WEIGH-TRONIX

Industrial SBU Product User's Manual

UNITED STATES

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CANADA

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la Class A prescrites dans le Reglement sur le brouillage radioelectrique que edicte par le ministere des Communications du Canada.

EUROPEAN COUNTRIES

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which the user may be required to take adequate measures.

CAUTION

Risk of electrical shock. Do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

Weigh-Tronix reserves the right to change specifications at any time.

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Specifications

Model*	Dimensions	Capacity
SC-1824	18" x 24"	
SC-2226	22" x 26"	
SC-2227	22" x 27"	
SC-2229	22" x 29"	300 x .1 lb / 150 x 0.05 kg.
SC-2424	24" x 24"	or
SC-2730	27" x 30"	500 x .2 lb / 250 x .1 kg.

*Custom sizes available upon request.

Construction: Base: Stainless steel shroud with painted mild steel frame and molded Lexan electronics enclosure.
Display: Enclosure of aluminum and a front panel of stainless steel.

Power Requirements: 117 VAC (+10%, -15%), 50/60 Hz (±3 Hz), .25 Amp. Max.

Display and Indicators: Master display consists of an LCD display, a ZERO annunciator, and a lb/kg annunciator.
Slave displays have an LCD display.

Control keys: Three membrane keys: ZERO, LB/KG, and DSPLY ON. (Slave display has no control keys.)

Environmental Limits:

Temperature: -10°C to +40°C (14°F to 104°F)

Humidity: 10% to 95% relative, non-condensing

Accuracy: Meets NTEP Class III 3000 division weighing accuracy.
Consult the factory for devices which have
Canadian Weights and Measures approval.

Options:

- Side guides for shroud
- RD-190 Remote Display (up to three can be used)
- RS-232 Output
- Accumulator

Safety: UL 114

Section 1 - General Information

Introduction

The Model SC Baggage Scale is a reliable, easy to install and easy to operate weighing system designed for use in a rugged baggage check environment.

The scale consists of a weighing platform and a Model WI-190 Remote Master Display. The system can also accommodate up to three additional Model RD-190 Remote Slave displays as an option.

The Master Display has three control switches to allow the operator to zero the scale, select units of measure (lb. or kg.) and turn the display on and off.

Section 2 - Installation

Initial Inspection

This scale has been calibrated and inspected for mechanical and electronic integrity prior to shipment. It should be free of defects and in perfect operating condition upon receipt. To confirm this, the scale should be inspected immediately for any physical damage incurred in transit.

If the scale is damaged, contact the Weigh-Tronix Service Department at once.

Installing and Leveling the Scale

Caution

Platform mounting bolts should be installed snugly but not tight enough to deform base rails.

Place the platform on a stable, non-vibrating, level surface. Adjust the feet so that the platform is level and all four feet are in equal contact with the surface. Use the leveling bubble located on the top of the load cell to level the platform by adjusting the feet, then tighten the lock nut on each of the feet to 35-40 inch-pounds.

If required, the platform can be secured using appropriate bolts (not supplied) through the hole in the middle of each base rail. Refer to figure 2.

Mounting Display

Select the location for the master and slave displays keeping in mind that each display mounting surface must be accessible from the rear (for recessed mounting) and within 14 feet maximum of cable routing distance of the base. See Figure 1 for mounting instructions and dimensions.

Connecting Display to Base

Warning

Failure to properly route display cable underneath the electronics housing could allow the cable to contact the shroud or load bridge causing weighment errors.

Remove shroud from scale base and route display cable under base and beneath electronics housing. Connect 8 pin phone jack to the receptacle next to the load cell connector.

Electrical Requirements

Warning

Connecting the scale to an outlet without a safety ground, by-passing the safety ground, or in any other way disrupting the safety earth ground, could make the scale an electrical shock hazard, or could affect its operation.

The scale requires a 117 VAC, 50/60 Hz power source, isolated from electrical noise inducing equipment such as motor starters, fluorescent lighting, etc.

The scale is supplied with a UL standard 3-prong plug for AC operation and must be connected to an outlet which provides a third wire earth ground to insure proper operation and safety. The ground wire must be connected to the building safety (earth) ground and neutral bus at the main fuse box.

