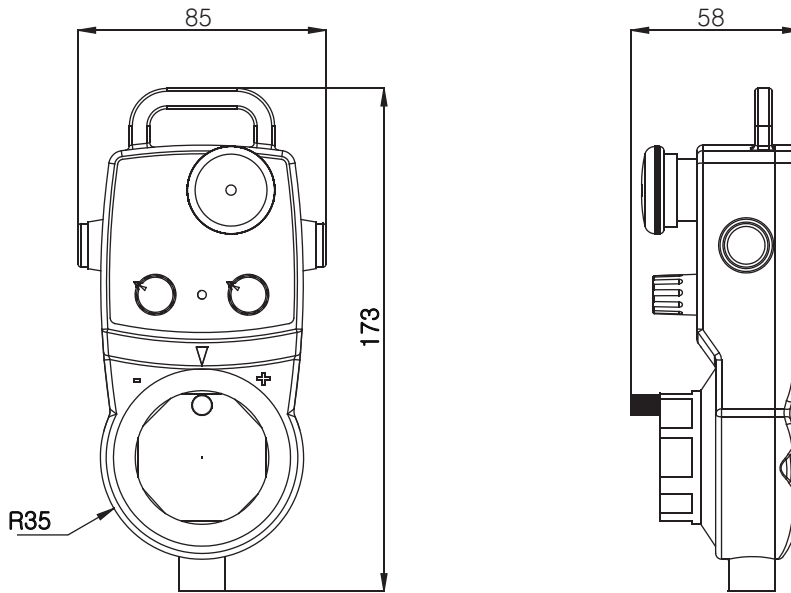
**Axis Select**

	Binary code			Switch code		
	AX1	AX2	AX4	AX1	AX2	AX4
OFF	0	0	0	0	0	0
X	1	0	0	1	0	0
Y	0	1	0	0	1	0
Z	1	1	0	0	0	1
Option	4th	0	0	1		
	5th	1	0	1		

**Multiple Select**

	Binary code			Switch code		
	AX1	AX2	AX4	AX1	AX2	AX4
x 1	0	0	0	0	1	0
x 10	1	0	0	0	0	1
x 100	0	1	0	0	0	0

## Dimension Drawing



## Specifications

	Specification	Description
Body	Dimension	173X70X35 mm
	IP grade	IP 50 /IP65
	Others	Printing customer Logo on front PAD/ MPG dial is available ( For Big volume only )
MPG	Power	5V±10%
	Dial	100 No. of Click / 1 Rotation
	Output signal	100pulse/rev(A, B Signal ; 400count/rev)
	Life time	Over 1M times of rotation
	Temp	-10℃ ~ +70℃
	Output type	Line Driver
Switch	Axis selection	OFF, X, Y, Z (Rotary Switch)
	Multipulation	×1, ×10, ×100 (Rotary Switch)
	JOG	+, ∞, - (Push Button)
	Enable	2 Push Button (Std'. OR contacts Option: AND Contacts)
	Emergency	Emergency Switch
Option	Communication	Binary code / Customer's Protocol
	Magnet	With / Without
		21wires : 21Cx28AWG
	Curl Cable	1 : Total Length :1.8m (Curl Length: 0.7m) 2 : Total Length : 2.1m(Curl Length: 1.0m)



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