

Owner's Manual

Model 4672B **400 Series iPad Conversion Kit**



P.O. Box 63 • 2821 Harvey Street • Hudson, WI 54016
800-635-7468 • www.harvesttec.com

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Introduction

Read this manual carefully to ensure correct steps are done to install the iPad Conversion Kit to the baler, as well as operate the system correctly. The iPad Conversion kit is designed to connect to an iPad via Bluetooth communication to run the applicator through the Hay App. The preservative applicator is designed to apply Harvest Tec buffered propionic acid.

Left and Right sides are determined by facing in the direction of forward travel.

Installation of Bluetooth Receiver

Locate a safe location in the cab of the tractor to place the Bluetooth Receiver (030-4672B). Recommended location is as close to the iPad being used as possible.

Connect communication wire (006-4660N(E)) to the bottom of the receiver, (E) indication is used for international dealers.

*New for production year 2018. All Bluetooth receivers (030-4672B) are now equipped with lights to indicated both power and iPad connection.

Red Light – The Bluetooth receiver has power

Green Light – When the proper active connection is selected in the Hay App menu, the green light will indicate connection with the iPad.



Small Square Baler Power Cable and Main Wiring Harness Installation

1. Connect the power harness (006-4640A) to the battery (12 volt) using the red wire with fuse to the positive side and the black wire to the negative.



A. The power harness must be connected to the battery! The unit will draw more amps than convenience outlets can handle. Any modifications of the power harness will void systems warranty. **CONTACT HARVEST TEC IF MODIFICATION IS REQUIRED!**

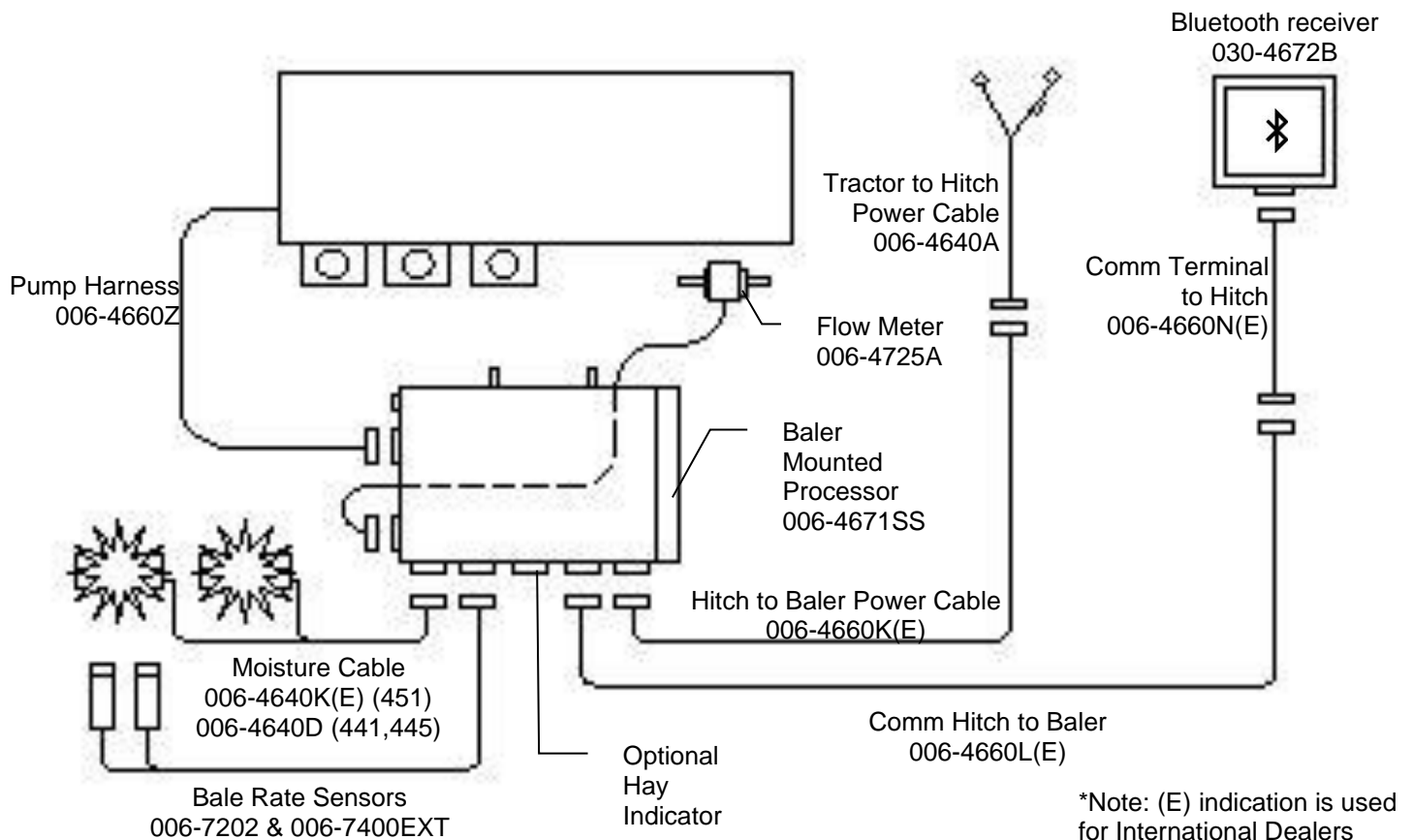
B. This unit will not function on positive ground tractors.

C. If the unit loses power while operating it will not keep track of accumulated pounds of product used.

2. The power harness (006-4640A) will run from the tractor battery to the hitch. The power harness (006-4660K(E)) will connect to the tractor power harness (006-4640A) at the hitch. Run the Communication harness (006-4660N(E)) from the cab to the hitch. This wire will connect to the Communication harness (006-4660K(E)). These wires will run together to the Baler Mounted Processor (006-4671SS).
3. Connect Communication harness (006-4660N(E)) to Bluetooth Receiver (030-4672B) mounted in cab.
 - A. Mount Bluetooth Receiver (030-4672B) in safe location as close to iPad as possible in cab.
4. Connect Flow Meter (006-4725A) to the Baler Mounted Processor.
5. Connect Pump Harness (006-4660Z) the Baler Mounted Processor.
6. Attach moisture cable (006-4640K(E)) to Baler Mounted Processor.
7. Connect bale rate sensors cable (006-7202) to the extension harness (006-7400EXT) and then to the Baler Mounted Processor.
8. Install Baler Mounted Processor in pump plate using 5/16" lock, nut and flat washers.

NOTE: The plugs on the Baler Mounted Processor must face down. Failure to mount correctly will void systems warranty.

System Wiring Diagram



*If using the optional Touch Screen Display (006-4670) it will replace Bluetooth Receiver location.

Round Baler Power Cable and Main Wiring Harness Installation

1. Connect the power harness (006-4640A) to the battery (12 volt) using the red wire with fuse to the positive side and the black wire to the negative.



A. The power harness must be connected to the battery! The unit will draw more amps than convenience outlets can handle. Any modifications of the power harness will void systems warranty. **CONTACT HARVEST TEC BEFORE MODIFICATIONS.**

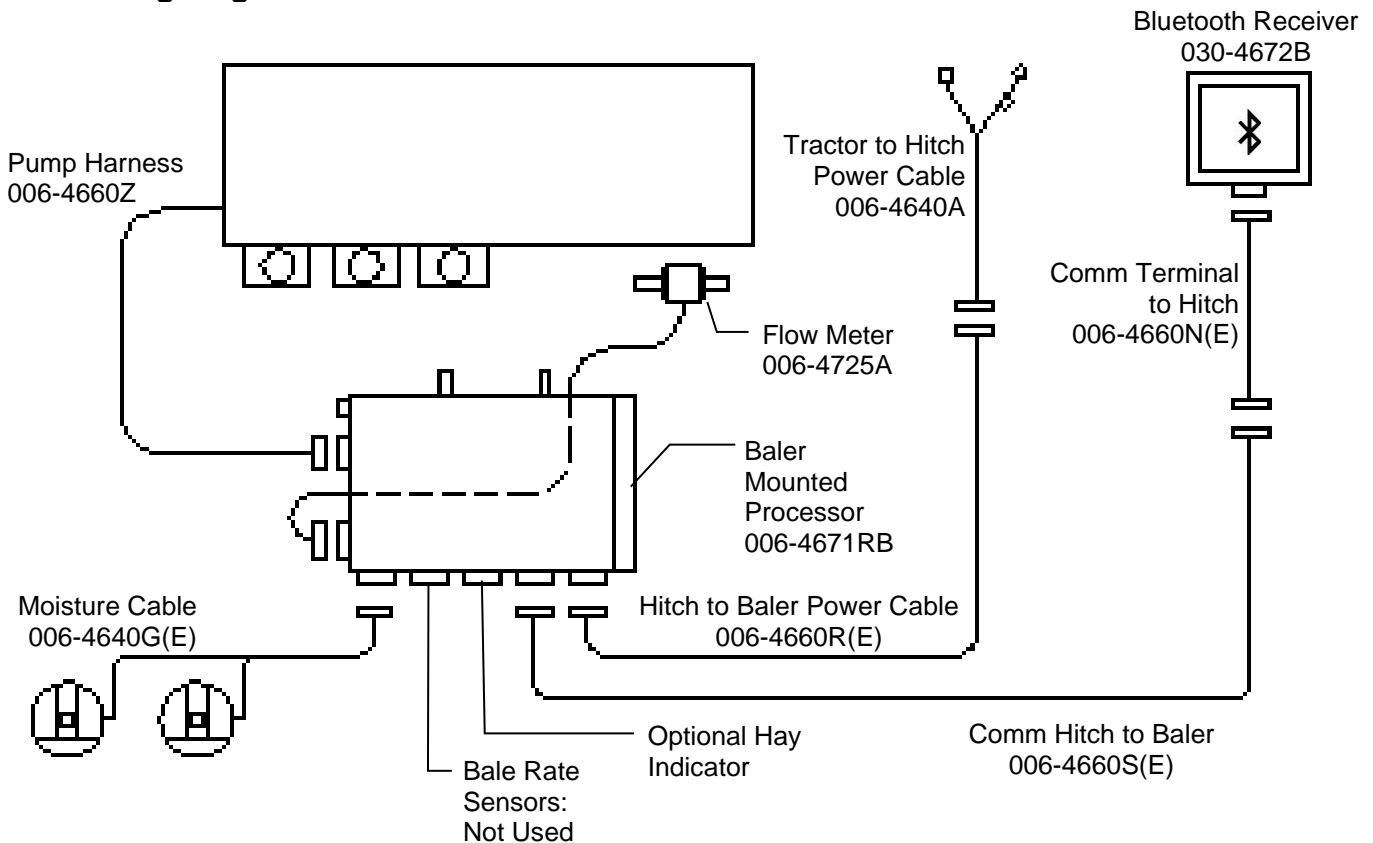
B. This unit will not function on positive ground tractors.

