

# Custom 920i Program

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Date : 7/26/19

ELS # : PN129998 Version 1.08

## Mobile Ag Weigh Center Software User Guide



## Scope

A USB 920i with custom programming will be interfaced to a trailer scale, inclinometer, and a TM-U295 ticket printer and allows the operator to weigh animals and store the total weight, head count, individual gross weight, shrink factor, and time/date. All transactions are stored locally on the 920i and can be retrieved using a USB flash drive or Interchange PC software (if directly connected to PC).

**After a successful download the 920i needs to be power cycled.**

## Sequence of Operation

System displays the [**Weigh Animals**] – [**Shrink %**] – [**Batch Complete**] – [**Reprint**] – [**Setup**] softkeys when it powers up or when it exits the configuration or setup menus.

### Weighing Animals (Mobile 129998)

1. Turn on the indicator by pressing the power switch and insert a ticket into the printer. Press *FORWARD* on printer to secure the paper. *If paper will not go into the printer under the print head, make sure the release light is on. If it is not, press the RELEASE button on the printer.*
2. Verify the scale is level. If it is not, it will blank the weigh display screen and go to a screen showing the current pitch and roll.
3. Press **ZERO** to re-zero the scale (if required).
4. Load the animals onto the scale. *Animals moving around could cause the scale to become out of level. An Out of Level prompt will display momentarily until animals settle down, if it goes off within five seconds it's ignored.*
5. Press [**Weigh Animals**] softkey.
6. The indicator will prompt – “Enter Head Count”. Using the keypad, enter the number of animals to be weighed and press **ENTER**. System captures a stable gross weight. If verify head count is turned on the indicator will prompt – “Re-Key in Head Count”. Using the keypad, enter the number of animals to be weighed and press **ENTER**. Head count, total weight and average weight per head will be displayed. A line (ticket) will print out with the animal count, weight, units and average weight to the TM-U295 printer. Typically, when using verify head count the operator will remove the cattle before entering the head count the second time.

Last Weighment	Current Weighment	Totals
Head Ct: 0	Head Ct: 0	Head Ct: 0
Gross Wgt: 0	Gross Wgt: 0	Gross Wgt: 0
Avg. Wgt: 0	Avg. Wgt: 0	Avg. Wgt: 0

- Last Weighment — this provides information on the previous group of animals that were on the scale.
  - Current Weighment — this provides information on the number of animals currently on scale, their total weight and the average weight per animal.
  - Totals — this provides information on the total of all animals weighed in the current weigh batch and their average weight.
7. Unload the scale.
  8. To continue weighing animals, repeat steps 4-7 until all animals from the current batch have been weighed.
  9. Press [**Batch Complete**] to complete the current batch of animals. Summary information will be printed on the ticket and the ticket will be released.

**Last Ticket Reprint**

Press [**Reprint**] any time prior to starting the next batch to reprint the last ticket.

**Shrink**

Press [**Shrink %**] at any time to change the shrink percentage (0.0-99.99 percent) to be subtracted from the total gross weight. This is saved through power cycles.

The default is 0.0 percent.

**Weighing a Single Animal**

Press [**Weigh Animals**] softkey and enter a head count of 1.

Press [**Batch Complete**] to print the summary information on the ticket.

**Serial Communications – Tickets, PC**

**Weigh Ticket**

The program uses the Auxiliary Print Format #1-3 so that the dealer may modify the print format thru the 920i front panel or by using iRev PC software.

```

02/04/2016 05:52PM
#Hd   Weight UM           Avg Wt
-----
 25   7720  lb             309
 22   7915  lb             360
 29   8010  lb             276
-----
 76   23645 lb             311 Gross
      23645 lb             311 Net
                0.00% Shrink

```

**Summary Report**

The program uses the Auxiliary Print Format #4-6 so that the dealer may modify the print format thru the 920i front panel or by using iRev PC software.

```

                Summary Report
Date/Time 05:54PM 02/04/2016
#Hd   Wgt   Shr
-----
02/03/2016 10:48PM
 2     550 lb 50.00%
-----
02/03/2016 10:49PM
 2     550 lb 50.00%
-----
02/04/2016 05:52PM
 76  23645 lb 0.00%
-----
Tot Head:   80
Tot Wgt : 24745 lb Gross

