Model 300I User Manual

Digital Weight Indicator with Analog Output

For version x.33.19

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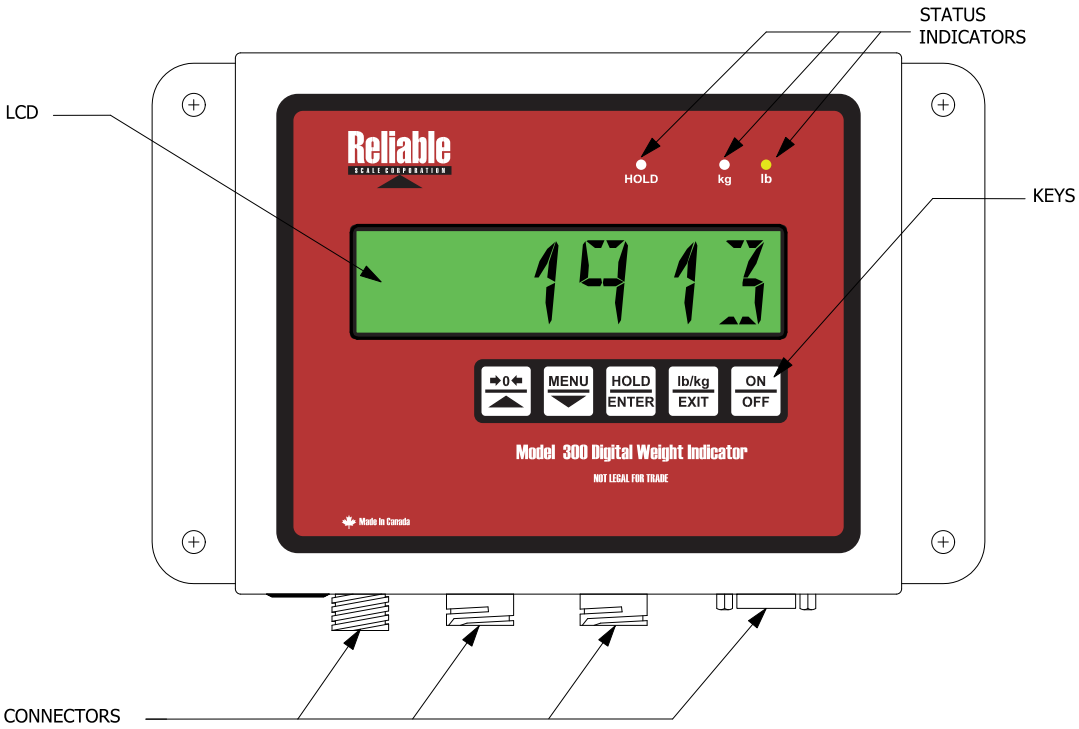
1 General

The 300 Series are general purpose digital weight indicators designed to operate with standard Wheatstone bridge load cells. They have additional features that make them well suited to industrial applications or live animal weighing, including an average and hold feature that can be triggered manually or automatically. The 300 Series can be equipped with optional features to collect and store RFID tags when connected to a compatible RFID reader by cable or Bluetooth connection.

1.1 Front Face Detail



1.2 Keypad

The keys on the 300 Series have different functions depending on the current operating mode.

In the **Normal Operating** mode, the upper label indicates the key function. In the **Configuration** mode, the lower label indicates its function.

Normal Operating mode **Fine Zero** sets the display to zero.	
Configuration mode Scrolls upwards through menus and adjusts parameters upwards.	
Normal Operating mode Enters **Configuration** mode.	
Configuration mode Scrolls downwards through menus and adjusts parameters downwards.	
Normal Operating mode Initiates a **Manual Hold** operation.	
Configuration mode Enters sub-menus and accepts/saves parameter changes.	
Normal Operating mode Toggles between **Weighing Units**.	

Configuration mode Exits sub-menus and cancels/discards parameter changes.	
Normal Operating mode Toggles power On & Off	ON/OFF

1.3 Status Indicators

In the **Normal Operating** mode, the status indicators show the current state of the device. When the device is waiting for user input, all status indicators will flash.

Status Indicator	Behavior
KG	On when operating in kilograms
	Flashes once when a key is pressed while operating in kilograms
	Flashes once when a **Zero Tracking** event occurs while operating in pounds
LB	On when operating in pounds
	Flashes once when a key is pressed while operating in pounds
	Flashes once when a **Zero Tracking** event occurs while operating in kilograms
HOLD	Flashes continuously while a locked/stable weight is displayed

1.4 Model Variations

		Model 300LG	Model 300ILG	Model 300LGX-2	Model 300LGX-2W	Model 350	Model 350-2W
Display	LCD	6 Digits x 1" (14 Seg)	6 Digits x 1" (14 Seg)	6 Digits x 1" (14 Seg)	6 Digits x 1" (14 Seg)	6 Digits x 1" (14 Seg)	6 Digits x 1" (14 Seg)
	Backlight	✓	✓	✓	✓	×	×
Interface Ports	Serial Port 1	RS-232	RS-232	RS-232	RS-232	×	×
	Serial Port 2	×	RS-232 or RS-485	RS-232 or RS-485	Bluetooth SPP	×	Bluetooth SPP
	Analog Output	×	4-20mA / 0-5VDC	×	×	×	×
	Remote Communication*	✓	✓	✓	✓	Optional Serial Port Req'd	✓
Weight Records	Storage Capacity	1,600	×	3,200	3,200	1,600	1,600
	Record Content	Weight	N/A	Weight, Date & Time, RFID**	Weight, Date & Time, RFID**	Weight	Weight
	Unique Lots***	20	20	20	20	20	20
	Min/Max/Average (by lot)	✓	×	✓	✓	✓	✓
Weighing Operation	Increments	1,2,5,10	1,2,5,10	1,2,5,10	1,2,5,10	1,2,5,10	1,2,5,10
	Decimal Points	Any Position	Any Position	Any Position	Any Position	Any Position	Any Position
	Weighing Units	lb, kg	lb, kg	lb, kg	lb, kg	lb, kg	lb, kg
	Zero Tracking	✓	✓	✓	✓	✓	✓

		Model 300LG	Model 300ILG	Model 300LGX-2	Model 300LGX-2W	Model 350	Model 350-2W
	Average & Hold	Auto & Manual	×	Auto & Manual	Auto & Manual	Auto & Manual	Auto & Manual
	Weight Triggered Alarm	×	×	×	×	×	×
	Gross/Net/Tare	×	×	×	×	×	×
	Field Adjustable Calibration	✓	✓	✓	✓	✓	✓
	Auto-Calibrate*****	✓	✓	✓	✓	✓	✓
General	Supply Voltage******	12-24VDC	12-24VDC	12-24VDC	12-24VDC	12-24VDC	12-24VDC
	Supply Current (1 Load Cell)	150mA	150mA	150mA	150mA	100mA	100mA
	Load Cell Excitation (VDC)	7.5	7.5	7.5	7.5	7.5	7.5
	Load Cell Capacity (350Ω)	Up to 6	Up to 6	Up to 6	Up to 6	Up to 6	Up to 6
	Operating Temperature	-5°F to 140°F / -20°C to 60°C	-5°F to 140°F / -20°C to 60°C	-5°F to 140°F / -20°C to 60°C	-5°F to 140°F / -20°C to 60°C	-5°F to 140°F / -20°C to 60°C	-5°F to 140°F / -20°C to 60°C
	Overall Case Dimensions (WxHxD)	10" x 7" x 3.75" / 25.4cm x 17.8cm x 9.5cm	10" x 7" x 3.75" / 25.4cm x 17.8cm x 9.5cm	10" x 7" x 3.75" / 25.4cm x 17.8cm x 9.5cm	10" x 7" x 3.75" / 25.4cm x 17.8cm x 9.5cm	9.5" x 8.5" x 5" / 24.1cm x 21.6cm x 12.7cm	9.5" x 8.5" x 5" / 24.1cm x 21.6cm x 12.7cm

		Model 300LG	Model 300ILG	Model 300LGX-2	Model 300LGX-2W	Model 350	Model 350-2W

* Remote Communication allows control and interfacing to an external PC or similar device.

** RF Identification (RFID) operation has been verified with many industry standard devices.

***Lots are used to group weight records, e.g. by pen, truckload, etc.

****Auto-Calibrate feature requires compatible load cells from Reliable Scale Corporation.

*****115vac to 12VDC adapter included as standard; battery clips or cigarette lighter adapter available as options.

Specifications subject to change without notice.

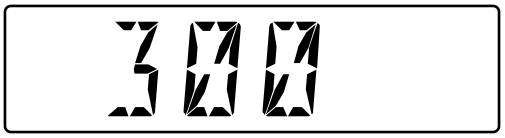
2 Basic Operation

2.1 Turning the 300 Series Weight Indicator On

When turned on, the 300 Series always starts operating in the **Normal Operating** mode.

1. Press the **ON** key.

   The model and version number are displayed, followed by a display test sequence.