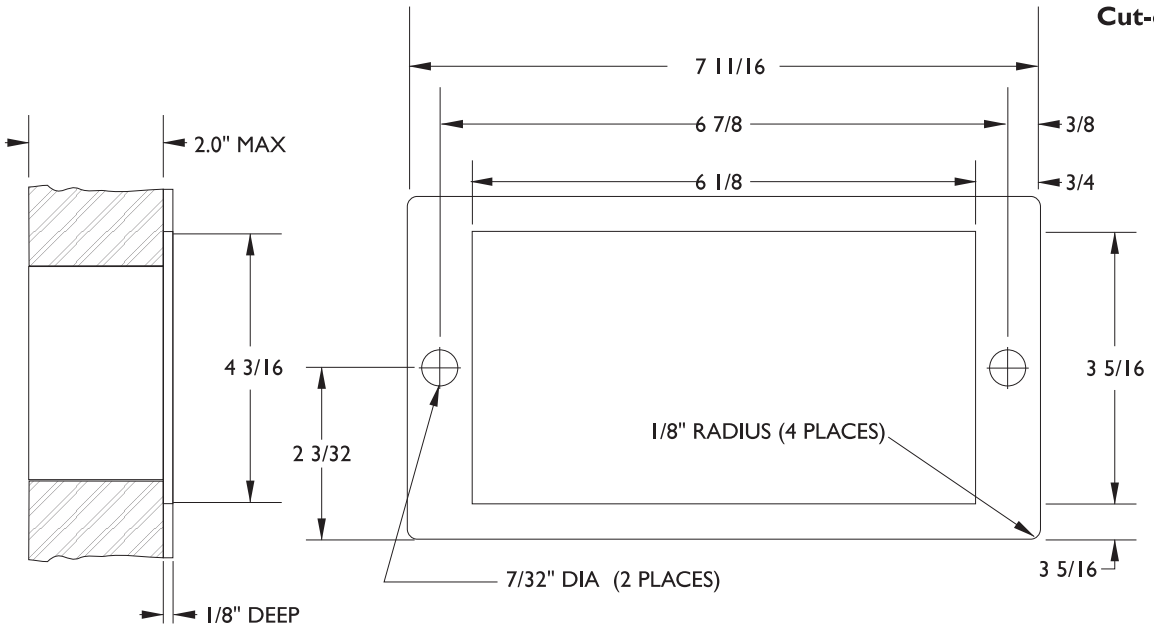
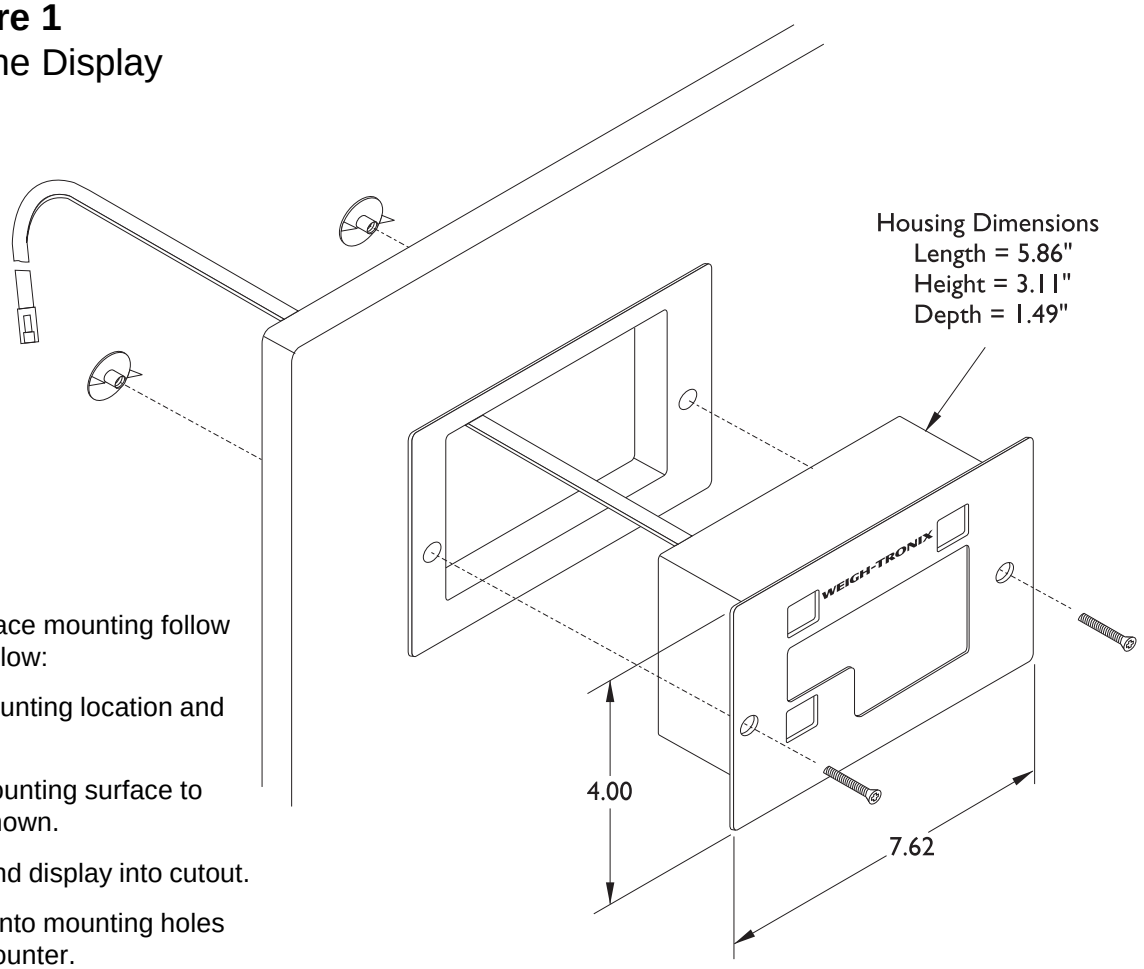