C. If the unit loses power while operating it will not keep track of accumulated pounds of product used.

2. The power harness (006-4640A) will run from the tractor battery to the hitch. The power harness (006-4660R(E)) will connect to the tractor power harness (006-4640A) at the hitch. Run the Communication harness (006-4660N) from the cab to the hitch. This wire will connect to the Communication harness (006-4660S). These wires will run together to the Baler Mounted Processor (006-4671RB).
3. Connect Communication harness (006-4660N(E)) to Bluetooth Receiver (030-4672B) mounted in cab.
 - A. Mount Bluetooth Receiver (030-4672B) in safe location as close to iPad as possible in cab.
4. Connect Flow Meter (006-4725A) and pump harness (006-4660Z) to the Baler Mounted Processor.
5. Attach moisture cable (006-4640G(E)) to Baler Mounted Processor.
6. Install Baler Mounted Processor in pump plate using 5/16" lock, nut and flat washers.

NOTE: The plugs on the Baler Mounted Processor must face down. Failure to mount correctly will void systems warranty.

System wiring diagram



*If using the optional Touch Screen Display (030-4670A) it will replace Bluetooth Receiver location.

*Note: (E) indication is used for International Dealers

Large Square Baler Power Cable and Main Wiring Harness Installation

1. Connect the power harness (006-4640A) to the battery (12 volt) using the red wire with fuse to the positive side and the black wire to the negative.



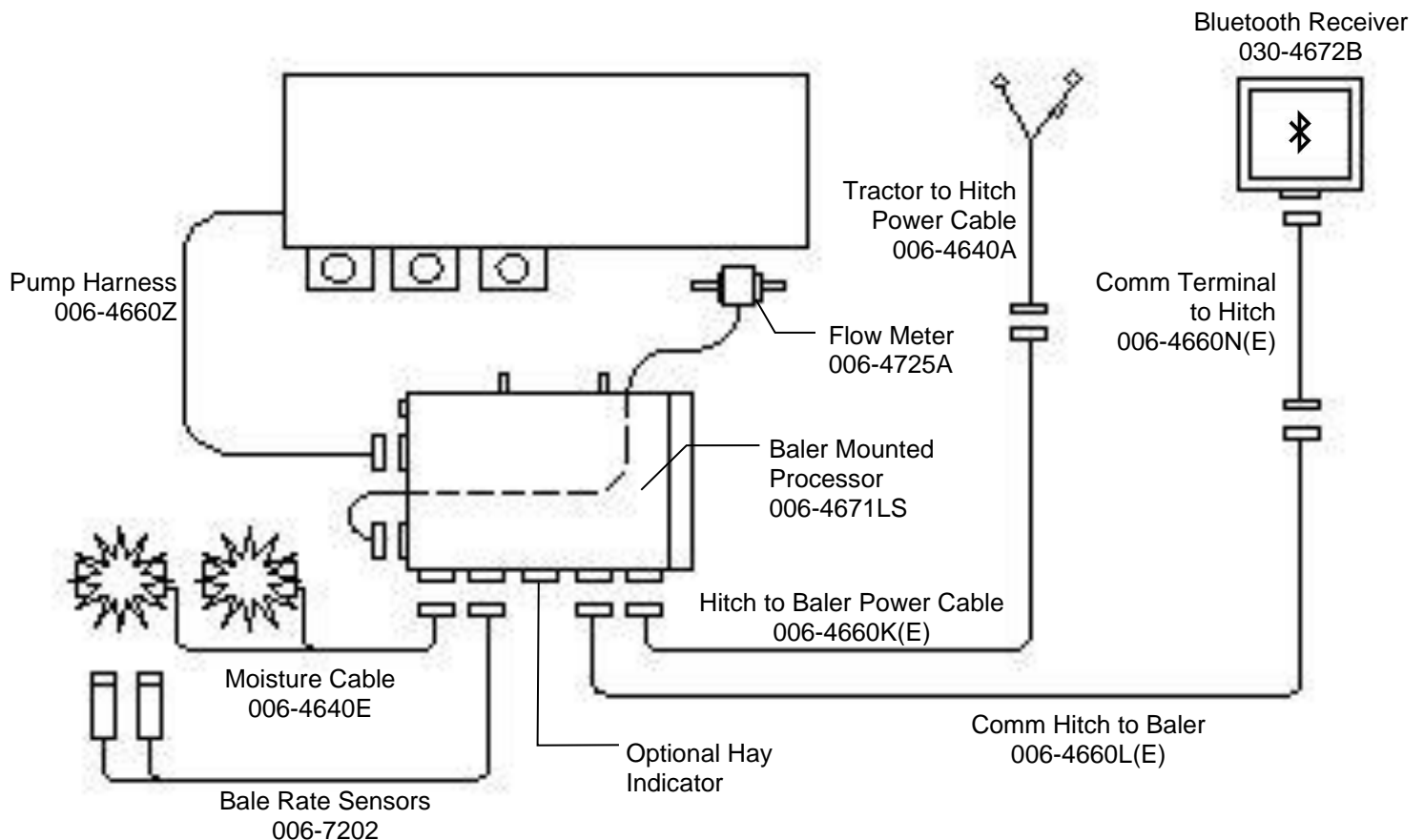
A. The power harness must be connected to the battery! The unit will draw more amps than convenience outlets can handle. Any modifications of the power harness will void systems warranty. IF MODIFICATIONS ARE REQUIRED CONTACT HARVEST TEC FIRST!

B. This unit will not function on positive ground tractors.

C. If the unit loses power while operating it will not keep track of accumulated pounds of product used.

2. The power harness(006-4640A) will run from the tractor battery to the hitch. The power harness (006-4660K(E)) will connect to the tractor power harness (006-4640A) at the hitch. Run the Communication harness (006-4660N(E)) from the cab to the hitch. This wire will connect to the Communication harness (006-4660L). These wires will run together to the Baler Mounted Processor (006-4671LS).
3. Connect Flow Meter (006-4725A) to the Baler Mounted Processor.
4. Connect Pump Harness (006-4660Z) the Baler Mounted Processor.
5. If you have the optional Hay Indicator kit connect it to the Baler Mounted Processor.
6. Attach moisture cable (006-4640E) to Baler Mounted Processor.
7. Install Baler Mounted Processor in pump plate using 5/16" lock, nut and flat washers.

NOTE: The plugs on the Baler Mounted Processor must face down. Failure to mount correctly will void systems warranty.



*If using the optional Touch Screen Display (030-4670A) it will replace Bluetooth Receiver location.

*Note: (E) indication is used for International Dealers

400T Bluetooth Operation – General Operation of SS, RB, LS Balers

Turn On / Off iPad using the Sleep/Wake button

*(Info from Apple User's Guide)

**Use the following information for Small Square Balers, Round Balers, and Large Square Balers.*

Turn iPad on. Hold down the Sleep/Wake button until Apple logo appears. iPad will take a moment to load.

You can lock iPad and put it to sleep when you're not using it. Locking iPad puts the display to sleep, saves the battery, and prevents anything from happening if you touch the screen.


Sleep/Wake Button

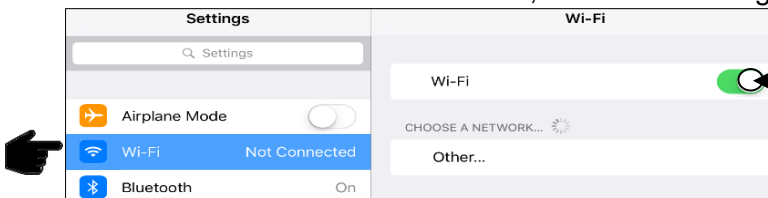


When you are not going to use the iPad for an extended period of time put the unit into sleep mode by pressing the Sleep/Wake button. Press Sleep/Wake button to wake iPad and then unlock iPad by entering passcode.

Turn iPad off. Hold down the Sleep/Wake button for a few seconds until the slider appears onscreen, then drag the slider to the right.

Downloading the Hay App

1. If iPad does not have Wi-Fi turned on, select the Settings tab  then select the Wi-Fi tab (below).

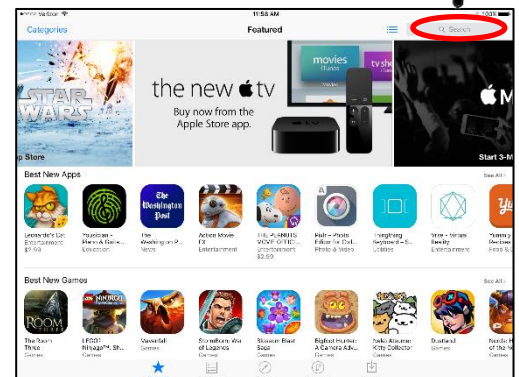


2. Turn Wi-Fi on by sliding button to the right.

*Green bar indicates ON

3. Use same process to turn on Bluetooth function

4. Select an available network when detected by the iPad, shown in area above that currently says 'Other.'
5. Select App Store icon (below) and open. *You will need a Wi-Fi connection available to view App Store.



Download the Hay App in the App Store by searching for 'Hay App' in the search bar in the top right corner of screen (right):

*The advertisements displayed on the App Store screen will change.

The app will have the icon as shown:



Note: Operation requires 3rd generation (2012) iPad, iPad Mini, or newer with iOS8 or greater operating system.

Shutting Down the Hay App

1. To shut down the Hay App double click the home button (Figure A). This will show the open apps that are running on your iPad (Figure B).

*Note: By pressing the home button one time to return to the home screen, the Hay App does not shut down. The system will however, stop applying preservative after 10 seconds.



Figure A

2. Slide the app you want to shut down by sliding the app toward the top of the iPad, until the app is no longer visible (Figure C).