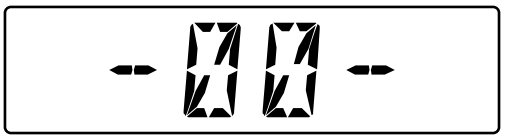
2. Allow a moment for the display to stabilize.

2.2 Fine Zero Adjustment

If the scale has no weight on it and the display does not show **"0"**.

1. From the **Normal Operating** mode, press the **FINE ZERO** key.

2. The new zero point is calculated.

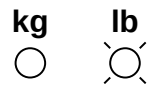


3. Display shows **"0"** and returns to the **Normal Operating** mode.

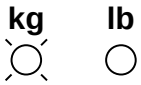
2.3 Toggle between weighing units

The 300 Series can display weights in either pounds (lb) or kilograms (kg). When working in either unit, the 300 Series will display, accept input and output weights in that unit exclusively. Weights saved in either unit and later recalled for display or output by the serial port will be done in the current units, any necessary conversion is automatic.

1. From the **Normal Operating** mode press the **LB/KG** key.



The current units are changed.



2.4 Turning the 300 Series Indicator Off

Note: Do not disconnect the power supply to turn the 300 Series off. Use the **OFF** key. Important status information is saved in memory when the 300 Series is turned off.

If the 300 Series is in the process of completing an operation (user input, Hold weight processing, report printing, etc.) and the off key is pressed, it will only turn off once the operation has been completed.

1. From the **Normal Operating** mode press the **OFF** key.

2. The 300 Series turns off.

3 Configuration Menus

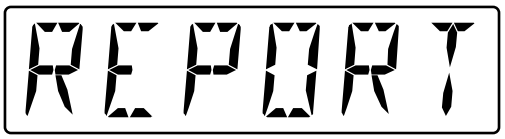
The 300 Series uses a system of menus to organize its various operating parameters. There are four main menus, each with a number of sub-menus. The menus are navigated using the arrow keys and wrap back to the top when the end of the current list is reached. Pressing **ENTER** selects the current menu item or steps into the next menu level. Pressing **EXIT** cancels the current operation or steps out of the current sub-menu.

Note: Be sure to read and fully understand the directions before making any modifications to the 300 Series configuration. Failure to do so may render the 300 Series inoperable for your application.

1. To access the configuration menus, press **MENU**.

2. Use **UP** and **DOWN** to move the cursor up or down to the sub-menu.

Report sub-menus are used to collect, report and manage Weight Record collection (including **RFID** if installed).



User Interface sub-menus are used to set the operator interface.

Auto-Hold sub-menus are used to set the automatic average and hold feature operating parameters.

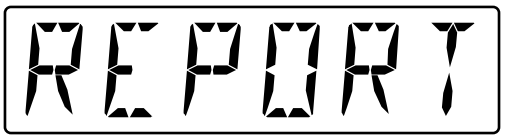
System Setup sub-menus are used to set the data acquisition operating parameters.

3. To return to the **Normal Operating** mode, press the **EXIT** key to back out of each menu level.

3.1 Report Menu

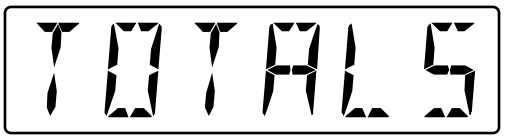
The **Report** menu controls the collection, reporting and management of Weight Records (including **RFID** if installed).

1. From the **Main** menu select the **Report** menu and press **ENTER**.



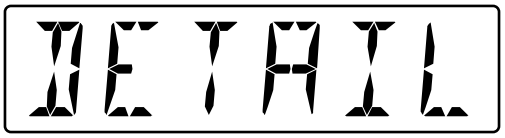
2. Using **UP** and **DOWN**, navigate to the sub-menu.

Display stored **Record Totals**.



Send a **Basic Report**.

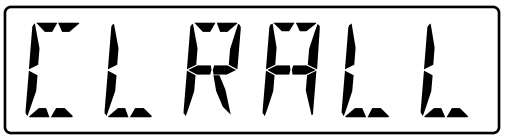
Send a **Detailed Report**.



Set Current Lot for record storage.

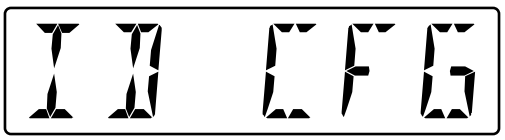
Clear Current Lot records.

Clear All Records.



Check Free Records.

Set the RFID Configuration.



Note: The RFID Configuration menu is only present in 'X' variations of the 300 Series devices.

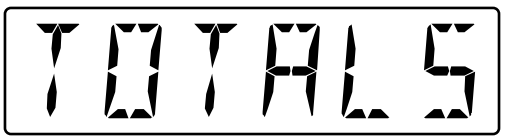
3. To return to a previous menu level, press the **EXIT** key to back out of each menu level.

3.1.1 Record Totals

A summary of the Weight Record Totals for each Lot can be displayed by the Series 300 device. The summary includes the number of records in the Lot as well as the total, average, maximum and minimum weights for that Lot.

Note: If the current lot is set to zero, the summary includes data from all Lots.

1. From the Record Totals menu, press **ENTER**.

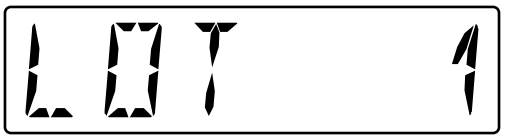


If Lots are enabled, a prompt for the Lot to summarize is displayed.

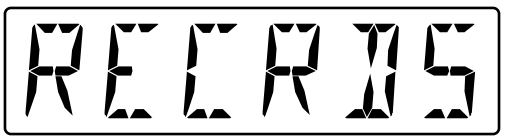
2. Using **UP** and **DOWN**, scroll to the **Lot** to view and press **ENTER**.

The summary is calculated.

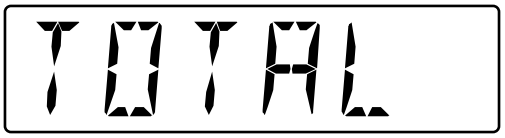
The **Lot** number is displayed.



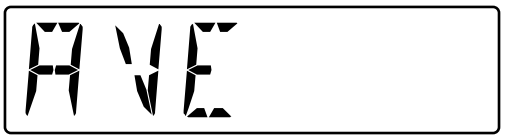
The number of records is displayed.



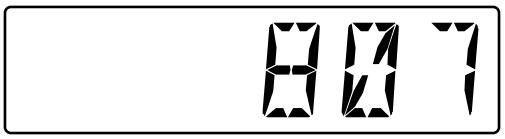
The total recorded weight is displayed.



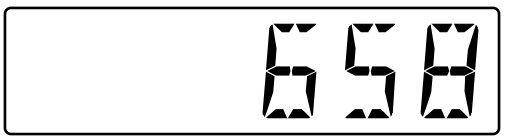
The average recorded weight is displayed.



The maximum recorded weight is displayed.



The minimum recorded weight is displayed.



3. Anytime while the summary is being displayed, press **ENTER** to choose another **Lot**, or press **EXIT** to return to the **Report** menu.

3.1.2 Basic Report

The **Basic Report** is used to send a basic summary of the **Weight Record Totals** for a specified **Lot** to an external device (PC, Printer, etc.) via the **Serial Port**.

Note: Any **Serial Port** that is configured to send reports will send the **Basic Report**.

Note: Time stamp information is only included in 'X' variations of the 300 Series devices.

1. From the **Basic Report** menu, press **ENTER**.

If **Lots** are enabled, a prompt for the **Lot** to report on is displayed.

2. Using **UP** and **DOWN**, scroll to the **Lot** to report on and press **ENTER.**

The report is calculated and sent.


```
Weight Record Summary Report

Report Date: 2017-02-20
Report Time: 16:47:20

Lot: 1
Lot Total Weight:   1589 lb
Lot Average Weight:    795 lb
Lot Maximum Weight:    824 lb
Lot Minimum Weight:    765 lb

2 Record(s) Processed.


Report Finished
```

3. When the **Lot** prompt is displayed, press **EXIT** to return to the **Report** menu, or repeat from step 2.

3.1.3 Detailed Report

The **Detailed Report** is used to send a complete listing of the **Weight Record Totals** (including a summary) for a specified **Lot** to an external device (PC, Printer, etc.) via the **Serial Port**.

Note: Any **Serial Port** that is configured to send reports will send the **Detailed Report**.

Note: Time stamp information is only included in 'X' variations of the 300 Series devices.

1. From the **Detailed Report** menu, press **ENTER**.

If **Lots** are enabled, a prompt for the **Lot** to report on is displayed.

2. Using **UP** and **DOWN**, scroll to the **Lot** to report on and press **ENTER.**

The report is calculated and sent.

