

# FairPick Pro™ Automated Weighing System User Manual

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### **GENERAL INFORMATION**

#### Introduction

Thank you for purchasing the FairPick Pro™, a weighing system that helps automate hand-harvesting fruits and vegetables, allowing growers to capture weight data in the field.

This manual provides information to users about the safe and optimal operation of the FairPick Pro. For your safety, you MUST carefully read and follow all warnings and cautions in this manual. The FairPick Pro must only be used in the manner for which it is intended. Any other use of the FairPick Pro may cause damage to the device and harm to the user.

The following signs call attention to special warnings and cautions.

STOP	CAUTION: Failure to follow these instructions constitutes a hazard to the operator.
	WARNING: Failure to follow these instructions constitutes a hazard to the device.
	NOTE: Important note.

STOP	CAUTION: Electric shock hazard. This equipment is to be serviced by trained personnel only.	4
STOP	CAUTION: Pinch point, keep hands clear.	
STOP	CAUTION: Heavy, team or mechanical lift.	
STOP	CAUTION: Sharp edges, handle with care.	

## System Requirements

- Weighing Station
  - Scale capacity: 150 lbs. (68 kg)
  - o Scale dimensions: 16.5" x 20.5" (40.6 x 50.8 cm)
  - o Power: 110-120 VAC, 50/60 Hz, 5A
  - Operating Temperature: 14°F to 104° F / -10°C to 40°C
  - o Humidity: 95% RH, non-condensing
- Web Portal Account: Secure website where user manages account information, settings, and data. Web address: <a href="http://portal.2ndsightbio.com">http://portal.2ndsightbio.com</a>
- Registration Station App with RFID USB Reader/Writer (Zadig Driver Required): 2<sup>nd</sup> Sight Windows-based app used to program RFID employee badges, RFID tags, and other function cards.
- RFID PVC Cards: 13.56 MHz RFID Chip Technology with PVC card covering

# **TERMS AND DEFINITIONS**

2 <sup>nd</sup> Sight Icon	Image shortcut that launches the Registration Station or other 2 <sup>nd</sup> Sight apps.	
Charging Cable	Cables used to provide Weighing Station power.	
Clock-Out Receipt	Printout of employee's total weights for the day registered on one Weighing Station.	
Configuration Card	Radio-frequency identification (RFID) card used to program a Weighing Station with specific settings such as language, time zone, container tares, and tracking features.	
Container	Any receptacle used to hold, transport, and carry fruits, vegetables, or produce.	
Container Label or Container Card	Radio-frequency identification (RFID) sticker that attaches to a Container or RFID card for identification and tracking purposes.	
Customer ID	A unique code used to identify a company in the 2 <sup>nd</sup> Sight Web Portal.	
Customer Secret	A unique code used to identify a company in the 2 <sup>nd</sup> Sight Web Portal.	
Employee	Person who harvests fruits and/or vegetables.	
Employee Badge	Radio-frequency identification (RFID) card assigned to an employee.	
Key Card	A card that provides the ability to program Weighing Station with Configuration Cards and upload harvest data.	
Leveling Mechanism	A FairPick Pro Rugged feature. Adjustable knob that allows the Scale Platform to tilt left or right on uneven surfaces, ensuring accuracy of recorded weights.	
Lid	Plastic cover used to protect the Electronics Box on the Weighing Station.	
Lid Latches	Locking mechanisms used to secure the Weighing Station Lid to protect the electronics.	
Password	A secret word or phrase that must be used to gain access to administrator functions on the Web Portal and Registration Station application	
Power Button	Button that turns devices on and off.	

Registration Station Application	2 <sup>nd</sup> Sight software used to program Employee Badges and Container Labels as well as create Upload Cards.	
Registration Station Computer	A desktop computer that runs the Registration Station Application	
RFID Reader/Writer	USB attachment on the Registration Station Computer that reads and writes data to radio-frequency identification (RFID) cards and labels.	
Router	The Access Point (AP) through which harvest data uploads to the secure server and Web Portal.	
Ruggedized Handheld Computer (RHC)	An Android-based device that runs 2 <sup>nd</sup> Sight apps such as the Data Bucket app for transferring data from the Weighing Station to a location with Wi-Fi connectivity.	
Scale Platform	The metal cover that sits on top of the scale on the Weighing Station on which employees set harvesting Containers to measure the weight of produce.	
Stabilization Foot	Adjustable, threaded foot used to steady the Weighing Station on uneven surfaces.	
Term	Definition	
Upload Card	Radio-frequency identification (RFID) card used to initiate wireless data upload from a Weighing Station through the FairPick router, to the 2 <sup>nd</sup> Sight Server.	
Username	An identification code used to access administrator functions on the Web Portal.	
Web Portal	Secure website where users enter harvesting information, manage employees, view uploaded data, and download data and reports. Web Portal web address: <a href="http://portal.2ndsightbio.com">http://portal.2ndsightbio.com</a> .	
Weighing Station	Portable field unit employee(s) use to weigh fruits and/or vegetables.	

### INSTALLATION

## Unpacking and Inspection



The FairPick Weighing Station weighs approximately 70lbs (32 kg) and may require two people to lift. Failure to follow proper handling and lifting techniques could result in injury.

Unpack the boxes and examine their contents. If anything is missing or damaged, contact your 2<sup>nd</sup> Sight sales representative at 509-381-2112 or at <a href="mailto:info@2ndsightbio.com">info@2ndsightbio.com</a>.

### The standard FairPick Pro box (000040) contains:

Sales Part#	Part Description	Quantity
	FairPick Pro Frame Shipping Box	1
	FairPick Pro Electronics Shipping Box (with Charging Cord)	1
FP00003	Custom Mettler-Toledo Scale	1
FP00011	Notched Scale Platter	1
	Right Scale Support	1
	Left Scale Support	1
	FairPick Pro Foot	2
	FairPick Pro Wheel	2

<sup>\*</sup>Quantity depends upon customer order.

### The rugged FairPick Pro box (000040-R) contains:

Sales Part#	lles Part# Part Description		
	FairPick Pro Frame Shipping Box		
	FairPick Pro Electronics Shipping Box (with Charging Cord)	1	
FP00003	Custom Mettler-Toledo Scale	1	
FP00011	Notched Scale Platter	1	
	FairPick Pro Pivot	1	
	FairPick Pro Rugged Spiked Foot	2	
	FairPick Pro Wheel	2	

<sup>\*</sup>Quantity depends upon customer order.

## Unpacking the FairPick Box

- **Step 1** Carefully open the top of the box by using a box cutter or utility knife.
- **Step 2** Remove the accessories box and place it in a safe location.
- **Step 3** Use the box cutter or utility knife to cut two side seams of the box from top to bottom.
- **Step 4** Remove the FairPick Weighing Station components from the new opening in the side of the box.

### Assembling the FairPick Weighing Station

The following demonstrates how to assemble your device.

The carton you received contains 4 boxes and a pair of wheels.

- Box A contains the FairPick Frame
- Box B contains the Scale
- Box C contains the Electronics Box and Frame Handle
- Box D contains the Scale Platter.

### Frame Assembly

To begin assembly, open Box A and lay out the contents as shown in the following picture.



A: Fastener Kit

B: FairPick Base Frame

C: Vertical Supports

D: Feet

E: Scale Support

F: FairPick Charger

G: Charger Wall Plug

H: Axel



NOTE: In addition to the contents of this box, you will need either a Crescent Wrench or a 10mm box end wrench.



