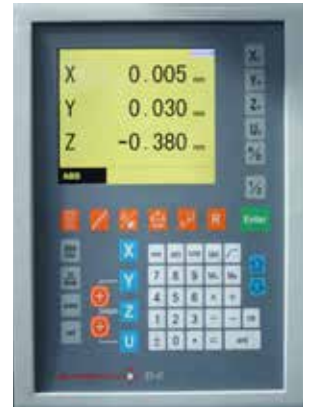


## EASSON ES-12 SETUP

The EASSON ES-12 is an affordable universal color DRO display that is multi function and can be configured for a mill, lathe, grinder, or borer machines. The ES-12 has adjustable voltage switch- 110/220 VAC. It has a strong membrane covering the buttons for long life. The main feature is the graphic display that allows you to see what the program will do. The following is the setup procedure for the ES-12 (Fig.1)



(Fig.1)



To enter the setup mode switch off the display and then switch the unit on again. The word "Easson" and model "ES" will be displayed on the screen. When they appear press the "Enter" button. (Fig.2)

The unit will finish the startup and display the words "SET UP" at the bottom of the screen (Fig.3)

(Fig.2)



(Fig.3)



To move to the next menu option press the down arrow button and the display will change to the first option "DRO TYPE" To select this menu option you must press "ENTER" (Fig.4)

The DRO type option "MILL" will appear on the screen. Use the down or up arrows to move through the options, "MILL, LATHE, GRINDER, BORER". Once you have chosen the DRO type required then press "ENTER" to confirm and save the DRO type change (Fig.5)

(Fig.4)



(Fig.5)



Press the down arrow for the next menu option "LANGUAGE". Press "ENTER" to change this option. (Fig.6)

Use the up and down buttons to view the options "ENGLISH, FRENCH. SPANISH. CHINESE, and once chosen press "ENTER" to to confirm and save. (Fig.7)

(Fig.6)



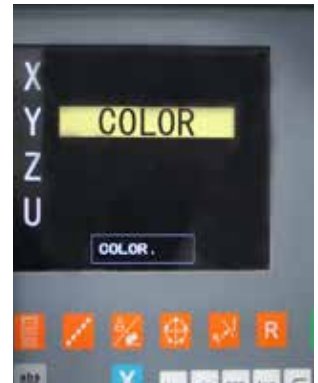
(Fig.7)



Press the down arrow for the next menu option "COLOR". This option allows the operator to change the color of the display. Press "ENTER" to change this option. (Fig.8)

Use the up and down buttons to view the options and once chosen press "ENTER" to confirm and save the color changes. (Fig.9)

(Fig.8)



(Fig.9)



Press the down arrow for the next menu option "BRIGHT". This option allows the operator to change the brightness of the display. Press "ENTER" to change this option. (Fig.10)

Use the numbers 1-7 to increase or decrease the brightness of the screen. Once chosen press "ENTER" to confirm and save the brightness changes.(Fig.11)

(Fig.10)



(Fig.11)



Press the down arrow for the next menu option "NO. AXIS". This option allows you to select the number of axis. Press "ENTER" to change this option. (Fig.12)

Use the numbers 1, 2 or 3 to select the number of axis that are attached to the display unit. Once selected press "ENTER" to confirm and save the number of axis.(Fig.13)

(Fig.12)



(Fig.13)



Press the down arrow for the next menu option "DIRECTN". This option allows you to change a scale so that it reads in the opposite direction. Press "ENTER" to change this option. (Fig.12)

Use the X, Y, Z to select the axis to be changed. When pressed the display it will change from "0" to "1" and reverse the direction of that scale.. Press again and it will return to "0". Press "ENTER" to confirm and save the direction changes (Fig.13)

(Fig.12)



(Fig.13)



(Fig.14)

Press the down arrow for the next menu option "RESEOLU". This option allows you to change the resolution to suit your scales. Press "ENTER" to change this option. (Fig.14)

If GS10 5um scales are fitted then the value against that axis should be 0.005. If the scale is a GS11 scale then by pressing that axis key (e.g. "X") the display will change to 0.001 for 1um. Make the changes for all the scales and then press "ENTER" to confirm and save the resolution changes. (Fig.15)



(Fig.15)



(Fig.16)

Press the down arrow for the next menu option "LIN.COMP.". This option allows the operator to move a distance stated on the DRO and put in what you want it to read. This mainly occurs where the DRO scales or the slide ways are not parallel to the motion, and may have created a cosine error. This happens more when you have a milling DRO when the axis may be slightly out of square and it is using a calculation between two scales to plot a point. Press "ENTER" to change this option. (Fig.16)



(Fig.17)

The display now asks for a value "PPV" "parts per million" (Fig.17)  
Example: If the error is on a 500mm scale is 19um. The calculation for over a metre is as follows:-  $19\mu\text{m} \times (1000/500) = 38\mu\text{m}$ .

The adjustment can be entered in either a negative or positive value. Once entered press "ENTER" to confirm and save the line compensation changes. (Fig.18)



(Fig.18)



(Fig.19)

Press the down arrow for the next menu option "NL. ERROR". This option is usually only used where high accuracy such as Grinder functions is required. It is recommended that for normal usage it will not be required. Arrow down to bypass this option. If you require this option please refer to the manual (Fig.19)

Press the down arrow for the next menu option "FLTR. PR". This option allows you to adjust the flickering of the last digit. Press "ENTER" to change this option. (Fig.20). The value will be displayed and allow you to increase or decrease the value. Press "ENTER" to confirm and save. Arrow down for "QUIT" and "ENTER" to exit setup.



(Fig.20)