



TeleWeigh™ with Bluetooth®

Model: 27135



Amendment Record

TeleWeigh™ with Bluetooth®

Document 51166

Manufactured by Fairbanks Scales Inc.
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Section 1: General Information

Scale Description

Fairbanks Scales TeleWeigh™ Health Scale is designed for weighing people and communicating that information to a variety of devices, via wireless Bluetooth®. The scale has its own calibration parameters and a display for showing measurements and audible alerts for signaling the user. The scale has the ability to store up to 10 measurement results in memory. A settable real time clock is also included for measurement time stamping.

- The scale is capable of working in a Stand Alone mode. In this mode the scale displays weight to the LCD display. The weight is shown in either pounds (lb) or kilograms (kg) depending on the setting of the slide switch on the bottom of the scale. See Section 2 step 5.

or

- BT mode - connected to a Remote Device which is equipped for Bluetooth® communications.
- Battery powered.

Uses (4) AA Alkaline batteries



Figure 1.1
TeleWeigh™ Health Scale

Scale Specifications

Dimensions	<ul style="list-style-type: none"> • 14" x 14" x 2"
Overall Weight	<ul style="list-style-type: none"> • Less than 10 lbs. without batteries
Material Construction	<ul style="list-style-type: none"> • Rigid metal platform frame • Composite base • Composite top-over platform
Weight Capacity	<ul style="list-style-type: none"> • 500 lbs / 226.8 kg
Division Size	<ul style="list-style-type: none"> • 0.5 lbs / 0.2 kg
Power	<ul style="list-style-type: none"> • 6VDC (4 AA Alkaline)
Power On Switch	<ul style="list-style-type: none"> • Integrated within the platform
Automatic Shutdown	<ul style="list-style-type: none"> • Shuts the scale down automatically to conserve battery life.
Mode Switch	<ul style="list-style-type: none"> • lb • kg • BT (Bluetooth® Communications)
Filtering	<ul style="list-style-type: none"> • Three levels, adjusted using Remote Communications
Time / Date	<ul style="list-style-type: none"> • Stored in volatile RAM
Overload Protection	<ul style="list-style-type: none"> • 50% above rated capacity
Annunciators	<ul style="list-style-type: none"> • lbs • kg • Ready / Stable • Connected
Load cell Interface	<ul style="list-style-type: none"> • Utilizes (4) internal load Cells. No external load cell interface
Wireless Communications	<ul style="list-style-type: none"> • Class I Bluetooth® device

Display

Display Type	<ul style="list-style-type: none"> • LCD, 1.25 in. • Seven (7) segment display • No backlight • 4-digits plus annunciators
CZ	<ul style="list-style-type: none"> • Upper-left corner • “C” used in Test Mode
Gross, Tare Net	<ul style="list-style-type: none"> • Gross only
Lb and Kg	<ul style="list-style-type: none"> • Small diamond indicates which unit of measure
Ready Stable	<ul style="list-style-type: none"> • Small diamond indicates when weight is stable
Connected	<ul style="list-style-type: none"> • Small diamond indicates the scale is connected to the Remote Device in the BT Mode
Low Battery	<ul style="list-style-type: none"> • Displays “LbAt”

Environmental Characteristics

Operating Environment	<ul style="list-style-type: none"> • Home, Office, Light Industrial
Water Resistance	Not designed for wash down or light spray, - Cleaning with damp cloth is acceptable.
Operating Temperature	0 deg C to +40 deg C
Humidity	0-90% Relative Humidity Non Condensing

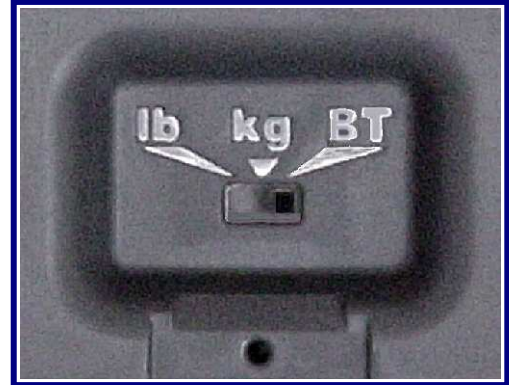
Section 2: Installation

Unpacking and Setup

1. Remove the scale from the packing box.
2. To install the four (4) AA Batteries, **lift the battery cover**.
3. Match the correct poles and **insert two batteries** in one direction, then two in the other direction.
4. Replace the **battery cover**.



5. On the bottom-side of the scale, move the switch to the appropriate setting.
 - **lb (Pounds)** is used for Standard English Weighments.
 - **kg (Kilogram)** is used for Metric Weighments.
 - **BT (Bluetooth® Communications)** is used for communicating the weighment from the scale to an external wireless Remote Bluetooth device.



