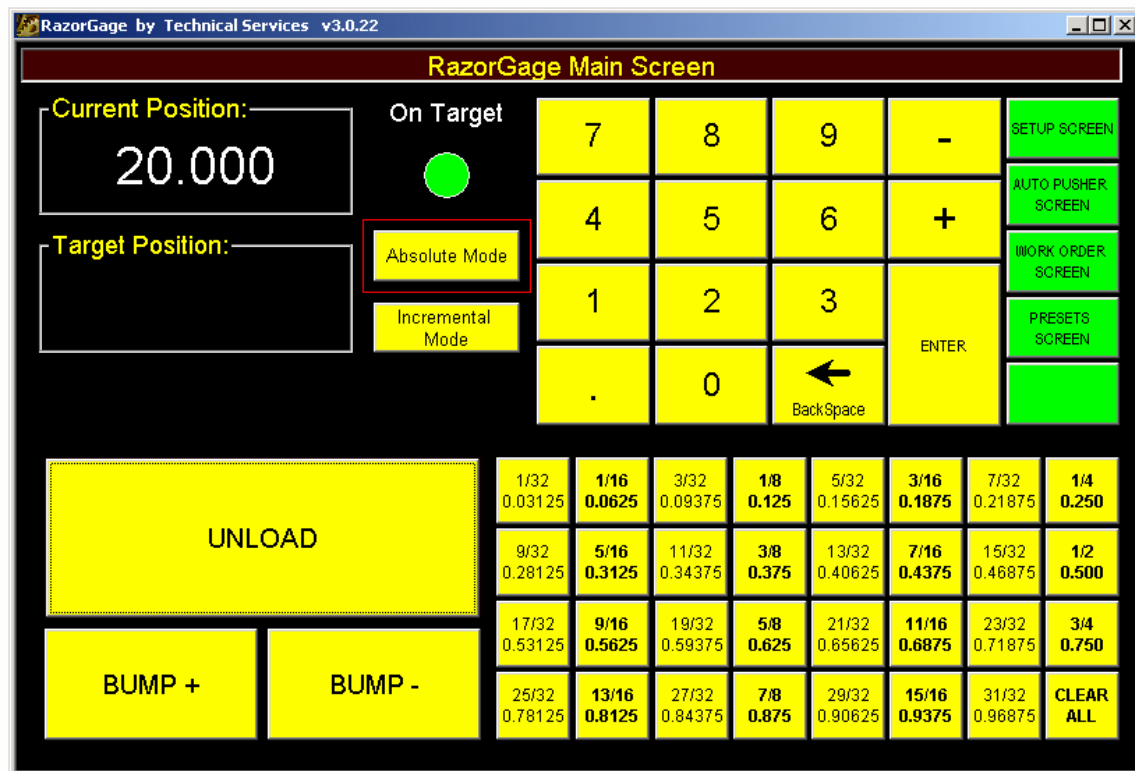


RAZORGAGE

TOOL GRADE SAW STOPS

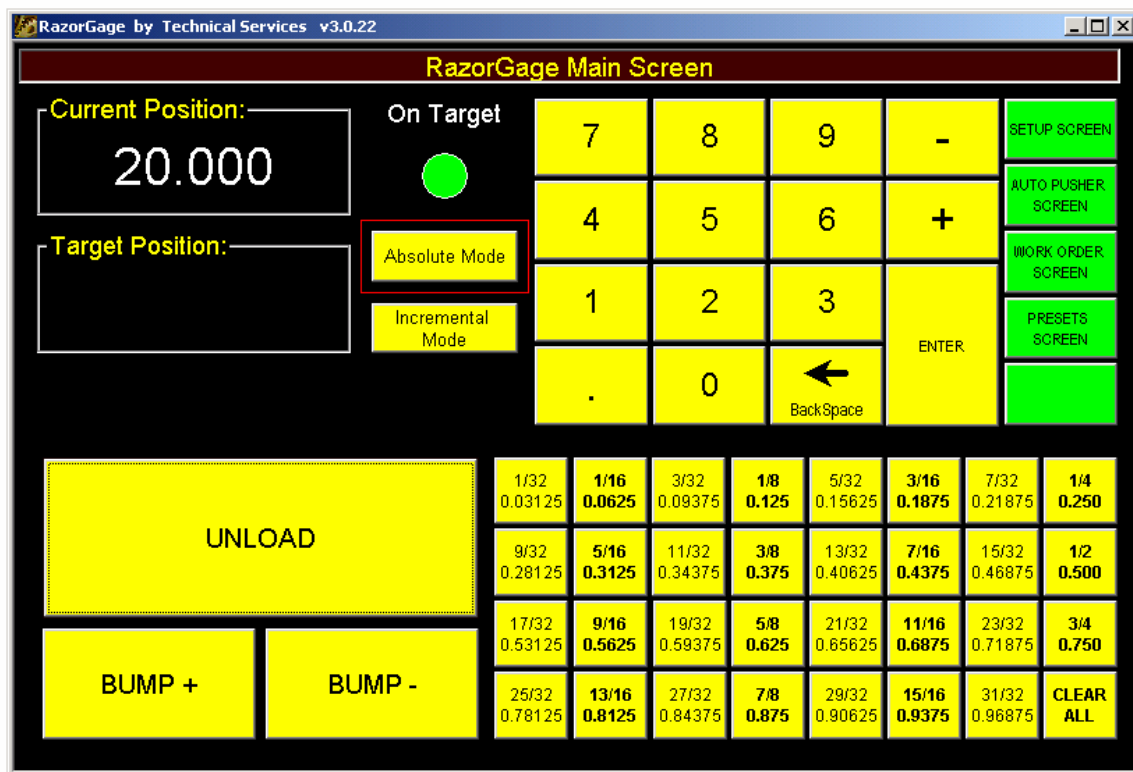
Software Manual

RazorGage PC Option



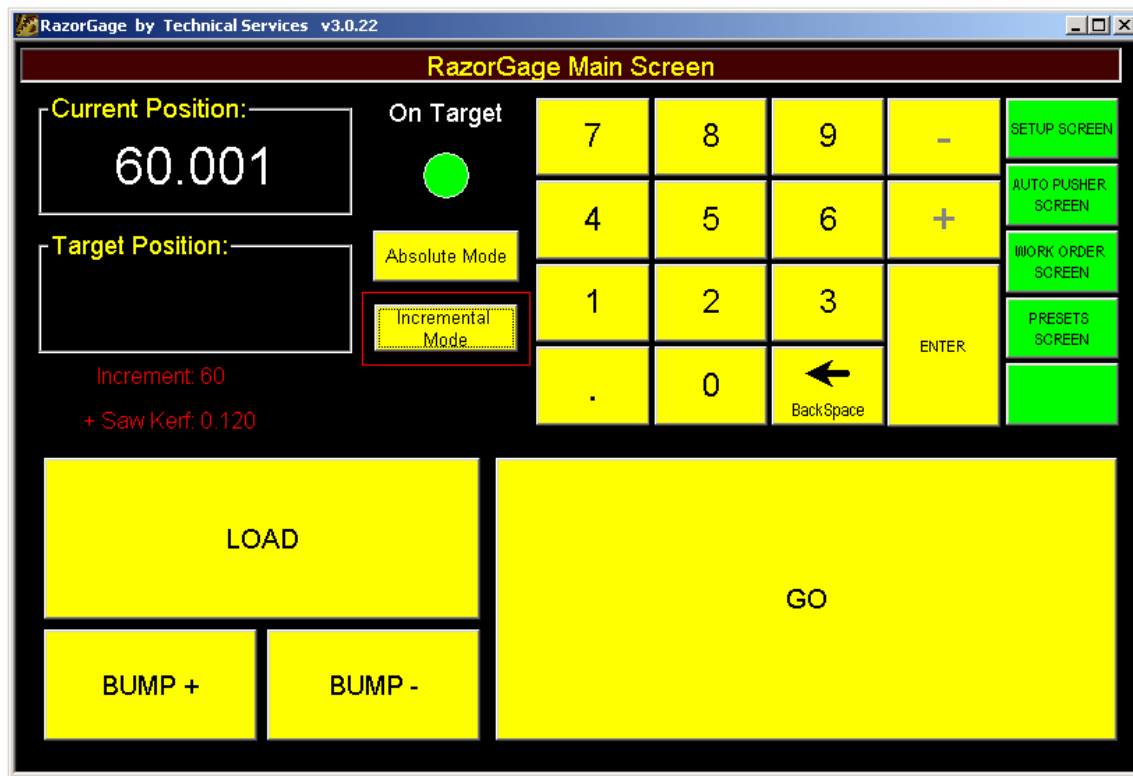
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When you power up the RazorGage with the PC Option you should first pull out the E-Stop on the enclosure, then press the green "Power" button, then turn on the LCD Monitor Touch Screen, then finally power up the PC. When Windows XP starts up touch the Start button in the lower left hand corner of the screen, touch the Programs button on the Start Menu, then look for RazorGage and press that. A screen will appear that says, "Press OK to Home". Press OK and the RazorGage will perform it's homing process. On linear encoder models, the carriage will move away from the drive motor until it either hits the outboard hard stop or moves half the stroke plus 6 inches, then turn around and find the home marker in the center of the RazorGage. On rotary encoder models, the carriage will first move inboard towards the drive motor until it hits the stop. Then it will turn around and find the marker on the rotary encoder. When this process is complete the PC will display the main screen as shown below:



