DIVISION SYSTEMS BAGGAGE SCALE INDICATOR MODEL DBSM1

1. GETTING STARTED
1.1 WIRE LOAD CELL

CONNECT LOAD CELL TO GREEN TERMINAL STRIP CONNECTOR .
THE TERMINAL STRIP SHOULD ALREADY HAVE POWER CONNECTED.
WIRING

```
    P1  +15 POWER
    P2  POWER GND
    P3  + EXCITATION
    P4  + SIGNAL
    P5  - SIGNAL
    P6  - EXCITATION & SHLD.
```

BE SURE WIRE IS CLEAN AND THAT YOU GET THE CONNECTIONS TIGHT.
CONNECT TO THE UNIT AND SECURE THE TERMINAL STRIP PLUG WITH
2 LOCKING SCREWS , LOCATED ON BOTH ENDS OF THE STRIP.

1.2 APPLY POWER

PLUG IN TO POWER 115 VAC 60HZ
THE UNIT SHOULD START AND DISPLAY;

```
 ----------
| DIVISION |
 ----------    THEN;
 ----------
| SYSTEMS  |
 ----------    THEN IT SHOULD BE READING WEIGHT;
 ----------
|   X.X lb |
 ----------
```

PRESS ON THE SCALE TO BE SURE IT IS ACTIVE.
IF THE SCALE IS OUT OF RANGE IT WILL DISPLAY

```
 ----------
| OVERLOAD |
 ----------
```

2. OPERATION ,

THERE ARE 3 HIDDEN BUTTONS LOCATED BETWEEN THE DIVISION SYSTEMS
LOGO AND THE DISPLAY;
MENU
TURN-OFF
RESET

2.1 MENU
    BUTTON LOCATED UNDER THE "N" IN THE WORD DIVISION
    THE **MENU** BUTTON IS USED TO GET INTO THE **"USER MENU"**
    AND WITH **RESET** (UNDER THE "V" IN DIVISION) TO GET INTO THE
    SETUP/CAL.

    2.2 TURN-OFF BUTTON LOCATED UNDER THE LETTER "E" IN THE WORD
    SYSTEMS.
    PRESS AND THE DISPLAY READS;

```
    ----------
   | TURN OFF |
    ----------
```

    PRESS **ENT** .
    TO TURN ON , PRESS THE BUTTON UNDER "E" AGAIN.

2.3 RESET UNDER THE UNDER THE "V" IN DIVISION
    THE **RESET** BUTTON IS USED WITH THE **MENU** BUTTON
    TO GET INTO **SETUP/CAL** .

3. MENU
    THERE ARE 3 ITEMS ON THE MENU;
3.1 FILTER
    THIS SETS THE FILTER BAND.
    IF THE SCALE IS MOVING AROUND,
    ENTER A NUMBER THAT IS 1 DIGIT MORE THAN IT IS MOVING.
    EXAMPLE ; SCALE READS 201.5 202.5 201.5 ETC
    IT IS CHANGING 1.0 , SO ENTER 1.5.
3.2 HIGH SP
    THIS IS FOR THE SETPOINT FOR A SINGLE BAG.
    WHEN THE WEIGHT ON THE SCALE IS ABOVE THIS VALUE ,
    THE DISPLAY WILL ALTERNATE THE **WEIGHT READING** WITH;

```
    ----------
   | BAG OVER |
    ----------
```

3.3 TOT SP
    THIS IS THE SETPOINT FOR BAG TOTAL.
    IF THE TOTAL ACCUMULATED WEIGHT IS OVER THIS AMOUNT
    THE DISPLAY WILL ALTERNATE THE **WEIGHT READING** WITH;

```
    ----------
   | TOT OVER |
    ----------
```

    TO USE THE MENU , PRESS THE **MENU BUTTON** ("N") THEN

SELECT THE DESIRED ITEM WITH THE **UP/DN ARROWS.**
PRESS **ENT** .
ADJUST THE DESIRED READING WITH THE **UP/DN ARROWS.**
TO SPEED UP , WHILE YOU ARE HOLDING ONE OF THE ARROW BUTTONS,
PRESS AND RELEASE THE OTHER ARROW BUTTON.
THIS WILL SPEED UP THE NUMBER BY 10 EVERY TIME YOU PUSH IT.
WHEN YOU GET CLOSE TO THE DESIRED READING , RELEASE THE
ARROW BUTTON , AND REPRESS IT OR SWITCH TO THE OTHER ARROW.
IT WILL RESORT TO THE SLOWEST MODE .
TAKES A LITTLE PRACTICE .
WHEN THE DESIRED READING IS SHOWN , PRESS ENTER.