6. Place the scale on a flat surface where it will be used. The scale should be level. Step on the scale briefly and then step off the scale. This will activate the scale. Allow the scale to zero itself and turn itself off.
7. If the scale is used for Stand-Alone operations, the scale is now ready for use.
8. If Bluetooth® Wireless Communications are required proceed to the next page for more detailed information.

Section 3: Bluetooth Communications

Bluetooth® Introduction

The Fairbanks TeleWeigh™ Health Scale, shown in Figure 3.1 below, is designed to communicate with external Bluetooth® enabled devices using compatible communications software. These devices are called *Remote Devices*. They can be computers, health monitoring equipment or other Bluetooth® enabled devices. They are programmed by the *Remote Device* manufacturer to use one of several Bluetooth® communications methods. Please refer to the *Remote Device* manual for the specific steps required to use the Fairbanks TeleWeigh™ Health Scale with the Remote Device.

NOTE: *Not all Bluetooth® enabled devices have software to communicate with the TeleWeigh™ Health Scale. The scale is designed to be part of a system when the Bluetooth® interface is used. The system consists of the scale plus a Remote Device.*

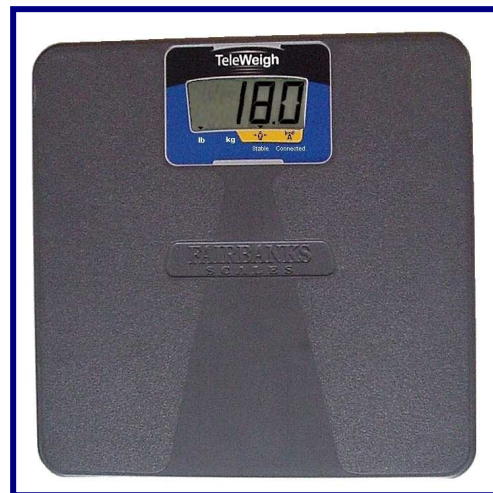


Figure 3.1.
TeleWeigh™ Health Scale

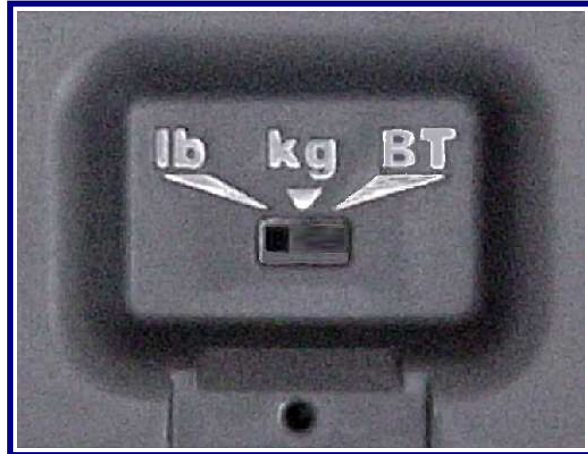
Section 4: Operation

Modes of Operation

There are **two basic modes of operation**, **Stand Alone Weighing Operations** and **Weighing with Bluetooth® Communications**.

Stand Alone Weighing Operations

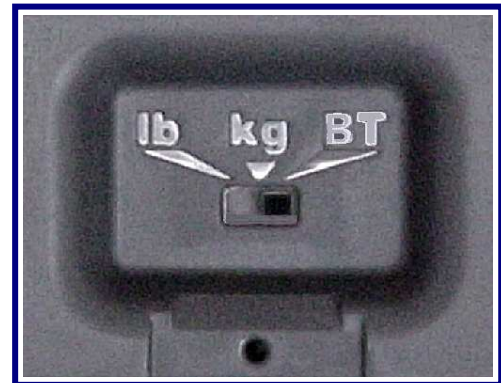
1. On the bottom-side of the scale, move the switch to the one of these settings.
 - **lb (Pounds)** is used for Avoirdupois Weighments.
 - **kg (Kilogram)** is used for Metric Weighments.
2. Once the switch is selected, place the scale on a flat surface where it will be used.
3. Stand on the scale. This will activate the scale.
4. The scale will beep once to indicate it has started a measurement cycle and start displaying the weight.
5. Once the weight is stable, the scale will beep twice, indicating the weight has been captured and the display will show the captured weight.
6. Step off the scale. The displayed weight is held on the display for about **ten (10) seconds**.
7. After the **ten (10) seconds**, the scale will briefly try to re-zero itself for the next weighment, provided there is less than **ten (10) pounds** on scale.
8. The scale will turn off and the weighing process is complete..



Weighing with Bluetooth® Communications

1. On the bottom-side of the scale, move the switch to the appropriate setting.

- **BT (Bluetooth® Communications)** is used for communicating the weighment from the scale to an external wireless Remote Bluetooth device.

