


GUIDEMATE

OPERATION MANUAL



GuideMate

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GPS  OK

Start Job

GPS Status

Settings

End
Program

IMPORTANT

The Compaq iPAQ is not covered under Raven Industries' warranty policy. Any issues with non-Raven manufactured products must be handled according to the product manufacturer's policies and guidelines.

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INTRODUCTION

Thank you for your purchase of the GuideMate Mobile Navigation Technology system. GuideMate provides guidance control and display for swathing applications. GuideMate receives position, speed over ground (SOG), and course over ground (COG) from a DGPS receiver. GuideMate then compares the COG and position to the desired swath pattern, and produces a guidance display.

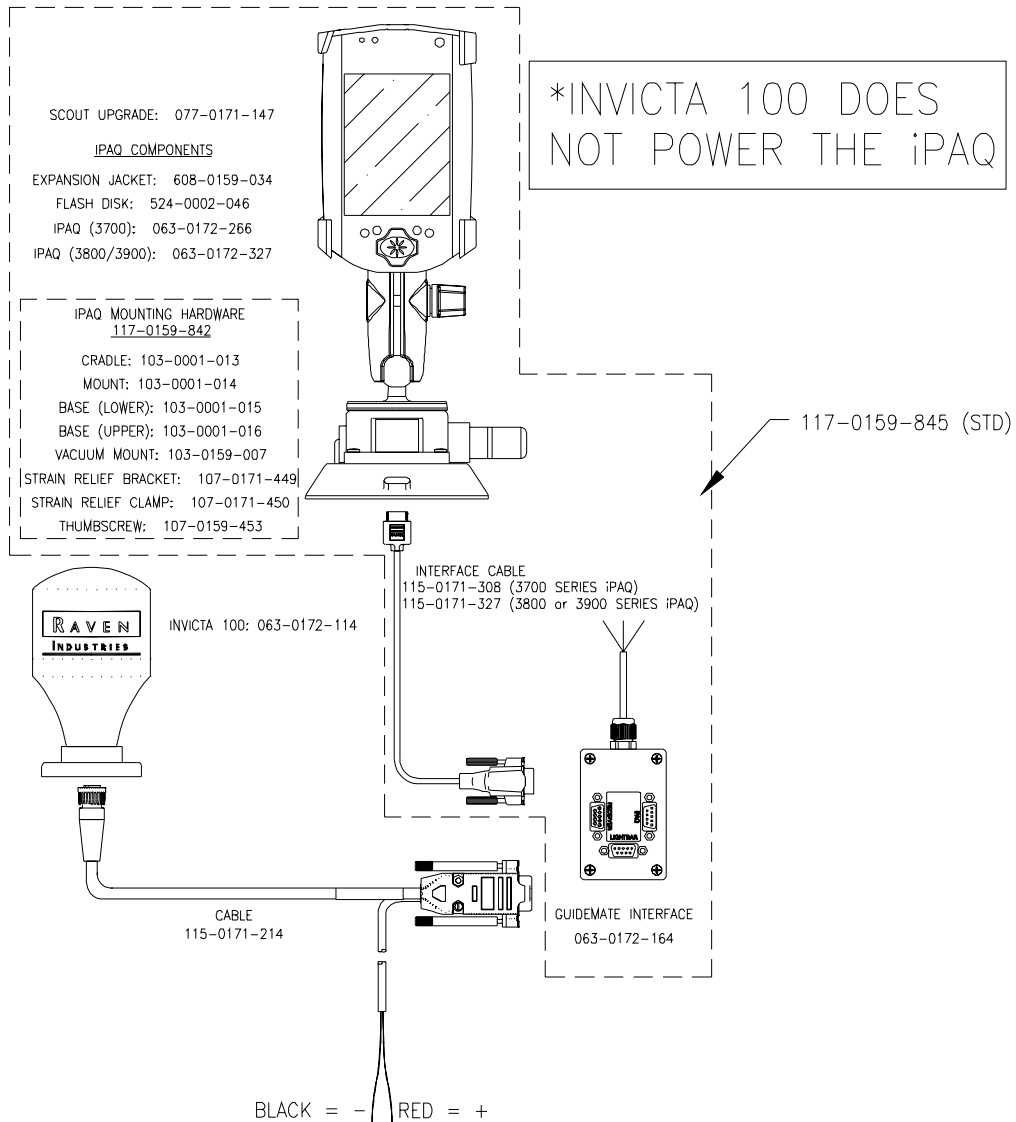
GuideMate (GM) along with SiteMate (SM) Features:

- * Advanced navigation with “driver friendly” on-screen steering graphics, acreage calculations, and numerous driving patterns (straight A-B, multiple contour modes, multiple headland modes, spiral, etc.).
- * Moving map display shows application accuracy while in the field.
- * Acreage calculator during guidance mode.
- * Records vehicle’s path for later printout of an Application Report.
- * Pan and zoom features show close up view to detect gaps and over-spray conditions.
- * Can be retrofit to Raven guidance systems.
- * Easily create maps of field boundaries, weed areas, tile lines, spray paths, soil sample locations, or anything else you may need.
- * All data saved in industry standard ArcView Shape Files.

APPLICATION DRAWINGS AND PARTS LIST

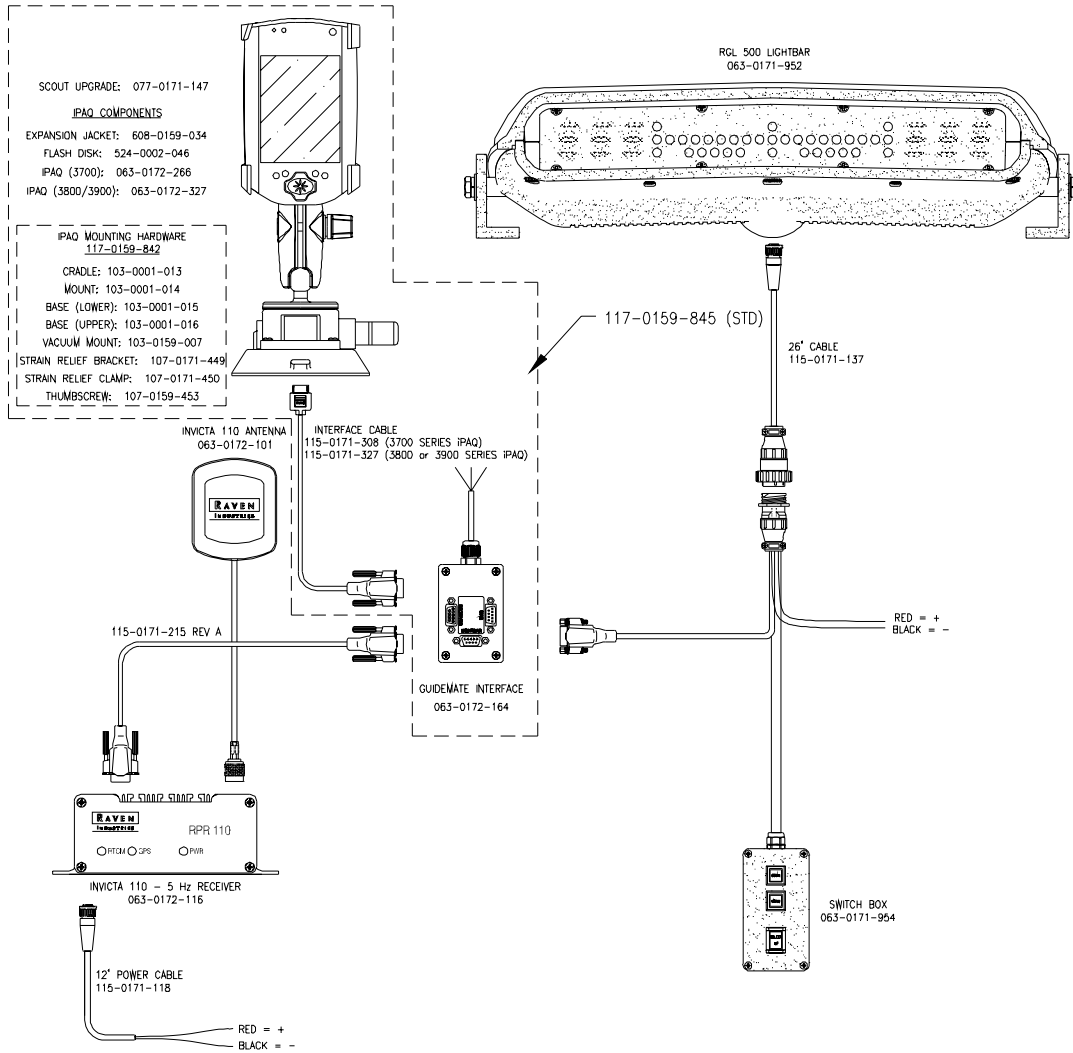
IPAQ GUIDEMATE/INVICTA 100 SYSTEM

COMPLETE KIT AS SHOWN: 117-0159-790



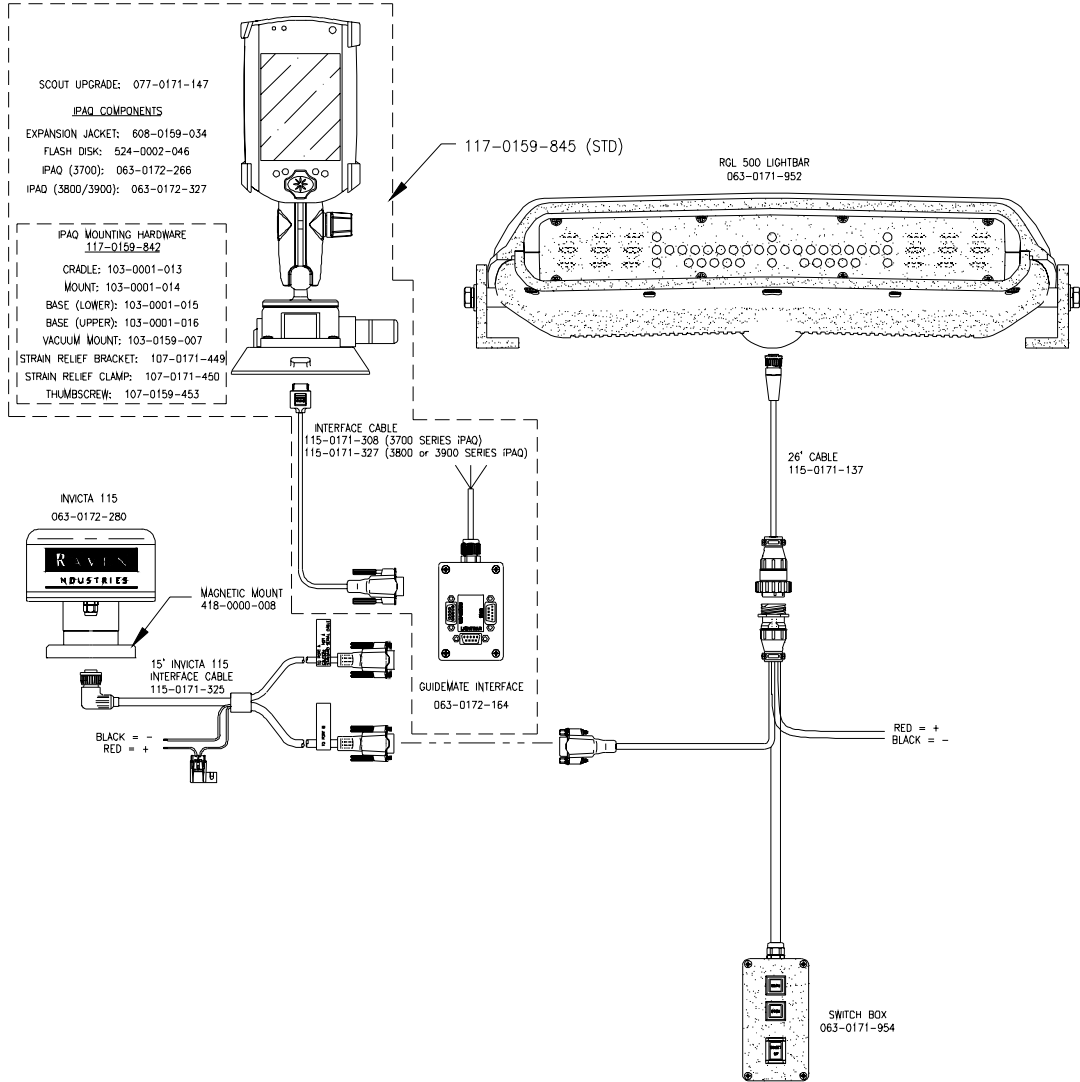
IPAQ GUIDEMATE/RGL 500/INVICTA 110 SYSTEM

