KEY OPERATING

WORKS	OPERATING PROCEDURES
● PRESET	☞ [X] [PRE SET] ┆Input Figures┆ [ENT] Or [X] [PRE SET] ┆Input Figures┆ [+/-] [ENT]
● PRESET RECALL	☞ [X] [PRE RCL]
● DISPLAY ZERO	☞ (X) Or (Y) Or (Z) (⌘ To make each axis "0.000") (X) (Y) (Z) (⌘ To make all axis "0.000")
● INITIALIZING	☞ [F] [5] [0] [1] [ENT]
● ADDITION (Adding up)	☞ [X] [+] ┆Input Figures┆ [ENT]
● REDUCTION(Subtraction)	☞ [X] [−] ┆Input Figures┆ [ENT]
● 1/2 DIVISION	☞ [X] [½]
● CONVERTING INCH/MM	☞ [INCH]
● INPUT ABSOLUTE ZERO POINT	☞ { [ABS] [F] [X] ┆Input Numbers┆ (X) (⌘ As absolute position is "0.000" basis) [ABS] [F] [X] ┆Input Numbers┆ [PRE SET] ┆Input Figures┆ [ENT] (⌘ As absoute position is NOT "0.000" basis) ⇨ MAXIMUM INPUT IS 10
● RECALLING OFF ABSOLUTE ZERO POINT	☞ [ABS] [F] [X] ┆Input Numbers┆
● SET AND RECALL MEMORY	☞ [F] [X] [1] [0] [0] [ENT] ┆Input Memory Address┆ [ENT] ┆Input Figures┆ [ENT] (⌘ Maximum memory is 50 per a Axis)
● DELET MEMORY	☞ [F] [X] [2] [0] [0] [ENT] (⌘ Delet all Axis - 50)
● ADDING Y AND Z AXIS (FOR LATHE)	☞ [F] [3] [0] [0] [NEXT] [ENT]
● DOUBLE COUNTING (FOR LATHE)	☞ [F] [X] [4] [0] [0] [ENT] [NEXT] [ENT]
● DIVIDING A CIRCLE	☞ [CIRCLE] ┆Input Radial (r) or Diameter (d)┆ [ENT] ↓ ┆Input number of dividing (d-no)┆ [ENT] ↓ ┆Input Start angle (Sph)┆ [ENT] ↓ ┆Input Ending angle (Eph)┆ [ENT]
● SETTING TO X,Y AXIS	☞ [F] [6] [0] [0] [ENT]
● SETTING TO X,Z AXIS	☞ [F] [6] [0] [1] [ENT]
● SETTING TO Y,Z AXIS	☞ [F] [6] [0] [2] [ENT]
● SETTING TO DIA/RAD	☞ [F] [6] [0] [3] [ENT]
● CHANGING AXIS DIRECTION	☞ [F] [X] [8] [0] [0] [ENT] [NEXT] [ENT]

REF.: The setting of Dividing Circle is as follows when it comes from factory.
● Radial(r)
● X, Y Axis

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WORKS	OPERATING PROCEDURES
● COMPENSATION RATIOS	☞ [F] [X] [9] [0] [0] [ENT] **Input Figures for compensating ratio** [ENT] $\text{Figures for compensation ratios} = \dfrac{RD}{MD}$ RD : Distance of check master(real distance) MD: Measured Distance of digital counter
● EDM	☞ [EDM] [AUTO] **Input Figures** [ENT] [NEXT] (As input only one digit , STEP1 Lamp goes on) [EDM] [AUTO] **Input Figures** [NEXT] ┅━▶ [ENT] [NEXT] (As input over one digit, over one STEP Lamps go on)
● SET DIRECTION " UP "	☞ [F] [5] [0] [2] [NEXT] [ENT] (Shows "dir up-" on Z-axis of display) [F] [Z] [8] [0] [0] [ENT] [NEXT] [ENT] (Z-Axis down, (+)value)
● SET DIRECTION " DN "	☞ [F] [5] [0] [2] [NEXT] [ENT] (Shows "dir dn-" on Z-axis of display) [F] [Z] [8] [0] [0] [ENT] [NEXT] [ENT] (Z-Axis down, (-)value)
● REVEAL X,Y VALUE OF NORMAL STATE	☞ [F] (Push, in the EDM mode - displaying X,Y value of normal state))

SYMPTOMS	SOLUTIONS
▶ Counter is not energized. (No-power)	● Check power supply cord. ● Confirm fuse blown off. ● Check if the power cord connection loose.
▶ Fuse is blown off so often.	● Check inflow of fluid into keyboard. ● Disconnect scale connector from counter and check. ● Apply for A/S if there is no problem regardless of the above.
▶ Power ON but displays are blanks.	● Check inflow of fluid into keyboard. ● Disconnect scale connector from counter and check. ● Confirm if the connection is OK..
▶ Poor accuracy.	● Check connection between scale and counter. ● Check if the mounting bolts are loosened. ● Compare checking result after changing defected scale to normal scale. ● Check if dirts, cutting fluids or others be stick into scale. Prevent them from getting into so that accuracy can be as usual. ● Check if machine has backlash. ● Check if scale is damaged from impact or twist.
▶ Numbers are not changed even after moving scale.	● Check the rate. ● Rate should be "1000000". ● Check the connection between conter and scale. [F] [X] [9] [0] [0] [ENT] [1] [·] [0] [ENT]
▶ One axis among three axis doesn't working.	● Change defected scale to normal scale and then check.
▶ On displays, "DIA" lamp is ON.	● Using lathe function, change it to "RAD" function. [F] [X] [4] [0] [0] [ENT] [NEXT] [NEXT] [NEXT] [ENT]
▶ Doubled number is showing on display..	● Check "RATE" ● Rate should be "1000000". [F] [X] [9] [0] [0] [ENT] [1] [·] [0] [ENT] ● Check the lamp of "DIA" and change it as follows : [F] [X] [4] [0] [0] [ENT] [NEXT] [NEXT] [NEXT] [ENT]
▶ Error used to occur with no matter of machine.	● Compensate with "RATE" function. $FCR = \dfrac{RD}{MD}$ FCR : Figures for compensation ratios RD : Distance of check master MD : Measured Distance of digital counter EX 1) $\dfrac{20}{19.1000} = 1.047120$ EX 2) $\dfrac{20}{20.0500} = 0.997506$
▶ Remarks.	● Prevent cutting fluids from getting into keyboard to avoid errors. ● Be careful not to inflow cutting oil and dirts into the scales.