

920i Rate of Gain Program

Single Animal Software Application

Version 1

Operation Manual



iRite

RICE LAKE®
WEIGHING SYSTEMS

PN 173160 Rev A

Contents

1.0	Introduction.....	1
2.0	Operation.....	2
	2.1 Weighing an Animal with ID Number	2
	2.2 Inclinator – Mobile Units Only	2
3.0	Serial Communication.....	3
	3.1 Single Animal Ticket	3
	3.2 Record Weigh Ticket.....	3
	3.3 Print Record Weigh Ticket	3
	3.4 Incoming ID Tag Serial Data	3
	3.5 Upload/Download Databases.....	4
4.0	Configuration	6
	4.1 Set Password.....	6
	4.2 Transaction Database.....	7
5.0	Hardware Setup	8



Technical training seminars are available through Rice Lake Weighing Systems. Course descriptions and dates can be viewed at www.ricelake.com/training or obtained by calling 715-234-9171 and asking for the training department.



Rice Lake continually offers web-based video training on a growing selection of product-related topics at no cost. Visit www.ricelake.com/webinars

1.0 Introduction

The *920i Rate of Gain Program* is available in either static or mobile versions. The mobile version includes an inclinometer that will cause the screen to go blank when scale is at an angle over three degrees.

The *920i Rate of Gain Program* can be used to weigh animals and store the weighments for download to a PC. Up to 500 animals with three weighments per ID may be stored (total of 1500 transactions). This program can be used with a 920i weighcenter or a stand-alone 920i.

This program is written to interface with an Allflex RS420 Stick Reader connected to the 920i serial port 3 (RS-232). Bluetooth or wired connection is available. Connect the stick reader to the indicator according to the stick reader manual.

RF Tag Reader needs to be set at:

- 9600 baud
- 8 bits no parity bit
- 2 stop bits

For more information about the 920i indicator, refer to the 920i Technical Manual.



Authorized distributors and their employees can view or download this manual from the Rice Lake Weighing Systems distributor site at www.ricelake.com/manuals

Warranty information can be found on the website at www.ricelake.com/warranties

2.0 Operation

Power up the indicator. It will go through the startup test and the startup screen will display. This screen also displays when the indicator exits the configuration or setup menus.

11/22/2014	11:06AM	Scale #
		Scale #
Gross		lb/kg
Animal Tag ID#		
Enter / Scan Animal ID		
Setup Menu		

Figure 2-1. Startup Screen

2.1 Weighing an Animal with ID Number

1. Place an animal on the scale. System prompts *Enter / Scan Animal ID*.
2. Using the numerical keypad, enter the animal ID number (up to 15 characters) or scan the animal's ear tag.

11/22/2014	11:06AM	Scale #
2379		Scale #
Gross		lb/kg
Animal Tag ID#	2379lb 11/24/15 01:12PM	
1234	2269lb 11/24/15 01:00PM	
	2340lb 11/24/15 12:30PM	
Select Action		
Record Weight	Print Records	End

Scanned or entered Animal ID#

Current Weight on Scale

Once Record Weight is pressed, the current weight is displayed at the top of the list and the oldest weight is erased.

Previously Stored Weights

Figure 2-2. Select Action Screen

3. Press the **Record Weight** or the **Print Records** softkey.
 - If the **Record Weight** softkey is pressed, previously saved weights for the ID will display, the current weight will be saved over the oldest weight in memory. If there are no previously saved weights in the database, a new record will be added. A ticket will print with the ID#, Gross Weight, Date and Time.
 - If the **Print Records** softkey is pressed, the system will print only the three previously recorded weights. The current weight will not be printed or recorded.
4. Press the **End** softkey to return to the startup screen.

2.2 Inclinometer – Mobile Units Only


The operator verifies the scale is level by looking at the digital input sent by an inclinometer. If the input is **ON/ACTIVATED** or if the scale is more than 3.9° out of level for more than 5 seconds, **SCALE NOT LEVEL** will display and weighing is not allowed.



Note Animal movement could trigger the input or knock the scale off level momentarily. If it goes off within 5 seconds it's ignored.

3.0 Serial Communication

3.1 Single Animal Ticket

To print the weight of only one animal, press  at any time between batches. This sends the gross format, including only the gross weight and time/date, to the printer.

GROSS	812 lb
03:36PM	11/25/2015

Figure 3-1. Print Key Ticket Example

3.2 Record Weigh Ticket

The program uses the Auxiliary Print Format #1, so the print format may be modified through the 920i front panel or by using iRev.

ID#	Wgt UM	Date	Time
123	812lb	11/25/2015	3:36PM

Figure 3-2. Record Weigh Ticket

3.3 Print Record Weigh Ticket

The program uses the Auxiliary Print Format #2, so the print format may be modified through the 920i front panel or by using iRev.