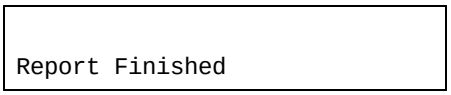

```
Weight Record Detailed Report

Report Date: 2017-02-20
Report Time: 16:47:20

Lot,Weight,Units
0,   765,lb
0,   824,lb

Lots: 1
Lot Total Weight:   1589 lb
Lot Average Weight:    795 lb
Lot Maximum Weight:    824 lb
Lot Minimum Weight:    765 lb

2 Record(s) Processed.
```



3. When the **Lot** prompt is displayed, press **EXIT** to return to the **Report** menu, or repeat from step 2.

3.1.4 Set Current Lot

Set Current Lot is used to specify the **Lot** number to be assigned to Weight Records as they are being stored. There are 21 possible **Lots** (0 though 20) and the **Lots** can be used to organize Weight Records in any way (by pen, truckload, etc.).

Note: Using a **Lot** setting of 0 is similar to not using **Lots** at all. When using **Lot** 0, printed and displayed reports will not ask for a **Lot** number and will report using all stored Weight Records.

1. From the **Set Current Lot** menu, press **ENTER**.

   The current setting is displayed.

2. Using **UP** and **DOWN**, navigate to the new setting.

3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **Report** menu.

3.1.5 Clear Current Lot

The **Clear Current Lot** menu is used to erase all animal record information from a specified Lot.

Note: It is not possible to recover animal record information once a lot has been cleared.

1. From the **Clear Current Lot** menu, press **ENTER**.

2. Using **UP** and **DOWN**, navigate to the lot to clear.

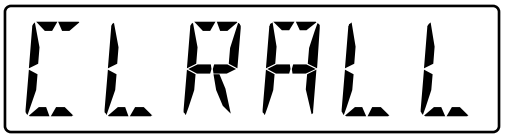
3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **Report** menu.

3.1.6 Clear All Records

The **Clear All Records** menu is used to erase all animal record information from all **Lots** at one time.

Note: It is not possible to recover animal record information once a lot has been cleared.

1. From the **Clear All Records** menu, press **ENTER**.



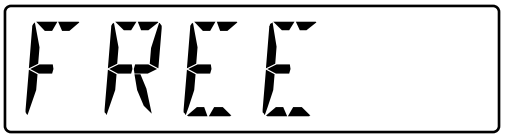
2. Using **UP** and **DOWN**, navigate to the lot to clear

3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **Report** menu.

3.1.7 Free Records

The **Free Records** menu is used to calculate the number of Weight Record locations available in permanent memory.

1. From the **Free Records** menu, press **ENTER**.



The number of free record locations is displayed

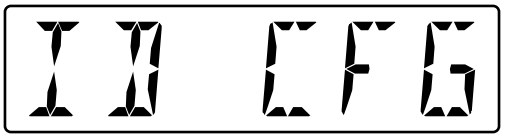
2. Press any key to return to the **Report** menu.

3.1.8 RFID Configuration

The 300 Series can collect, store and report Radio Frequency Identification (RFID) / Electronic Identification (EID) tag information. The tag information is associated with a weight and timestamp (date & time) and then stored as a Weight Record. These Weight Records can then be used for simple record collection or more advanced analysis on a PC. The RFID or barcode reader connects to a serial port on the 300 Series and can be a wired or Bluetooth connection depending on the specific configuration of the indicator and the reader. The 300 Series has been tested with a number of industry standard barcode and RFID readers.

Note: The **RFID Configuration** menu is only present in 'X' variations of the 300 Series devices.

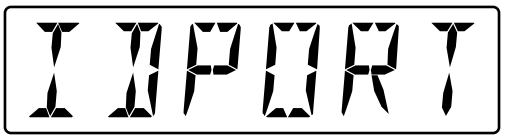
1. From the **Report** menu select the **RFID Configuration** menu and press **ENTER**.



2. Using **UP** and **DOWN**, navigate to the sub-menu.

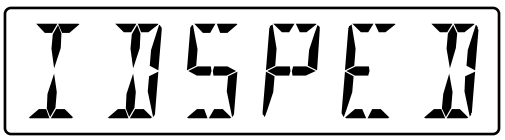
Set the **RFID Format**.

Set the **RFID Port**.



Set the **RFID Display Length**.

Set the **RFID Display Speed**.



3. To return to a previous menu level, press the **EXIT** key to back out of each menu level.

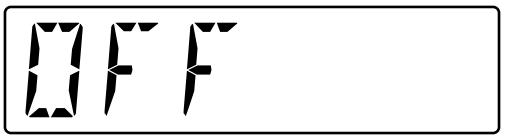
3.1.8.1 RFID Format

The **RFID Format** setting determines the ID number formatting that the 300 Series should expect to receive from the ID reader device. With **RFID Format** set to **Off**, no incoming ID information will be accepted. With **RFID Format** set to **ISO**, the incoming ID must consist of exactly 15 digits. With **RFID Format** set to **Raw**, the incoming ID can consist of up to 29 characters.

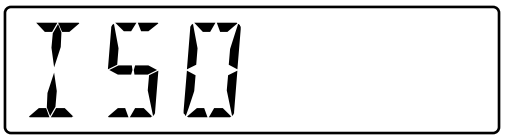
Note: The incoming ID must be terminated with a single ASCII LF character (0x0A) or a CR (0x0D) and an LF (0x0A).

1. From the **RFID Format** menu, press **ENTER**.

The current setting is displayed.



2. Using **UP** and **DOWN**, navigate to the new setting.

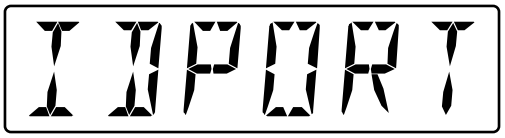


3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **RFID Configuration** menu.

3.1.8.2 RFID Port

The **RFID Port** setting specifies the port to be used to receive RFID tag data.

1. From the **RFID Port** menu, press **ENTER**.



The current setting is displayed.

2. Using **UP** and **DOWN**, navigate to the new setting.

3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **RFID Configuration** menu.

3.1.8.3 RFID Display Length

The **RFID Display Length** setting specifies the number of RFID digits (trailing) that are displayed once a Weight Record has been saved. With an **RFID Display Length** of zero, no RFID value will be displayed.

1. From the **RFID Display Length** menu, press **ENTER**.

The current setting is displayed.

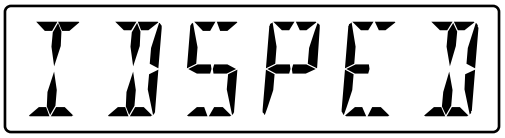
2. Using **UP** and **DOWN**, scroll to the new setting.

3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **RFID Configuration** menu.

3.1.8.4 RFID Display Speed

The **RFID Display Speed** setting specifies the speed at which RFID digits are scrolled across the display (in seconds/digit) once a Weight Record has been saved.

1. From the **RFID Display Speed** menu, press **ENTER**.



The current setting is displayed.

2. Using **UP** and **DOWN**, scroll to the new setting.

3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **RFID Configuration** menu.

3.2 User Interface Menu

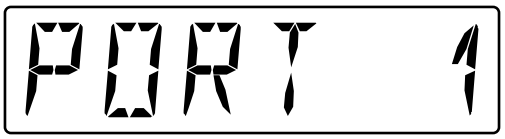
The **User Interface** menu allows configuration of the 300 Series user interface and weight display.

1. From the **Main** menu select the **User Interface** menu and press **ENTER**.

2. Using **UP** and **DOWN**, navigate to the sub-menu.

Time of Day Clock sub-menu.

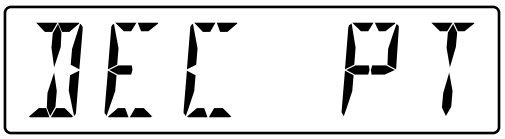
Serial Port configuration sub-menus.



Bluetooth configuration sub-menus.

Set the **Count By**.

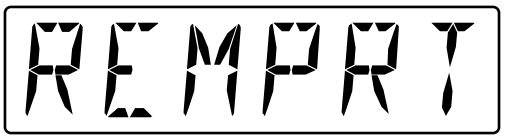
Set the **Decimal Places**.



Set the **Backlight Auto Shutoff Period**.

Set the **Inactivity Auto Shutoff Period**.

Set the **Remote Interface Port**.



Set the **Remote Communications Address**.

3. To return to a previous menu level, press the **EXIT** key to back out of each menu level.

3.2.1 Time of Day Clock

The **Time of Day Clock** menu allows configuration of the internal clock. The clock (time) is used when recording animal records to memory.

Note: The **Time of Day Clock** feature is only included in 'X' variations of the 300 Series devices.

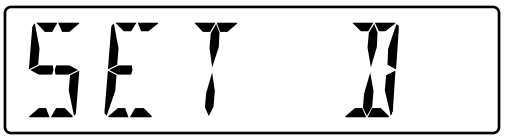
1. From the **User Interface** menu select the **Time of Day Clock** menu and press **ENTER**.

2. Using **UP** and **DOWN**, navigate to the sub-menu.

Display **Current Time & Date**.

Set the **Time**.

Set the **Date**.