NOTE: If you have your own set of metric allen wrenches, you can use those as well or you can use the wrenches supplied in the Fastener Kit (A).

**Step 1** Open the Fastener Kit (A) and lay out the components as shown below.



NOTE: Extra fasteners have been added, to replace those that have been lost or misplaced.



Qty (10 + 1 extra) M6X55 hex head bolt Qty (10 + 1 extra) M6 Nylon lock nut

Qty (20 + 2 extra) M6 washers

Qty (4) Axel Washers

Qty (2) snap lock cotter keys

Qty (4) M10X16mm hex head bolt Qty (4) M10 lock washers

Qty (1) Cable P-clamp

Qty (1) M5X8mm

Step 2 Set the FairPick Base Frame (B) on a table with the vertical support ears facing up and towards you.

Step 3 Place one M6 washer on each of four M6X55 bolts and insert these bolts into the two holes in each of the Vertical Supports (C) as shown below.

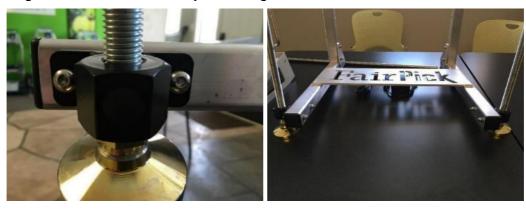


- With the Vertical Support (C) in the upright position, insert the two bolts in the Vertical Supports into the corresponding holes in the wings of the FairPick Base Frame, add a washer to each bolt followed by an M6 nylon lock nut.
- Step 5 Using the 4mm hex wrench and a 10mm wrench or Crescent wrench, tighten all four nuts until they are tight against the wing of the Base Frame.

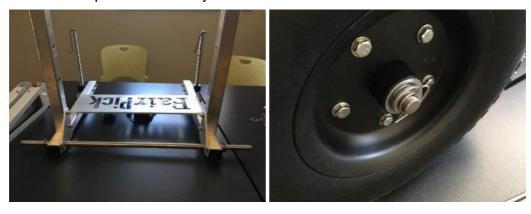


- **Step 6** Rotate the Base Frame 180 degrees so that the far end is facing you and extended beyond the end of the table.
- **Step 7** Place M6 washers on each of 4 M6 X 55 bolts and insert into the two holes in each of the Feet (D).
- **Step 8** With the bolts and washers inserted through the holes in the Feet (D), insert both bolts through the corresponding holes in the Base Frame (A).
- **Step 9** Add a washer to each bolt followed by an M6 lock nut.

**Step 10** Using the M4 allen wrench and 10mm box end wrench or Crescent wrench, tighten all 4 nuts until they are snug.



- Step 11 Rotate the Base Frame (B) with attached Vertical Supports (C) and Feet (D) 180 degrees so that the Vertical Supports are facing you.
- **Step 12** Insert the Axel (H) through the corresponding holes in the Base Frame, add a M16 Axel Washer to each end of the axel.
- **Step 13** With the longest section of the wheel hub facing in toward the frame, insert wheels onto each end of the axel.
- **Step 14** Add another M16 washer to each end of the axel and lock everything in place with the snap lock cotter keys.



- **Step 15** Place the entire assembly on the table.
- **Step 16** Level the unit by adjusting the feet. Do this by pushing in on the push button on the side of the Spring Nut and letting the foot fall so that the Base Frame is parallel to the table. Repeat with the other foot.

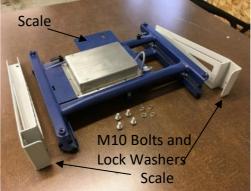
**Step 17** Set the entire Frame Assembly on the floor. The FairPick Frame is now assembled and ready to accept the Scale and Electronics Box.



## **Scale Bracket to the Scale Assembly**

- **Step 1** Remove the Scale from Box B, and invert the scale so that the scale display is upside down and facing away from you.
- **Step 2** Set the Scale Supports on the Scale as shown.
- **Step 3** Place the M10 lock washers onto the M10X16mm bolts.
- **Step 4** Insert the bolts through the holes in the Scale Support, and thread into the corresponding holes in the scale.
- **Step 5** Leave all bolts loose until all have been threaded into their corresponding holes.
- **Step 6** Using the M6 allen wrench, tighten all 4 bolts.





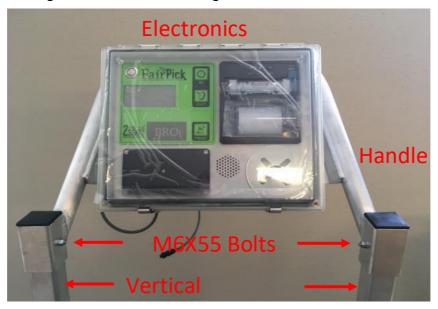
**Step 7** Invert the Scale/Scale Bracket and gently slide them onto the Frame until the assembly is resting on the Base Frame as shown.



## **Electronics Box Assembly**

- **Step 1** Remove the Electronics Box from Box C.
- **Step 2** Remove all of the wrapping and insert the Electronics Box and Handle onto the Frame.
- **Step 3** Align the holes in the Handle to the holes in the Frame.
- **Step 4** Place a washer onto each of two M6X55 bolts and insert the bolts through the holes, add another washer to each of the bolts followed by an M6 nylon lock nut.

Step 5 Using the M4 allen wrench and the 10mm box end wrench or crescent wrench, tighten the nuts until snug.



- **Step 6** Connect the P-clamp for strain relief and connect the Electronics Box to the Scale.
- Step 7 With the FairPick facing away from you, you will see a M6 bolt hole in the Right scale support. Insert the Electrical wire hanging from the electrical box into the P-Clamp so that about 6 inches (15cm) of wire extend beyond the clamp.

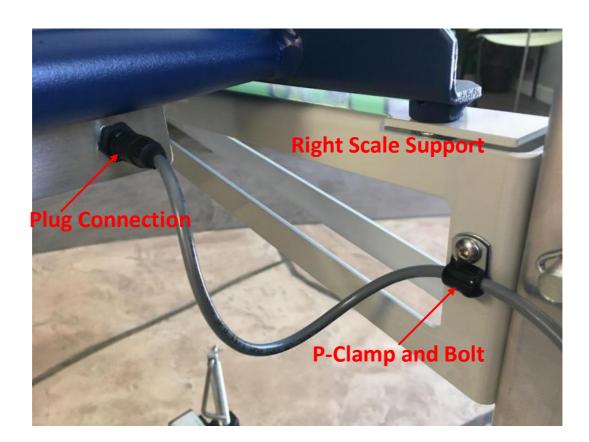
**Step 8** Insert the M6X8mm bolt into the holes on the P-clamp and gently squeeze the clamp shut. Insert the bolt into the hole in the right scale support and tighten with the M4 hex wrench.



NOTE: The male and female ends of the electrical plug are keyed so that they only go together in one orientation. Look at the end of the plug (male end) and the connection on the scale (female end) and make sure that when you put them together, they mate properly.



WARNING: When they have been mated properly, you will need to tighten the nut on the end of the connection. ONLY tighten hand tight! You will feel the nut click into place. Once you feel this click, gently tug on the electrical connection to make sure that it is securely attached to the scale.