ID#	Wgt UM	Date	Time
123	941b	11/25/2015	3:36PM
123	812lb	11/25/2015	3:37PM
123	1054lb	11/25/2016	2:38PM
366 Days			
Avg. Rate of Gain 2.6 lb / day			

Figure 3-3. Print Record Weigh Ticket

3.4 Incoming ID Tag Serial Data

Tag Type	Default Format
HDX ISO	LA 982 000001088420{CR}{LF}
HDX Industrial	LR 0006 0000000018514243{CR}{LF}
FDX-B ISO	LA 982 000000255895{CR}{LF}

Note: _ = space; {CR} = carriage return; {LF} = line feed

Figure 3-4. Incoming ID Tag serial Data

Once the ID tag is scanned and read by the 920i, the system will remove all characters before the second _ (space) and will suppress all leading zeros of the unique ID number.

Example

LA_982_000001088420{CR}{LF} will be recorded and printed as 1088420{CR}{LF}.

3.5 Upload/Download Databases

Databases can be uploaded and downloaded for use on a PC or another 920i indicator.



Note For more information on databases, see the 920i Technical Manual.

3.5.1 Download Database Files



Note File names are limited to eight characters. If loading a database file, be aware the indicator uses an alias name and a .db file extension when saving database files.

1. Using a PC, copy the desired database file to a flash drive.
2. Connect the flash drive to the 920i type-A USB connector.
3. Press **Setup Menu** softkey.
4. Press the **USB** softkey.



Figure 3-5. Setup Menu Softkeys

5. Press the **Upload/Download** softkey.



Figure 3-6. USB Menu Softkeys

6. Select **Save All Databases (*.db)**.
7. Press .

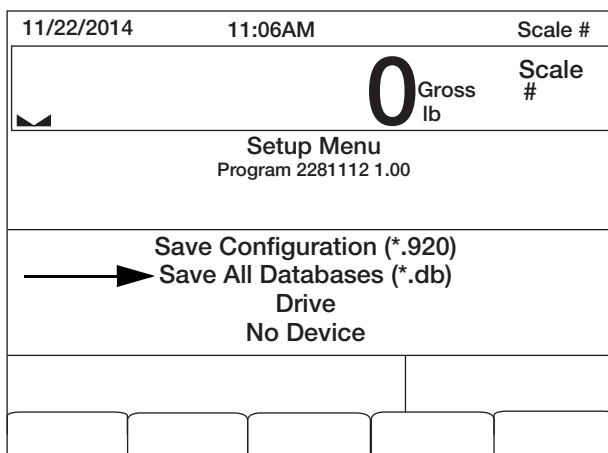


Figure 3-7. Save All Databases

8. Press **Exit** softkey to return to the **Setup Menu**.
9. Press **More=>** softkey.
10. Press **Exit** softkey to return to weighing mode.

3.5.2 Upload Database Files



Note File names are limited to eight characters. If loading a database file, be aware the indicator uses an alias name and a .db file extension when saving database files.

1. Using a PC, copy the desired database file to a flash drive.
2. Connect the flash drive to the 920i type-A USB connector.
3. Press **Setup Menu** softkey.
4. Press **USB** softkey.



Figure 3-8. Setup Menu Softkeys

5. Press **Upload/Download** softkey.



Figure 3-9. USB Menu Softkeys

6. Select **Load All Databases (*.db)**.

7. Press .

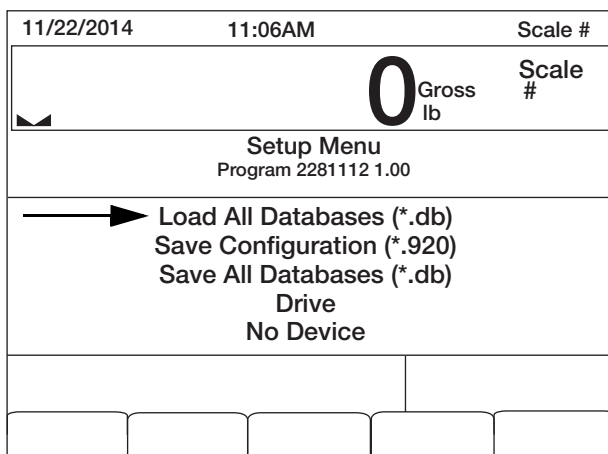


Figure 3-10. Load All Databases

8. Press **Exit** softkey to return to the **Setup Menu**.
9. Press **More=>** softkey.
10. Press **Exit** softkey to return to weighing mode.

4.0 Configuration

The **Setup Menu** softkey offers access to the program name/version and weight widget. It may be password-protected.

