

# DS750 DRUM SCALE

# INSTALLATION & OPERATION MANUAL

Version 1.0 March 2007

### **DS750 GENERAL INFORMATION**

#### **GENERAL**

The DS750 is a drum scale designed specifically for the water and wastewater industry. The scale base and weighing surface is made of Type 2 PVC plastic and guaranteed for five years against environmental damage. All mechanical parts, wherever possible, are made of stainless steel or protected with a durable chemical-resistant powder finish.

The DS750 can accommodate any drum that does not exceed 23 1/2" diameter and 750 lbs. gross weight.

### **SPECIFICATIONS**

Accuracy:	+/- 0.25% FS
Resolution:	0.5 lb.
Scale Readability:	0.1 lb.
Scale capacity:	750 lbs.
Safe overload capacity:	1000 lbs.

### **FEATURES**

- Solid PVC, corrosion-resistant weighing surface.
- All electronics housed in NEMA 4X enclosures.
- Stainless steel load cell mounted on top of platform for protection from corrosive chemicals and for ease of maintenance.
- All scales are factory assembled, tested and calibrated.

### **ASSEMBLY**

The DS750 scale base is fully assembled at the factory. Installation and testing procedures are presented later in this manual.

#### **OPERATION**

See Instruction Manual El-1000 for scale setup and operation.

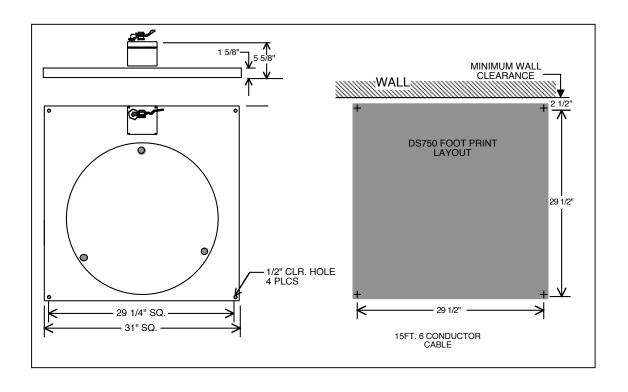
#### WARRANTY

Eagle Microsystems warrants the DS750 scale base to be free from all defects in material and workmanship. Any parts that fail because of defective workmanship or material within five (5) years of date of shipment will be replaced. The warranty does not include misuse, negligence, or modifications. Eagle Microsystems shall not be liable for transportation or installation charges, or any other expenses incurred by the customer.

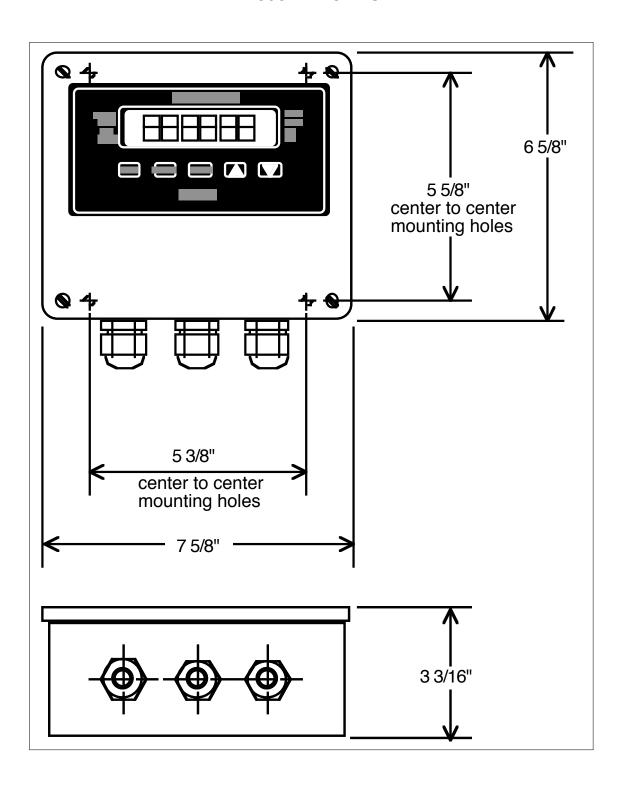
# INSTRUCTIONS DS750 DRUM SCALE

- 1. Before placing scale in operation remove the aluminum shipping angles located on the underside of the scale, and the plastic shipping spacers from the top of the platform.
- 2. Determine service location of scale and position base 2 1/2-inches or more from the wall.
- 3. Anchor scale base securely to smooth, level floor using 3/8-inch anchor bolts (not supplied) through the four (4) 1/2-inch diameter holes in the corners of the scale base. It is recommended that the floor be level to within 0.5 degree for optimal performance.
- 4. Mount NEMA 4X EI-1000 Single Channel Digital Display Instrument to a suitable and convenient wall surface. Remove instrument cover and mount instrument to the wall with #10 screws or suitably sized masonry or hollow wall anchors, as applicable. The instrument case has four (4) through holes, as shown in the Operating Manual, located on 5 3/8-inch centers horizontally and 5 5/8-inch centers vertically.
- 5. Route the cable provided, and factory-terminated at the scale, to the display instrument. Make wiring connections as shown on pages 10 and 11 of the "El-1000 Operating Manual".
- 6. Follow instructions in the Operating Manual for startup and calibration of the El-1000. The scale base is factory calibrated using known weights and is ready for use when received.

