DIGITAL WEIGHT COMPUTER MODEL TR-1-NK

STANDARD OPERATION FEATURES   (MINI295-KG SOFTWARE)
    This unit has the pounds to kilogram conversion feature
    If this feature is enabled, be sure that all calibration is done in pounds.

ZERO BUTTON:
 To bring the scale to a zero balance reading, press the ZERO
button. The button will not activate if the MOTION lamp is
on.
    NOTE: On battery powered units, hold this button to turn the power
        OFF.

    : Lb/Kg CONVERSION
    Push to change between lb and kg display modes. Each time the button
    is pushed, the tare weight will be automatically cleared.
    NOTE: This is the power ON button for battery powered units

GROSS NET:
 Press the GROSS/NET button to switch between the GROSS
weight display mode and the NET weight display mode. The lamp
will light to indicate which mode is being displayed.

PRINT:
 To activate an optional printer, press the PRINT button.
The printer data output will become active when the weight is
not in motion or in an overload condition.

TARE:
 This button is used to input a TARE weight value. This
value is taken automatically taken as the GROSS weight value.

    When the weight is stable (no motion), press the TARE
    button, and hold for one display update. If the gross
    weight was not a negative value, the tare weight now
    equals the gross weight and the display will show a NET
    weight of zero.

Parameter Entry:

1. Open the indicator to access the CAL button.
2. Press the CAL button until the display shows------
3. Press and release the NET/GROSS button.
4. The display will show 00--nn (The 00 denotes parameter
   number 0 and the nn may be any 2-digit number representing
   the current value set for parameter number 0.
5. To change the value of this parameter, use the PRINT
   button to go up or use the TARE button to go down.
6. To cycle to the next parameter, press the NET/GROSS button
8. Continue steps 5 and 6 for all parameters desired.
9. When finished, press the CAL. button again to flash
   ------ and return to the weight display mode.

Note: Do not change parameters as this may affect proper function of the scale

Factory Parameter Setting

                        Parameter List:
1   # 0 = LB/KG enable & startup mode.
         Set to 0 to disable the lb to kg conversion Set to 1
         to startup in POUNDS mode
         Set to 2 to startup in KILOGRAM mode
3   # 1 = Sample rate / Update rate.
       The sample rate can be set for the desired operation. Note that
       having the continuous data output turned on by parameter 9, will
       slow down the displayed update rate.
         Set this to a value between 1 and 7.
       1 is the slowest and most stable update rate
       7 is the fastest update and can be used when batching or set
         points are being used.
01   # 2 = The displayed graduation size. Set at 05 if a
       graduation size of 5 is required.
       Valid settings are from 01 to 50
       NOTE: Graduation size of 1 can only be used up to 14,000
             Graduation size of 10 can only be used up to 140,000
99   # 3 = The overload trip-point in hundreds of graduations +1% If
       the scale is to be   2,500 by a graduation of 1, then a
       setting of 25 would cause the overload to activate at 2,525.
         Set to 99 if no overload point is desired. Set to
         00 for a 10,000 graduation overload.
02   # 4 = The motion detection window setting. Set this to the
       number of graduations that will be allowed as a no- motion
       condition.
       For units with battery, this parameter sets the auto-shutoff time period.
00   # 5 = Zero tracking amount. This parameter is set to the
       number of graduations allowed to be auto-zeroed, when the
       weight is not in motion and is equal or under this setting.
00   # 6 = The decimal point position. i.e., 02 will cause 0.00
00   # 7 = Relay options: Set to 01 to turn ON the solid state
                     relay when it reaches the low limit and turn
                     OFF when it reaches the high limit. Set to 00 for
                     opposite operation.
00   # 8 = Slave indicator output enable.
       00 = No slave indicator output
       01 = Send GROSS only to slave unit
       02 = Send NET only to slave unit
00   # 9 = Optional / Printer OR Continuous data output wire
         cable direct to main board or ask for data output kit.
         (contains terminal block and strain relief for
         enclosure.
       00= Printer output of displayed weight only to EPSON
          TM295 or other Epson printer.
       01= Same as 00 without the EPSON format codes
       02= Printer output of gross tare and net with EPSON printer
          codes.
       03= Printer output of gross tare and net without EPSON
           format codes.
       04= ELTRON form recall TARA for displayed weight print 05=
       ELTRON form recall TARAGTN for gr/tr/nt print
       10= Continuous output of displayed weight 11=
       Continuous output of gross tare and net 20=
       Continuous output of GROSS weight only

MAIN CALIBRATION

NOTE: IF THE LB/KG CONVERSION IS ENABLED, THEN ASSURE THAT ALL CALIBRATION IS DONE IN POUNDS

Major Test Weight Calibration:

 This procedure is done to set the initial calibration.

1. Open the scale indicator to access the CAL button.
2. Press the CAL button until the display shows. ------
3. Press and release the TARE button.
4. The display will be in the calibrate mode.
5. Assure there is no weight on the scale and press ZERO
   to remove the dead load.
6. When the display is zeroed, load the known weight, as
   in a feed bag on each white skid.
7. Press the * button to reset the calibration to the starting point.
8. Press the PRINT button to increase and TARE to decrease
   until the display is as close to the correct weight as you can get it.
   (Note: the display will jump in large amounts in the beginning and by
    pressing the NET/GROSS button, causes it to jump in lesser increments.)
9. If the display is showing the correct weight, go to step 11
10. Press and release the NET/GROSS button to flash ------ to step down to a
    lesser increment, then go to step #8.

11. If the display is showing the correct weight, press the
    CAL button to flash ------ and exit to the normal weigh
    mode.

                    LOAD CELL CONNECTION
ASSURE THAT THE LOAD CELL SIGNAL IS POSITIVE. A NEGATIVE
SIGNAL WILL NOT REGISTER.
                                    Summing box diagram
        Summing Box TERMINAL   (BACK VIEW LEFT HAND SIDE)
                                                ALTERNATE
   PIN 1 =   NEG EXCITATION   BLACK   **CORRECT WIRING**
   PIN 2 =   POSITIVE EXCITATION   RED
   PIN 3 = POSITIVE SIGNAL   GREEN
   PIN 4 = NEGATIVE SIGNAL   WHITE
   PIN 5   = SHIELD   REVERSE SIGNAL LINES IF
                              SCALE OPERATES BACKWARDS

DATA OUTPUT CONNECTION

    *** STANDARD OUTPUTS ***
        (DB9P CONECTOR)
   PIN 5 ---- DATA GROUND
   PIN 3 ---- DATA OUTPUT

PRINTER OUTPUT:
Set parameter number 9 for the printer type or continuous
data output.
Set for single line of displayed weight or gr/tr/nt
NOTE: For ELTRON printers, use the "Create-a-Label" program
to setup the label. Then name the label TARA or TARAGTN and
set parameter 9 accordingly. A sample format of these two
labels can be sent via email or on diskette upon request.

Baud rate 9600
8 data bits 1 stop bit no parity

In continuous output mode, the data string starts with the
addition of a STX (Start of text) character at the beginning

Slave indicator output OPTION:
  If a slave model RM-SE is attached, it can read the gross
or net weight from the main indicator. Be sure to set the
slave parameter #8 accordingly. (for example, disable the
slave tare through parameter 8 if it will be receiving NET
weight)
Terminal #1 ground
Terminal #2 data
The data stream is a combination of binary and Ascii data and
is not easily read by a computer.