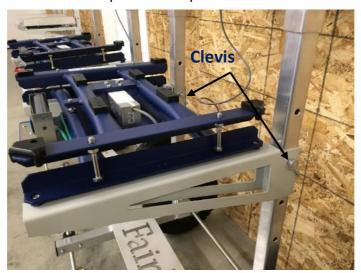


**Step 9** Lift the scale to what you deem to be the ideal height for weighing your particular product.



NOTE: The second hole down from the top is the standard starting point.

- **Step 10** Align the holes in the Scale Supports to the holes in the Vertical Supports and pin in place with the Clevis Pins.
- **Step 11** Using the spring clamps on the pins, lock the pins in place. Open Box D, remove the scale platter and place it onto the scale.



**Step 12** Your FairPick is now fully assembled; however, you will need to take a few more steps to ensure everything works correctly.

- Step 13 Open the Electronics box by unlatching the two latches on the front bottom of the box. Lift the lid, and let it rest against the handle.
- **Step 14** Press the POWER button on the upper left side of the Electronics Box to power on the unit. The unit should power up and say "Welcome to FairPick".



The screen on the unit will display:

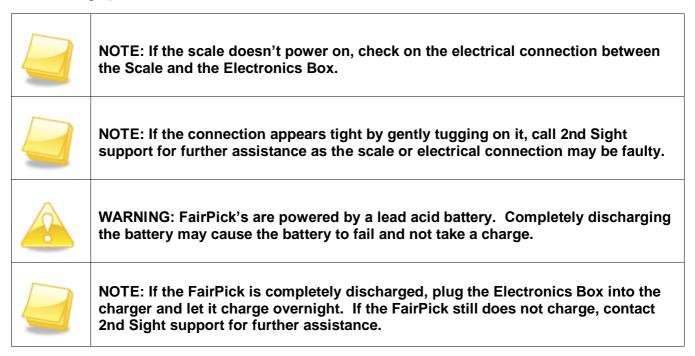


- Batt #### shows a fully charged battery on the charger.
- V38 shows the version of the firmware currently running on the FairPick. Your version may be different.
- WS#18-FE-88-C1-99 is the Serial number for this particular unit. NOTE that your number will be different.

• The screen on the scale will display: (NOTE – If your scale does not have a notched platter, you will have to bend down and look up under the platter to see the reading on the scale).



 The weight displayed on the scale display is always the GROSS WEIGHT. The weight displayed on the main screen of the FairPick is the NET WEIGHT (Gross Weight – Tare Weight).



# Setting the Scale GeoCal

Mettler Toledo scales require the user to set the scale to the appropriate GeoCal number before use. FairPick Pros use these scales in its system. Refer to the tables below to determine the appropriate number for your location.

# **US Codes by Location**

GeoCal <sup>®</sup> USA Location Codes					
State	Code	State	Code	State	Code
Alabama		Indiana		North Carolina	
Birmingham & North	13	North of Indianapolis	16	Raleigh & North	14
South of Birmingham	12	Indianapolis & South	15	South of Raleigh	13
Albaka		bwa		North Dakota	18
Anchorage & South	23	North of Des Moines	17	Ohio	
Anchorage – Kotzebue	26	Des Moines & South	16	Akron & North	16
North of Katzebue	27	Kansas	14	South of Akron	15
Arizona		Kentucky	14	Oklahoma	13
Phoenix & North	12	Louisiana	12	Огедо п	
South of Phoenix	11	Maine	18	Salem & North	18
Arka maas	13	Maryland	15	Salem - Oakridge	17
California		Massachusetts	17	South of Oakridge	16
North of Chico	16	Michigan		Pennaylvania	16
Chico – San Francisco	15	NW of Lake Michigan	18	Rhode Island	16
San Fran Bakersfield	14	SE of Lake Michigan	17	South Carolina	13
South of Bakersfield	13	Minnesota	18	South Dakota	17
Colorado		Misaisaippi		Tennessee	13
Denver & North	13	Kosciusko & North	13	Texas	
South of Denver	12	South of Kosciusko	12	NE of Colorado River	12
Connecticut	16	Misso uri		SW of Colorado River	11
Delaware	15	North of Springfield	15	Utah	13
Florida		Springfield & South	14	Vermont	17
West Palm Beach & North	11	Montana		Virginia	14
South of West Palm Beach	10	Helena & North	18	Washington, DC	15
Georgia	12	South of Helena	17	Washington State	18
Hawaii	9	Nebraska	15	WeatVirginia	15
ldaho		Nevada	13	Wisconsin	
North of Salmon River Mt.	17	New Hampshire	17	Green Bay & North	18
South of Salmon River Mt.	16	New Jersey	16	South of Green Bay	17
Il lino is		New Mexico	11	Wyoming	
Bloomington & North	16	New York	T	North of Casper	15
South of Bloomington	15	Albany & North	17	Casper & South	14
		South of Albany	16		

# Canada

Providence	Code	Providence	Code	Providence	Code
Alberta	10000	New found land		Prince Edward Island	1000
Calgary	19	Come by Chance	19	Charlottetown	19
Edmonton	21	St John's	19	O'LINGELD WIT	"
L will dribit	-	02 4011115	"	Quebec	19
British Columbia		Nova Scotia		Charles bourg	18
Vancouver	20	Halifax	18	Montreal	19
Victoria	19		''	Trois Rivieres	19
Prince Rupert	22			Ville de Quebes	'-
		Ontario			20
Manito ba		<b>⊘ttawa</b>	18	Saskatchewan	21
Moose Jaw	20	Sudbury	18	Regina	
Winnipeg	20	Thunder Bay	20	Saskatoon	
		Toronto	17		
New Brumswick		Windsor	16		
Moneton	19				
Saint-John	18				

# Europe

Country	Geographical latitude	Geo Code value
Austria	46°22′ - 49°01′	18
Belgium	49°30′ – 51°30′	21
Bulgaria	41°41′ - 44°13′	16
Croatia	42°24′ – 46°32′	18
Czechia	48°34′ – 51°03′	20
Denmark	54°34′ – 57°45′	23
Estonia	57°30′ - 59°40′	24
Finland	59°48′ - 64°00′	25
	64"00" - 70"05"	26
France	41°20′ - 45°00′	17
	45°00′ - 51°00′	19
Germany	47°00′ - 55°00′	20
Greece	34*48' - 41*45'	15
Hungary	45°45′ – 48°35′	19
foeland	63°17′ - 67°09′	26
Ireland	51°05′ – 55°05′	22
Italy	35°47′ - 47°05′	17
Latvia	55°30′ - 58°04′	23

Country	Geographical latitude	Geo Code value
Liechtenstein	47°03′ – 47°14′	18
Lithuania	53°54′ – 56°24′	22
Luxemburg	49°27′ – 50°11′	20
Netherlands	50°46′ - 53°32′	21
Norway	57°57′ – 64°00′	24
	64°00′ - 71°11′	26
Poland	49°00′ – 54°30′	21
Portugal	36°58' - 42°10'	15
Romania	43*37' - 48*15'	18
Slovakia	47°44′ – 49°46′	19
Slovenia	45°26′ – 46°35′	18
Spain	36°00′ - 43°47′	15
Sweden	55°20′ - 62°00′	24
	62°00′ - 69°04′	26
Switzerland	45°49′ – 47°49′	18
Turkey	35°51′ – 42°06′	16
United Kingdom	49*00′ – 55*00′	21
	55°00' - 62°00'	23

**Step 1** Carefully remove the round cover from the bottom scale screen to access the control buttons. Follow the flow chart below to set the GeoCal.