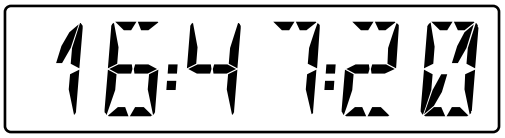
3. To return to a previous menu level, press the **EXIT** key to back out of each menu level.

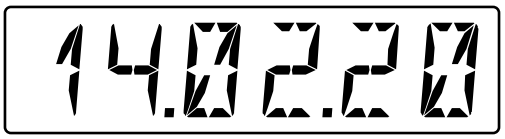
3.2.1.1 Current Time & Date

The current time can be viewed with the **Current Time & Date** operation.

1. From the **Current Time & Date** menu, press **ENTER**.

The current time & date are alternately displayed on the screen in 24 hour format in the order **HH:MM:SS**, **YY.MM.DD**.



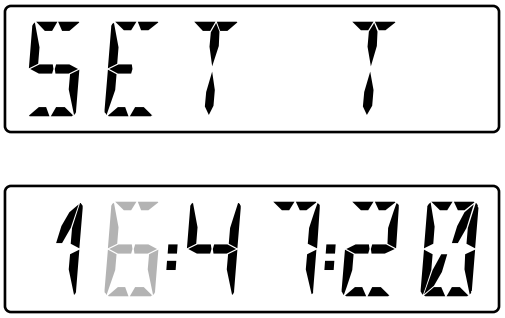


2. Press **EXIT** to cancel and return to the **Time of Day Clock** menu.

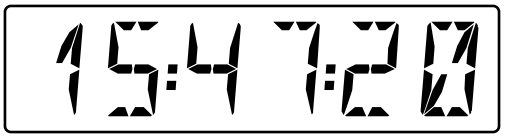
3.2.1.2 Set Time

The **Set Time** function is used to set the current time of day. The time is set in 24 hour format in the order **HH:MM:SS**.

1. From the **Set Time** menu, press **ENTER**.



2. Using **UP** and **DOWN**, modify the current digit (blinking digit) to a new value as necessary. Press **ENTER** to move to the next digit.

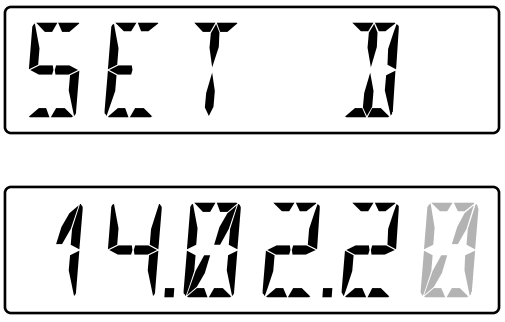


3. Press **ENTER** at the last digit to save the new time, or press **EXIT** on any digit to cancel and return to the **Time of Day Clock** menu.

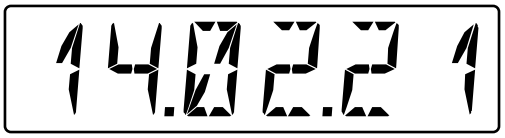
3.2.1.3 Set Date

The **Set Date** function is used to set the current date. The date is in the order **YY.MM.DD**.

1. From the **Set Date** menu, press **ENTER**.



2. Using **UP** and **DOWN**, modify the current digit (blinking cursor) to a new value as necessary. Press **ENTER** to move to the next digit.



3. Press **ENTER** at the last digit to save the new date, or press **EXIT** on any digit to cancel and return to the **Time of Day Clock** menu.

3.2.2 Serial Ports

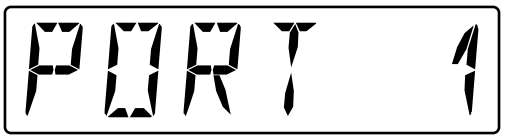
The 300 Series is equipped with one RS-232 serial port as standard. Additional serial ports (up to two) are available as options. The options and configuration of all ports are the same and each port has its own **Serial Port** sub-menu. All ports are configured for 8 Data Bits, 1 Stop Bit and No Parity (8N1).

Note: To communicate, the sender (Series 300) and receiver (PC, printer, remote display, etc.) must be transmitting at the same baud rate and port settings.

Note: The additional **Serial Port** menus may be present even when the additional port(s) are not installed.

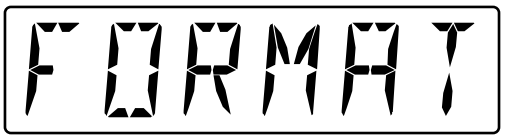
Note: The serial port(s) may not be user accessible depending on the specific model variation.

1. From the **User Interface** menu select the **Serial Port** menu and press **ENTER**.



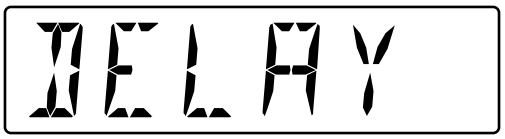
2. Using **UP** and **DOWN**, navigate to the sub-menu.

   Set the **Output Format**.

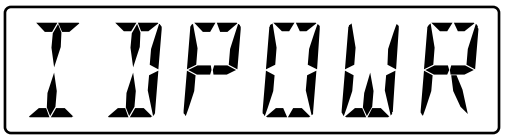


Set the **Baud Rate**.

Set the **Line Delay**.



Enable **Accessory Power**.

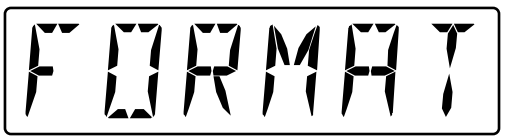


3. To return to a previous menu level, press the **EXIT** key to back out of each menu level.

3.2.2.1 Output Format

The **Output Format** setting determines when and what data is sent by the serial. See the section on **Serial Output Formats** for details on the available formats.

1. From the **Output Format** menu, press **ENTER**.



The current setting is displayed.

2. Using **UP** and **DOWN**, navigate to the new setting.

3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **Serial Port** menu.

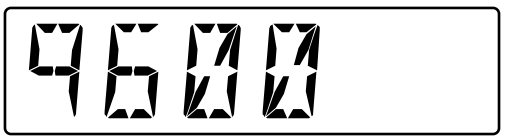
3.2.2.2 Baud Rate

The **Baud Rate** setting determines the speed (signaling rate) at which data is transmitted and received.

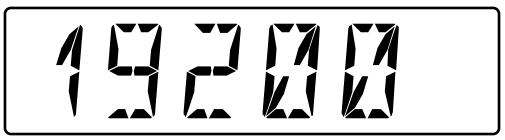
Note: To communicate, the sender (DD) and receiver (PC, printer, remote display, etc.) must be transmitting at the same baud rate and port settings.

1. From the **Baud Rate** menu, press **ENTER**.

The current setting is displayed.



2. Using **UP** and **DOWN**, navigate to the new setting.



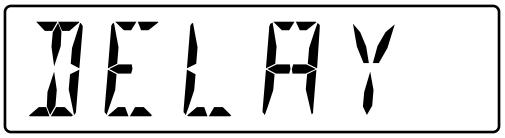
3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **Serial Port** menu.

3.2.2.3 Line Delay

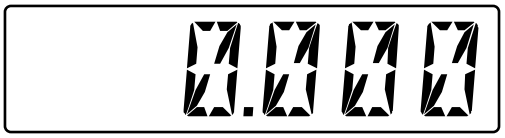
The **Line Delay** setting specifies the amount of time to wait between sending consecutive lines of data out the serial port. This is useful when transferring data to slower devices without large buffers like some tape printers.

Note: The Line Delay should only be set to a non zero value when absolutely necessary.

1. From the **Line Delay** menu, press **ENTER**.



The current setting is displayed.



2. Using **UP** and **DOWN**, scroll to the new setting.

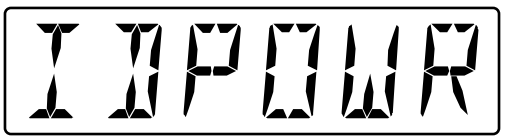
3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **Serial Port** menu.

3.2.2.4 Accessory Power

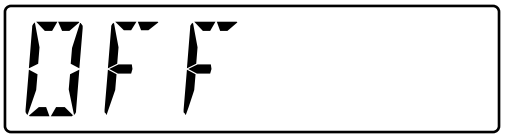
The **Accessory Power** setting determines if the 300 Series will supply power for an accessory device (such as a RS-232 to Bluetooth dongle) on pin 9 (RI) of the 9 pin serial port connector.

Note: The Series 300 accessory output voltage is +8VDC (typ) and can supply a maximum of 50mA.

1. From the **Accessory Power** menu, press **ENTER**.



The current setting is displayed.



2. Using **UP** and **DOWN**, scroll to the new setting.

3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **Serial Port** menu.

3.2.3 Bluetooth

The 300 Series is capable of interfacing to compatible devices (RFID reader, PC, etc.) through an internally and/or externally attached Bluetooth module.

Note: The **Bluetooth** menus may be present even when there is no Bluetooth module installed.

