



The Handheld Operator Station with handwheel (or MPG) from **MACHINEMATE** INC is specially designed to complement the **MACHINEMATE** control with the following features:

- ❑ Dust and waterproof pendant
- ❑ 3-meter flexible cable (polypropylene insulated, polyurethane jacket) is included, with a 26-pin round connector
- ❑ Emergency stop push button (push in to lock, twist out to release)
- ❑ Handwheel (manual pulse generator or MPG) with 100 pulses per revolution
- ❑ Axis selection switch (six positions: X, Y, Z, 4, 5, 6)
- ❑ Feed selection switch (three position: X1, X10, X100)
- ❑ Two general purpose push buttons (illuminated)
- ❑ PLC application template for this MPG available from **MACHINEMATE** INC or from its web site

There are two versions.

- One version has the Emergency stop push button on the front of the pendant; in this configuration one general-purpose white push button is at the lower left front and the other is on the right side of the pendant.
- The other version has the Emergency stop push button on the right side of the pendant; in this configuration both general-purpose

white push buttons are on the bottom of the pendant. This version is pictured above.

The first MPG version is preferred in some applications because that configuration easily supports the side push button to act as a 'deadman' switch for the handwheel activity. If the 'deadman' switch is not depressed, the handwheel is not active. If the handwheel is active and the operator releases the 'deadman' switch, then the motion immediately stops.

Easy installation	The 3-meter cable comes with a 26-pin round connector for a bulkhead connection. The 24VDC supply and Emergency stop circuit connections are made there. The other pins are connected to a MachineMate I/O module.
IO connector	The inputs and outputs are connected to the control via this 26-pin round connector on the end of the 3-meter flexible cable.
Cable	3-meter cable is provided; 4 and 5-meter cables are optional. When fully coiled, the cables are about 1.3-meter, 1.6-meter and 1.8-meter respectively. Each of these cables will actually uncoil well beyond their stated length; the stated cable length is for the usual distance (not the maximum).
Dimensions	roughly 7.9" (200 mm) x 3.15" (80 mm)
Weight	22.9 ounces (650 grams)



The Machine Tool Builder’s Panel (MTBP) from **MACHINEMATE** INC is specially designed to complement the **MACHINEMATE** control with the following features:

- ❑ Easy installation – same width as the **MACHINEMATE** control
- ❑ 50-pin D-shell connector for easy cabling to the **MACHINEMATE** system (it is also pin-compatible with the SERCOS control X9 connector)
- ❑ 2-meter cable included, 50-pin D-shell connectors on both ends
- ❑ Emergency stop push button (push in to lock, twist out to release)
- ❑ Feed rate and spindle speed override rotary switches
- ❑ Cycle start (green) and cycle stop (red) push buttons (illuminated)
- ❑ Jog + and Jog – push buttons (illuminated)
- ❑ Six general purpose push buttons (illuminated)
- ❑ All eight of the small push buttons can have different labels on their backing (buttons with no backing or with blank backing are available)
- ❑ PLC application template for this MTBP available from **MACHINEMATE** INC or from its web site

Easy installation	The panel has the same 19" width (standard rack-mount dimension) as the MachineMate control. The 2-meter cable is pin-compatible with the X9 connector on the MachineMate SERCOS control (its IO connector, separate from the other system IO modules). Alternately, a 50-pin breakout card with terminal strips is available for the electrical connection to the system IO modules.
4-pin terminal block	The power supply (24VDC and ground) is connected to a small terminal block on the panel's circuit card. On the same block, the Emergency stop signals (two pins) are provided to connect the push button to the control's Emergency stop electrical circuit.
IO connector	The 24VDC inputs and outputs are connected to the CNC via this 50-pin D-shell connector.
Dimensions	19.0" (482 mm) x 4.0" (101.6 mm) Allow at least 6" (153 mm) behind the panel for the cable and its bend radius.



The Teach Panel from **MACHINE**MATE INC complements the **MACHINE**MATE control with the following features:

- ❑ Easy installation, using COM2 (X6) on the MachineMate
- ❑ IP54 enclosure; comes with mounting bracket
- ❑ 15-meter cable allows the operator to use the panel far from the CNC
- ❑ Panel enable buttons on each side of the panel
- ❑ Complete operator interface: LCD display (about 3"x5"), the five CNC operation mode keys, the eight F1-F8 soft keys and a complete alphanumeric keypad. Several other keys are provided to support the teaching process (for axis jogging) and the editing of the part program.
- ❑ Emergency stop push button and feed rate override potentiometer

Easy installation	The 15-meter cable comes with a 25-pin D-shell connector for a bulkhead connection. The 24VDC supply and Emergency stop circuit connections are made there. The other pins are pin-compatible with the COM2 port (X6) on the MachineMate.
Remote operator interface	LCD display, CNC operation mode keys, F1-F8 soft keys, complete alphanumeric keypad, special keys for teaching and editing.
Standard connector	The panel is connected to the CNC via the 15-meter cable with its standard 25-pin D-shell connector (pin-compatible with COM2, except for the addition of two 24VDC supply signals and the two Emergency stop signals).
Cable	15-meter cable (49 ft) is provided; a 25-meter cable (82 ft) is optional.
Dimensions	9.45" (240 mm) x 12.65" (310 mm) x 3.54" (90 mm)
Weight	3.3 lbs (1.5 kg)