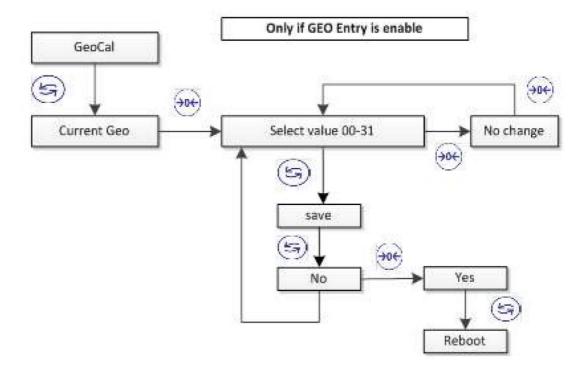
# Basic Display – 7 Segment



Note: The 7 segment display has limitations in displaying all alpha characters. For example, the letter "m" cannot be displayed, and will be replaced with an "n."

This display includes a **Unit Switch** key and a **Zero** key. All functionality is accessed using these buttons.

After entering Setup, the scale will display the Geo-Cal function on the first power up only if the parameter is enabled. Use the ZERO key to scroll through the selection of codes 00-31, and the UNITS key to accept the selection.



#### Initial Calibration

Each industrial scale has unique installation environment and application requirements, so performance must be tested and certified. Our calibration services and certificates document weight accuracy to ensure production quality and provide a trustworthy system.

The FairPick Weighing Station comes factory pre-calibrated and is accurate and precise to within 0.05 lbs. between 0-150 lbs.



Warning: Scale accuracy depends upon the scale being level. Ensure that the bubble is centered in the bubble level prior to weigh events. Testing has found that the scale is accurate when it is no more than 3 degrees out of level in any direction. The scale becomes increasingly inaccurate when it becomes more out of level.

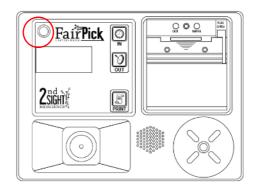
### USING THE WEIGHING STATION

### Charging the Weighing Station

Turn on the Weighing Station by pressing the Power Button (circled in red at right). A green light appears around the button. Listen for the machine's audio prompt, "Welcome to FairPick."

Initially, the Weighing Station searches for a GPS signal. The screen displays the battery's charge and the Weighing Station's ID number. The FairPick is ready for use when you see this information.

If the FairPick does not power on, the battery may be drained and need charging.

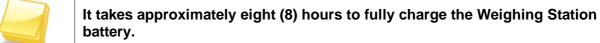




NOTE: Turn off the FairPick when charging, or the Weigh Station will charge slowly or not completely.

NOTE: When the screen is illuminated, pound signs at the bottom of the screen indicate the battery's charge.

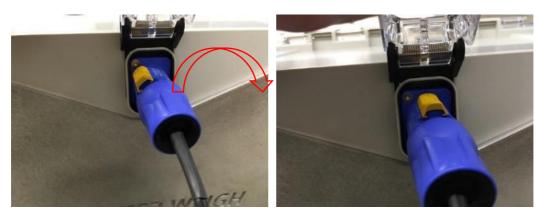
Batt #### indicates a full charge. As soon as its unplugged from the charger, the screen displays Bat ###.



2<sup>nd</sup> Sight recommends charging the Weighing Station at the end of every day of harvest. At the end of the season, keep the Weighing Station plugged into the charger, left to "trickle charge."

**Step 1** Connect the Charging Cable to the Charging Port, found on the back or side of the Weighing Station, and to an 110V power supply.

**Step 2** Insert and rotate right until click.



**Step 3** The display on the charger will show rolling dots when the unit is charging or solid green lights when fully charged. The number of solid "dots" indicates the degree of charge.

OR

The screen on the Electronics Box displays "Batt: ####" when fully charged





NOTE: Three pound signs will display as soon as the FairPick is unplugged because it is no longer 100% charged. A single charge will last one full work day of constant use.

**Step 4** When the battery is fully charged, carefully unplug the Charging Cable from the Charging Port and from the Weighing Station by pulling back the yellow

handle and rotating left to remove.





# MOVING THE WEIGHING STATION

2<sup>nd</sup> Sight's FairPick Pro Weighing Station moves easily from location to location in the field. One person can easily move the Weighing Station by pulling the top handle:

Step 1 Press the Power Button (shown circled in red to the right) to power down/off the Weighing Station.	Pair Pick ON OUT
Step 2 Flip the clear Electronics Box Protective Lid down as shown by the red arrowed arc to the right.	
Step 3 Secure the protective lid with the two lid latches underneath the Electronics Box. Closing and latching the lid protects the electronics during transport).	
Step 4 To move the Weighing Station, hold the top handle, tilt the unit back on the two wheels, and then pull it to the desired location.	

### PREPARING FOR HARVEST

In anticipation of harvest, you will need to program RFID cards to operate the FairPick Weighing System. People who oversee the system's operation will need an Employee RFID Card, a Key Card, and the appropriate Configuration Cards.

To upload data to the Web Portal, you will need a Key Card and an Upload Card. For more information about programming cards, see *Web Portal Manual* and *Registration Station Manual*.

### Key Cards

Key Cards allow authorized employees, generally crew bosses, to make changes to the way the FairPick works while in the field. Key Cards allow the authorized employee to change the machine's configuration in the field (tare weights and containers), and they "unlock" the machine so that data can be uploaded.

### **Configuration Cards**

Configuration (or "Config") Cards are RFID cards programmed with important settings and information including the language, time zone, container types, location and batch information, and tracking features.

Configuration Cards are used to to program or attach information to weigh events that occur on the Weighing Station. Config cards will contain information about the weighing task that is occurring on a particular Weighing Station (*e.g.*, crop variety, location, etc.)

Using Config Cards, an authorized user with a Key Card can change the weighing process and how the Weighing Station collects data. Each day of harvest, the Weighing Station should be programmed using a Config Card.

Config Cards are also used during the day to change the way field information is recorded (e.g., change Container Type, change pricing, etc.).

To use a Config Card to program the Weighing Station:

- **Step 1** Turn on the Weighing Station by pressing the Power Button.
- Step 2 Press the "In" button.
- **Step 3** Scan a Key Card. This allows the system to recognize that a change is authorized.
- Step 4 Scan the appropriate Config Card by holding it to the Weighing Station's card reader. A beep indicates the Weighing Station read the card successfully and is now programmed with the Config Card's information and ready for harvest. It may take several seconds for the Weighing Station to beep.

## **Upload Cards**

Upload Cards are used in the office to transfer data from the Weighing System to the Web Portal where the information is used to track employee labor.

To use an Upload Card to transfer data, see Upload Data – Weighing Station to Web Portal.

### SETTING UP FOR HARVEST

Once the Weighing Station arrives at the desired location in the field, it will need some slight adjustments before it is ready to weigh produce. To adjust the Weighing Station:

### Scale Height Adjustment



CAUTION: PINCH POINT, KEEP HANDS CLEAR. Do not remove the scale platform pins with the FairPick in the upright position. Lay the FairPick on its back before proceeding.



Step 1 Adjust the height of the Scale Platform by removing the two pins (shown circled in red 0 to the right) that secure the Scale Platform to the frame. Step 2 Remove the pins by pulling the metal loop over the end of the pin so that the Scale Platform can be moved up or down. Position the Scale Platform at the desired Step 3 height and realign the holes so that the pins can be reinserted. Step 4 Reinsert the pins and carefully secure them by pulling the metal loop over the end of the screw (see areas circled in red in the graphic 0 to the right).