COMPLETE KIT AS SHOWN: 117-0159-847
 COMPLETE KIT WITH RGL 500T: 117-0159-861

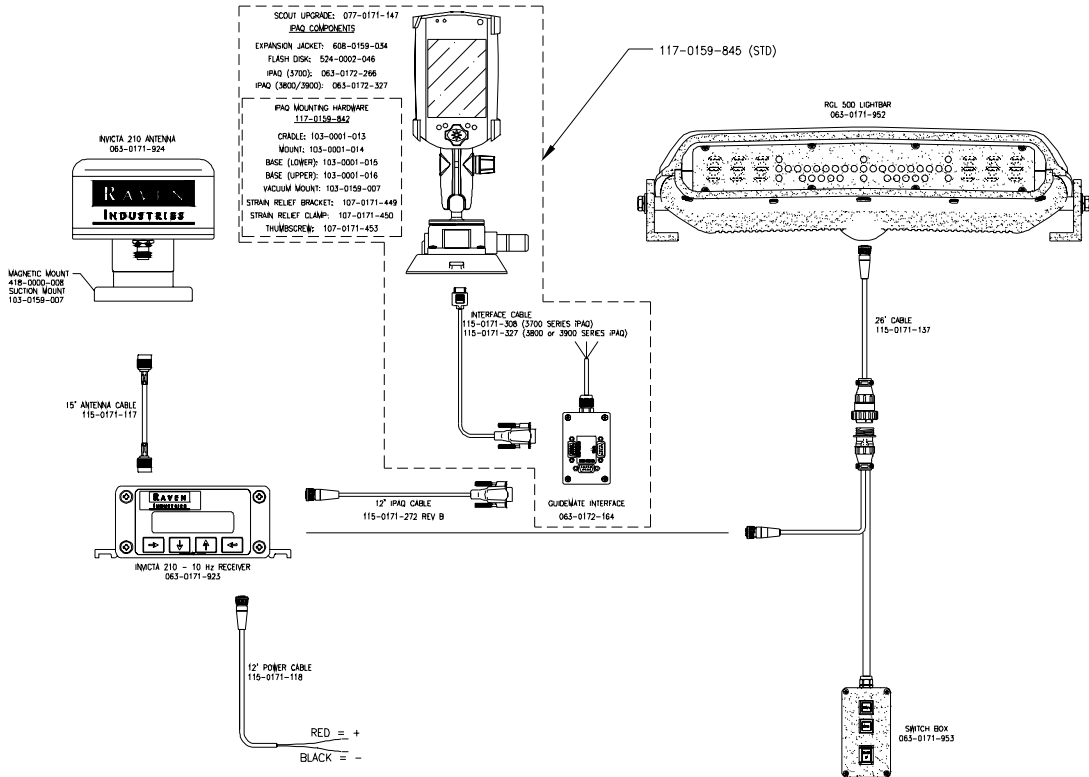


IPAQ GUIDEMATE/RGL 500/INVICTA 115 SYSTEM

COMPLETE KIT AS SHOWN: 117-0159-848
 COMPLETE KIT WITH RGL 500T: 117-0159-862

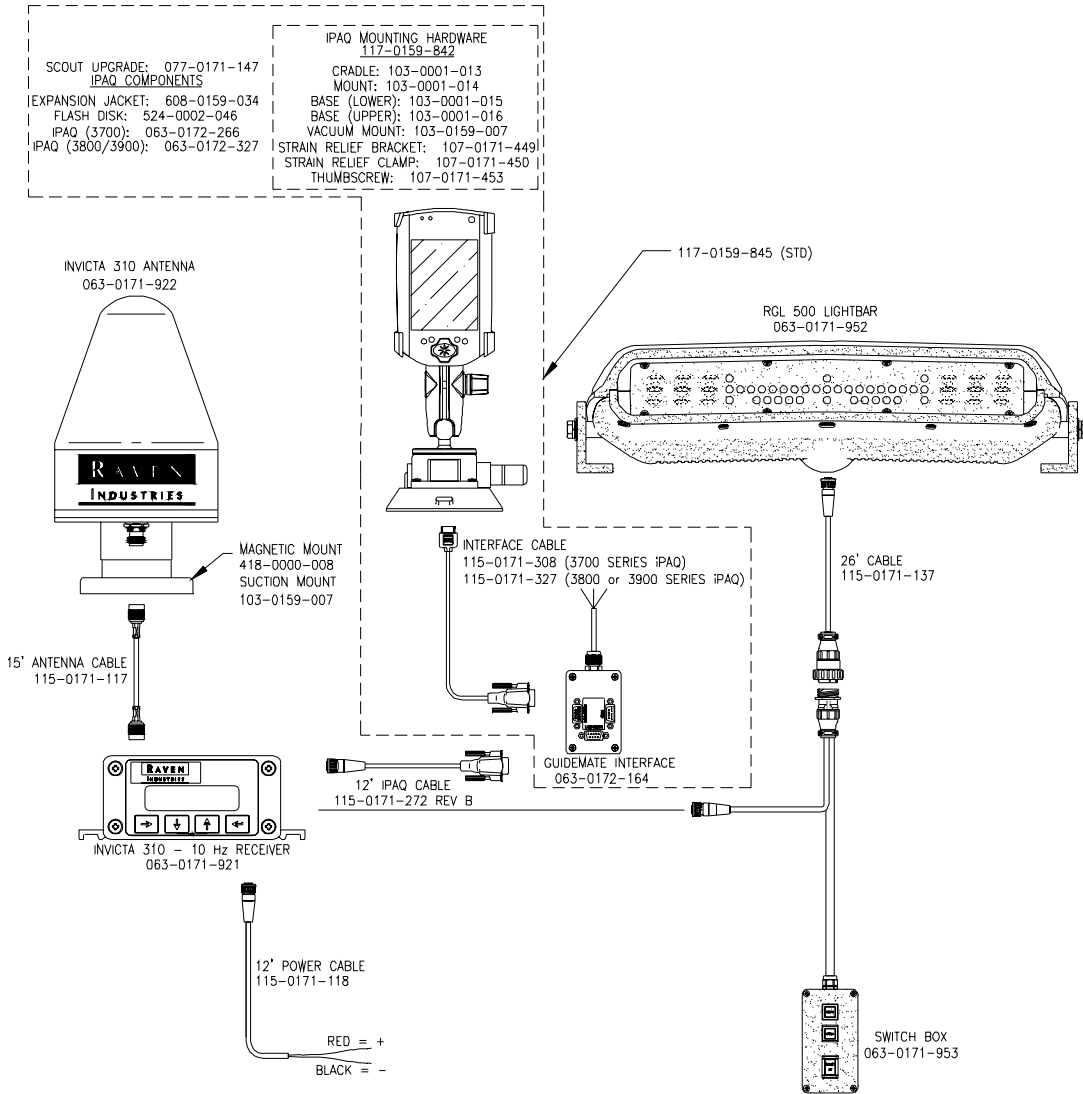


IPAQ GUIDEMATE/RGL 500/INVICTA 210 SYSTEM
 COMPLETE KIT AS SHOWN: 117-0159-849
 COMPLETE KIT WITH RGL 500T: 117-0159-863



IPAQ GUIDEMATE/RGL 500/INVICTA 310 SYSTEM

COMPLETE KIT AS SHOWN: 117-0159-850
 COMPLETE KIT WITH RGL 500T: 117-0159-864



IPAQ GUIDEMATE/RECEIVER/ WITHOUT LIGHTBAR (need pwr source)

GUIDEMATE BASIC: 117-0159-845

HARDWARE KIT: 117-0159-842

CABLE: 115-0171-312

