


Operating Principles

The MSP unit turns “On” or “Off” in synchronization with the equipment on which it is installed. It will dispense a preset amount of grease as long as the machine is operating. If the equipment is not on, the Pulsarlube MSP unit goes into “stand-by mode” and does not dispense lubricant until the machine goes back into operation.


The MSP unit is an externally powered unit. The power supply connected to the machine or PLC powers the unit. Therefore, there is no need to replace the battery; only the grease pack will need to be replaced.

MSP Lubricator

Specifications	Description	Image
Models Available	60ml, 125ml, 250ml, 500ml and OL500	
Normal Operating Pressure	30kgf/cm ² (425psi)	
Operating Temp range	- 15 °C ~ 60 °C (5 °F ~ 140 °F)	
Multi Point Lubrication	Up to 8 points	
Power Supply	Available in VAC and VDC	
Back Up Power Source	DC 4.5V Replaceable Alkaline Battery	
Other Functions	Same as the Pulsarlube M Lubricator	

Product upgrades may occur without prior notice for quality purposes.

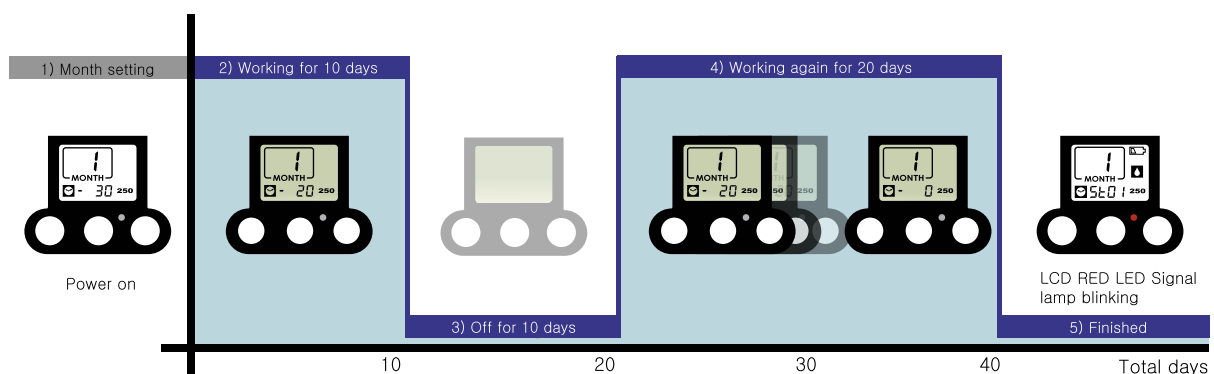
Power supply

Specifications		MSP VAC AC- DC Adapter	MSP VDC DC- DC Converter	Image
Voltage Rate Input Range		100~220V, 50~60Hz	12V ~ 24V	
Voltage Rate Output Range		5.0V, 2A	5.0V, 2A	
Power ON Indicator		Red LED	Red LED	
Relay Box Dimensions(mm)		85(D) x 49(W) x 32(H)	85(D) x 49(W) x 32(H)	
Wire Length	Power Supply	Input	1 meter	
	Output	4.5 meter	4.5 meter	
Lubricator		90mm	90mm	

Note: The MSP Power Supply was designed specifically for the Pulsarlube MSP unit.

Product warranty will be null and void if any other type of unspecified adapter or converter is used.

The Pulsarlube MSP functioning process



How the MSP unit time control programming works - Example (1 Month Mode)

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

Now, Main machine power 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"

NOTE

- The MSP unit's rate input power is DC 5.0 Volts.
- The MSP unit can be turned off at any time by pressing the "POWER" button for 2 seconds.
- The MSP unit will go into stand-by mode 6 to 7 seconds after the equipment has been turned off.
- The equipment that the MSP is connected to must be ON while programming the lubricator.

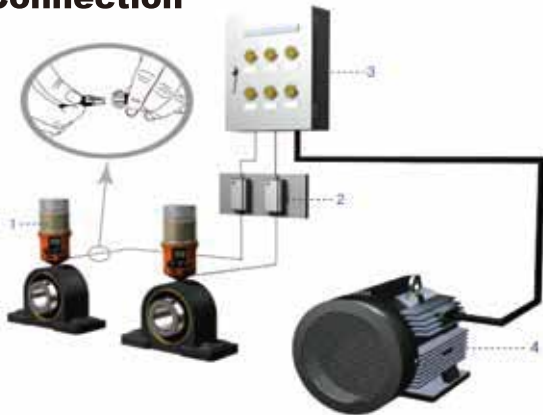
Pulsarlube MSP Installation

1. Please install the unit in a convenient location for easy access.
2. Direct or remote mount the MSP unit to the bearing as you would a Pulsarlube M unit.
3. Connect the male end of the power supply to the female end coming from the main body of MSP unit.
4. Select voltage of power supply needed for your application. i.e. (VAC, VDC) Connect the power supply to machine's power cable.
5. It is not necessary to check for wire polarity (+) and (-) for the AC power source. For DC powered units, please connect in corresponding polarity (+) to (+) and (-) to (-). The light blue color wire is (+) and the brown wire is (-).
6. Hold the "POWER" button for a couple seconds to turn the lubricator on and program lubricator by pressing the "MODE" button.
7. Please make sure that red LED blinks once while turning the power on.

Safety Instructions

- **Water. and Moisture.** The power supply should never be used in, or near water or any other chemicals due to the risk of fatal shock.
- **Heat.** Never locate the power supply near a heat source.
- **Hazard.** Please place the power supply in a safe area.
- **Ventilation.** Please maintain power supply in a well-ventilated area to avoid overheating.
- **Flammability.** Keep power supply away from flammable and combustible chemicals.
- **Vibration.** Keep power supply away from high vibration areas.
- **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.

System Connection



► Equipment

1	Automatic Lubricator	MSP Series
2	Power Supply	For VAC/VDC
3	Main machine (Motor)	Connect wiring to equipment's power supply
4	Electric Motor	

► Wiring

VAC Adapter	VDC Converter
<ul style="list-style-type: none"> - MC (Magnet Coil) Terminal of main machine power source - Main machine power control switch ON lamp Terminal which is on the control panel case front - Relay Terminal - PLC Terminal - Other Terminal 	<ul style="list-style-type: none"> - DC 12 ~ 24 Voltage output Terminal <p>Check polarity of VDC Converter wires</p>

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