# Stabilization Adjustment

	-	
Step 1	Stabilize the Weighing Station by adjusting the Stabilizing Feet (shown circled in red in the graphic to the right).	
Step 2	Adjust each Foot by pressing the spring bolt button and sliding the Stabilizing Foot into place. Release the button to lock the foot into place. Use the top cranks on each Foot to make very minor adjustments up or down.	

# Scale Leveling Adjustment

This feature is only available on rugged FairPick Pro models.



Caution: The Weighing Station must be leveled to 10° or less to safely operate and guarantee accurate measurements. Typically, if the Scale Platform looks level, it is.

Step 1	Level the Scale Platform by turning the Leveling Knob, located on the back, right-hand side of the Scale Platform, counterclockwise to loosen it.	
Step 2	Tilt the Scale Platform left or right to create a level weighing surface.	
Step 3	When the Scale Platform is level, tighten the Leveling Knob by turning it clockwise.	
Step 4	Lift the Scale Platform off the scale to view the bubble level to help level the unit.	Pairfich

# Loading Receipt Paper

Depending on your FairPick Pro model, you have an auto-cut or manual-tear printer. Both printers are similar in function, using the same thermal receipt paper and similar paper installation method.



NOTE: A colored line on the receipt paper indicates that the roll is almost out of paper.



WARNING: Use only 2  $\frac{1}{4}$ " x 85' thermal roll receipt paper. Make sure the paper is installed in the correct direction for proper printing and feeding. The printer can only print on one side of the paper, so ensure proper installation or employees will receive blank receipts.

Step 1	Remove the extra roll of paper from the compartment located under the receipt printer (shown circled in red in the graphic to the right) by turning the knob counterclockwise until you can pull the cover off.	PairPick ON COUNTY OF THE PROPERTY OF THE PROP
Step 2	Remove the extra roll of paper from the compartment.	•
Step 3	Put the cover back on by holding the knob and inserting the cover into the grooves of the compartment until it turns clockwise to lock into place (shown circled in red in the graphic to the right).	Pair Pick  South Frame Company  South Frame Company
Step 4	For the auto-cut model, pull the plastic tab down (shown circled in red in the graphic to the right) to open the printer door.  For the manual-tear model, lift the bottom portion of the window to open the printer door.	
Step 5	Remove the old roll of paper.	

Step 6 Place the new roll of paper into the compartment. Make sure the paper is installed in the correct direction with the end of the paper curling over the top of the roll, as shown in the picture to the right.





Step 7 Close the door by pushing the tab up and pressing the door shut until it snaps into place.



Step 8 For the auto-cut printer, press the "feed" and "cut" buttons to finish installing the new roll.

The roll should move forward and cut a small receipt.



For the manual-tear model, press the feed button and tear the extra receipt paper off by gently pulling up and sliding the paper along the serrated edge of the printer.

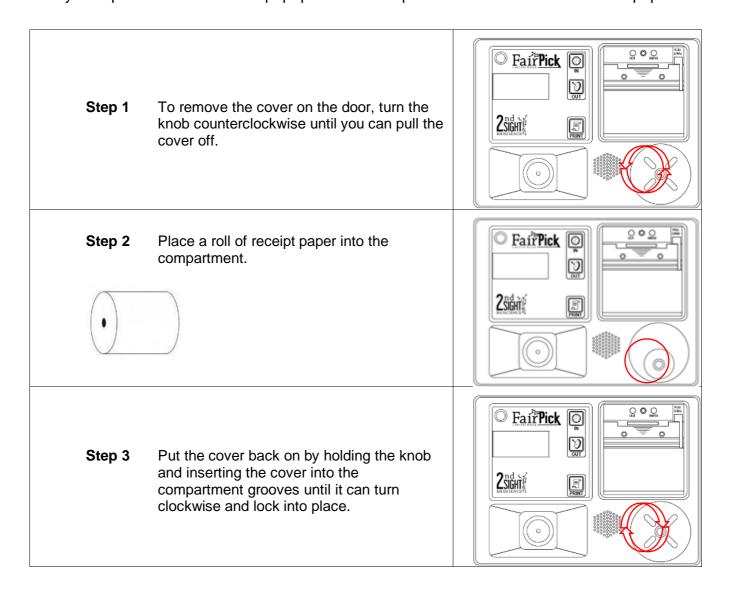




NOTE: Remember to keep an extra roll of receipt paper in the storage compartment.

# Loading an Extra Roll of Receipt Paper

Always keep an extra roll of receipt paper in the compartment located under the receipt printer.



# Fixing Paper Jams

Step 1 For the auto-cut printer, pull the plastic tab (shown circled in red in the graphic to the right) down to open the printer door.

For the manual-tear model, lift the bottom portion of the window to open the printer door.





Step 2	Remove jammed paper roll. Pull the paper so it is tight around the roll. Unraveled paper causes jams.	
Step 3	Cut or tear the paper to create a clean edge, and then return the roll to the compartment. Make sure the paper is installed in the correct direction with the end of the paper curling over the top of the roll (shown circled in red in the graphic to the right).	
Step 4	Close the door by pulling the tab up and pressing the door shut until it snaps into place.	
Step 5	For the auto-cut printer, press the "feed" and "cut" buttons to finish installing the new roll. The roll should move forward and cut a small receipt.	
	For the manual-tear model, press the feed button and tear the extra receipt paper off by gently pulling up and sliding the paper along the serrated edge of the printer.	

#### **EMPLOYEE TRAINING**

The Weighing Station is programmed with particular Configuration settings. Instruct the Crew Boss to help the Picking Crew to follow the appropriate procedure during harvest by watching one or more of the following employee Training Videos.

### **Employee Training Videos:**

- a. Standard Container Tare Weights, Tracking Feature Off
- b. Standard Container Tare Weights, Tracking Feature On
- c. Individual Container Tare Weights, Tracking Feature Off
- d. Individual Container Tare Weights, Tracking Feature On

# Standard Container Tare – Container Tracking Off

This is when only one type of standardized container is used for weighing in the field, and the system does not expect a Container RFID code to be entered.

#### Clock In

- **Step 1** To clock in at the assigned Weighing Station, press the "In" button.
- **Step 2** Touch the Employee Badge to the red light on the RFID Reader. The Weighing Station beeps when it registers the Badge.
- **Step 3** Begin harvesting.

### **Weigh Produce**

- **Step 4** When the employee is ready to weigh, place the filled container on the Weighing Station scale platform.
- Step 5 After approximately three seconds, the Weighing Station says, "Scan Badge." Touch the Employee Badge to the red light on the RFID Reader. The Weighing Station beeps when it registers the Badge and collects the data.



NOTE: If the Weighing Station does not beep, the scale may not be steady. When the scale is not steady, the FairPick cannot record produce weight accurately. Make sure the employee is not leaning on or touching the scale.

- **Step 6** When the Weighing Station says, "Remove Items," withdraw the container from the scale platform.
- When the Weighing Station instructs the employee to remove items from the scale, the FairPick has recorded the produce weight. The employee can either print a receipt at that point, or the employee can wait until clocking out at the end of the day to get an end-of-day receipt with that day's total weight picked that Weighing Station.

#### **Print Receipt**

**Step 8** To print a receipt, press the "Print" button. Wait for the receipt to finish printing before gently pulling on or tearing the paper off.



NOTE: Once another item is placed on the Scale Platform, the employee can no longer print a receipt for the previous weigh.