4. SETUP/CAL
THERE ARE 3 ITEMS ON THIS MENU ;
 3.1 **SETUP**
 3.2 DEFAULTS N/A NOT USED.
 3.3 **CALIBRATE**

TO GET INTO THE **SETUP/CAL MENU** , PRESS AND HOLD THE
MENU BUTTON. *WHILE* THE **MENU BUTTON** IS HELD DOWN ,
PRESS AND *RELEASE* THE **RESET BUTTON.**
AFTER THE DISPLAY SHOWS "DIVISION SYSTEMS" then PR-4XX , RELEASE
THE MENU BUTTON.
THE DISPLAY READS
```
    ----------
   |  SET UP  |
    ----------
```
SELECT **SETUP** OR **CAL** WITH THE UP ARROW BUTTON
THEN PRESS ENTER .

4.1 SETUP
SETUP ALLOWS YOU TO SET THE INCREMENTS ,
COUNTBY 1,2,5 AND FIXED ZERO.
THERE ARE SOME COMBINATIONS THAT ARE LOCKED OUT.
THE DISPLAY HAS 8 CHARACTERS SO IT WILL HANDLE
1000 X 5 WITH 1 D.P. ;
500.5 lb
BUT YOU CANNOT HAVE 3000 X 5 AND 1 D.P.;
1500.5 lb ETC.

WHEN SETUP SELECTED;
THE DISPLAY WILL FLASH;
```
    ----------
   |   PRESS  |
    ----------
    ----------
   | INTERNAL |
```

```
     ----------
     ----------
    |  CAL SW  |
     ----------
```
THE CAL SWITCH IS LOCATED UNDER THE LEFT (FROM THE REAR)
MOUNTING BRACKET. REMOVE ONE OF THE HEX SCREWS AND LOOSEN
THE OTHER.
ROTATE THE BRACKET UNTIL THE HOLE IS EXPOSED.
USE A SMALL SCREW DRIVER , HOLD BETWEEN FINGER AND THUMB,
NOT REAL TIGHT. THERE IS A MYLAR COVER INSIDE , OVER THE
SWITCH. LET THE MYLAR GUIDE THE TOOL TO THE BUTTON.
PRESS AND HOLD FOR 3 SECONDS.

THE DISPLAY WILL READ;
```
     ----------
    | INC 1000 |
     ----------
```
SELECT THE DESIRED INCREMENTS WITH THE ARROW BUTTONS.
AVAILABLE INCREMENTS;
  1000
  1500
  2000
  2500
  3000   SELECT 1000
THE DISPLAY WILL READ;
```
     ----------
    | CTBY = 5 |
     ----------
```
THEN SELECT THE COUNTBY WITH THE ARROW BUTTONS
 AVAILABLE ;
 1,2,5   , SELECT 5
THE DISPLAY WILL READ;
```
     ----------
    | D.P. = 1 |
     ----------
```
AVAILABLE 0 , 1   , SELECT 1
SELECT THE NUMBER OF DECIMALS AND PRESS ENTER.
IF NO DECIMALS ARE SELECTED THEN YOU MAY SELECT A FIXED
ZERO.

THEN THE DISPLAY READS ;
```
     ----------
    | FS=500.5 |
     ----------
```
THIS INDICATES THE CAPACITY IS 500 BY .5
IF THIS IS CORRECT , PRESS ENTER .
OTHERWISE PRESS ESC.

```
THEN THE DISPLAY READS;
     ----------
    | TRACK ON |
     ----------
    ( OR TRACK OFF )
    THIS ALLOWS YOU TO TURN OFF ZERO TRACKING FOR TESTING.
    TO TURN OFF , USE ONE OF THE ARROW KEYS AND PRESS ENTER.
    LEAVE TRACK ON FOR NORMAL OPERATION.

    THEN DISPLAY READS;
     ----------
    | X10 OFF  |
     ----------
    ( OR ON )
    THIS ALLOWS AN "EXPANDED" X 10 READING FOR TESTING.
    SELECT WITH ARROW , PRESS ENT.
    TURN X10 OFF FOR NORMAL OPERATIONS.
    IN EXPANDED MODE 500.5 WILL DISPLAY 500.05
```

4.2 DEFAULTS
DEFAULTS TO ORIGINAL FACTORY CAL , N/A AT THIS TIME.

4.3 CALIBRATE
(SCALES IN CANADA MUST BE CALIBRATED USING 100 lb, IT SETS THE 4% ZERO LIMIT)

```
    SELECT THE CAL MODE ,
    THE DISPLAY WILL FLASH "PRESS INTERNAL CAL SW"
    PRESS AND HOLD THE INTERNAL SWITCH FOR 3 SEC.
    THE DISPLAY READS;
     ----------
    | EMPTY SC |
     ----------

    REMOVE ALL WT FROM THE SCALE AND PRESS ENT .

    THE DISPLAY WILL READ;
     ----------
    | APPLY WT |
     ----------
    APPLY TEST WEIGHT AND PRESS ENT .
    THE DISPLAY WILL READ THE CURRENT WEIGHT WITHOUT
```