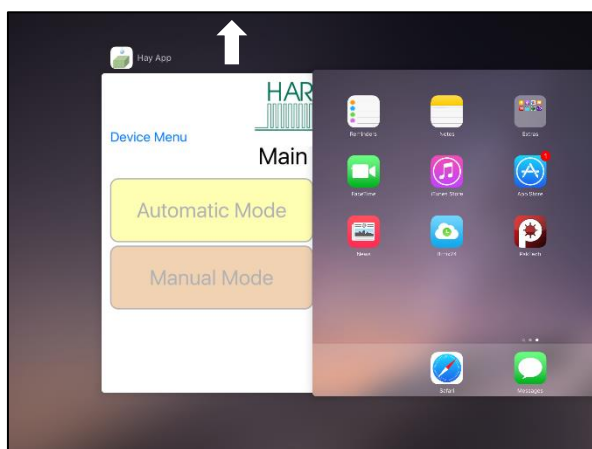


Figure B

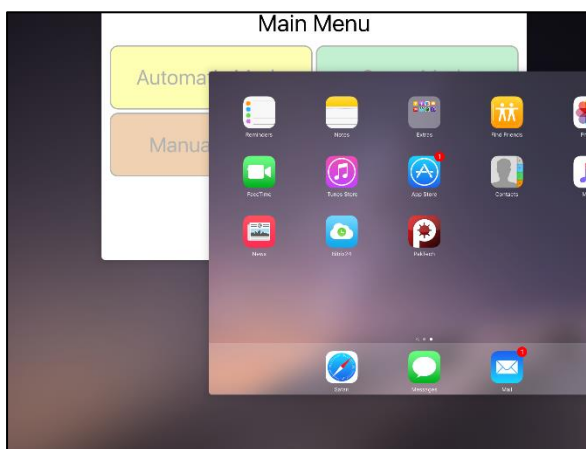


Figure C

Operating the Harvest Tec iPad App (continued)

After installation of the Bluetooth Receiver (030-4672B) on to the applicator system, attach the power cord 006-4640A to supply power.

*Refer to the applicator installation manual for details on connecting the Bluetooth Receiver.

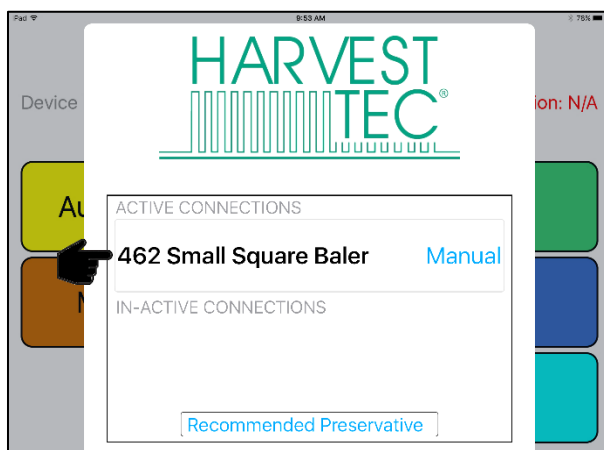
When ready to operate your applicator system, open the Hay App on the iPad by selecting the Hay App icon.

**Use the following information for Small Square Balers, Round Balers, and Large Square Balers.*

Device Selection

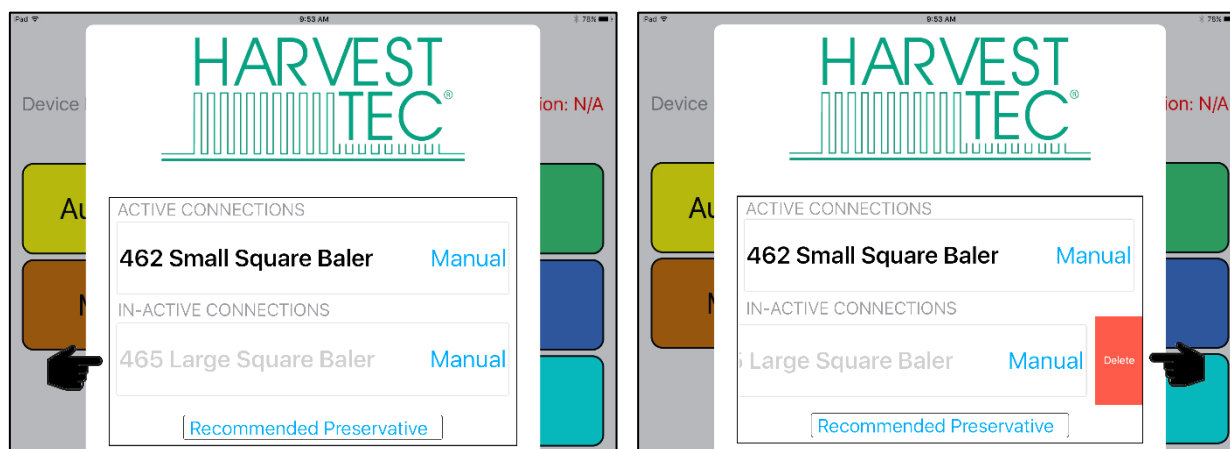
The app will open to the Device Menu screen as shown below. Applicators which are equipped with the Bluetooth receiver that are within range (20') of the iPad and have power going to them, will be shown under the Active Connections section.

After the iPad connects to the Bluetooth receiver, select the applicator you want to connect with.



The In-Active Connections section will show applicator systems that have been connected in the past, but are not within range of the iPad or do not currently have power going to them (bottom left).

To remove a baler from the In-Active list, slide the bar displaying the baler name to the left, and select the Delete button that will appear (bottom right).



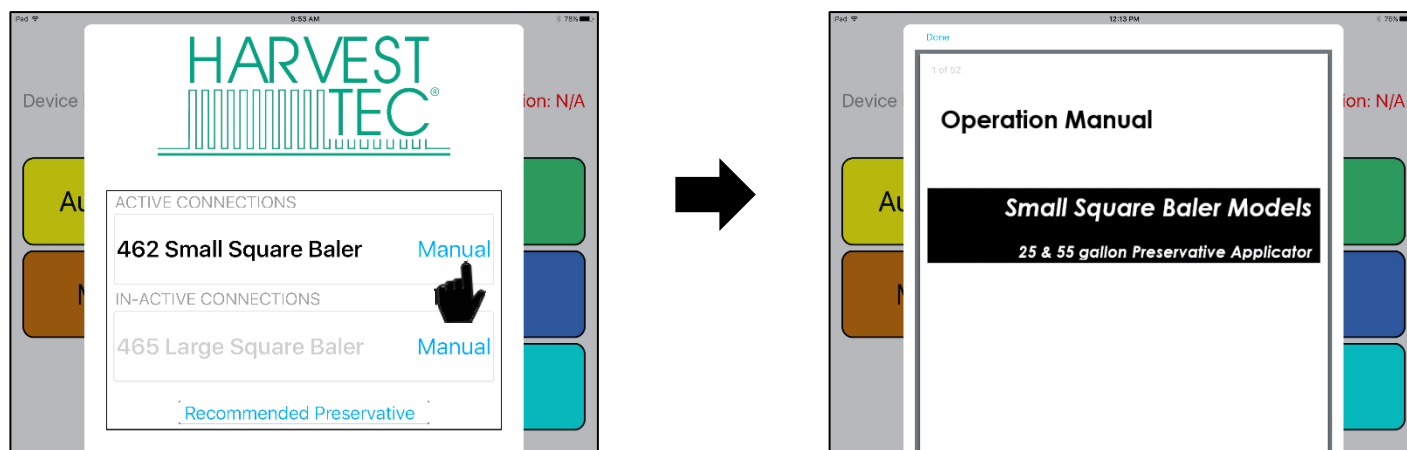
Operating the Harvest Tec iPad App (continued)

Manual Selection

Selecting the Manual button (below) displayed to the right of the baler name will open the operation manual for your baler.

**Use the following information for Small Square Balers, Round Balers, and Large Square Balers.*

**You do not need to be connected to a baler to open the manual after a baler has been connected.*

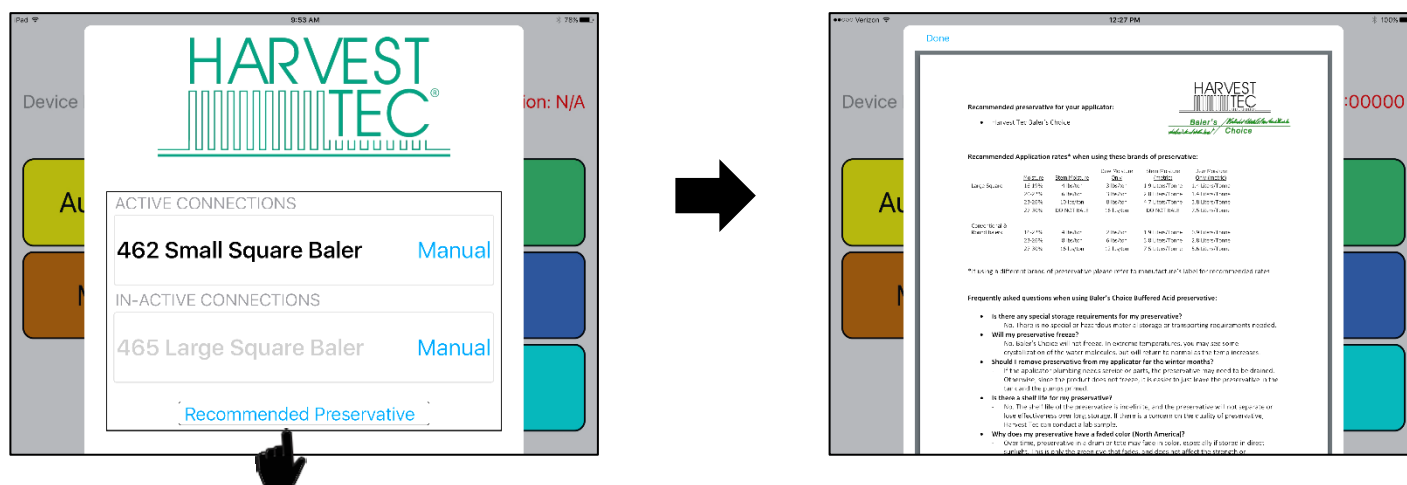


When finished reviewing the manual, press the Done button in the top left corner to return to the Device Menu.

Recommended Preservative

To view recommended preservative information, application rates, and frequently asked preservative questions, select Recommended Preservative (below).

**You do not need to be connected to a baler to open the recommended preservative page.*

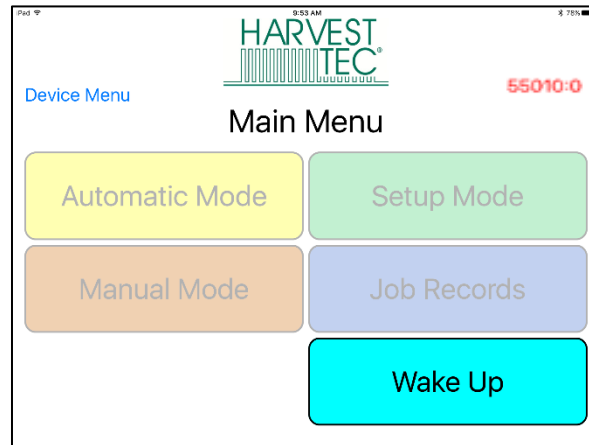


Operating the Harvest Tec iPad App (continued)

Once you have selected the baler you want to connect with from the Device Menu, the applicator main menu will display (below).