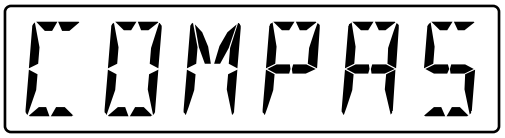
Note: The **Bluetooth** configuration operations are designed to work with the Bluetooth modules supplied by Reliable Scale Corporation. Compatible third party modules can be connected to the 300 Series serial ports, but must be configured separately.

1. From the **User Interface** menu select the **Bluetooth** menu and press **ENTER**.

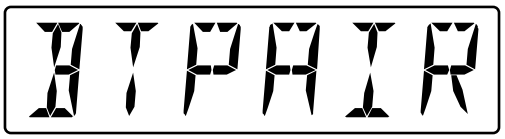
2. Using **UP** and **DOWN**, navigate to the sub-menu.

Set the **Module Operating Mode**.

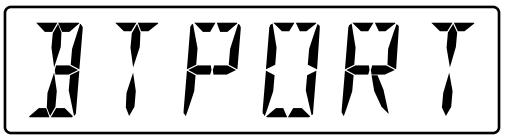
Enable **Port Pass-Through**.



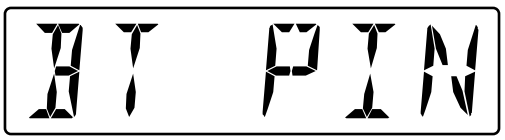
Perform **Module Pairing**.



Set the **Module Configuration Port**.



Set the **Module PIN Code**.



3. To return to a previous menu level, press the **EXIT** key to back out of each menu level.

3.2.3.1 Module Operating Mode

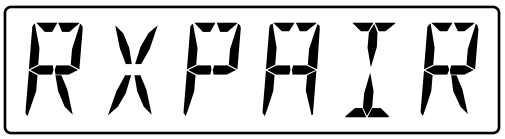
The **Module Operating Mode** setting determines whether the Bluetooth module operates as a Master or as a Slave or if the module should be disabled (standby). In the Master mode (RXPAIR), the Bluetooth module will accept incoming data (RFID or Remote Commands) to the port exclusively from a paired Slave device. In the Slave mode (TXANY), the Bluetooth module will share the connected port with any Master device (with a matching PIN Code).

Note: To operate in the Master mode, the module has to have been previously paired to a Slave device.

1. From the **Module Operating Mode** menu, press **ENTER**.

The current setting is displayed.

2. Using **UP** and **DOWN**, navigate to the new setting.



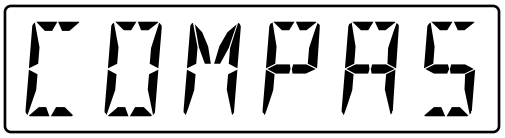
3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **Bluetooth** menu.

3.2.3.2 Port Pass-Through

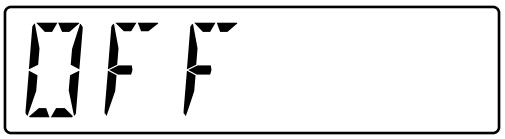
The **Port Pass-Through** setting allows an internal Bluetooth module to be factory calibrated by a PC through Serial Port 1.

Note: The **Port Pass-Through** is automatically disabled when the 300 Series device is turned off.

1. From the **Port Pass-Through** menu, press **ENTER**.



The current setting is displayed.



2. Using **UP** and **DOWN**, navigate to the new setting.

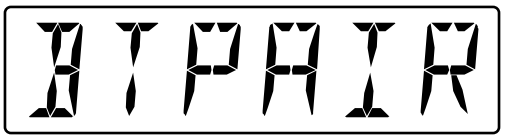
3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **Bluetooth** menu.

3.2.3.3 Module Pairing

The **Module Pairing** process is used to discover and connect to a Slave device. Once paired with a Slave device and in the **Master operating mode**, the 300 Series device will automatically initiate a Bluetooth connection with the Slave whenever the Slave is in range.

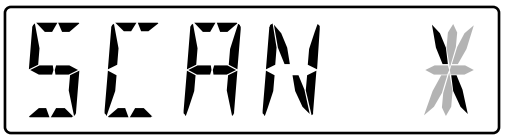
Bluetooth pairing is a multi-step step process where the Master searches for any discoverable Bluetooth Slave devices that are in range.

1. From the **Module Pairing** menu, press **ENTER**.



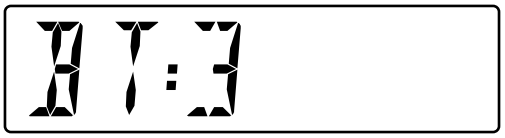
The Master (300 Series device) configures its Bluetooth module for pairing.

The Bluetooth Slave scan begins. The scan will end after 30 seconds or after five devices have been discovered.

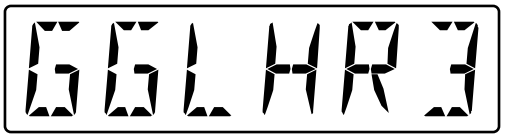


Note: Slave devices to be paired with must be in discovery mode to be found by the scan process.

The number of Bluetooth Slaves discovered is displayed.

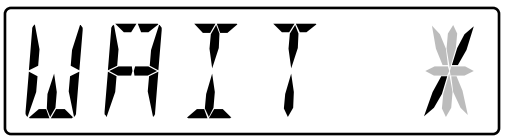


2. Using **UP** and **DOWN**, scroll to the name of the Slave device to pair with and press **ENTER**, press **EXIT** to cancel the scan process.



Note: The 300 Series Bluetooth module only supports the Serial Port Profile (SPP).

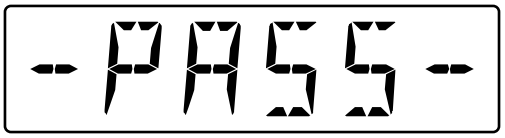
The Master attempts to connect to the chosen Slave device.



Note: The Master **Module PIN code** must match the Slave's (if required by the Slave).

The Master configures its Bluetooth module for automatic connection to the Slave device.

3. Once the process has completed, press any key to return to the **Bluetooth** menu.



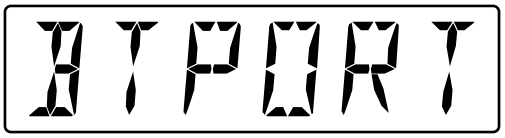
3.2.3.4 Module Configuration Port

The **Module Configuration Port** setting specifies the port to be used for the **Module Operating Mode** and **Module Pairing** operations.

Note: The **Module Configuration Port** only specifies a port for **Bluetooth** configuration purposes and does not affect its normal purpose (Report output, RFID, Remote Commands, etc.).

Note: If multiple Bluetooth modules are present, they can each be configured through the **Bluetooth** menus so long as the Module to configure is presently specified by the **Module Configuration Port**.

1. From the **Module Configuration Port** menu, press **ENTER**.



The current setting is displayed.

2. Using **UP** and **DOWN**, navigate to the new setting.

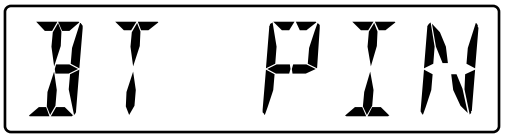
3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **Bluetooth** menu.

3.2.3.5 Module PIN Code

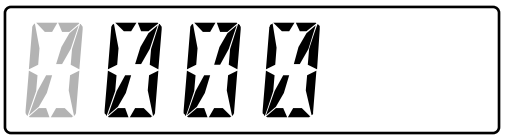
The **Module PIN Code** specifies the four digit security code to be used when pairing (Master or Slave) with other Bluetooth devices (RFID reader, PC, etc.).

Note: Not all devices require a PIN code.

1. From the **Module PIN Code** menu, press **ENTER**.



The current setting is displayed.



2. Using **UP** and **DOWN**, modify the current digit (blinking digit) to a new value as necessary. Press **ENTER** to move to the next digit.

3. Press **ENTER** at the last digit to save the new PIN, or press **EXIT** on any digit to cancel and return to the **Bluetooth** menu.

3.2.4 Count By

The **Count By** setting determines graduation size for displayed weight.

Note: If using Reliable Scale Corporation load bars/cells compatible with **Auto-Calibration** and the feature is enabled in the Series 300, the **Count By** setting will be chosen automatically.

Note: The **Count By** value should be chosen to achieve 5,000 to 10,000 displayed graduations over the capacity of the system.

Note: The **Decimal Places** are overlaid on the **Count By** value, therefore, with a **Count By** setting of 5 and a **Decimal Places** setting of 0.0, the displayed graduation size will be 0.5.

1. From the **Count By** menu, press **ENTER**.

   The current setting is displayed.

2. Using **UP** and **DOWN**, navigate to the new setting.

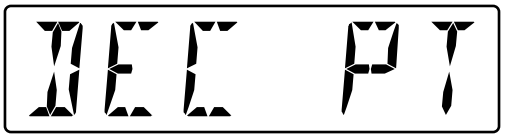
3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **User Interface** menu.

3.2.5 Decimal Places

The **Decimal Places** setting determines the number of decimal places for displayed weight.