### **Clock Out & Print Receipt**

- **Step 9** To clock out, press the "Out" button.
- **Step 10** Touch the Employee Badge to the red light on the RFID Reader. The Weighing Station beeps when it registers the Badge.
- **Step 11** After the Weighing Station beeps, press the "Print" button to print a clock-out receipt. This receipt shows the employee's total weight registered on that Weighing Station for that day.
- **Step 12** Wait for the receipt to finish printing before gently pulling or tearing the paper to remove it from the printer. The employee should keep this receipt for his/her records.

#### Standard Container Tare – Container Tracking On

This is when only one type of standardized container is used for weighing in the field, and the system expects a Container RFID code to be entered.

#### Clock In

- **Step 1** To clock in at the assigned Weighing Station, press the "In" button.
- **Step 2** Touch the Employee Badge to the red light on the RFID Reader. The Weighing Station beeps when it registers the Badge.
- **Step 3** Begin harvesting.

# **Weigh Produce**

- **Step 4** When the employee is ready to weigh, place the filled container on the Weighing Station scale platform.
- Step 5 After approximately three seconds, the Weighing Station says, "Scan Badge." Touch the Employee Badge to the red light on the RFID Reader. The Weighing Station beeps when it registers the employee's Badge.



NOTE: If the Weighing Station does not beep, the scale may not be steady. When the scale is not steady, the FairPick cannot record produce weight accurately. Make sure the employee is not leaning on or touching the scale.

**Step 6** When the Weighing Station says, "Scan Container," touch the container RFID label or card to the red light on the RFID Reader. The Weighing Station beeps when it registers the label or card.

- **Step 7** When the Weighing Station says, "Remove Items," take the container off the scale platform (if it has not yet been removed).
- **Step 8** The employee can either print a receipt after each weigh or wait until clocking out at the end of the day to get a clock-out receipt with total weight picked for that day on that Weighing Station.

### **Print Receipt**

**Step 9** To print a receipt, press the "Print" button. Wait for the receipt to finish printing before gently pulling on or tearing the paper off.



NOTE: Once another item is placed on the Scale Platform, the employee can no longer print a receipt for the previous weigh.

### **Clock Out & Print Receipt**

To clock out, press the "Out" button.

- **Step 10** Touch the Employee Badge to the red light on the RFID Reader. The Weighing Station beeps when it registers the Badge.
- **Step 11** After the Weighing Station beeps, press the "Print" button to print a clock-out receipt. This receipt shows the employee's total weight registered on that Weighing Station for that day.
- **Step 12** Wait for the receipt to finish printing before gently pulling or tearing the paper to remove it from the printer. The employee should keep this receipt for his/her records.

# Individual Container Tare - Container Tracking Off

This is when each employee has a unique (not standardized) container used for weighing in the field, and the system does not expect a Container RFID code to be entered.

#### Clock In

- **Step 1** To clock in at the assigned Weighing Station, press the "In" button.
- **Step 2** Touch the Employee Badge to the red light on the RFID Reader. The Weighing Station beeps when it registers the Badge.

# **Determining Unique Container's Tare Weight**

- Step 3 Next, the Weighing Station instructs, "Weigh Empty Container." Place the employee's EMPTY container on the scale platform of the assigned Weighing Station to register the weight of his/her empty container (tare weight).
- **Step 4** When the Weighing Station beeps, the tare is registered to that Employee Badge, and the employee takes the container off the scale platform.



NOTE: If the employee uses multiple Weighing Stations throughout the day, he/she must repeat the clock-in process (Steps 1-4 of this section) on each machine. The employee must reset his/her tare weights every day.

**Step 5** Begin harvesting.

#### **Weigh Produce**

- **Step 6** When the employee is ready to weigh, place the filled container on the Weighing Station scale platform.
- Step 7 After approximately three seconds, the Weighing Station says, "Scan Badge." Touch the Employee Badge to the red light on the RFID Reader. The Weighing Station beeps when it registers the Badge.



NOTE: If the Weighing Station does not beep, the scale may not be steady, and the FairPick will not record the weight. Make sure the employee is not leaning on or touching the scale.

- **Step 8** When the Weighing Station says, "Remove Items," take the container off the scale platform.
- When the Weighing Station instructs the employee to remove items from the scale, the FairPick has recorded the produce weight. The employee can either print a receipt after each weigh or wait until clocking out at the end of the day to get a clock-out receipt with total weight picked for that day on that Weighing Station.

#### **Print Receipt**

**Step 10** To print a receipt, press the "Print" button. Wait for the receipt to finish printing before gently pulling on or tearing the paper off.



NOTE: Once another item is placed on the Scale Platform, the employee can no longer print a receipt for the previous weigh.

# **Clock Out & Print Receipt**

- **Step 11** To clock out, press the "Out" button.
- **Step 12** Touch the Employee Badge to the red light on the RFID Reader. The Weighing Station beeps when it registers the Badge.
- **Step 13** After the Weighing Station beeps, press the "Print" button to print a clock-out receipt. This receipt shows the employee's total weight registered on that Weighing Station for that day.
- **Step 14** Wait for the receipt to finish printing before gently pulling or tearing the paper to remove it from the printer. The employee should keep this receipt for his/her records.

# Individual Container Tare - Container Tracking On

This is when each employee has a unique (not standardized) container used for weighing in the field, and the system expects a Container RFID code to be entered.

#### Clock In

- **Step 1** To clock in at the assigned Weighing Station, press the "In" button.
- **Step 2** Touch the Employee Badge to the red light on the RFID Reader. The Weighing Station beeps when it registers the Badge.

### **Determining Unique Container's Tare Weight**

- **Step 3** Next, the Weighing Station instructs, "Weigh Empty Container." Place the employee's EMPTY container on the scale platform of the assigned Weighing Station to register the weight of the employee's empty container (tare weight).
- Step 4 The Weighing Station beeps, then instructs the employee to "Scan Container." Scan the container's RFID label or card by touching it to the red light on the RFID Reader.
- **Step 5** The tare is now registered to that Employee Badge and associated with the container RFID tracking information.
- **Step 6** Repeat Steps 3-6 for each additional individually-tared container that the employee will use during harvest. If the employee is finished registering his/her containers, press the "Out" button.



NOTE: If using multiple Weighing Stations throughout the day, an employee MUST repeat the clock-in process (Steps 1-6 of this section) on each machine. Employees must set tare weights every day.

**Step 7** Begin harvesting.

# **Weigh Produce**

- **Step 8** When the employee is ready to weigh, place the filled container on the Weighing Station scale platform.
- **Step 9** After approximately three seconds, the Weighing Station says, "Scan Badge." Touch the Employee Badge to the red light on the RFID Reader. The Weighing Station beeps when it registers the Badge.



NOTE: If the Weighing Station does not beep, the scale may not be steady, and the FairPick will not record weight. Make sure the employee is not leaning on or touching the scale.

- **Step 10** When the Weighing Station says, "Scan Container," touch the container RFID label or card to the red light on the RFID Reader. The Weighing Station beeps when it registers the label or card.
- **Step 11** When the Weighing Station says, "Remove Items," take the container off the scale platform (if it has not yet been removed).

**Step 12** The employee can either print a receipt after each weigh or wait until clocking out at the end of the day to get a clock-out receipt with total weight picked for that day on that Weighing Station.

#### **Print Receipt**

**Step 13** To print a receipt, press the "Print" button. Wait for the receipt to finish printing before gently pulling on or tearing the paper off.