```

**Ethernet Settings (if applicable)**

Ethernet Settings (Test Settings)		
	UDS2100 00-20-4A-E6-4B-74	PC
IP	99.9.9.999	99.9.9.999
Subnet	255.255.255.0	255.255.255.0
Gateway	99.9.9.999	99.9.9.999
Local Port	10001	10002
Remote Host	99.9.9.999	0.0.0.0
Remote Port	0	0
Connect Mode	C1 (With Any Character)	C1 (With Any Character)
Flush Mode	Yes	No
Pack Ctrl	Disabled	Disabled
Dis Con	No (Hard Disconnect=Yes)	No (Hard Disconnect=Yes)
Send Char	Default	Default

If a wireless card is being used we would need all this PLUS the SSID of the access point or router being used for wireless communication.

**Modifying the Database Tables**

A PC program called iNterchange can be used by the end-user to upload, export and clear the database tables. The exported file may be saved as a delimited text file, an Excel spreadsheet, or as a XML document. iRev is another option to do database maintenance.

**Application Setup & Configuration**

The [Setup] softkey is password-protected and offers access to the following:

- Display Program Name & Version
- Display a weight widget

Parameter	Default	Softkey	Description
Report	On/Off	Report	Allows the operator to turn reports and transaction storage On or Off. Off by default.
USB Options	-	USB	Allows operator to upload/ download database files and adjust screen contrast.
Change System Password	""	Change Password	Changing the password that is required for entry into the Setup menu. Setting the password to nothing will cause the system to not prompt for a password when the [Setup] softkey is pressed.
System Time and Date	Current	Time/Date	Allows the operator to view/adjust the Time and date of 920i.
More=>	-	More=>	Allows the operator to navigate to the next screen of Setup menu softkeys.
<=Back	-	<=Back	Allows the operator to return to the previous screen of Setup menu softkeys.
% Delta Weight	90%	% Delta Wt	Allows the operator to edit the percentage of change in printed weight before the Live Total is updated again.
Verify Head Count	On/Off	Verify Head Count	Allows the operator to turn the Verify Head Count On or Off. Off by default.
Print Report	-	Print Report	Option to print the Transaction dabase with an option to clear after printing.
Exit	-	Exit	Allows the operator to exit the Setup menu and return to main screen.

## Database Tables

Transactions ("trans") Database Table 1,000 Records		
Field	Type	Description
TD	Date/Time	Time & Date of Transaction
totalWgt	Real	Total Weight on Scale
HeadCnt	Integer	Head Count Entered/Used
AvgWgt	Real	Individual Gross Weight (Total divided by Head Count)
Units	String	Units (lb, kg, etc.)
Shrink	Real	Shrink Factor % entered 0.0-100.0

## Hardware Setup

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

Digital I/O			
Slot	Bit	Type	Function
0	1-6	Off	Currently Not Used

Serial Port			
Port	Type	Description	Setup
1	INCLIN	Inclinometer	19200,8,N,1
2	USB	Optional USB Flash Drive	115200,8,N,2
3	CMD	Currently Not Used	9600,8,N,2
4	CMD	TM-U295 Ticket Printer	9600,8,N,2

## Version Changes

Version	Changes	Date	WO	Firmware
1.07	<ul style="list-style-type: none"> <li>Initial Release</li> </ul>	03/14/2018	XXXXX	5.10
1.08	<ul style="list-style-type: none"> <li>Moved Printing reports to Setup Menu</li> <li>Enabled printing a standard Gross/Net Format when the PRINT key is pressed while not group weighing animals.</li> </ul>	07/25/2018	XXXXX	5.10

Download: SC PF SP W DB COD  
**SC** = Standard Configuration    **PF** = Print Formats    **SP** = Setpoints    **W** = Widgets  
**DB** = Database Tables    **COD** = Program