Note: If using Reliable Scale Corporation load bars/cells compatible with **Auto-Calibration** and the feature is enabled in the Series 300, the **Decimal Places** setting will be chosen automatically.

1. From the **Decimal Places** menu, press **ENTER**.



   The current setting is displayed.

2. Using **UP** and **DOWN**, navigate to the new setting.

3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **User Interface** menu.

3.2.6 Backlight Auto-Off

The **Backlight Auto Shutoff Period** setting specifies the amount of time (in minutes) from the last keypress until the LCD backlight turns off. Any keypress will turn the backlight back on and restart the backlight shut-off timer.

Note: A setting of 0 disables the Backlight Shut-Off.

Note: Not all Series 300 variations have an LCD backlight.

1. From the **Backlight Auto Shutoff Period** menu, press **ENTER**.

The current setting is displayed.

2. Using **UP** and **DOWN**, scroll to the new setting.

3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **User Interface** menu.

3.2.7 Inactivity Auto-Off

The **Inactivity Auto-Off** setting specifies the amount of time (in minutes) from the last keypress until the Series 300 automatically turns off. Any keypress will restart the inactivity shut-off timer.

Note: A setting of 0 disables the Inactivity Shut-Off.

Note: In battery powered systems, it is recommended to use the **Inactivity Auto-Off** feature.

1. From the **Inactivity Auto-Off** menu, press **ENTER**.

The current setting is displayed.

2. Using **UP** and **DOWN**, scroll to the new setting.

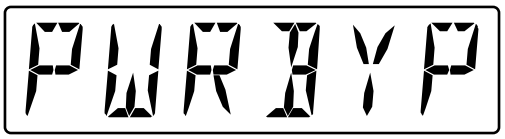
3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **User Interface** menu.

3.2.8 Power Switch Bypass

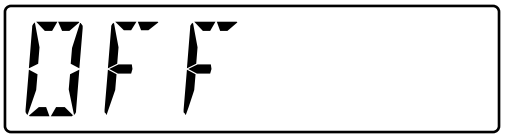
The **Power Switch Bypass** setting is used to disable the **OFF** key functionality.

Note: The 300 Series can be supplied in an Auto-On mode (order option **B**) for "always-on" applications. For these applications, it is recommended to use the **Power Switch Bypass** feature to prevent inadvertent system shutdowns.

1. From the **Power Switch Bypass** menu, press **ENTER**.



The current setting is displayed.



2. Using **UP** and **DOWN**, scroll to the new setting.

3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **User Interface** menu.

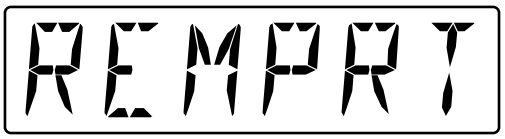
3.2.9 Remote Interface Port

The **Remote Interface Port** setting specifies the serial port that the Series 300 will accept remote commands from.

Note: **Serial Ports** may be listed even when the port(s) are not installed.

Note: If there is a port function conflict, an error message will be displayed. The port will not accept commands until the conflict is resolved.

1. From the **Remote Interface Port** menu, press **ENTER**.



   The current setting is displayed.

2. Using **UP** and **DOWN**, scroll to the new setting.

3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **User Interface** menu.

3.2.10 Remote Address

The **Remote Communications Address** provides a mechanism for multiple Series 300 devices to share a communications line (typically RS-485) for receiving commands from a master device (typically a PC). The chosen **Remote Communications Address** for a Series 300 device must precede all messages sent to that device.

Note: If only one Series 300 device is connected to a master device, addressing is not required and can be set to 0.

1. From the **Remote Communications Address** menu, press **ENTER**.

   The current setting is displayed.

2. Using **UP** and **DOWN**, scroll to the new setting.

3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **User Interface** menu.

3.3 System Setup Menu

The **System Setup** menu allows configuration of the DD signal processing functions.

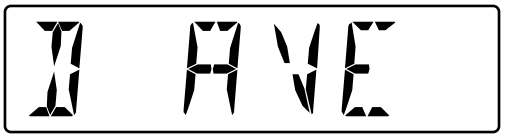
1. From the **Main** menu select the **System Setup** menu and press **ENTER**.

2. Using **UP** and **DOWN**, navigate to the sub-menu.

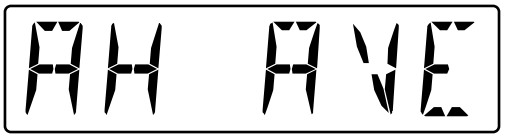
Adjust the **Calibration Factor**.

Set the **Manual Hold Period**.

Set the **Averaged Display Samples**.

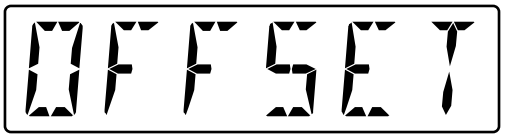


Set the **Averaged Auto-Hold Samples**.



Set the **Factory Calibration**.

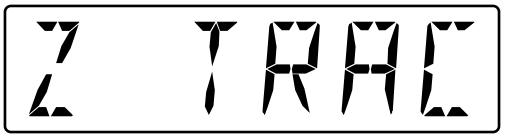
Perform an **Amplfier Zero Offset Adjustment**.



Set the **Load Cell Input Range**.

Enable **Auto-Calibration**.

Enable **Zero Tracking**.



Perform a **System Report**.

3. To return to a previous menu level, press the **EXIT** key to back out of each menu level.

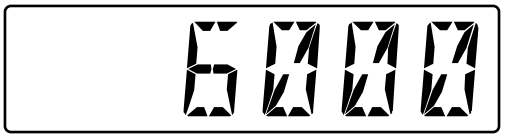
3.3.1 Adjust Calibration Factor

The 300 Series is factory calibrated to a specific mV/V signal. This allows for a simple field calibration process with predictable and repeatable results. Field calibration adjustments are made by adjusting a single **Calibration Factor**. Use the formula below to calculate the **Calibration Factor**.

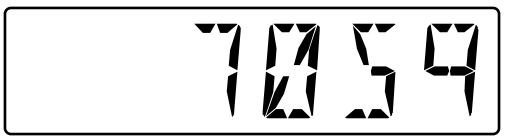
Note: If unsure about making changes to the **Calibration Factor**, contact your dealer or Reliable Scale Corporation directly for help with this process.

1. From the **Adjust Calibration Factor** menu, press **ENTER**.

The current setting is displayed.



2. Using **UP** and **DOWN**, scroll to the new setting.



3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **System Setup** menu.

The example below shows the process to calculate a new Calibration Factor (CF). The final calculation is used for field adjustments.

- Displayed Value: 10,000
- Actual Load: 10,100
- Old CF: 5,000
- New CF: 5,050

$$\frac{\textit{Old CF}}{\textit{Displayed Value}} = \frac{\textit{New CF}}{\textit{Actual Load}}$$

$$\frac{5{,}000}{10{,}000} = \frac{\textit{New CF}}{10{,}100}$$

$$\textit{New CF} = \frac{(5{,}000 * 10{,}100)}{10{,}000}$$

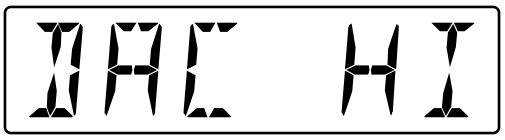
$$\textit{New CF} = 5{,}050$$

$$\boldsymbol{\textit{New CF} = \frac{(\textit{Old CF} * \textit{Actual Load})}{\textit{Displayed Value}}}$$

3.3.2 DAC High Level

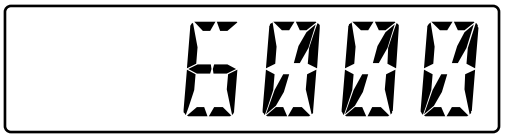
The **DAC High Level** setting specifies the weight value that corresponds to the high level of the Digital to Analog Converter (DAC) output. Depending on the **DAC Output Signal** setting, this could be 20mA or 5V.

1. From the **DAC High Level** menu, press **ENTER**.



   The current setting is displayed.

2. Using **UP** and **DOWN**, scroll to the new setting.

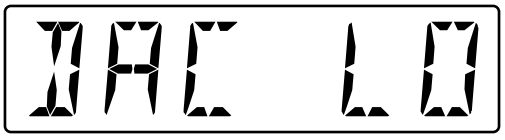


3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **System Setup** menu.

3.3.3 DAC Low Level

The **DAC Low Level** setting specifies the weight value that corresponds to the high level of the Digital to Analog Converter (DAC) output. Depending on the **DAC Output Signal** setting, this could be 4mA or 0V.

1. From the **DAC Low Level** menu, press **ENTER**.



   The current setting is displayed.

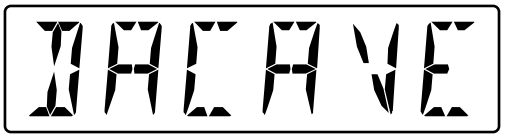
2. Using **UP** and **DOWN**, scroll to the new setting.