NOTE: Once another item is placed on the Scale Platform, the employee can no longer print a receipt for the previous weigh.

# **Clock Out & Print Receipt**

- **Step 14** To clock out, press the "Out" button.
- **Step 15** Touch the Employee Badge to the red light on the RFID Reader. The Weighing Station beeps when it registers the Badge.
- **Step 16** After the Weighing Station beeps, press the "Print" button to print a clock-out receipt. This receipt shows the employee's total weight registered on that Weighing Station for that day.
- **Step 17** Wait for the receipt to finish printing before gently pulling or tearing the paper to remove it from the printer. The employee should keep this receipt for his/her records.

# Employee Receipts

Clock in receipts contain the following information:

Unit: 18-FE-34-D3-89-44 Badge: 2718826730

Clock in

17/10/04 08:08:08

Weighing Station Unit ID Employee RFID Badge ID

**Event** 

Date (YY/MM/DD) Time (24-hr clock)

Weigh receipts contain the following info

Unit: 18-FE-34-D3-89-44

Badge: 2718826730

Weigh

17/10/04 10:08:08

Container 1

Net: 6.20 lb Gross: 8.20 lb Tare: 2.00 lb Weighing Station Unit ID Employee RFID Badge ID

**Event** 

Date (YY/MM/DD) Time (24-hr clock)

**Container Name** 

Net Weight (Gross Weight – Tare Weight)

Gross Weight (Total Weight on Scale)

Tare Weight (Weight of Container when Empty)

Clock out receipts contain the following information:

Unit: 18-FE-34-D3-89-44 Badge: 2718826730

Clock Out

17/10/04 10:30:08

**Day Totals** 

Container Name 1 Net: 24.21 lb Container Name 2 Net: 10.70 lb

Weighs
Container 1

Net: 13.71 lb Gross: 15.71 lb Tare: 2.00 lb

Container 1

Net: 10.50 lb Gross: 12.50 lb Tare: 2.00 lb

Container 2

Net: 10.70 lb Gross: 12.20 lb Tare: 1.50 lb Weighing Station Unit ID Employee RFID Badge ID

**Event** 

Date (YY/MM/DD) Time (24-hr clock)

Day Totals (on this Weighing Station only)

Container Name 1

Total Net Weight for Day

Container Name 2

Total Net Weight for Day

Container Name

Net Weight (Gross Weight – Tare Weight)

Gross Weight (Total Weight on Scale)

Tare Weight (Weight of Container when Empty)

. . . . .

(If an employee prints a clock out receipt part-way through the day, the clock out receipt will only list individual weighs recorded since the last clock-out receipt)

### **USE DURING HARVEST**

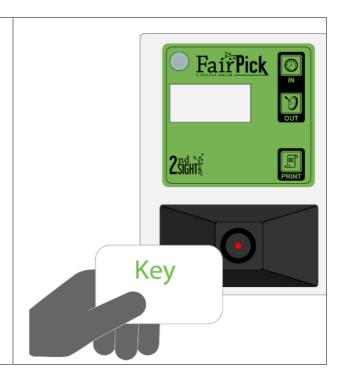
# **Changing Configuration Settings Midday**

Using Config Cards, an authorized person with a Key Card can change configuration settings at any point during the day. Changing the Weighing Station configuration will change the manner in which the Weighing Station collects information. For information about how to set up Config Cards, see Registration Station Manual.

**Step 1** Ensure that the Weighing Station is on.



Step 3 Scan a Key Card by holding the card up to the RFID reader (the red light will be on in the middle of the reader)..



Step 4 Scan the new Config Card by holding the card up to the RFID reader for approximately three seconds.

**Step 5** Listen for the beep that indicates a successful scan.

**Step 6** Begin harvesting with the new Configuration settings.



# Assigning or Replacing an Employee Badge Midday

If a employee loses, misplaces, or forgets to bring his/her Employee Badge to the field during the day and cannot return to the office to get a new Badge assigned, the employee can be assigned an Employee Badge in the field as follows:



NOTE: The following procedure requires a preprogrammed RFID badge.

**Step 1** Give the employee a Badge that has been programmed with a temporary employee name and number.



NOTE: Temporary badges are created using the same method as one would create a permanent employee badge. A name, such as "Temporary Employee" with ID "100" is added to the Web Portal, and a badge is created with the Registration Station.

- **Step 2** Instruct the employee to use this Badge during harvest.
- **Step 3** After harvest, to ensure the employee receives credit for produce picked with that Badge, notify office staff that the employee used the temporary Badge.
- **Step 4** Have office staff assign the Employee a new Employee Badge. See Web Portal Manual.



NOTE: If the temporary Badge is programmed with the Employee Name and ID number at the Registration Station before harvest data is uploaded that day, the weights will be recorded under the employee's name.



NOTE: If the Badge is assigned after data is uploaded, or the Employee is assigned a different Badge, the harvest data will need to be assigned on the Web Portal by an Employee batch edit.

### Upload Data - Weighing Station to Web Portal

The easiest way to upload data is to move the Weighing Station at the end of the day into range of the 2<sup>nd</sup> Sight Router. The user can then upload weigh data directly from the Weighing Station through the 2<sup>nd</sup> Sight Router to the secure server.

If that is not possible, you can upload data using a cell phone with a personal mobile hotspot. For more information about using your personal hotspot to upload FairPick data, please contact 2nd Sight at 509-381-2112 or info@2ndsightbio.com.



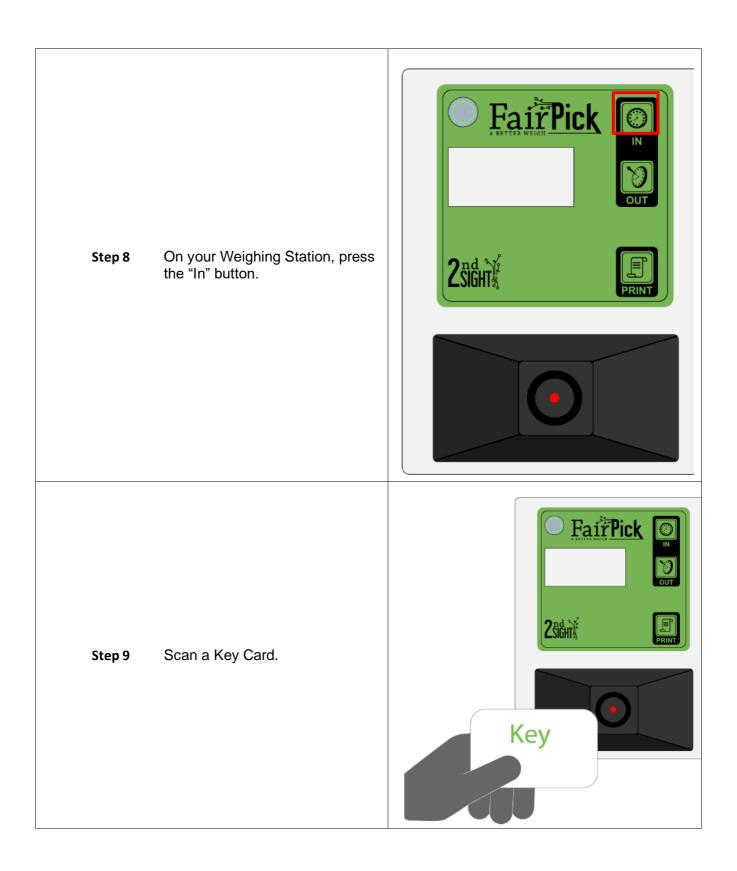
NOTE: You are not required to upload the data every day of harvest. Data will remain on the Weighing Station's SD card and flash memory, even after an upload. This ensures data security and integrity.