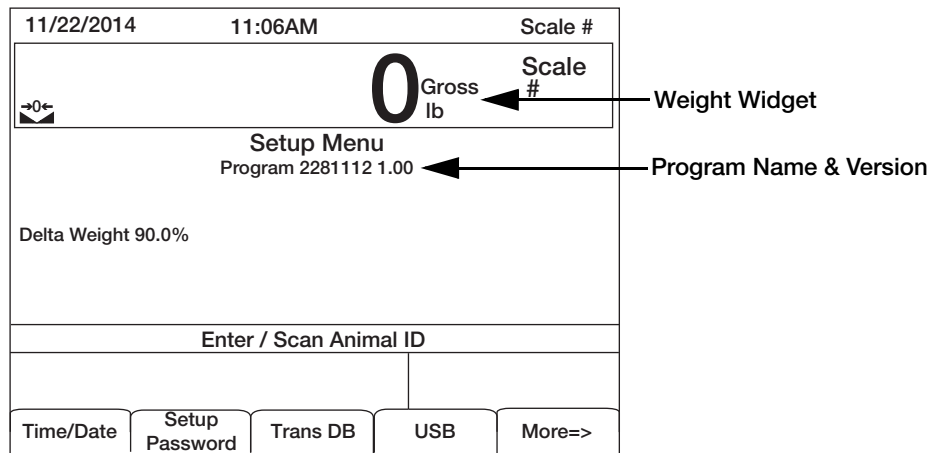




Figure 4-1. Setup Menu Screen

Parameter	Description
Time/Date	Current time and date of the 920i (view only)
Setup Password	Used to enter/change the password required for entry into the setup menu See Section 4.1
Trans DB	Allows user to delete selected weight, delete all weights for selected ID or print recorded weights of each ID number, see Section 4.2 on page 7
USB	Allows user to download the database to a USB flash drive
% Delta Weight	Percentage of change in recorded weight required before the next weighment can begin Press More=> softkey to view this parameter

Table 4-1. Setup Menu Parameters

4.1 Set Password

When a password has been set, pressing the **Setup Menu** softkey will prompt user to enter the password. If nothing is set in the password screen, pressing the **Setup Menu** softkey will enter the setup menu.

1. Press **Setup Menu** softkey.
2. Press **Setup Password** softkey.
3. Using the keypad, enter the desired password. Up to seven digits can be entered.
4. Press . **Re-enter Password to Verify** prompt is displayed.
5. Re-enter the password.
6. Press . **Password Changed** is displayed.


4.2 Transaction Database

The transaction database can be viewed, cleared or printed from this menu. Up to 1500 transactions can be stored.

1. Press **Setup Menu** softkey.
2. Press **Trans DB** softkey. The database screen displays.



Figure 4-2. Transaction Database Softkeys

3. Use the softkeys to perform the following actions.
 - **Page Up** or **Page Down** scrolls through the records
 - **Clear DB** will clear all records in the database
 - **Print All** sends all records to be printed
4. To select individual database items, use the navigation arrows to scroll up/down until the arrow on the screen is next to desired record.
5. Press . The record screen displays the animal ID, the weight captured in that record and the time and date of the transaction. See Table 4-2.
6. Use the softkeys to perform the following actions.
 - **Delete** will delete the current record
 - **Delete All for ID** will delete all records for the current ID
 - **Print** will print the current transaction

Field	Type	Description
ID	Integer	Unique numeric product identifier
Wgt	Real	Weight
DT	DateTime	Time and Date of transaction

Table 4-2. Transaction Database Table 1500 Records

7. Press **Exit** to return to the **Setup Menu**.

5.0 Hardware Setup

Slot	Type
1	Single Channel A/D Card
2	Currently Not Used

Figure 5-1. Option Card Locations

Slot	Bit	Type	Function
0	1-6	Off	Currently Not Used

Table 5-1. Digital I/O

Port	Type	Description	Setup
1	CMD	Inclinometer (mobile version only)	9600, 8, N, 2
2	CMD	USB Download	115200, 8, N, 2
3	CMD	Allflex RS420 Stick Reader	9600, 8, N, 2
4	CMD	TM-U295 Ticket Printer	9600, 8, N, 2

Table 5-2. Serial Port



© Rice Lake Weighing Systems Specifications subject to change without notice.
Rice Lake Weighing Systems is an ISO 9001 registered company.

230 W. Coleman St. • Rice Lake, WI 54868 • USA
U.S. 800-472-6703 • Canada/Mexico 800-321-6703 • International 715-234-9171 • Europe +31 (0)26 472 1319

www.ricelake.com www.ricelake.mx www.ricelake.eu www.ricelake.co.in

January 14, 2016

PN 173160 Rev A