SCOUT UPGRADE: 077-0171-147

IPAQ COMPONENTS

EXPANSION JACKET: 608-0159-034

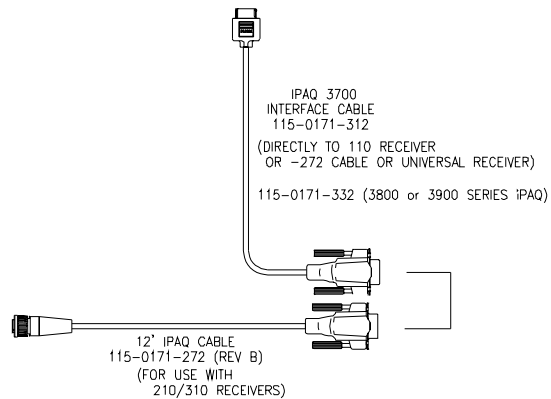
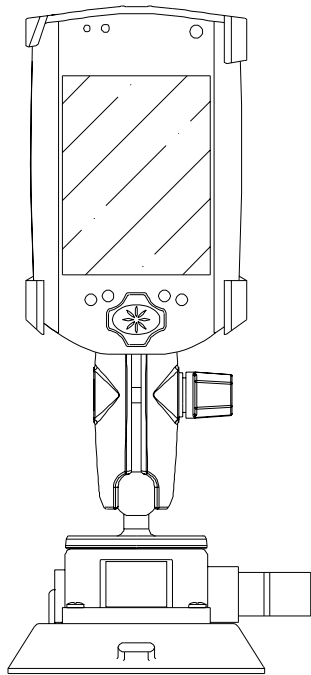
FLASH DISK: 524-0002-046

IPAQ (3700): 063-0172-266

IPAQ (3800/3900): 063-0172-327

IPAQ MOUNTING HARDWARE
117-0159-842

CRADLE: 103-0001-013
MOUNT: 103-0001-014
BASE (LOWER): 103-0001-015
BASE (UPPER): 103-0001-016
VACUUM MOUNT: 103-0159-007
STRAIN RELIEF BRACKET: 107-0171-449
STRAIN RELIEF CLAMP: 107-0171-450
THUMBSCREW: 107-0171-453



GETTING STARTED

- 1) Refer to the "Getting Started" Compaq iPAQ manual for **turning on the battery** on the iPAQ, as well as other general information concerning the operation and features of the iPAQ.
- 2) Place iPAQ into expansion sleeve (3700 series iPAQ). If 3800 or 3900 series iPAQ, insert into supplied "Protective Cover Pack".
- 3) Insert 64 MB compact flashcard into expansion sleeve, or secured digital card into slot on 3800 or 3900 series iPAQ.
Note: if expansion sleeve and/or compact flashcard or secured digital card is not available, user must install software to the iPAQ's memory.
- 4) If GM and SM software have been pre-loaded onto the compact flashcard or secured digital card →continue to the "Software Registration Process". If GM and SM software have not been pre-loaded →continue to the "Software Installation Process".