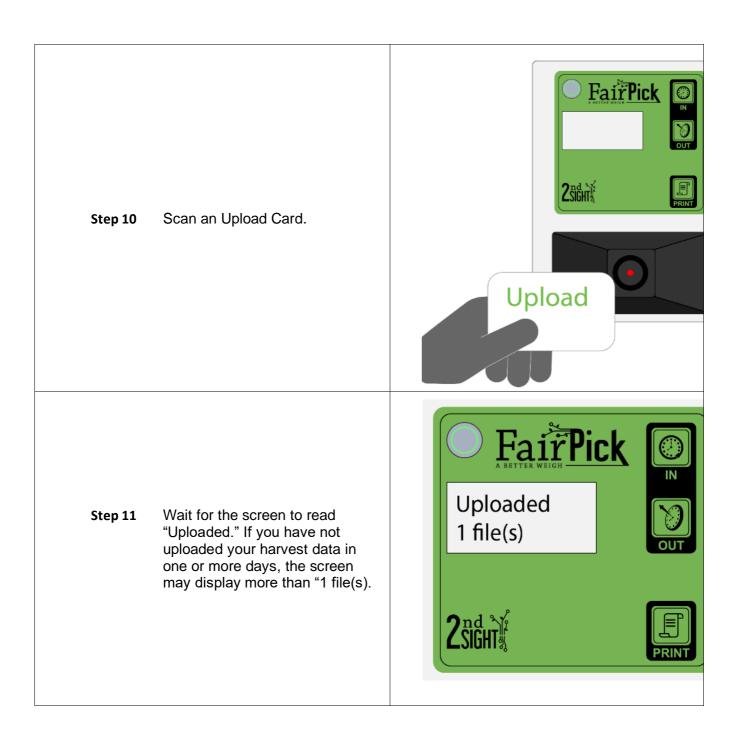
- **Step 1** After harvest, safely transport the Weighing Station to the designated charging and uploading location. This location must be within range of the 2<sup>nd</sup> Sight Router and have wireless internet access.
- **Step 2** Power on the Weighing Station.
- Step 3 Press the "In" button.
- Step 4 Scan a Key Card.
- **Step 5** Scan a pre-programmed Upload Card.
- **Step 6** After the Upload Card is scanned, the FairPick will beep to indicate that data upload has been initiated.
- **Step 7** When the data finishes uploading, the screen will display a number indicating the quantity of new files successfully uploaded.



NOTE: The Weighing Station must be in range of the 2<sup>nd</sup> Sight Router installed at your office or the designated Router location, and the system will need Internet access.

If the Instructional Screen says, "Failed to connect to AP (Access Point)," you may need to move the Weighing Station closer to the Router. Follow the previous steps to retry the data upload.





#### MAINTENANCE & CARE

The FairPick Pro may need the following parts replaced from time to time or may need periodic care to ensure optimal operation.

# Main Battery Replacement

You will need:

- Power Sonic PS-1270 12 volt 7.0 AH battery.
  - F1 Quick disconnect tabs
- 1/8" Allen Key



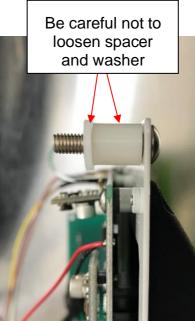


#### **Features**

- Absorbent Glass Mat (AGM) technology for superior performance
- Valve regulated, spill proof construction allows safe operation in any position
- Power/volume ratio yielding unrivaled energy density
- Rugged impact resistant ABS case and cover (UL94-HB)
- Approved for transport by air. D.O.T., I.A.T.A., F.A.A. and C.A.B. certified
- U.L. recognized under file number MH 20845

**Step 1:** Loosen the four bolts on the faceplate, but **DO NOT** fully remove them. There are spacers with kept washers on the back side that may fall off into the box.





Step 2: Unplug the power harness from the motherboard and set the faceplate out of the way.



**Step 3:** Remove the Black and White leads from the battery, then remove the two bolts securing the battery to the bracket.



**Step 4:** Remove the battery and replace it with the new battery. Then, follow these steps in reverse order to properly reassemble the electronics box.

# GPS Battery Replacement

If you power on the FairPick Pro and it is stuck on "Searching for GPS," or it takes more than one minute "Searching for GPS," then you may need to replace the coin cell battery that powers the GPS module.

**Tool Requirements** 

- 1/8" Allen Key
- 1/16" pick (or a toothpick)
- BR1225 coin type battery

**Step 1** Using the 1/8" Allen Key, loosen the four bolts on the faceplate.



NOTE: Do not fully remove bolts. They are attached with keep washers on the back side.





**Step 2** Unplug the power harness from the motherboard.



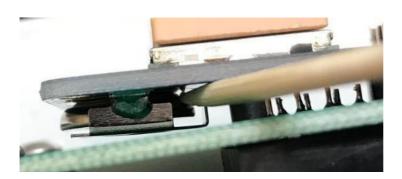


**Step 3** Locate the •BR1225 coin type battery.





**Step 1** Using the pick, push the battery out of its cradle.





**Step 2** With the positive side of the battery facing down, slide the battery into the cradle.





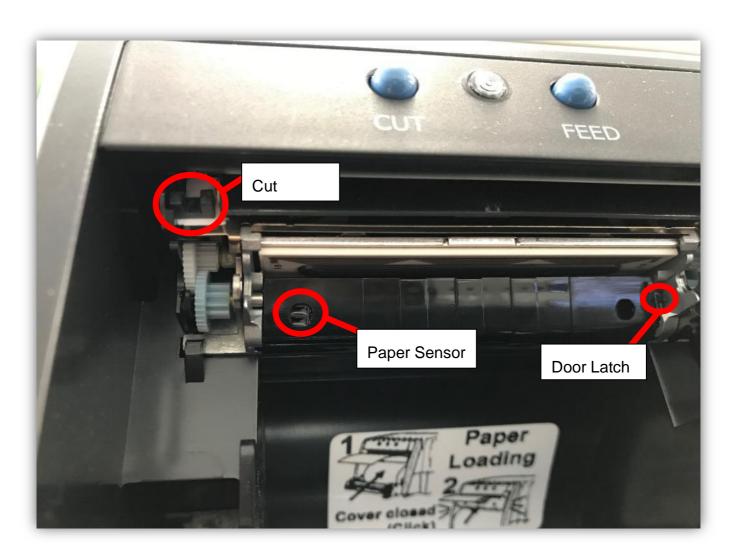
**Step 3** Reassemble in reverse order.

### **Printer Cleaning**

In extremely dusty field conditions, the printer may begin to make a chattering noise and will not function properly. When this behavior occurs, blowing the dust out of the printer head with compressed air will typically fix the problem.

There are three sensors (shown in the figure below) on which to aim the compressed air. Typically, cleaning the entire printer out with air is sufficient.

If the problem persists, please contact 2<sup>nd</sup> Sight at 509-381-2112 or info@2ndsightbio.com.



#### Periodic Scale Calibration Maintenance

The scale should be calibrated periodically using a calibrated weight to verify accuracy. Utilize the bottom scale display to confirm gross weight on the scale.