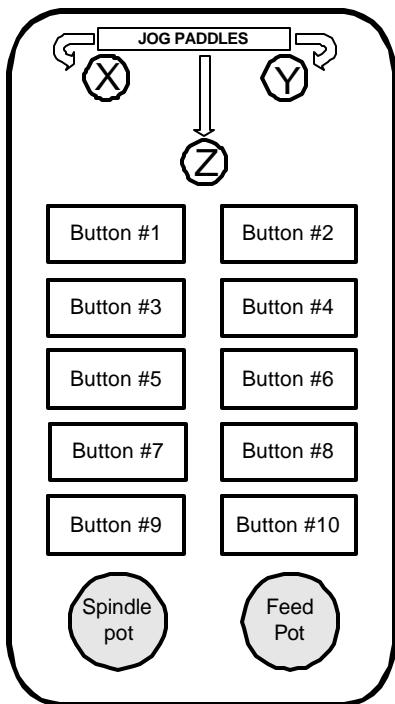


PENDANT CONTROL

The PENDANT CONTROL (or remote pendant) is used to operate the machine away from the trackball station or keyboard. Manual machine movement (JOGGING), and CNC cutting (Cycle start and Abort) are performed from the remote pendant. The remote pendant consists of the following:



- 1) THREE JOG PADDLES (one for each axis)
- 2) TEN PUSH BUTTONS
- 3) FEED POTENTIOMETER (Feed pot)
- 4) SPINDLE R.P.M POTENTIOMETER (Spindle pot)

When you first look at the remote pendant, you might be confused because none of the buttons are labeled. Don't get discouraged because the SCREEN is where all the button descriptions are given. Look at the graphic illustration of the pendant on screen to see what the buttons represent.

JOGGING THE MACHINE

The machine is always in the **jog mode** while the axis drives are on. The hand wheels are also active at this time. To make the machine move, push any one of the "jog paddles". The feedrate can be adjusted using the "feed pot". Below the pendant, there is the option to adjust the Maximum Jog Speed (feedrate). The feedrate can be set from 3% of maximum to 100%. Pick or highlight the

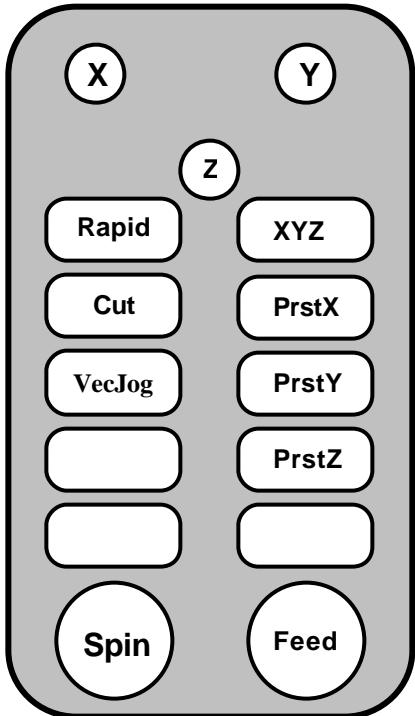
percentage of maximum that you want the machine to move.

JOG SPEED = 3% 25% 50% 100%

The feedrate is infinitely variable **UP TO** the maximum jog speed with the feed pot. Pushing the jog paddles will make the machine move. It is best to start moving the machine around slowly until you have become familiar with how the machine accelerates and de-accelerates.

JOG

To **JOG** the machine the **DRIVES** must be ON. With the drives on, the prompt (**ICON**) in the lower right hand corner of the screen will indicate that the machine is in the **JOG MODE**. Simply move the jog paddle on the remote pendant (the axes are displayed for which paddle jogs which axis) and the machine will move. Turning the **FEEDPOT** (right hand pot on pendant) can infinitely vary the feedrate at which the machine jogs. The maximum feedrate is set to the system max feed.



REMOTE PENDANT

The device that is attached to the graphics monitor is the hand held remote PENDANT. At this pendent, the operator has much flexibility to run the machine by not having to be right at the control to execute various functions. You can move around the machine freely with the pendant in hand. The on-screen-pendant menu indicates what each button on the pendant does, which is why the buttons on the pendant are not physically marked, because in different modes of operation, the buttons perform different tasks.

In addition to the buttons, there are 3 jog paddles, and 2 pots (potentiometers). The top left paddle jogs X-axis, the top right jogs Y-axis and the lower middle one jogs Z as indicated on the menu. The left "pot" controls the spindle RPM'S. This **“SPINDLE POT”** allows you to vary the spindle speed from 0 to maximum RPM (the max RPM is set on the menu in “R.P.M”).

To change Jog Modes from X Y Z jog, to A B Z jog, you press the [X Y Z] pendant button. This will toggle over to [A B Z], which means you can then jog the A and B-axis along with Z-axis.

The right "pot" controls the feedrate or “feed override”. With the exception of a few commands in the software, the **FEEDRATE** is constantly adjustable by using the **“FEED POT”**.

In **EXECUTE** or when running a **CNC** program the feedrate **“MAX”** will be determined by what is entered in **FEEDRATE** on the menu. The feedrate can be adjusted by using the **FEED POT** to go from minimum to maximum feed.

EMERGENCY STOP

There also is a RED button on top of the pendant. This is an **EMERGENCY STOP**. When this button is hit, the drives are shut off. There is also an "E-STOP" on the side of the graphics monitor. Normally when the machine is not in use, the drives should be turned off.

FCC INFORMATION:

Class A Device Statement: (Section 15.105(a) of the FCC Rules)

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio

frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.