Ensure the iPad Bluetooth function is turned on in the Settings App.

*The applicator system will not appear under the Bluetooth Devices in the Settings App upon initial connection. You must open the Hay App to view the available devices by selecting the Device Menu. After you have connected through the Hay App, the system will then appear under the Bluetooth Devices in the Settings App.



Tab Descriptions

Wakeup: Press this button to take the system out of the Standby mode and perform operation (above).

Automatic Mode: This mode allows you to use all of the applicator features such as adjusting preservative application on the go and counting total pounds of product used.

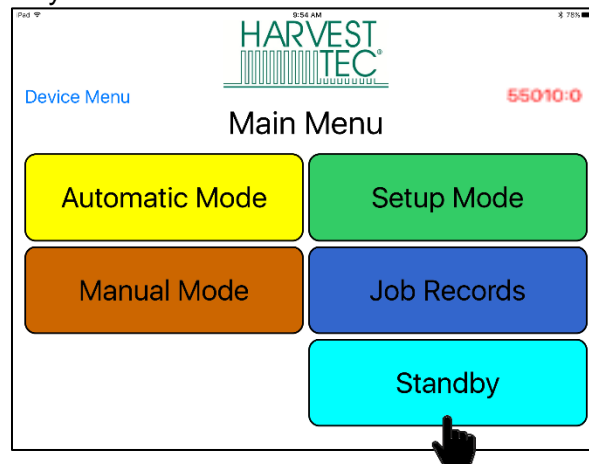
Manual Mode: Allows operator to manually turn pumps on and off. This mode also has moisture content displayed. Use this mode to prime pumps.

Setup Mode: This mode allows the operator to adjust bale rate, application rate settings and select tip output.

Job Records: Keep track of up to 63 jobs with total product used, average moisture content, tons baled, and baling date.

Standby: The feature puts the system into a non-operating mode when operation is not needed.

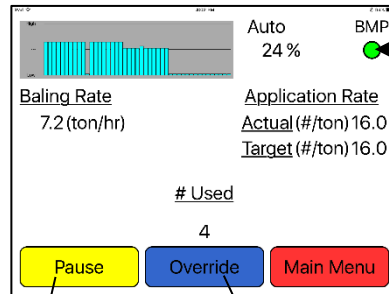
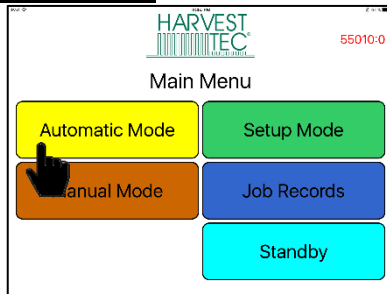
Device Menu: This button will take you back to the Device Menu to select an applicator to connect with.



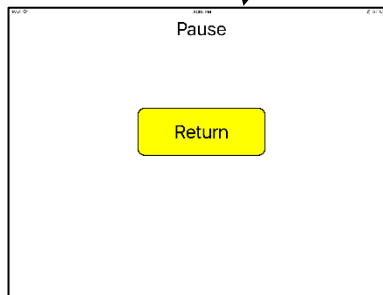
Screen Menus

Use the screen shots below to navigate through the operation screens.

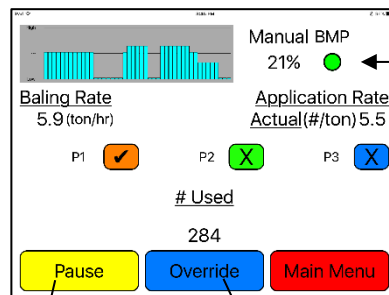
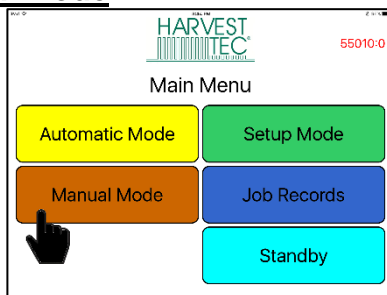
Automatic Mode



Bluetooth Connection Indicator
Green -BMP is connected
Yellow -BMP connecting
Red -BMP not connected

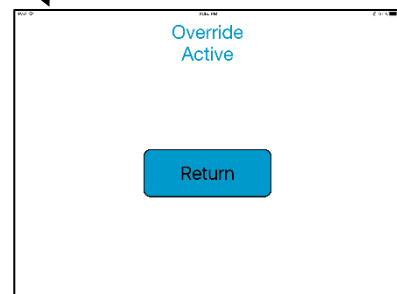
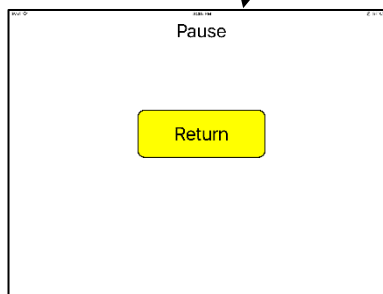


Manual Mode



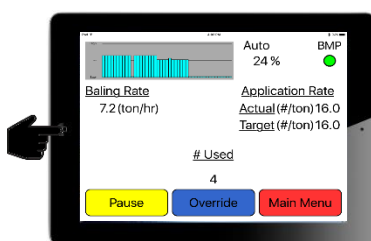
Bluetooth Connection Indicator
Green -BMP is connected
Yellow -BMP connecting
Red -BMP not connected

X -Pump is OFF
✓ -Pump is ON



Operation Note:

Pressing the Home Button on the iPad **WILL NOT** immediately stop application of the System (see below):

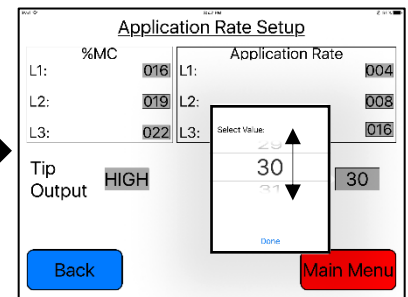
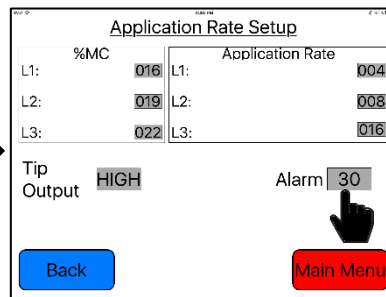
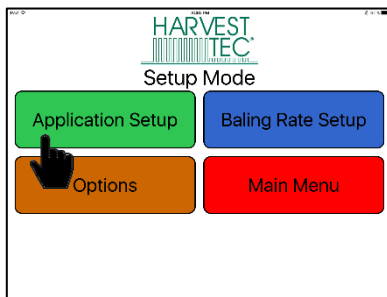
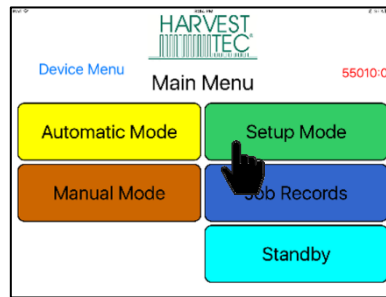


Select **Pause** or **Main Menu** to stop application

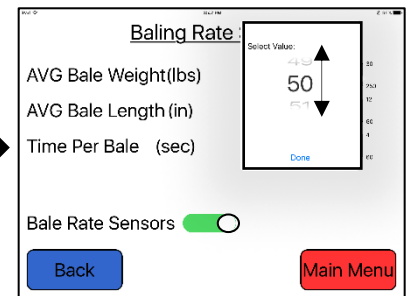
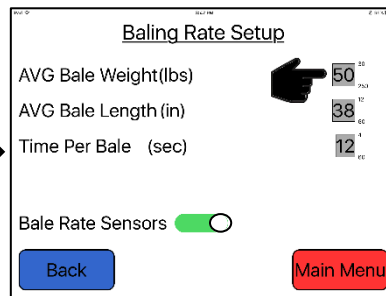
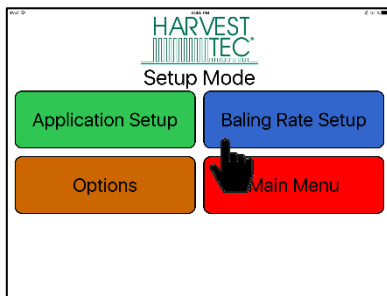
*To close app see the Shutting Down Hay App Section

**When the app is not displayed for 10 seconds, preservative application will stop.

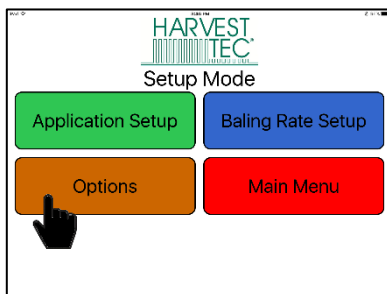
Setup Mode – Small and Large Square Balers



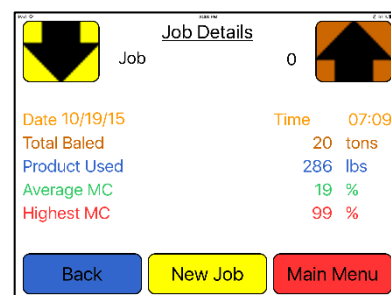
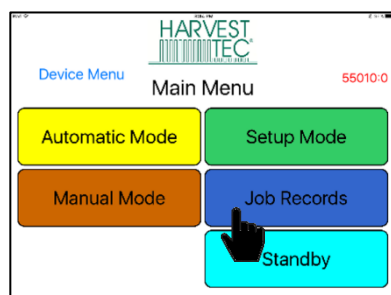
*All values can be changed



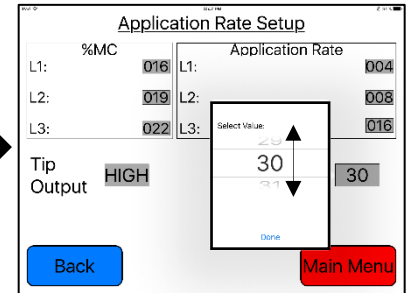
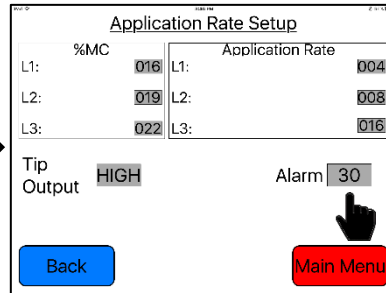
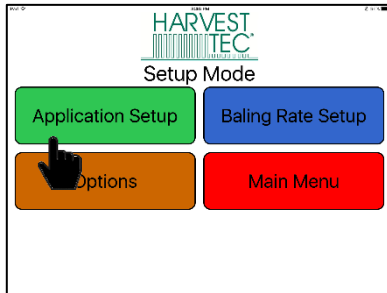
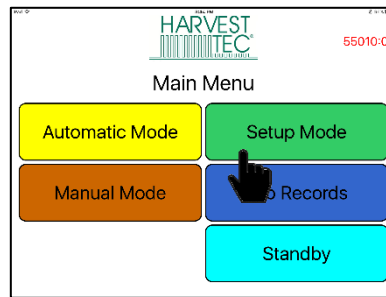
*All values can be changed