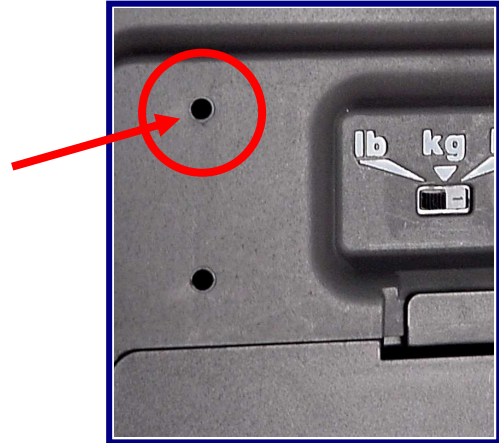


2. Once the switch is selected, place the scale on a flat surface where it will be used.
3. Stand on the scale. This will activate the scale.
4. The scale will beep once to indicate it has started a measurement cycle and start displaying the weight. The scale will establish communications with the remote Bluetooth® device.
5. The scale will indicate a Bluetooth® connection has been established by turning on the CONNECTED indicator on the display.
6. Once the weight is stable, the scale will beep twice, indicating the weight has been captured and the display will show the captured weight.
7. Step off the scale. The displayed weight is held on the display for at least **ten (10) seconds**.
8. The captured weight is sent to the remote Bluetooth® device. If the Remote device does not confirm the weight has been received the scale will retry several times to resend the weight. If the weight is not accepted the scale will beep three times and display *n[0]n* to indicate the weight was not sent. The unsent weight is stored internally to be resent during the next measurement cycle. The scale can store up to 10 measurements internally.
9. After the communication is complete, the scale will briefly try to re-zero itself for the next weighment, provided there is less than **ten (10) pounds** on scale.
10. The scale will turn off and the weighing process is complete.

Manual Zero Operation

The scale may need to be manually zeroed occasionally. The following procedure will perform a manual zero of the scale.

1. While the display is still active (**thirty seconds**), press the **Zero Button** using an item such as a straightened paper clip or toothpick.
 - This is the top hole on the bottom of the scale near the **Mode Switch**.
2. Once the switch has been pressed, place the scale on a flat surface where it will be used.
3. The scale will set itself to **zero (0.0)** and be ready for use.



Section 5: Service & Maintenance

Scale Error Codes

There are several error conditions and operational steps indicated by the scale.

- Not all are applicable in every sequence.
- Some errors are indicated using audible beeps and some are shown on the scale display.

LCD Display Indications

Displayed Text or Annunciator	Description
----	The scale is initializing its hardware
All LCD Segments ON	Hardware test to check for a malfunctioning display.
LbAt	Scale battery requires changing
Motion/Stable Annunciator	Weight is stable on the scale
Lb Annunciator	Displayed weight is in pounds
Kg Annunciator	Displayed weight is in kilograms
-u l-	Weight Under Capacity
-o l-	Weight Over Capacity
PASS	Inquiry process done successfully. <i>This is a Setup Function display value.</i>
FAIL	Inquiry process found no Remote Device to connect with <i>This is a Setup Function display value.</i>
Good	Calibration sequence successful
ErrC	Error in Calibration sequence
Ing	Inquiry taking place
nCon	Indicates no Remote Device was found during a Bluetooth Measurement Cycle
EEEE	7 Short chirps at five (5) second intervals for thirty (30) seconds. Weight is left on scale, and On switch contact closed.

Audible Beep errors/Signals

Number of Beeps	Display message	Description
1	---- or 0.0	Scale is ready for the weighment.
2	Weight value and indicator on	Weight measurement is captured.
2	INQ	Inquiry taking place
3	n[on	Indicates no Remote Device was found during a Bluetooth Measurement Cycle
5	FR IL	Indicates Inquiry failure. <i>This is a Setup Function error display .</i>
7	EEEE	7 Short chirps at five (5) second intervals for thirty (30) seconds. Weight is left on scale, and On switch contact closed.

Scale Maintenance

Installing Batteries

1. To install the four (4) AA Batteries, **lift the battery cover**.
2. Match the correct poles and **insert two batteries** in one direction, then two in the other direction.
3. Replace the **battery cover**.



Finding the Best Location

- Place the scale on a flat, solid, level floor.
- When the scale is to be used with a remote Bluetooth® device the scale location must be within radio range of the remote device. Follow the Remote Device's setup procedure to confirm communication between the scale and the Remote Device.
- Keep the scale in a location completely away from all high water, such as low-lying areas that may flood, and away from any drain pipes.

Cleaning the Scale

- Use a moist cotton cloth to clean the scale.
 - If spray cleaner is needed for shoe sole marks, squirt it into the cloth, and not directly onto the scale.
 - Use only tap water in the cloth to wipe off the scale's clear plastic display.



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