THE UNITS (lb OR kg).

```
 ----------
|    475.0 |
 ----------
```

ADJUST THE READINGS WITH THE **UP/DN ARROWS** AND PRESS **ENT** .
USE THE **"SPEED UP"** ROUTINE AS DESCRIBED IN 3.3
ASSUMING IT IS ADJUSTED TO 500.0
THE DISPLAY WILL READ;
```
 ----------
| 500.0 lb |
 ----------
```

5.0 SCALE ZERO

TO ZERO THE SCALE PRESS **ZERO** .
SCALE-ZERO IS INTERLOCKED WITH MOTION.
IF THE SCALE READING IS MOVING WHEN PRESSED THE DISPLAY READS
```
 ----------
|  MOTION  |
 ----------
```
UNTIL THE WEIGHT IS STABLE , THEN THE SCALE WILL ZERO.
THE UNIT WILL ONLY ZERO LOADS
OF UP TO 20% OF CAPACITY (FROM THE ORIGINAL ZERO).
IF THE WEIGHT EXCEEDS THIS THE DISPLAY WILL READ;
```
 ----------
| ZERO LIM |
 ----------
```
AND THE SCALE WILL NOT ZERO.

6.0 ACCUM

THE ACCUM FEATURE IS INTERLOCKED WITH MOTION.
PLACE A BAG ON THE SCALE AND PRESS **ACCUM** .
IF THE SCALE IS STABLE , THE WEIGHT AND NUMBER OF BAGS
WILL BE ADDED TO THE TOTAL.
THE DISPLAY READS;
```
 ----------
| 1=  50.0 |
 ----------
```
SHOWING THE NUMBER OF BAGS AND THE TOTAL WEIGHT.
NEXT BAG;
```
 ----------
| 2= 100.0 |
 ----------
```
THIS IS 2 BAGS , TOTAL WEIGHT = 100.
THE WEIGHT MUST BE REMOVED FROM THE SCALE TO **REARM** THE
ACCUM FUNCTION. IF THE ACCUM IS PUSHED AGAIN BEFORE REMOVING

LOAD , THE TOTALS ARE RECALLED AND DISPLAYED.
IF THE SCALE READING IS MOVING WHEN PRESSED
THE DISPLAY READS;

```
  ----------
 |  MOTION  |
  ----------
```

UNTIL THE WEIGHT IS STABLE, THEN THE WEIGHT WILL BE ADDED.

TO CLEAR THE TOTALS;
WITH THE SCALE EMPTY, PRESS THE **ZERO** BUTTON.

7.0 **lb/kg**

PRESS **lb/kg** TO TOGGLE BETWEEN lbs AND kgs.
NOTE ; THE UNIT IS CALIBRATED IN POUNDS.

8.0 **REMOTE DISPLAY**

CONNECT THE REMOTE DISPLAY WITH THE CABLE SUPPLIED.
THE REMOTE OUTPUT FROM THE MASTER IS ON THE LEFT SIDE
OF THE UNIT (FACING THE REAR).

NOTE; THE REMOTE DISPLAY WILL READ EXACTLY THE SAME AS
THE MAIN EXCEPT WHEN THE MAIN IS BUSY WITH SETUP OF IN
THE EXPANDED MODE, THEN THE REMOTE WILL DISPLAY;

```
      ----------
     | OFF LINE |
      ----------
```

RESETING THE "WATCHDOG SECURITY" FEATURE VIA THE USER MENU

This feature is accessed through the hidden use buttons above the display. The feature is used to prompt owners/operators the scale is nearing time for service and/or Certification. Locations of these buttons are described in section 2.1 of this manual. We shall refer to these as "left, right & center" buttons in this section.

The default settings for this feature are:

WATCHDOG ON

WARNING DAYS 30

GRACE DAYS 30

Press and hold the center button. While holding the center button press and release the left button. Release the center button when display reads "DIVISION SYSTEMS".

Display will show "SET-UP". Press the down arrow scrolling down the parameter list (approx 6 times) until the display reads "WATCHDOG SET-UP" and press enter.

Display will read "ENTER PASSWORD". Using the up arrow scroll to "77" and press enter.

Display reads "USE WATCHDOG". Use the arrow keys to choose ""YES" and press enter.

Display reads "RESET WATCHDOG", choose "YES" and press enter.

Display reads "WARNING DAYS" and the current number of warning days programmed. Scroll to "30" if needed and press enter.

Display reads "GRACE DAYS". Choose "30" and press enter. Scale will return to weigh mode.

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