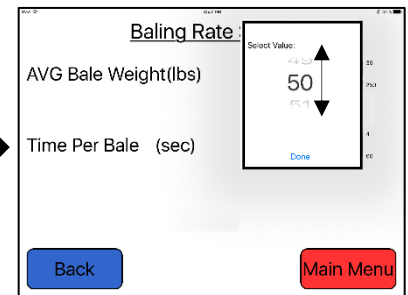
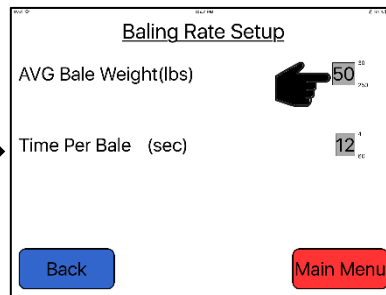
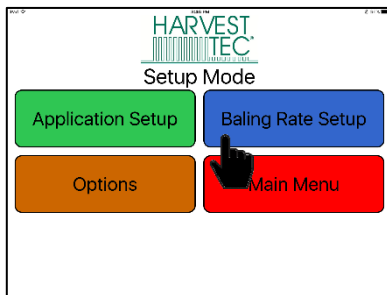
Job Records



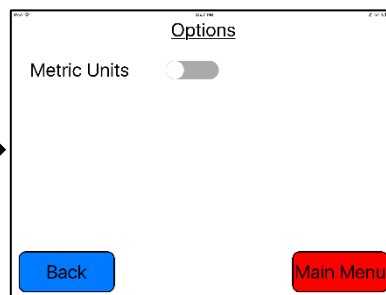
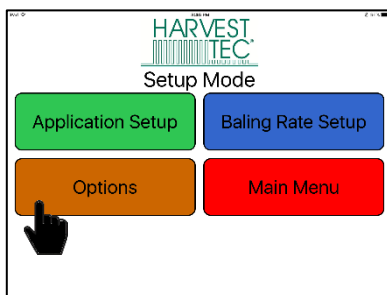
Setup Mode – Round Baler



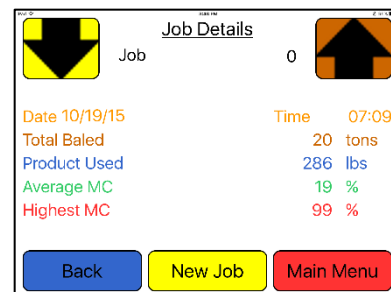
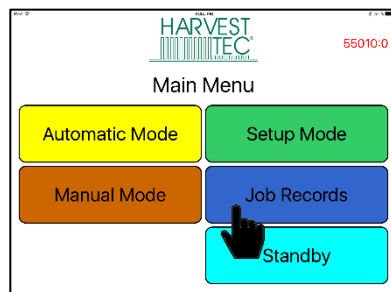
*All values can be changed



*All values can be changed



Job Records

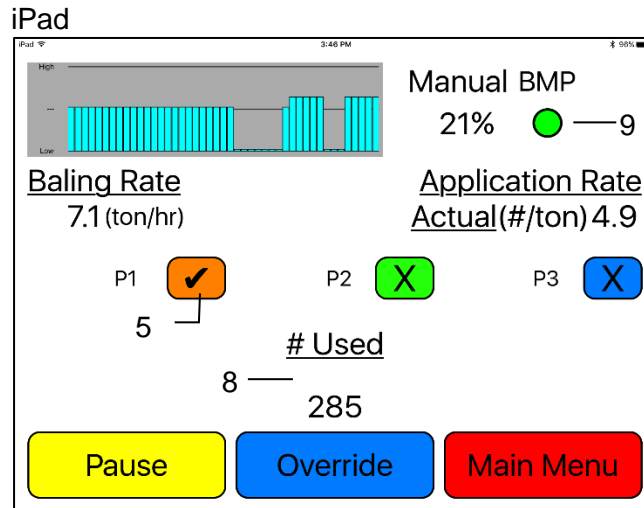


First Time and Annual Startup Instructions – Small Square Balers

THE UNIT MUST BE CHECKED OUT BEFORE FIELD OPERATION!

Check and Prime the Pumps

1. Put 10 gal of water in tank and turn main ball valve on.
2. Inspect for any leaks or drips at this time. If any are found tighten or replace area or fitting.
3. Turn controller on.
4. Press the SETUP MODE key. Turn bale rate sensors off. Make sure the AVG Bale Weight is 100 lbs (45kg) and the AVG Baler Length is 36" (92cm), Time per bale is 10 seconds, and press the MAIN MENU key to return to the opening screen.
5. Press the MANUAL MODE key and the screen shown below will appear.



Note: The system comes with the tips already installed on the spray shield or nozzle tubes.

Pump	2-Tie Baler Tip Output (Lbs / Ton) (L/MT)	3-Tie Baler Tip Output (Lbs / Ton) (L/MT)
1	1.2 – 1.6 (.5 - .7L)	1.8 – 2.6 (.8 - 1.2L)
2	3.6 – 5.0 (1.6 - 2.3L)	3.6 – 5.0 (1.6 - 2.3L)
3	6.7 – 9.3 (3.0 - 4.2L)	10.0 – 13.4 (4.5 - 6.1L)

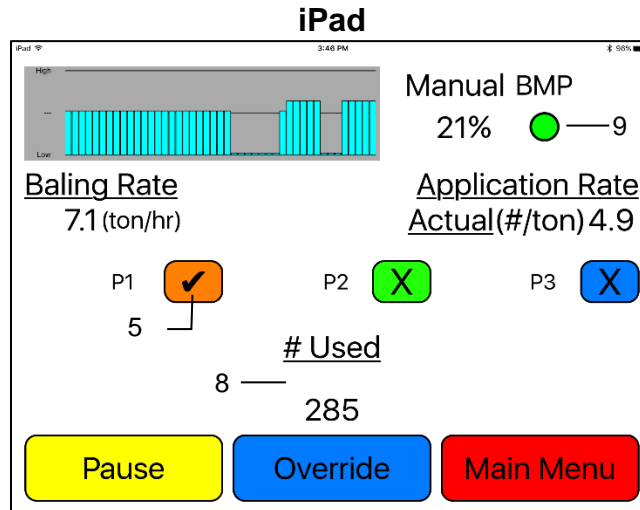
6. Turn pump 1 on (P1). To turn the pump on, select the colored box next to P1 and change the 'X' to a check mark Repeat the process for pumps 2 and 3 (P2 and P3).
7. This process will also be used to prime the pumps whenever needed.
8. While running pumps check for a good spray pattern out of the respective tips and verify that no parts of the system are leaking.
9. While doing these tests the Volume Used on the bottom of the screen will be increasing, this verifies that the flow meter is functioning.
10. The BMP button displays your connection signal with the Bluetooth receiver. Green – BMP is connected, Yellow – BMP is connecting, Red – BMP not connected. Pressing MAIN MENU key to return to the initial startup screen.

First Time and Annual Startup Instructions – Round Balers

THE UNIT MUST BE CHECKED OUT BEFORE FIELD OPERATION!

Check and Prime the Pumps

1. Put 10 gal (5L) of water in tank and turn main ball valve on.
2. Inspect for any leaks or drips at this time. If any are found tighten or replace area or fitting.
3. Turn controller on.
4. Press the SETUP MODE key. Make sure the AVG Bale weight is 1500 lbs (680kg), and Time Per Bale is 60 seconds. Press the MAIN MENU key to return to the opening screen.
5. Press the MANUAL MODE key and the screen shown below will appear.



Note: The system comes with the high tips already installed on the spray shield or nozzle tubes. Test the system with the tips you will use most often.

Pump	Low Output (Lbs / Ton) (L/MT)	High Output (Lbs / Ton) (L/MT)
1	0.7 – 1.2 (.3 - .5L)	1.3 – 1.9 (.6 - .9L)
2	1.7 – 2.4 (.7 - 1.1L)	2.6 – 3.6 (1.2 - 1.6L)
3	2.5 – 3.5 (1.2 - 1.6L)	4.9 – 6.8 (2.2 - 3.0L)

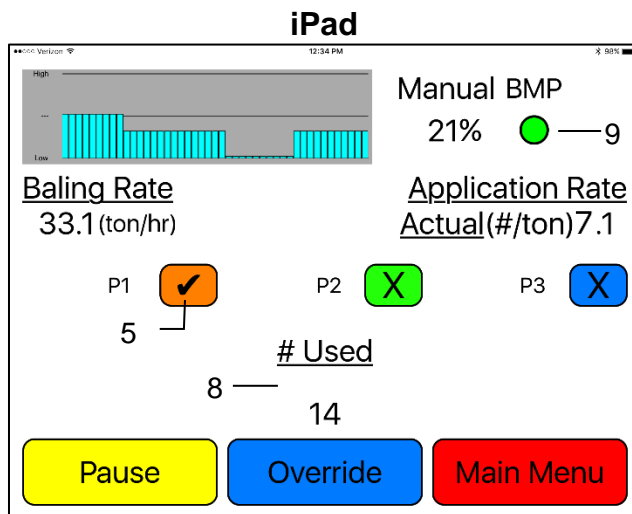
6. Turn pump 1 on (P1). To turn the pump on, select the colored box next to P1 and change the 'X' to a check mark Repeat the process for pumps 2 and 3 (P2 and P3).
7. This process will also be used to prime the pumps whenever needed.
8. While running pumps check for a good spray pattern out of the respective tips and verify that no parts of the system are leaking.
9. While doing these tests the Volume Used on the bottom of the screen will be increasing, this verifies that the flow meter is functioning.
10. The BMP button displays your connection signal with the Bluetooth receiver. Green – BMP is connected, Yellow – BMP is connecting, Red – BMP not connected. Pressing MAIN MENU key to return to the initial startup screen.

First Time and Annual Startup Instructions – Large Square Balers

THE UNIT MUST BE CHECKED OUT BEFORE FIELD OPERATION!

Check and Prime the Pumps

1. Put 10 gal (5L) of water in tank and turn main ball valve on.
2. Inspect for any leaks or drips at this time. If any are found tighten or replace area or fitting.
3. Press the SETUP MODE key. Turn bale rate sensors off. Make sure the AVG Bale Weight is 1500 lbs (680kg) and the AVG Baler Length is 96" (243cm), Time per bale is 60 seconds, and press the MAIN MENU key to return to the opening screen.
4. Press the MANUAL MODE key and the screen shown below will appear.