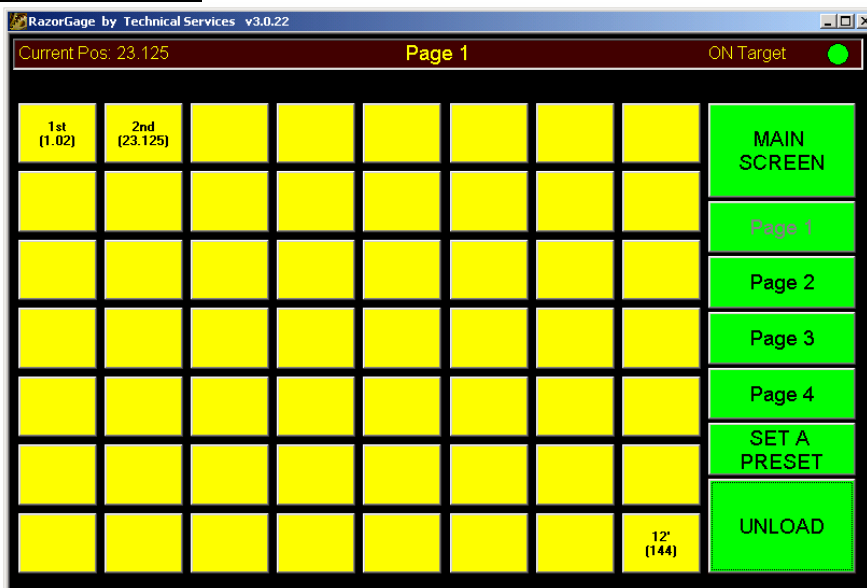
To position the stop just punch in a number, press ENTER and the stop will go to that position. If you wish to use the fraction hot keys, just enter the whole number followed by pressing the desired fraction and the stop will immediately go to that position without pressing ENTER. The UNLOAD button makes the RazorGage stop back up for unloading small parts. Once the stop is back a screen comes up that, when touched, makes the stop move back to the previous position. Before UNLOAD works, an UNLOAD DISTANCE must be entered in the SETUP screen. BUMP buttons make the stop move forward or backward a very small amount. The other buttons take you to screens that are described below.

Incremental Mode



In incremental mode the RazorGage advances the stop incrementally by the amount entered rather than going to the Absolute position you enter. In the screen above note that the increment is 60 and the saw kerf is .120. That means that when the operator presses GO, the stop will advance 60.12 inches.

Preset Screen



The PC Option ships with 4 preset screens like the one shown at left. Each screen has 56 programmable hot keys that may be labeled with a description and the length. To define a Hot Key just press the SET A PRESET button. The screen background will turn red to show that you're in key definition mode. Press the key you wish to define and a keypad will appear in which you may enter length and label.

Auto Pusher Screen

The Auto Pusher Screen allows you to define cut routines for specific board lengths and save them to the hard drive. The number of routines one can save is virtually unlimited. See the steps below for defining a cut routine:

Labels: You may define a different label for each part or define labels for some parts and not for others. Just press Set Label to define.

Step 5: Enter the length of the first part you want cut.

Step 6: Enter the quantity of parts of that length.

Step 7: Repeat steps 5 & 6 until done and press Save Current Board.

