

## PULSARLUBE MSP

### Pulsarlube MSP

MACHINE SYNCHRONIZED EXTERNAL POWER UNIT



<MSP M250 >



#### Operating Principle

- The MSP unit turns "On" or "Off" in synchronization with the machine on which it is installed. It will dispense the preset amount of grease as long as the machine is operating. If the machine is not operating, then the Pulsarlube MSP unit goes into "stand-by mode" and does not dispense lubrication until the machine operates again.

The MSP is an externally powered unit. The power supply is connected to the machine or PLC which operates the unit. **Therefore, there is no need to replace battery. Only grease pouch will be replaced.**

#### Specification for Main Unit

| Item                  | Description   |
|-----------------------|---|
| Available Model       | KLT125, KLT250, ML500 and OL500   |
| Operating Pressure    | 20kgf/cm <sup>2</sup> (280psi)  |
| Operating Temperature | -15°C ~ 60°C (5°F ~ 140°F)  |
| Multi Points          | Up to 8 points  |
| Back Up Battery       | DC 4.5V(Service Life 5 years),<br>No need replacement along with grease pouch |



|                     |  |
|---------------------|--|
| Power Supplier      | Select power supply according to machine power<br>Source VAC Adaptor for AC power,<br>VDC converter for DC power |
| Other Specification | Same as Pulsarlube M   |

### Specification for Power Supply

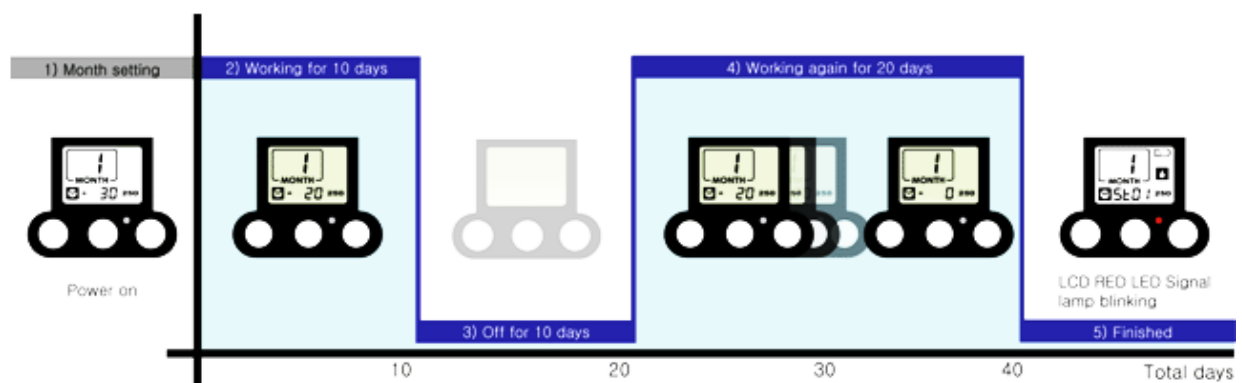
| Item                          |                   |        | MSP VAC<br>AC- DC Adapter | MSP VDC<br>DC- DC Converter |
|-------------------------------|-------------------|--------|---------------------------|-----------------------------|
| Rate Input Power              |                   |        | 100~220V, 50 ~ 60Hz       | 12V ~ 24V                   |
| Rate Output Power             |                   |        | 5.0V, 2A                  | 5.0V, 2A                    |
| LED Lamp to indicate power ON |                   |        | RED LED                   | RED LED                     |
| Case Size(mm)                 |                   |        | 85(D) x 49(W) x 32(H)     | 85(D) x 49(W) x 32(H)       |
| Wire Length                   | Power Supply Side | Input  | 1M                        | 1M                          |
|                               |                   | Output | 4.5M                      | 4.5M                        |
| MSP                           |                   |        | 90mm                      | 90mm                        |



NB: Power supply VAC Adaptor and VDC Converter were designed to fit Pulsarlube MSP unit. Warranty will be void if unspecified adapter or converter were being used.

### How to work Pulsarlube MSP

#### MSP working process



#### MSP unit time control (Example; 1 Month Mode)

1. If MSP unit was set in 1 Month Mode, then start "1" month blinks and 30 days is displayed on the LCD
2. If MSP unit was working with main machine for 10 days, then "1" month blinks and 20 days is displayed on LCD
3. Main machine power was OFF for 10 days, and then MSP unit has been in sleep mode for 10 days. No LCD display. However, CPU will keep internal data using back up battery.

4. Now, when Main machine is powered ON, MSP unit will be on and continue working for the remaining 20 days
5. After 40 days (30days working, 10 days sleeping), LCD, Red LED Signal Lamp will be blinking.
6. Replace grease pouch only. (No need to change battery even though Low Battery I-con appear on the LCD)
7. After replacing grease pouch, Press "RESET " button, press "POWER" button and set "MODE"

**Remark:** • Rate input power for MSP unit is DC 5.0 Voltage.

- MSP unit can be stopped by pressing "POWER" button
- If main machine power OFF, then unit will be OFF in 6~7seconds and all system will be in the sleep mode.
- Initially, MODE has to be set when main machine power is ON

#### How to install Pulsarlube MS

1. Please install unit at convenient location to replace grease pouch and control unit.
2. Mount unit directly to the bearing as you would a Pulsarlube M unit
3. Connect female end on Power supply to the MSP unit main body
4. Connect Power Supply to machines' power source
5. Have to select Power Supply VDC or VAC depending on main machine power source AC or DC
6. No need to check wire (+),(-) polarity for AC power source
7. Have to check (+), (-) polarity in case of DC power source  
VDC power supply wire; (+) Light Blue color, (-) Brown color wire.
8. All safety and operating instructions should be read before using VAC / VDC power supplies
  - i) Read instructions - All safety and operating instructions should be read before using AC/DC adapter and should be retained for future reference.
  - ii) Water and Moisture - The power supply should never be used in, on or near water due to the risk of fatal shock.
  - iii) Heat - Never locate the power supply near heat sources such as a radiator, floor register, stove or other heat-generating device.
  - iv) Dangerous Entry - Care should be taken that no foreign objects or liquids fall or are spilled inside the power supply.
  - v) Ventilation - The power supply should always be located in such as way that it maintains proper ventilation.
  - vi) Flammable - Keep away from flammable and combustible materials.
  - vii) Vibration - Keep away from vibration prone items, machine and equipments.
  - ix) Service - The user should not attempt to service the power supply beyond what is described in the user's manual. All other servicing should be referred to qualified personnel.
9. Connect MSP unit with power supply VAC or VDC (Please check red LED lamp is ON)
10. Turn ON POWER button and setting MODE.

## Wiring

| VAC Adapter   | VDC Converter   |
|---|---|
| <ul style="list-style-type: none"><li>- MC (Magnet Coil) Terminal of main machine power source</li><li>- Main machine power control switch ON lamp Terminal which is on the control panel case front</li><li>- Relay Terminal</li><li>- PLC Terminal</li><li>- Other Terminal</li></ul> | <ul style="list-style-type: none"><li>- DC 12~24 Volt out put Terminal</li></ul> <div data-bbox="986 479 1273 645" style="text-align: center;"><p>The diagram shows two wires emerging from a terminal block. The top wire is light blue and is labeled 'light blue(+)' with a plus sign. The bottom wire is brown and is labeled 'Brown(-)' with a minus sign. The entire diagram is enclosed in an oval.</p></div> <p data-bbox="858 663 1394 698"><b>⚠ Check polarity of VDC Converter wires</b></p> |

**⚠ Don't connect MSP unit directly to Electric Motor or Electric Power cable.**