Figure 1
Mounting the Display



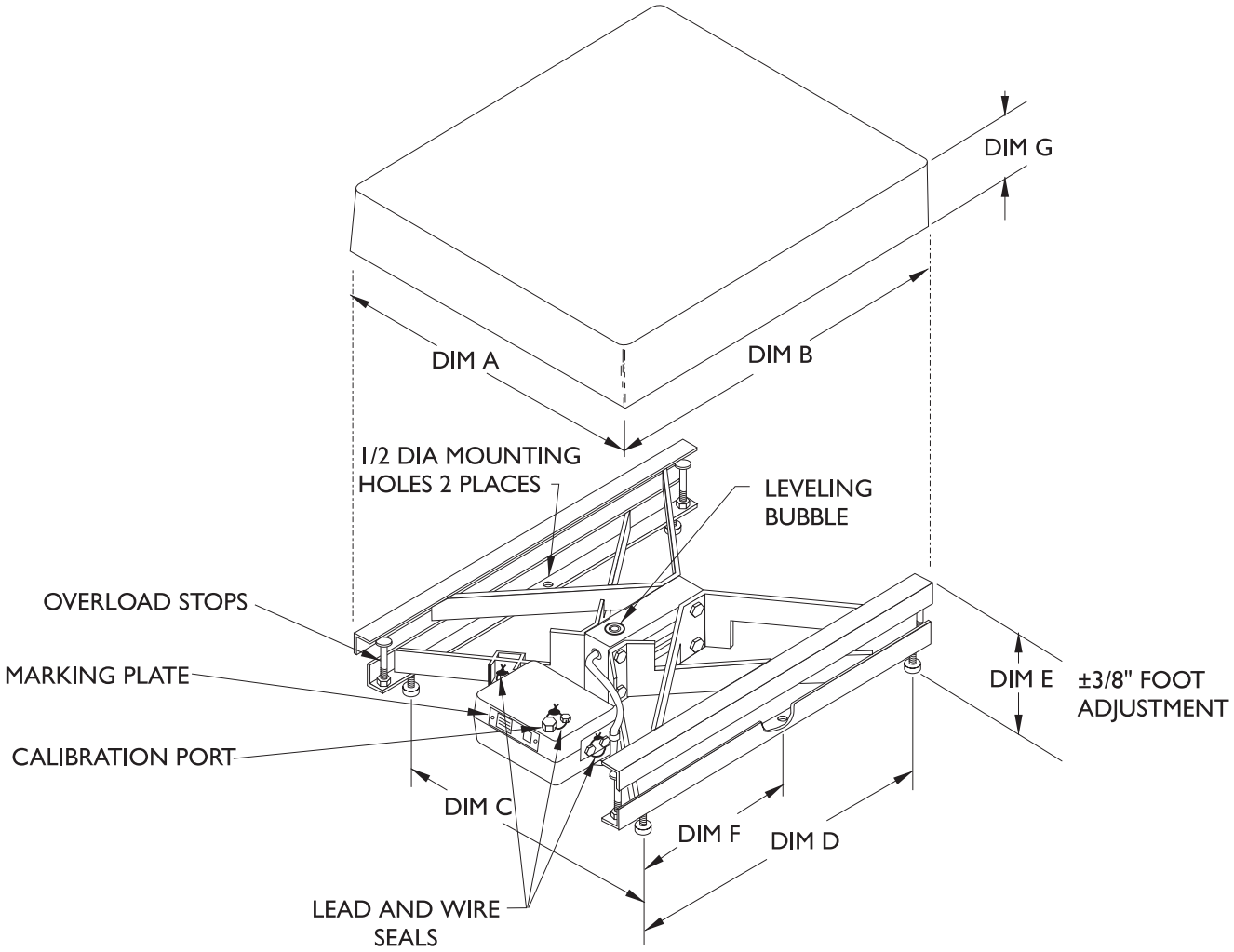
NOTES:

For recessed surface mounting follow the instructions below:

1. Determine mounting location and method.
2. Cut hole in mounting surface to dimensions shown.
3. Insert cable and display into cutout.
4. Install T-nuts into mounting holes from rear of counter.
5. Install and tighten the two hood down screws through front panel against mounting surface to secure display assembly firmly.