RE-SETTING THE iPAQ:

If at anytime the software "locks-up" and the iPAQ will not respond to any of the buttons →use the stylus and press the reset button (located on the bottom of the iPAQ towards the right side).

SOFTWARE INSTALLATION PROCESS

(Skip this procedure if the software has been pre-loaded onto the compact flashcard.)

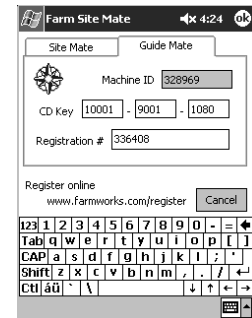
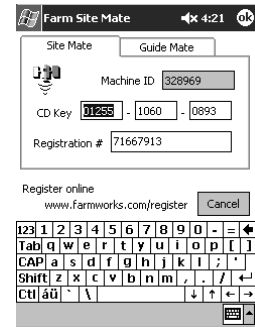
Note: Must have available USB port on laptop or desktop computer for software installation. If not, a Hotsync cable for iPAQ is required in order to connect to a RS232 com port on the computer.

- 1) Insert the Compaq iPAQ Pocket PC Companion CD that is included with each iPAQ into desktop or laptop computer.
- 2) Follow the on-screen instructions for installing Microsoft ActiveSync version 3.5 or higher.
 - 2a) Select "Run this program from its current location".
 - 2b) After installation of ActiveSync is complete, close program and remove Pocket PC Companion CD.
- 3) Insert the AC adapter plug into the DC jack on the back of the cradle.
- 4) Connect cradle to USB port on desktop or laptop computer.
- 5) Insert iPAQ into cradle and push firmly.
- 6) The Microsoft ActiveSync program should initiate automatically, if not, then open ActiveSync software on the desktop or laptop computer and establish communication to the iPAQ.
- 7) Insert Farm Works installation CD.
- 8) Click on "Install SiteMate".
- 9) Follow the on-screen instructions for installation of GuideMate and SiteMate software.
 - 9a) Select "Windows CE or PocketPC" for the platform on which SiteMate and GuideMate will be installed.
 - 9b) Select "GuideMate" as an installation option.
 - 9c) Both GuideMate and SiteMate CD keys will be required for software installation.
 - 9d) Select "Install to PocketPC Storage Card" (if storage card is not available, then select "Install to PocketPC Main Memory").
- 10) Now follow instructions for "Software Registration Process".
Note: turn the iPAQ power off and then re-power before opening GM software.

SOFTWARE REGISTRATION PROCESS

GuideMate and SiteMate software must be installed before the registration process can begin.

- 1) Turn iPAQ power on.
- 2) Click the "Start" button and then select "Programs".
- 3) Click on the "GuideMate" icon.
- 4) An "Invalid Registration" message will appear. Press "OK" to continue.
- 5) The Registration Information screen will now be present with tabs for both SiteMate and GuideMate.
- 6) Note Machine ID # along with SiteMate and GuideMate CD Keys.
- 7) Go to www.farmworks.com/register and select "Farm Site Mate" and "GuideMate".
- 8) Enter Machine ID #, SiteMate and GuideMate CD Keys, and then select "submit".
- 9) Enter name, mailing address, phone #, and e-mail address into registration screen and select "submit registration".
- 10) Registration #'s for both GuideMate and SiteMate will be e-mailed after registration information is submitted.
- 11) Enter the SM and GM CD keys along with their respective Registration #'s into the SiteMate and GuideMate tabs.
- 12) Click the "OK" button located at the top right corner.
- 13) SiteMate screen will now be present. Click on the "File" button located at the bottom left corner and then choose "Exit". This will close the SiteMate program and return to the iPAQ's "Programs" screen.
- 14) Click on the "GuideMate" icon to launch both GuideMate and SiteMate software (after a job is started using GM, SM will automatically operate). Choose the "SiteMate" icon from the "Programs"