Note: The system comes with the tips already installed on the spray shield or nozzle tubes.

Pump	Low Output (Lbs / Ton) (L/MT)	High Output (Lbs / Ton) (L/MT)
1	.7 – 1.2 (.3 - .5L)	1.3 – 1.9 (.6 - .9L)
2	1.7 – 2.4 (.7 - 1.1L)	2.6 – 3.6 (1.3 - 1.7L)
3	2.5 – 3.5 (1.2 - 1.6L)	4.9 – 6.8 (2.2 - 3.1L)

5. Turn pump 1 on (P1). To turn the pump on, select the colored box next to P1 and change the 'X' to a check mark Repeat the process for pumps 2 and 3 (P2 and P3).
6. This process will also be used to prime the pumps whenever needed.
7. While running pumps check for a good spray pattern out of the respective tips and verify that no parts of the system are leaking.
8. While doing these tests the Volume Used on the bottom of the screen will be increasing, this verifies that the flow meter is functioning.
9. The BMP button displays your connection signal with the Bluetooth receiver. Green – BMP is connected, Yellow – BMP is connecting, Red – BMP not connected. Pressing MAIN MENU key to return to the initial startup screen.

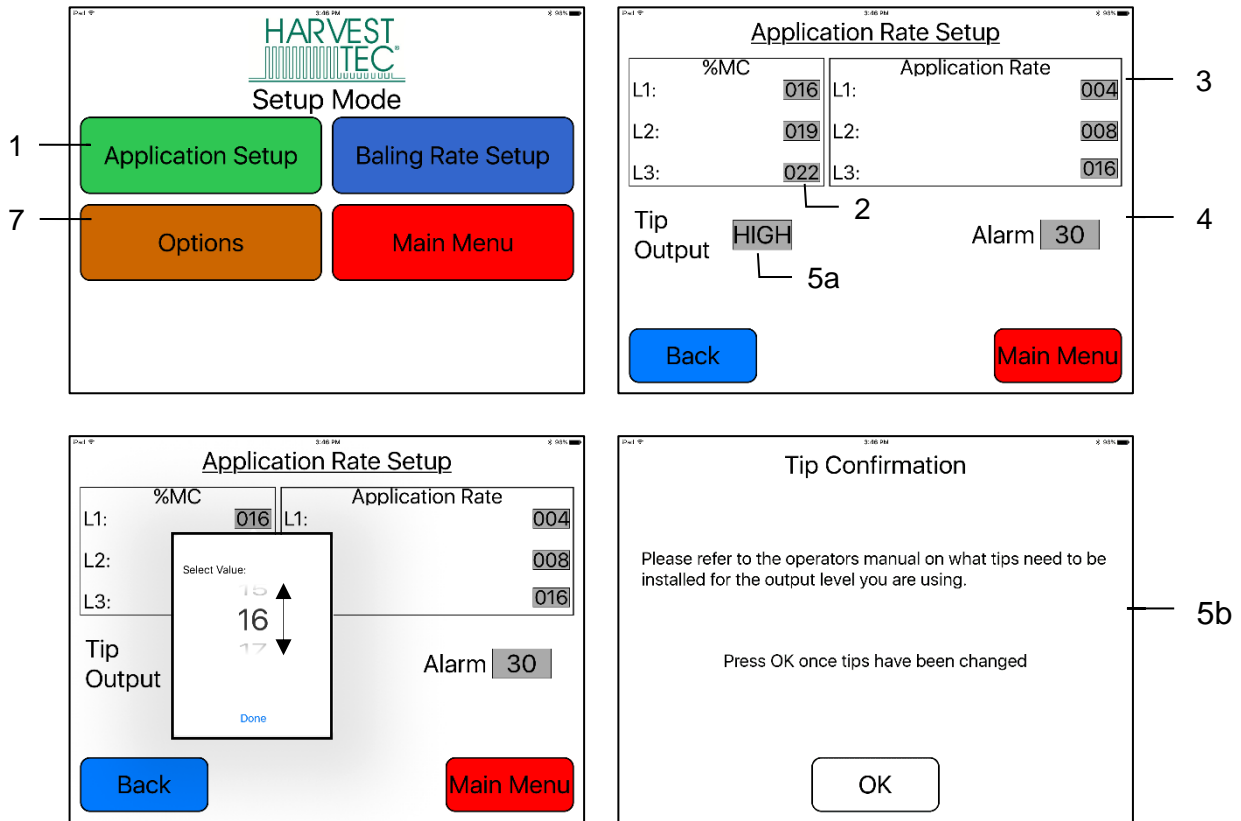
Setting Up the System for initial use with the iPad

In this mode you will setup your initial application rate and baling rate.

**Use the following information for Small Square Balers, Round Balers, and Large Square Balers.*

Application Rate

After pushing the SETUP MODE key in the Main Menu screen, the top left screen will appear:

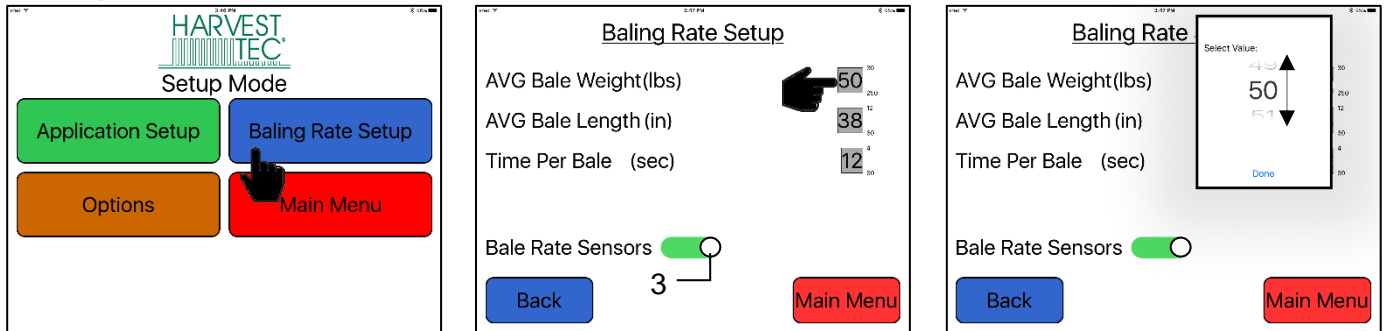


1. On the Setup Mode screen press the APPLICATION RATE key. Once selected the SETUP APPLICATION RATE screen will be shown. (Top right picture)
2. Press any of the grey number values to the right of %MC to adjust their figures. The scroll pad shown on the bottom left will display. Remember level 1 must be lower than level 2 and level 2 must be lower than level 3. Press Done, when value has been selected. Harvest Tec products recommend set points of 16, 22, and 26 % MC levels. These are preset from the factory.
3. To change rate of chemical application, press any of the grey number values to the right of RATE. Remember level 1 must be lower than level 2 and level 2 must be lower than level 3. Press Done, when value has been selected. Harvest Tec products recommend rates of 4, 8, and 16 lbs/ton (2,3,8 L/MT). These rates are preset from the factory. Press Back to return to previous screen. **IT IS THE OPERATORS RESPONSIBILITY TO FOLLOW THE RECOMMENDATIONS OF THE PRESERVATIVE. ONLY THE OPERATOR CAN APPLY THE PROPER RATE.**
4. To set the alarm, press the grey number value and set the level at which you want the alarm to activate. To turn the alarm off, set level above 50.
5. Press the grey area next to Tip Output to **cycle between the high and low sets of tips** (5a). Use the correct tip set for the field conditions. The tip confirmation screen will appear (5b). Press OK once tips are changed.
6. Next press the BACK key found on the bottom left hand figure of the screen to return to SETUP MODE screen or press MAIN MENU key on bottom right hand figure of the screen to return to opening screen.
7. Press OPTIONS to adjust the unit between metric and standard units.

Baling Rate Settings – Small Square Balers

After pushing the SETUP MODE key in the Main Menu screen, the screen on the left will appear:

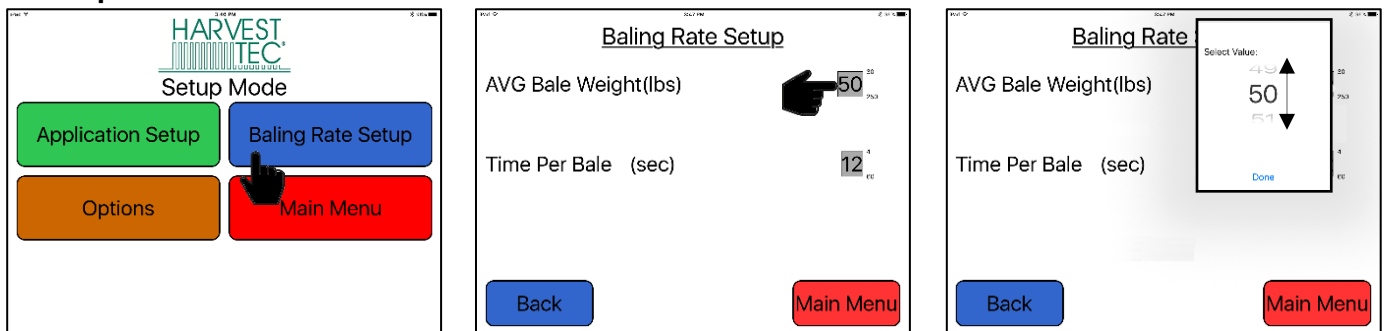
iPad Operation



1. On the setup mode screen press the BALING RATE key.
2. Press the grey number value to the right of AVG Bale Weight (Lbs). To adjust the weight of your bales, the scroll tool shown on the right will display. Scroll through the values to select correct information, press DONE when value has been selected. The information will be saved until updated. Use the same procedure for adjusting bale length and time per bale.
3. Small square balers are equipped with Bale Rate Sensors which can be turned ON by sliding the bar to the right as shown above. A green bar indicates that the bale rate sensors are on. While a grey bar means the bale rate sensors are off.
4. Press the BACK key found on the bottom left hand figure of the screen to return to SETUP MODE screen or press the MAIN MENU key to return to the opening screen.