The screenshot shows the 'RazorGage by Technical Services v3.0.22' software interface. It features a central display area showing a wooden board with cut lines. To the left is a 'Set Label' section with a list of labels (2, 3, 1, 4, 5, 1.1) and a 'Set Label' button. To the right is a numeric keypad (0-9, ., ←, ENTER) and a 'BackSpace' button. Below the keypad are 'Board Options' (PRINT LABELS, AUTO RUN, RELOAD, Delete Selected Cut), 'Status' (Remaining: 2.980, Saw Kerf: 0.12, Current Pos: 0.000, Last Move:), and 'Board Settings' (OAL: 20, Load Pos: 22, Head Trim: .2). At the bottom are 'GRIPPER-ON', 'GRIPPER-OFF', 'LOAD', and 'GO' buttons. A 'File Name: C:\Board-1.csv' is displayed at the bottom left. Numbered steps 1 through 9 are overlaid on the interface, indicating the sequence of actions for defining a cut routine.

Step 1: Press Create New Board

Step 2: Punch in Overall Length of stock.

Step 3: Punch in the desired position you wish for the stop to go for loading the stock.

Step 4: Punch in the leading edge trim cut amount.

Step 5: Enter the length of the first part you want cut.

Step 6: Enter the quantity of parts of that length.

Step 7: Repeat steps 5 & 6 until done and press Save Current Board.

Step 8: Once board is saved press Load and the pusher will retract to the load position defined in the routine.

Step 9: When the pusher is in load position, place a board against the fence and against the pusher and press GO. The routine will run it's pattern. If you check AUTO RUN and have the appropriate options your RazorGage will cycle clamps, saw, and advance automatically.

Workorder Screen

You may download workorders to your PC RazorGage with the Workorder Screen. Press the OPEN WORKORDER button to find the file you wish to open whether it is on the RazorGage PC or on a shared network drive. Once you select a file and press OK, the headings in that file will be displayed on the left hand column of the screen and the values on the first line of the list will be placed next to their corresponding heading. If you have an existing file format you wish to use, just email it to RazorGage and we'll set up the Workorder screen to accept it. If you wish to create a file in Microsoft Excel, you just create a cut list with Line #, Lenth, and Quantity as the first three columms, then populate up to seven more columns with whatever information you want. The headings will be displayed as shown below with the data for that column next to the heading.

The screenshot shows a software window titled "RazorGage by Technical Services v3.0.22". Inside, the "RazorGage Work Order Screen" displays the following information:

- Line #:** 2
- Length:** 15.125
- Quantity:** 1
- Thickness:** 1
- Description:** Oak
- Layout Qty:** 2
- Layout #:** 1
- Warehouse:** E-2
- Packing:** Wrap
- Paint:** No

In the center, a box displays "Current Position: 15.125" in red, with "ON Target" and a green circle below it.

On the right side, there are five buttons: "MAIN SCREEN", "NEXT LINE" (with a right arrow), "PREVIOUS LINE" (with a left arrow), "MOVE TO POSITION" (with a scissors icon), and "OPEN WORKORDER" (with a folder icon).

At the bottom, a large yellow button is labeled "UNLOAD".

The status bar at the very bottom shows "File Name: C:\Sample_Cutlist.csv".

Setup Screen

The setup screen is password protected. System parameters are protected by a different password than User Parameters.

System Parameters Password: 5239

User Parameters Password: 90210

Refer to the Standard RazorGage Manual for a description of the Offset variable and how to set the offset for your saw.

The screenshot shows the 'RazorGage Setup Screen' window. The title bar reads 'RazorGage by Technical Services v3.0.22'. The main area is divided into three columns for parameter editing: System Parameters, User Parameters, and Saw Parameters. Each column has input fields for various settings. To the right is a numeric keypad with buttons for digits 0-9, a decimal point, a backspace arrow, and an 'ENTER' button. At the bottom, there are sections for 'Home: (Zero)' with radio buttons for 'Left' and 'Right', a 'Home' button, a 'Password:' field with a masked 'XXXX' display, and a 'Save Changes' button.

System Parameters	User Parameters	Saw Parameters
Scale: 3386.667	Speed: 35 IPS	Timer 1 = 100ms
Stroke: 96"	Unload: 2.000	Timer 2 = 100ms
Offset: 0.000	Load Pos.: 96.000	Timer 3 = 100ms
<input type="checkbox"/> Metric	Saw Kerf: 0.120	1. Clamp Valve - ON 2. Timer 1 - Delay 3. Saw Valve - ON 4. Timer 2 - Delay 5. Saw Valve - OFF 6. Timer 3 - Delay 7. Clamp Valve - OFF

Home: (Zero)

☐ Left ☐ Right

Password: XXXXX