

Power connection

Connect the RD 100 to your 230V net. Move the power switch on the back of the RD100 to ON. When the Logo **QUADRA-CHEK** appears press the \ll FINISH \gg key.

Reference mark

For finding back the machine zero the reference marks must be crossed in positive R and A direction after you switched on the unit. After this the DRO screen shows the current position.

Adjusting LCD contrast

Adjust the LCD contrast for optimum viewing of the DRO screen.. Press « decimal point key » or « +/-» on the numeric keypad.



Display

The radial RD 100 allows you to view your axis display either in X/Y Coordinates or as Radius/Angle

10 ZU	MM	Bez pkt	X/Y	Menii

Coordinates (R/A). To switch from one mode to the other press the X/Y or R/A key as seen in the graphic :

The Radial RD 100 allows you to toggle between : Millimeter (MM) and Inch (IN). To switch press the « IN » or « MM » button.

Command entry and -abort Keys

- The ENTER key **takes** : takes over an entry.
- ✤ The FINISH key finish : Finishes a command.

Hint : Pressing several times the FINISH key gets you back to

your initial menu.

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- ✤ The CANCEL key cancel : removes your last entry.
- ✤ The QUIT key
 Image: Aborts a command.

Workpiece preparation

The Softkey « Datum » gets you to further menus to set up your workpiece on the machine.

Adjusting the probe diameter

Key press sequence: « Datum » « Probe »

To get an absolute zero point on your workpiece you need to use a probe. The diameter of your probe can be adjusted by pressing the « Probe » key. If you use an electronic edgefinder, the points and the direction of probing will be entered automatically. If you use a hard probe you have to enter the points manually with the ENTER key. The probe direction can be entered by the arrow keys.

To skew the workpiece

Key press sequence: « Datum » « Skew ».

The set the coordinates of the RD 100 that it follows the x Axis of your workpiece you have to skew your part.

On an edge: Probe your workpiece 2 to max. 8 times on a straight edge. Terminate the command by pressing the FINISH key.

On one or several holes: Choose the HOLE command. By probing a hole you get the center of the hole as one point of your skew (remember that you need at least 2 points to skew). By pressing FINISH the function will be terminated.

Setting the Zero point

Key press sequence: « Datum » « Zero »

On an edge:

The first point of your skew will be set automatically as the zero point. If you want to move this zero point on your workpiece edge choose the « Zero » command followed by the appropriate axis. Probe the edge that is rectangular to the skew axis. The zero point is moved to the point of intersection of these two lines.

In a hole:

If you want to have the zero position in a hole please choose the hole function and probe the hole several times. Terminate the command by pressing the FINISH key. If you have done a skew function prior to zeroing the direction keeps the same, just the zero position is moved to the center of your hole.

Getting the center of a rectangular part

Key press sequence: « Datum » « Zero» < Choose the axis> «Mid.-P.»

To get the center position of a rectangular part press the « Zero » function and than choose the appropriate axis. Press than the «Mid.-P.» Softkey. Probe the part on one side of the workpiece and than on the opposite side. Do the same procedure for the other axis. Terminate the function by pressing the FINISH key. The zero point is being moved to the mid of your rectangular part.

Moving the Zero point

Key press sequence: « Datum » « Move 0 »

If the zero point of your part is not reachable by a probe you can move the zero point from an other place by entering the coordinates from a point you have probed. Choose the command « Move 0 » and enter the distance in relation to the probed point. Terminate the function by pressing the FINISH key.

Entering presets

Press one of the upper axis keys to enter your target values. Enter the value in absolute coordinates or incremental to a previously entered target. By pressing the other axis key you can enter the second value of your preset..

In addition you can enter on the D display the diameter of the drill to be used. This is only an information for the user.

After you have finished your entries press the FINISH key.

The display will show you now the distance to go to this target point. With the arrow key you can select an other target position.

Hole pattern

Key press sequence: « Menu » « Pattern »

The RD 100 offers you four possibilities to enter hole patterns: for frames, rectangles, lines or circles

Frame

Start X

Start Y

Num of Col

X Distance

Y Distance

Num of Row

Angle of Artay

50

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Frame pattern

Key press sequence: « Menu » « Pattern » « Frame »

Enter all the data's according to the graphic. With the arrow keys you get to the next entry field. After you have finished your entries press the FINISH key.. The display will show you now the distance to go to these target points.

Rectangle pattern

Keypress sequence: « Menu » « Pattern » « Rect »

Enter all the data's. With the arrow keys you get to the next entry field. After you have finished your entries press the FINISH key. The display will show you now the distance to go to these target points.

Line pattern

Key press sequence: « Menu » « Pattern » « Line »

Enter all the data's. With the arrow keys you get to the next entry field. After you have finished your entries press the FINISH key. The display will show you now the distance to go to these target points.

Circle pattern

Key press sequence: « Menu » « Pattern » « Circle »

Enter all the data's. With the arrow keys you get to the next entry field. After you have finished your entries press the FINISH key. The display will show you now the distance to go to these target points.



Programs

Key press sequence: « Menu » « Prog »

Programs can be saved for later use.

Saving a program

Key press sequence: « Menu » « Prog » < Programname> « Save »

After you have entered several target positions you can save these in a program. Press the « Prog » key and name the program by entering up to three numbers. Press the « Save » key followed by « OK »

Run a program

Key press sequence: « Menu » « Prog » < Programname> « Run »

Press the « Prog » key and choose with the arrow keys one of the program name. Press the « Run »key.

The first target position of your program will be displayed on the screen. Move the machine to this position and than press FINISH to get the target for the next position.

To move to a different target in the list use the arrow keys. In addition to this you can also use the « Goto » key to directly enter the desired target number.

After you have worked of the last target, the message "The program is done. Clear target list?" appears on the screen. By entering « Yes » the list will be removed but the program not deleted.

Deleting a program

Key press sequence: « Menu » « Prog » < Programname> « Delete »

Press the « Prog » key and choose with the arrow keys one of the program name. Press the « Delete » key. The massage " Delete selected program?" appears. If you choose the « Yes » key, the program is deleted.

Clear target positions from the screen

Key press sequence : < Red Screen ON/Off key> « Clear »

If you want to clear the screen from all the targets you have entered, press the Red Screen ON/Off key. You will see to choices:

« Clear » : deletes all the target positions

« ClAlle » : deletes all the target positions and your datum and skew

Setup

Key press sequence : « Menu » « Setup »

All parameter can be seen by pressing the SETUP menu. To change a menu item, use the arrow keys to move down and right to select it. It is not possible to change all the values. Some of them are entered during calibration of the machine and can only be changed after entering a password in the « Supervisor » menu.

About Display Encoders Hot Keys	Deutsch No English Yes Français <u>No</u>		
Print Ports Supervisor LEC Radial Drill Calibrations	Radial Drill Version 1.01 PTD, Ext. Edge		
Yes			