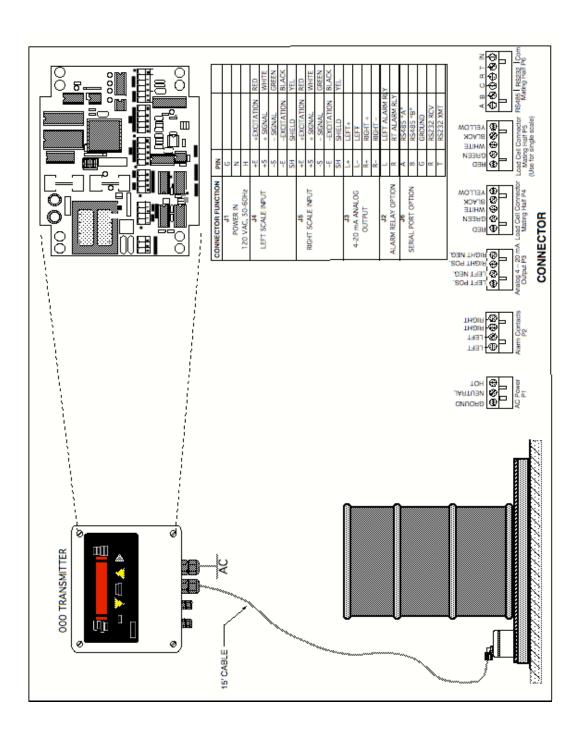
### **SCALE INSTALLATION**



### **EI1000 INDICATOR**



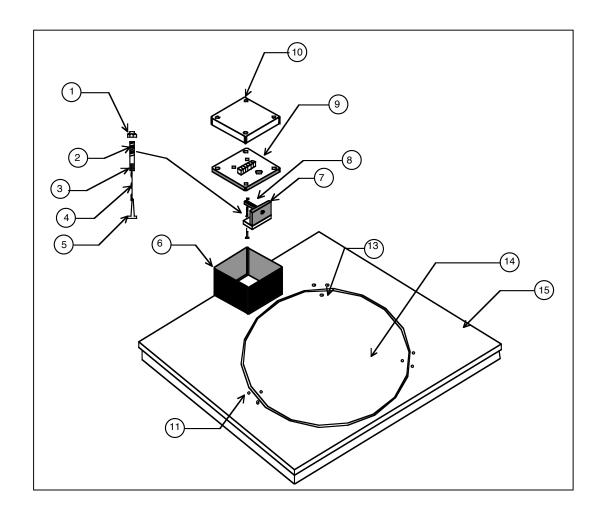
### **PC BOARD CONNECTIONS**



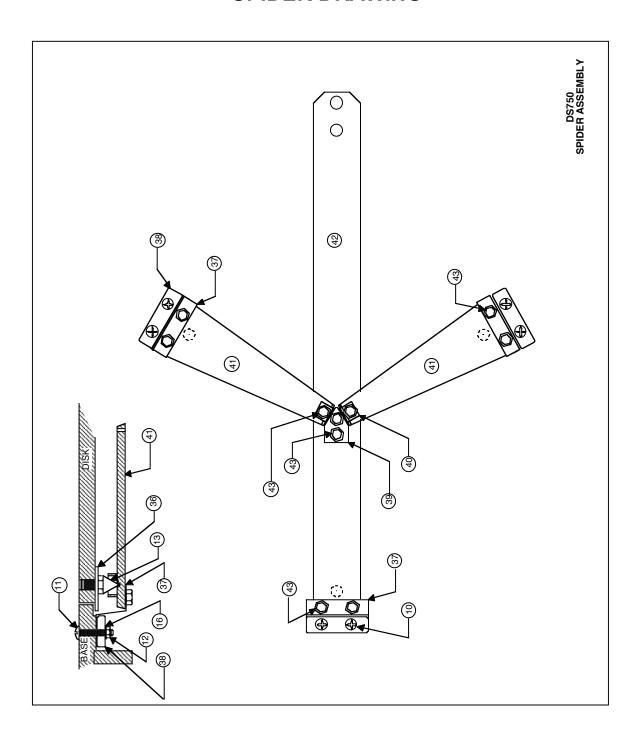
# TEST PROCEDURES DS750 DRUM SCALE SCALE

- 1. Press the ZERO pushbutton to make the El1000 read Zero.
- 2. Place a drum of known weight equal to approximately 75% of the full scale value on the weigh surface. Carefully position the drum in the center of the weighing platform. Use the UP/DOWN arrows to adjust the displayed value to read the correct weight.
- 3. Remove the drum. The El1000 should return to zero. If the indicator does not return to Zero, repeat steps 1 & 2.
- 4. If the application is known at time of order, the factory will already have set up the EI1000 for the correct MODE. (See the EI1000 manual to change the operating MODE)

## DS750 DRUM SCALE BASE



# **SPIDER DRAWING**



# **DRAWING KEY**

ITEM	DESCRIPTION	P/N
1	Locknut	612541
2	Adjusting bolt, ss	400177
3	Pin, spring (split), ss, type 420	640136
4	Chain, sash, ss, 1/0	100356
5	Chain clip	400182
6	Enclosure, FG 5x5x3	630604
7	Bracket, cell, PVC-1	400244
8	Load cell, 80#, 14", 350 ohm	500639
9	Term. block, 6 ckt, screw term.	532061
10	Lid, enclosure, FG	Part of Item 6 above
11	Screw, 10-24 x 1", ss, pan head	611053
12	Nut, 10-24 ss hex	611023
13	Pivot screw	400229
14	Disc	400230
15	Deck	400214
16	Washer, #10, star	611008
17-35 Not used		
36	Disc washer	400211
37	Perimeter flexure	400143
38	Perimeter clamp	400144
39	Center clamp	400145
40	Center flexure	400142
41	Short lever	400210
42	Long lever	400209
43	Screw, 10-24 x 3/8 Hex head	611061