Baling Rate Settings – Round Balers

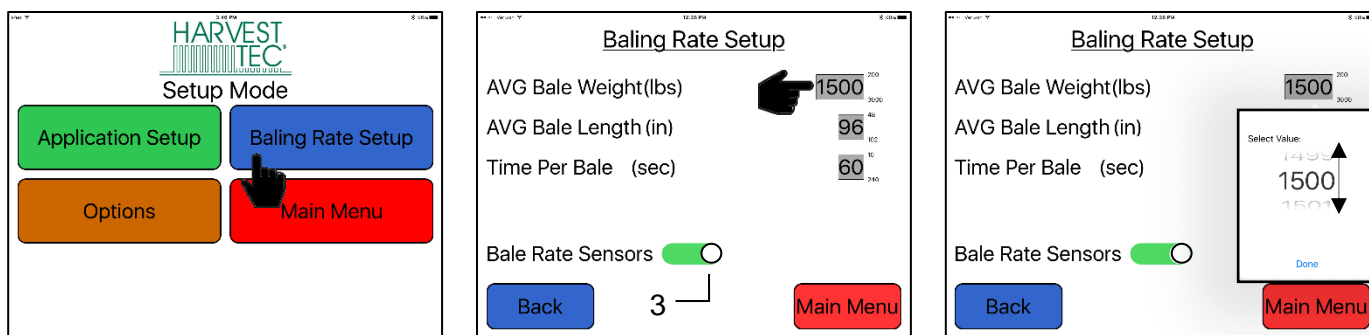
iPad Operation



1. On the setup mode screen press the BALING RATE key.
2. Press the grey number value to the right of AVG Bale Weight (Lbs). To adjust the weight of your bales, the scroll tool shown on the right will display. Scroll through the values to select correct information, press DONE when value has been selected. The information will be saved until updated. Use the same procedure for adjusting time per bale.
Note: Only count time that hay is coming into the baler, do not count tie time or drive time.
3. Press the BACK key found on the bottom left hand figure of the screen to return to SETUP MODE screen or press the MAIN MENU key to return to the opening screen.

Baling Rate Settings – Large Square Balers

After pushing the SETUP MODE key in the Main Menu screen, the screen on the left will appear:



1. On the setup mode screen press the BALING RATE key.
2. Press the grey number value to the right of AVG Bale Weight (Lbs). To adjust the weight of your bales, the scroll tool shown on the right will display. Scroll through the values to select correct information, press DONE when value has been selected. The information will be saved until updated. Use the same procedure for adjusting bale length and time per bale.
3. Large square balers are equipped with Bale Rate Sensors which can be turned ON by sliding the bar to the right as shown above. A green bar indicates that the bale rate sensors are on. While a grey bar means the bale rate sensors are off.
Note: Bale rate sensors are used instead of a fixed time per bale to help determine a ton per hour reading.
4. Press the BACK key found on the bottom left hand figure of the screen to return to SETUP MODE screen or press the MAIN MENU key to return to the opening screen.

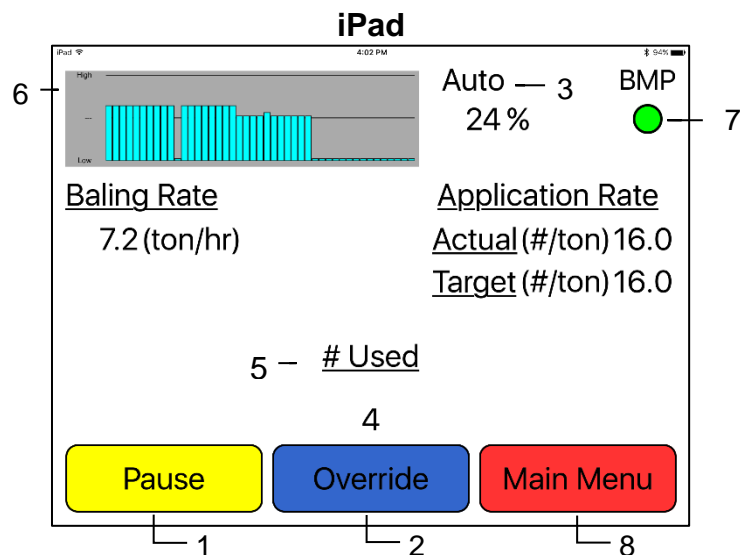
Operation Instructions

Automatic mode will automatically apply product based on hay moisture content sensed by the moisture sensors and the operator's presets. See SETTING UP SYSTEM FOR INITIAL USE to change any of these settings. Manual mode will apply preservative to the hay at a fixed rate regardless of the moisture content.

**Use the following information for Small Square Balers, Round Balers, and Large Square Balers.*

Automatic Mode

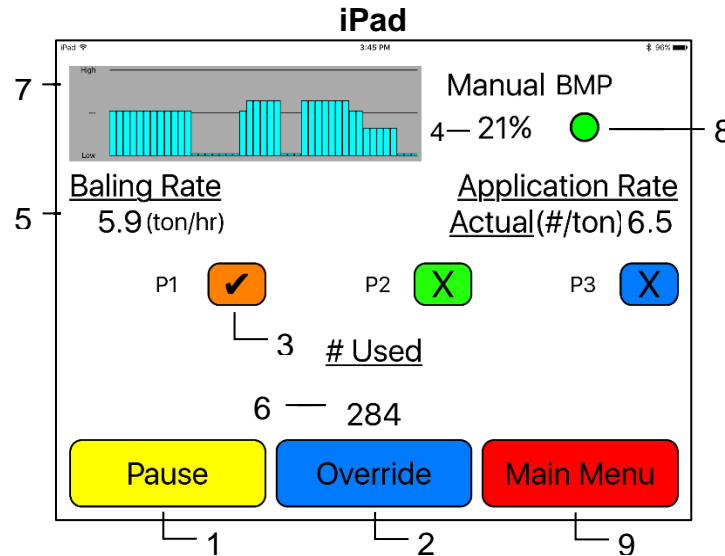
After pushing the AUTOMATIC MODE key in the Main Menu screen, the following screen will appear:



1. To pause the unit while in operation select the Pause key.
2. Push the OVERRIDE key to turn on all three pumps at the same time for full output of the system. Use this mode when going through a short area of wet crop.
3. The moisture content is shown in the upper right hand corner.
4. Baling Rate and Application Rate are shown in the middle of the screen. The operator sets the target application rate and baling rate in the setup mode; the actual rate should be within +/- one pound.
5. Volume used shown at the bottom of the screen will show accumulated pounds of preservative used on the go. This number will reset at power down, but remains in the job record screen. **NOTE: Initial start-up requires pressing the New Job key in the Job Records screen in order for Volume Used accumulation to be recorded. This only needs to be done once on initial start-up of system and not every time the system is started for operation.** (See JOB RECORDS screen)
6. The graph shows the moisture trend from the past 90 seconds in 3 second intervals.
7. The BMP button shown when using an iPad displays your connection signal with the Bluetooth receiver. Green – BMP is connected, Yellow – BMP is connecting, Red – BMP not connected.
8. Press the MAIN MENU key to return to the opening screen.

Manual Mode

After pushing the MANUAL MODE key in the Main Menu screen, the following screen will appear:



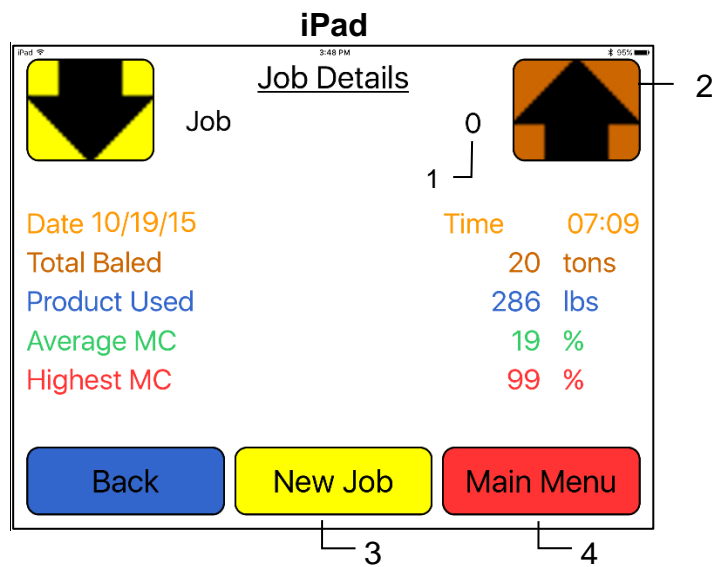
1. To pause the unit during operation select the Pause key.
2. Push the OVERRIDE key to turn on all three pumps at the same time for full output of the system. Use this mode when going through a short area of wet crop.
3. To turn the pump on, select the colored box next to P1 and change the 'X' to a check mark. In Manual Mode (regardless of moisture, baling rate or bale weight) the outputs are fixed rates as follows:

Large Square Balers	Pump	Low Tips Output (Lbs / HR) (L)	High Tips Output (Lbs / HR) (L)
	1	45 (20L)	75 (34L)
	2	90 (41L)	140 (64L)
	3	135 (61L)	265 (120L)
Round Balers	Pump	Low Tips Output (Lbs / HR) (L)	High Tips Output (Lbs / HR) (L)
	1	45 (20L)	75 (34L)
	2	90 (41L)	140 (64L)
	3	135 (61L)	265 (120L)
Small Square Balers	Pump	2-Tie Baler Tips Output (Lbs / HR) (L)	3-Tie Baler Tips Output (Lbs / HR) (L)
	1	25 (11L)	40 (18L)
	2	75 (34L)	75 (34L)
	3	145 (66L)	205 (93L)

4. The moisture content is shown in the upper right hand corner.
5. Baling rate and Application rate are shown in the middle of the screen. The output of a pump can be checked by dividing the preset output (shown in step 3) by the displayed baling rate. For example, if you have the high output tips in a small square baler and are running pump 1, by itself, your output is 40 lbs/hr. Given the baling rate shown on the above screen of 5.9 tons/hr, the application rate should be about 6.5 lbs/ton (40 lbs/hr divided by 5.9 tons/hr). The baling rate is set in the SETUP MODE.
6. Volume used shown at the bottom of the screen will show accumulated pounds of preservative used on the go. This number will reset at power down, but remains in the job record screen. **NOTE: Initial start-up requires pressing the New Job key in the Job Records screen in order for Volume Used accumulation to be recorded. This only needs to be done once on initial start-up of system and not every time the system is started.**
7. This graph shows the moisture trend from the last 90 seconds of baling (one reading every 3 seconds).
8. The BMP button shown displays your connection signal with the Bluetooth receiver.
Green – BMP is connected, Yellow – BMP is connecting, Red – BMP not connected.
9. Pressing MAIN MENU will return you to the opening screen.

Job Records

After pushing the JOB RECORDS key in the Main Menu screen, the following screen will appear:



1. The job number will be displayed at the top center. The current job being viewed will always read "Job #: 0". Product used and average moisture content will be reset when the NEW JOB key is pressed. The job records screen will store up to 63 jobs allow you to access previous jobs by using the up and down arrows.
2. Scrolling through previous jobs is done by pressing the UP or Down keys.
3. **Every time the NEW JOB key is pressed the accumulated pounds on auto and manual modes will be reset to zero.** After 63 jobs have been stored, the next time the NEW JOB key is pressed the system will start over with job one and the old job will be replaced.
4. To return the opening screen, press the MAIN MENU key.