3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **System Setup** menu.

3.3.4 Averaged DAC Samples

The **Averaged DAC Samples** setting specifies the number of samples (at a 50Hz rate) used in the running average for the DAC output. A larger number of averaged samples may result in a more stable output at the expense of responsiveness to changes in the measured value.

1. From the **Averaged DAC Samples** menu, press **ENTER**.



The current setting is displayed.

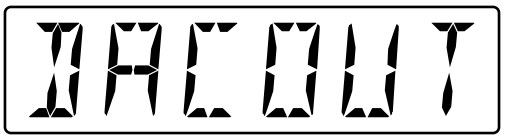
2. Using **UP** and **DOWN**, scroll to the new setting.

3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **System Setup** menu.

3.3.5 DAC Output Signal

The **DAC Output Signal** setting specifies the type of electrical signal out the DAC output terminals. The signal can be a 4 to 20mA current loop or a 0 to 5V voltage.

1. From the **DAC Output Signal** menu, press **ENTER**.



The current setting is displayed.

2. Using **UP** and **DOWN**, scroll to the new setting.

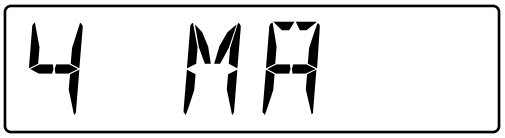
3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **System Setup** menu.

3.3.6 DAC Output Level Test

The **DAC Output Level Test** can be used to calibrate equipment connected to the DAC output terminals. The DAC output will be forced to the **DAC Low Level** and **DAC High Level**.

1. From the **DAC Output Level Test** menu, press **ENTER**.

The display will alternate between the **DAC Low Level** value and signal level. The signal at the DAC output terminals will be forced to the low signal level (4mA or 0V).



2. Press **ENTER** to alternate to the high signal level.

   The display will alternate between the **DAC High Level** value and signal level. The signal at the DAC output terminals will be forced to the high signal level (20mA or 5V).

3. Press **EXIT** to cancel the forced signal output and return to the **System Setup** menu.

3.3.7 Manual Hold Period

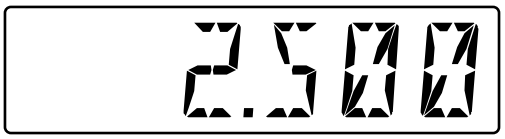
The **Manual Hold Period** setting specifies the length of time (in seconds) for a Manual Hold operation. A longer time will result in more individual samples used in the calculation of the averaged reading.

Note: Depending on the application, a longer time than the factory default (3.000 S) may not result in more accurate readings and could possibly result in less accurate readings.

1. From the **Manual Hold Period** menu, press **ENTER**.

The current setting is displayed.

2. Using **UP** and **DOWN**, scroll to the new setting.

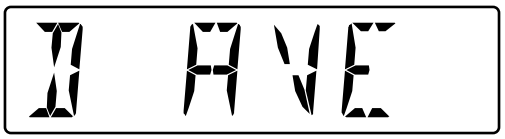


3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **System Setup** menu.

3.3.8 Averaged Display Samples

The **Averaged Display Samples** setting specifies the number of samples (at a 50Hz rate) used in the running average for the digital display. A larger number of averaged samples may result in a more stable display at the expense of responsiveness to changes in the measured value.

1. From the **Averaged Display Samples** menu, press **ENTER**.



The current setting is displayed.

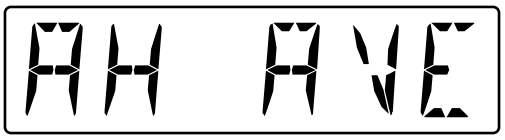
2. Using **UP** and **DOWN**, scroll to the new setting.

3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **System Setup** menu.

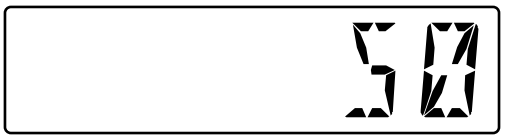
3.3.9 Averaged Auto-Hold Samples

The **Averaged Auto-Hold Samples** setting specifies the number of samples (at a 50Hz rate) used in the running average for the Auto-Hold feature. A larger number of averaged samples may result in a more stable display at the expense of responsiveness to changes in the measured value.

1. From the **Averaged Auto-Hold Samples** menu, press **ENTER**.



The current setting is displayed.



2. Using **UP** and **DOWN**, scroll to the new setting.

3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **System Setup** menu.

3.3.10 Factory Calibration

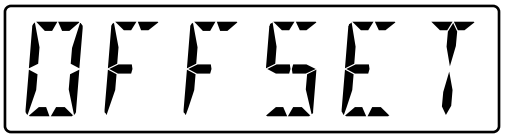
The **Factory Calibration** function is used for factory configuration only.

3.3.11 Amplfier Zero Offset Adjustment

The **Amplfier Zero Offset Adjustment** operation is used to compensate for certain load cell properties and for static loads such as platforms or rigging.

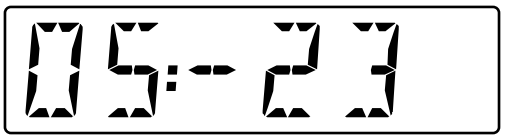
Note: The **Amplfier Zero Offset Adjustment** operation should only be performed at a no load condition with all normal rigging in place.

1. From the **Amplfier Zero Offset Adjustment** menu, press **ENTER**.



2. Press **ENTER** to continue, or press **EXIT** to cancel the operation and return to the **System Setup** menu.

The 300 Series device will automatically adjust the **Amplifier Offset** until an optimal value is found.



When the operation has completed, the 300 Series device automatically returns to the **System Setup** menu.

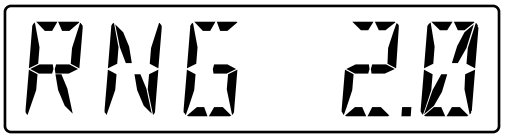
3.3.12 Load Cell Input Range

The **Load Cell Input Range** configures the amplifier that determines the upper limit for the load cell signal. When selecting the **Load Cell Input Range** value, be sure that the value is as low as possible while also being equal to or larger than the maximum load cell signal (rated in mV/V at full load).

1. From the **Load Cell Input Range** menu, press **ENTER**.

   The current setting is displayed.

2. Using **UP** and **DOWN**, scroll to the new setting.



3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **System Setup** menu.

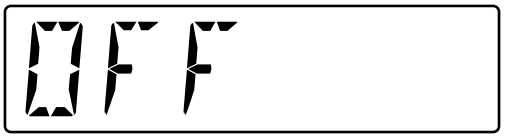
3.3.13 Auto-Calibration

The **Auto-Calibration** feature allows certain load cells/bars manufactured by Reliable Scale Corporation to be detected by the Series 300 device and automatically set the **Calibration Factor**, **Count By** and **Decimal Places** to optimum values.

Note: The **Auto-Calibration** is sensed at power-up. Compatible load cells must be connected prior to turning the power on.

1. From the **Auto-Calibration** menu, press **ENTER**.

The current setting is displayed.



2. Using **UP** and **DOWN**, scroll to the new setting.

3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **System Setup** menu.

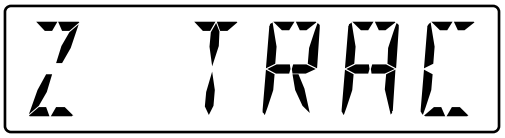
3.3.14 Zero Tracking

The **Zero Tracking** setting determines if the Series 300 device will automatically make fine zero adjustments to compensate for material buildup (mud, weather, manure, etc.) on the sensor rigging.

Note: **Zero Tracking** only operates at or near the zero point.

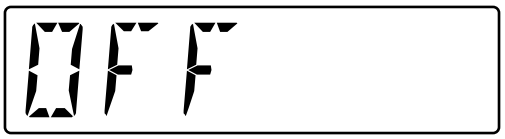
Note: Only applications with live loads (eg. live animals) should consider operating with **Zero Tracking** enabled.

1. From the **Zero Tracking** menu, press **ENTER**.



The current setting is displayed.

2. Using **UP** and **DOWN**, scroll to the new setting.



3. Press **ENTER** to save the new value, or press **EXIT** to cancel and return to the **System Setup** menu.

3.3.15 System Report

The **System Report** function is for factory use only.