Recessed surface mounting (Recommended for both models WI-190 and RD-190)

Figure 2
Scale Dimensions



DIMENSION TABULATION							
MODEL NUMBER	**DIM A**	**DIM B**	**DIM C**	**DIM D**	**DIM E***	**DIM F**	**DIM G**
SC-1824	18.00	24.00	15.50	22.00	5.38	11.00	3.00
SC-2226	22.00	25.00	19.00	23.54	5.38	11.75	3.00
SC-2227	22.00	27.00	19.00	20.00	5.38	10.00	3.00
SC-2229	22.00	29.00	19.00	25.00	5.38	12.50	3.00
SC-2424	24.00	24.00	19.00	22.00	5.38	11.00	3.00
SC-2730	27.00	30.00	24.00	25.00	5.38	12.50	3.00

*** ±3/8" FOOT ADJUSTMENT**

RS-232 Communications

Communications Protocol

Baud Rate	Parity	Data Bits	Stop Bits
1200*	even*	Seven*	1*
2400	odd	Eight	
4800			
9600			

* Default Setting

Computer commands and scale responses are ASCII character strings.
(CR) is an ASCII carriage return.
(LF) is an ASCII line feed.
(ETX) is an ASCII end of text

COMPUTER COMMAND	SCALE REPONSE	RESULTS
W (CR)	(LF)xxxxx.xlb (CR) (LF)hh(CR) (ETX)	Returns weight, and returns scale status.
S(CR)	(LF)Shh(CR) (ETX)	Returns scale status in two ASCII bytes.
Z(CR)	no response	Zeros scale.
All else	(LF)?(CR)	Unrecognizable command.

Interpretations of Scale Status Hex Digits -

High Order Byte:
- Bit 0: High = scale in motion
Low = scale stable
- Bit 1: High = scale at zero
Low = scale not at zero
- Bit 2: Not used
- Bit 3: Not used

Low Order Byte:
- Bit 0: High = scale is under capacity
Low = scale is not under capacity
- Bit 1: High = scale is over capacity
Low = scale is not over capacity
- Bit 2: High = scale ROM program failure
Low = scale ROM is OK
- Bit 3: Not used

PIN	SIGNAL	DESCRIPTION	DIRECTION
2	TXD	Transmit Data	from scale to peripheral
3	RXD	Receive Data	from peripheral to scale
1	SG	Signal Ground	
6		Chassis Ground	
4	DSR	Data Set Ready	from peripheral to scale
5	DTR	Data Terminal Ready	from scale to peripheral

Section 3 - Operations

Keys

There are three keys or buttons on the baggage scale master display:

ZERO - Press this key to zero the display and start Auto Zero Tracking.

LB/KG - Press this key to toggle between pound and kilogram units of measure.

DSPLY ON - Press this key to turn the display on or off.

Indicators

The display has several indicators to tell you the operating condition of the scale.

ZERO - This indicator illuminates whenever the scale is within ±1/4 digit of scale zero.

LB - This indicator is illuminated when displaying weight in Avoirdupois pounds.

KG - This indicator is illuminated when displaying weight in kilograms.

-------- Upper Dashes indicate a weight exceeding the stated capacity is on the scale.

Lower Dashes indicate a weight less than zero is on the scale.

Normal Weighing Operation

When the scale is first powered up the display will show “rotESt”, then the model number, the software revision level, and then perform a display test. It then enters normal weighing mode.

To perform a normal weighment follow these instructions:

1) Zero the scale by pressing the ZERO key. Display should read 0.
2) Place baggage to be weighed on the scale platform. The gross weight will be displayed.
3) Remove the baggage from the scale platform.

Troubleshooting

If you have any problems, check the items listed below before calling an authorized service representative:

1) Make sure the scale is plugged into a live power outlet.
2) Be sure the scale is stable. It should not be subject to air currents, vibration from nearby motors, or contact with nearby objects.
3) Be sure all connecting cables are firmly seating in mating connectors.
4) Make sure the scale is level and all four feet are evenly supporting the weight of the scale.

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