NOTE: Initial start-up requires pressing the New Job key in the Job Records screen in order for Volume Used accumulation to be recorded. This only needs to be done once on initial start-up of system and not every time the system is started for operation.

Backup fuse

The Model 462, 463, and 465 kits are equipped with a backup system if your display is not functioning. This function is intended for use only as a temporary means for application and not as a way to apply preservative over multiple fields or for a lengthy amount of time. The baler mounted processor has a location for a backup fuse on the same side as the pump and flow meter harness that bypasses all other system inputs and applies preservative using one pump (Pump Three) at a constant lbs/hour shown below. These values are based upon on input voltage of 13.5 DC. Insert at least a 10 amp up to 20 amp fuse (3 AG style) into the backup fuse port to activate the bypass. The system will not turn off or pause until the fuse is removed. The main fuse must also be functional for the backup fuse to work.

	Tip Set	Output (lbs / hr)
462 – Small Square Balers	High	180
	Low	150
463 – Round Balers	High	230
	Low	180
465 – Large Square Balers	High	230
	Low	150

iPad Troubleshooting

<u>iPad Symptom</u>	<u>Troubleshooting</u>
iPad won't turn on	- Turn your iPad off and on. Press and hold the Sleep/Wake button for a few seconds until a red slider appears; then slide it. Press and hold the Sleep/Wake button to turn on again.
	-Reset your iPad. Press the "Sleep/Wake" button and the "Home" button simultaneously for at least 10 seconds until the Apple logo appears on the screen. This reset will not damage your files.
	You may have a drained battery. Plug your iPad into your computer or AC adapter and see if anything happens. Ideally your iPad will recognize it has been connected to a power source and charge its battery. If it will no longer charge, the battery must be swapped with a replacement battery. Battery level is display in top right corner of iPad.
iPad won't connect to Bluetooth accessory	-Make sure that your Bluetooth accessory and iOS device are close to each other when connecting.
	-Make sure that your Bluetooth accessory is on and fully charged or connected to power. If it uses batteries, test them to see if they need to be replaced.
	-Restart your Bluetooth receiver, by removing power and reconnecting after 30 seconds.
	-Make sure that you have at least a 3 rd generation iPad with iOS8 or greater operating system on your iPad
	-On your iPad, go to Settings > Bluetooth and make sure that Bluetooth is on. If you can't turn Bluetooth on or you see a spinning gear, restart your iPad
	-Unpair the Bluetooth accessory, put the accessory back in discovery mode, then pair and connect it again. By tapping on its name in the Bluetooth accessories tab and then Forget this Device. In settings, tap on a device's name, then Unpair.
iPad touchscreen is slow or does not respond	-It may be that your screen is dirty. Try cleaning your screen. To do this, unplug everything, turn off iPad then with a very soft, lint-free and slightly damp cloth gently wipe the screen. Do NOT use window cleaners and paper towels.
	-If you have any screen protector sheet, try removing it.
iPad is not charging or is slow to charge	-In order to charge your iPad you can try either connecting your iPad to a power outlet or connecting to a USB 2.0 port on a computer. However, note that computers generally don't supply enough power to their USB ports to be able to charge an iPad. When this happens, a "Not Charging" message will appear.
How can I unlock my iPad if I forgot the passcode	If you cannot remember the passcode, you will need to restore your device using the computer with which you last synced it. This allows you to reset your passcode and resync the data from the device (or restore from a backup). If you restore on a different computer that was never synced with the device, you will be able to unlock the device for use and remove the passcode, but your data will not be present.
How do I send in my iPad for service?	Refer to your iPad owner's manual or contact apple customer service. DO NOT SEND iPad TO HARVEST TEC.
For other issues refer to your iPad Owner's Manual or contact Apple Directly	

***Harvest Tec Does Not Service iPads ***

Helpful Hints

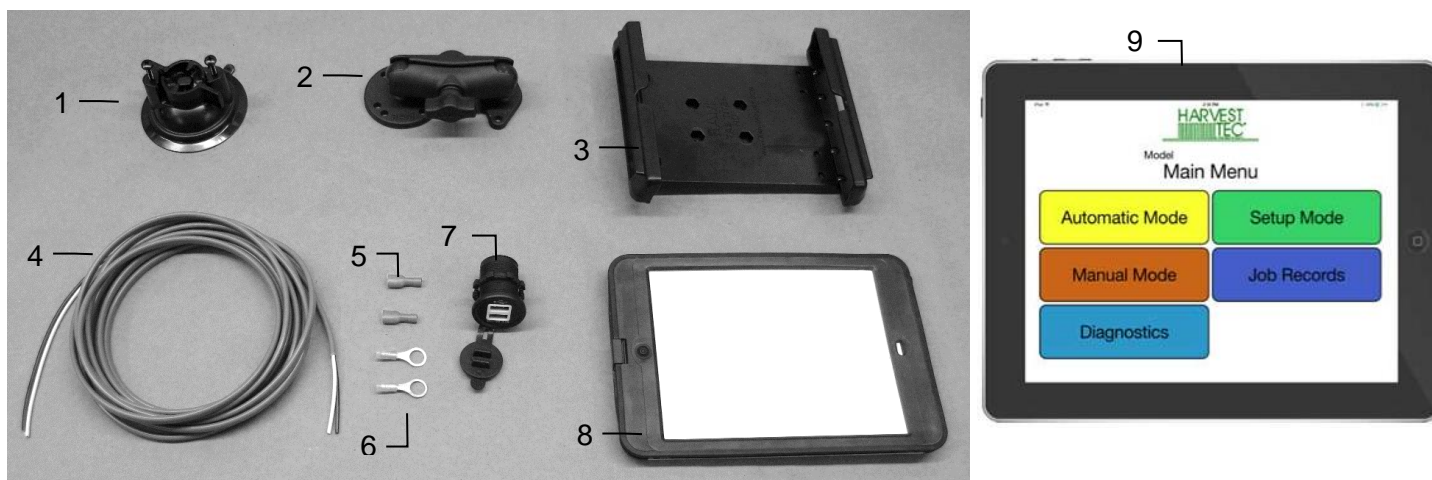
- Bluetooth devices use large amounts of battery power. Make sure your iPad is fully charged before heading to the field.
- If using a car charger to charge the iPad, make sure it is designed to charge an iPad. Most phone chargers do not supply enough voltage to maintain or charge an iPad.
- If you have other Bluetooth or WiFi devices in the cab of that tractor that are not being used. Turn them off to improve the signal for the preservative applicator.
- The Hay App must be displayed on the main screen of the iPad for operation of the application system. After the app is not display for 10 seconds the preservative applicator will stop applying.
Example: When pressing the iPad home button to look at another app or the internet, the Hay App will stop application after 10 seconds.

Parts Breakdown

Bluetooth Receiver -- 030-4672B



Optional iPad Display Kit (030-4670DK)



Ref	Description	Part #	Qty	Ref	Description	Part #	Qty
1	Suction cup mount	001-2012SCM	1	7	iPad Mini Charger 12V	001-2012P	1
2	Ram mount	001-2012H	1	8	iPad Mini 4 case	001-2012C4	1
3	iPad Mini spring load cradle (Mini 4)	001-2012SLC	1	9	iPad Mini 4	006-4670IP	1
4	16 gauge power wire	006-4723P	1	NP	4 amp fuse	Hardware	1
5	Female spade connector	Hardware	2				
6	Eye loop connector	Hardware	2				
					Mounting Kit Assembly	030-4670DK (Includes All Parts)	

Installation Instructions

- Identify 12V power source for wires to connect.
 - Eye loops included if wiring directly to the battery is desired.
 - Test for key power source if preferred to have power to the USB shut off with the key.
- Once power source is identified, cut wires to desired length.
- Crimp the two supplied quick connectors onto the white and black wire.
- Remove the round locking plastic nut from USB plug before connecting the wires. Black (+) White (-).
- The wires will then be hooked to the designated terminals on the bottom of the USB plug
- Drill a 1 1/8" hole in the preferred mounting location. Be sure to clean any sharp edges after drilling.
- Feed the wires through the mounting hole.
- If using the round plastic nut to secure plug in place, slide the nut back over the wiring before connecting the wires to powered source.
- Connect the wires to the identified power source if easier to do so before tightening the plug into place.
- Tighten plug using either the round plastic nut or mounting plate and two screws, both options supplied.
- Once connected, hook a USB charging cord into the plug and connect a mobile device/tablet to ensure the plug is operating as you wish (key power working properly if necessary).

NOTE: This plug is not designed to charge two iPads. System damage could occur if this is attempted. System will charge a mobile phone and iPad simultaneously without problem.

Harvest Tec LLC. Warranty and Liability Agreement

Harvest Tec, LLC. will repair or replace components that are found to be defective within 12 months from the date of manufacture. Under no circumstances does this warranty cover any components which in the opinion of Harvest Tec, LLC. have been subjected to negligent use, misuse, alteration, accident, or if repairs have been made with parts other than those manufactured and obtainable from Harvest Tec, LLC.

Our obligation under this warranty is limited to repairing or replacing free of charge to the original purchaser any part that in our judgment shows evidence of defective or improper workmanship, provided the part is returned to Harvest Tec, LLC. within 30 days of the failure. If it is determined that a non-Harvest Tec branded hay preservative has been used inside the Harvest Tec applicator system where the failure occurred, then Harvest Tec reserves the right to deny the warranty request at their discretion. Parts must be returned through the selling dealer and distributor, transportation charges prepaid.

This warranty shall not be interpreted to render Harvest Tec, LLC. liable for injury or damages of any kind, direct, consequential, or contingent, to persons or property. Furthermore, this warranty does not extend to loss of crop, losses caused by delays or any expense prospective profits or for any other reason. Harvest Tec, LLC. shall not be liable for any recovery greater in amount than the cost or repair of defects in workmanship.

There are no warranties, either expressed or implied, of merchantability or fitness for particular purpose intended or fitness for any other reason.

This warranty cannot guarantee that existing conditions beyond the control of Harvest Tec, LLC. will not affect our ability to obtain materials or manufacture necessary replacement parts.

Harvest Tec, LLC. reserves the right to make design changes, improve design, or change specifications, at any time without any contingent obligation to purchasers of machines and parts previously sold.

Revised 4/17

HARVEST TEC, LLC.
P.O. BOX 63
2821 HARVEY STREET
HUDSON, WI 54016 USA
PHONE: 715-386-9100
FAX: 715-381-1792
Email: info@harvesttec.com