4 Error Messages

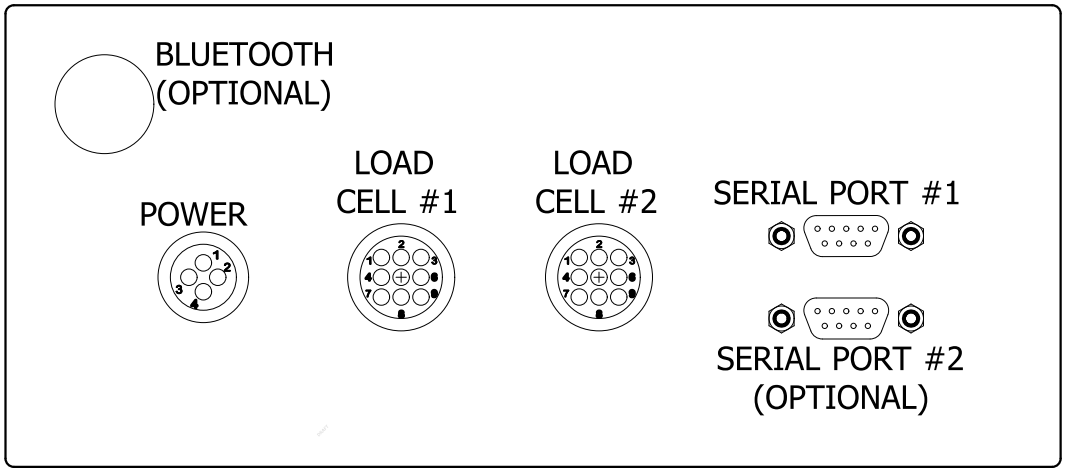
If the 300 Series device determines that it is unable to perform an operation properly or that an internal error has occurred, an error message will be displayed. Each of the possible error messages is listed below along with a brief description of the failure encountered.

Note: Contact your dealer or Reliable Scale Corporation directly for help if you are unsure about any error message you receive.

Error Type	Description
Err 01	Factory Calibration: High weight below zero (0)
Err 02	Factory Calibration: Negative slope
Err 03	Calibration Adjustment: Slope too steep
Err 04	Calibration Adjustment: Slope too shallow
Err 08	Amplifier Offset Adjustment: Out of range (negative input)
Err 09	Amplifier Offset Adjustment: Out of range (positive input)
Err 10	Menu error
Err 11	A/D Converter: Internal full scale calibration failed
Err 12	A/D Converter: Internal zero scale calibration failed
Err 13	Calibration Adjustment: Slope less than 4.00 (applies to Legal For Trade applications only).
Err 14	Fine Zero Adjustment: Out of range
Err 15	Auto-Calibration: Load cell mismatch
Err 22	Automatic Count By Adjustment: Out of range
Err 23	Bluetooth: No Bluetooth module found

Error Type	Description
Err 24	Bluetooth: Configuration operation failed
Err 25	Serial Port function conflict
Err 26	Bluetooth: No pairing address stored
Err 30	Operation timeout

5 Connector Details



5.1 Power Connector

Power connector P/N: AMP 206061-1

Mating connector P/N: AMP 206060-1

Note: Specified wire colours are for internal connections, external mating cables may not use matching wire colours.

Pin #	Wire Colour	Signal
1	Red	DC Supply
2	Black	DC Common

5.2 Load Cell Connectors

Load Cell connector P/N: AMP 206705-1

Mating connector P/N: AMP 206708-1

Note: Specified wire colors are for internal connections, external mating cables may not use matching wire colors.

Note: Connecting a signal input pin directly to one of the voltage output pins can result in electrical damage to the pin and potentially to the rest of the system.

Pin #	Signal Type	Wire Colour	Signal	Direction
1	Load cell	Red	+ Excitation	Output
2	Load cell	Black	- Excitation	Common
3	Load cell	Green	+ Signal	Input
4	Load cell	White	- Signal	Input
7	Load cell (Auto-Calibration)	Grey	Calset A	Input
8	Load cell (Auto-Calibration)	Violet	Calset B	Input
9	Load cell	Orange	Shield	Common

5.3 Serial Port Connectors

Serial Port (RS-232) connector P/N: TE 5-747904-8 (or equivalent)

Mating connector P/N: TE 5-747905-2 (or equivalent)

Note: Specified wire colors are for internal connections, external mating cables may not use matching wire colors.

Pin	Signal Type	Wire Color (Internal)	Signal	Direction
2	RS-232	White	Receive (Rx)	Input
3	RS-232	Green	Transmit (Tx)	Output
5	RS-232	Black	Common	Common
9	**Accessory Power**	Red	+8 VDC	Output

6 Serial Port Output Formats

The **Serial Port Output Format** determines what is output from the **Serial Port** and what triggers the output.

Port Format	Output Type and Trigger Sample Output *(Italicized text indicates ASCII control codes)*
C OFF	Serial Port disabled, no output from Serial Port.
C 1	Serial Port enabled, reports will be output from Serial Port.
C 11	Averaged weight only on an Auto-Hold Lock and/or Weight Record Save 4001*<CR><LF>*
C 12	Averaged weight with weighing units on an Auto-Hold Lock, or Weight Record Save 4001 lb*<CR><LF>*
C 13	Averaged weight with weighing units and time stamp on an **Auto-Hold Lock**, or Weight Record Save 4001 lb*<CR><LF>* 2014-02-20 16:47:20*<CR><LF>*
C 14	Averaged weight with weighing units, RFID and time stamp on an **Auto-Hold Lock**, or Weight Record Save Note: If the report is triggered by an **Auto-Hold Lock**, an empty RFID field will be printed one has not been received yet 4001 lb*<CR><LF>* 12345678901345*<CR><LF>* 2014-02-20 16:47:20*<CR><LF>*

Port Format	Output Type and Trigger Sample Output *(Italicized text indicates ASCII control codes)*
C 15	Lot & Record numbers, Averaged weight with weighing units, RFID and time stamp on an **Auto-Hold Lock**, or Weight Record Save Note: If the report is triggered by an **Auto-Hold Lock**, an empty RFID field will be printed one has not been received yet `Lot No. 1 Record No. 10`*<CR><LF>* `4001 lb`*<CR><LF>* `12345678901345`*<CR><LF>* `2014-02-20 16:47:20`*<CR><LF>*
C 16	Current weight only (w/ leading spaces) on Display Update (every 300mS when in the **Normal Operating** mode) `4001`*<CR><LF>*
C 17	Current weight with units (w/ leading spaces) on Display Update (every 300mS when in the **Normal Operating** mode) `4001 lb`*<CR><LF>*
C 18	Current weight (w/o leading spaces) with units on Display Update (every 300mS when in the **Normal Operating** mode) `4001 lb`*<CR><LF>*
C 19	RFID on Receipt `12345678901345`*<CR><LF>*

7 Specifications

	Version 1.xx.xx	Version 2.xx.xx	Version 3.xx.xx
Operating Temperature	-30°C to +50°C / -20°F to 120°F		
Supply Voltage Requirement	12 VDC		12-24 VDC (non-battery models) 12 VDC (battery models)
Current Requirement	500 mA typical (6 load cells, 12 VDC supply)		
Display	1", 6 digit 7 segment LCD w/ backlight	1", 6 digit 14 segment LCD w/ backlight	
	(backlight is optional on Model 350)		
Load Cell Excitation	7.5 VDC		
Computer Interface	#1 RS-232 (N/A on Model 350)		
	#2 Optional RS-232, RS-485 or Bluetooth		
Increments	1, 2, 5, 10, w/decimal point & Dummy “0”s		
Counts	230,000 internal		
Load Cell Options	Up to six (6) 350 ohm cells		Up to eight (8) 350 ohm cells
Display Averaging Rate	Programmable		
A/D Conversion	Sigma-Delta, 50 Hz sample rate		

	Version 1.xx.xx	Version 2.xx.xx	Version 3.xx.xx
Zero Tracking	Available		
Calibration	Field programmable		
Fine Zero Range	Programmable up to full scale		
Analog Output (I model only)	Selectable 4-20mADC or 0-5VDC w/ Programmable Range		

8 Limited Warranty

This warranty applies to all new equipment manufactured by RELIABLE SCALE CORPORATION except when otherwise specified in the Terms of Sale. Warranty is subject to the following terms and conditions:

- All new products are warranted for a period of twelve (12) months from the date of final sale to the end user (maximum 24 months from date of manufacture).
- RELIABLE SCALE CORPORATION shall at its option, repair or replace or refund the purchase price, within a reasonable period of time, after being notified of the alleged defect and after acknowledging that a defect does in fact exist.
- Warranty claims must be submitted in writing by mail, fax or email to RELIABLE SCALE CORPORATION within the warranty period.
- This warranty does not extend to any consequential damage of other equipment, loss of use, commercial or economic loss or inconvenience prior to or during the repair period.
- RELIABLE SCALE CORPORATION is not responsible for any damage or defects caused by misuse, negligence, neglect, modification, improper operation, improper maintenance, or repairs by any unauthorized persons.
- This is the sole warranty applicable to RELIABLE SCALE CORPORATION'S products, and no RELIABLE SCALE CORPORATION employee, agent or dealer has any authority to add to this warranty whatsoever.
- Products for warranty repair must be returned to the factory freight prepaid by the customer. RELIABLE SCALE CORPORATION is not liable for any cost related to removal, replacement, or shipping of the products or any other associated equipment.
- Except as expressly set forth herein, RELIABLE SCALE CORPORATION makes no representations or warranties of any kind, either expressed or implied, as to the product, its merchantability or fitness for any intended purpose. This clause does not apply where prohibited by law.
- Batteries supplied in or with RELIABLE SCALE CORPORATION products are NOT covered by this warranty.