GUIDEMATE HOME SCREEN

Indicates version of GuideMate firmware and whether or not GPS is being received.

“**GPS Status**” button indicates detailed DPGS information and Auto GPS Setup feature.

“**Start Job**” button will initiate starting a new job or open an existing job.

“**Settings**” button will allow user to select swath patterns, boom widths, boom offsets, boom status, along with other selection options.

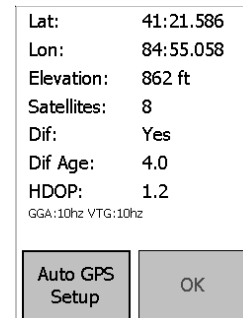
“**End Program**” button will close GuideMate program.



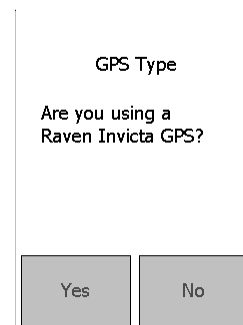
GPS STATUS

Detailed DGPS information receiver.

Lat:	Latitude location point.
Lon:	Longitude location point.
Elevation:	Displays feet above sea level.
Satellites:	Displays the # of GPS satellites that are being tracked.
Dif:	Indicates if a Correction signal is present.
Dif Age:	Age of data or # of seconds between differential correction signals.
HDOP:	Horizontal Dilution of Precision (accuracy ratio).
GGA: 10hz VTG: 10hz	Indicates which NMEA messages are present along with their respective update frequency (ex: 10 Hz= 10 times per second). If “hz” is missing then the number displayed is the count of messages received since GM was started. This occurs for messages that are being received only occasionally.



“**Auto GPS Setup**” - Allows user to configure a Raven receiver or automatically set the baud rate on GM to the same baud rate of an external receiver (**Note: Raven receiver must be at software version 4.07 or higher before the “Auto GPS Setup” for a Raven Invicta can be performed**).

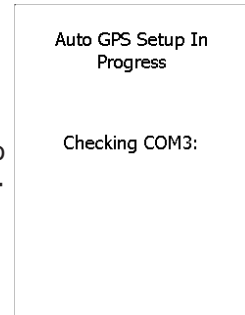


Press the “Yes” button for use with a Raven DGPS Receiver with an external Raven lightbar. Choose “No” if GM will not be used with an external lightbar and for all non-Raven DGPS receivers.

Note: Raven receiver is required in order for GM software to interface with an external Raven lightbar.

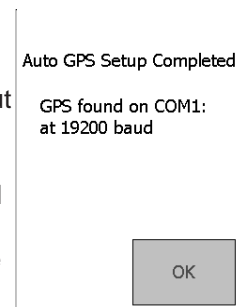
Auto GPS Setup Non-Raven:

- * GM will attempt to communicate with a receiver by scanning each port while scrolling through baud rates of 4800, 9600, 19200, 38400, and 57600. GM will adjust to the same baud rate of the receiver. **Note: At next start-up, GM will default back to the baud rate set during its last operational mode.**

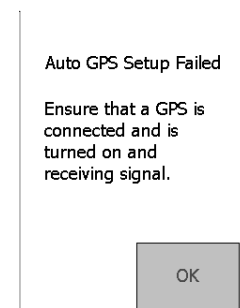


Auto GPS Setup Raven Receiver:

- * GM will initially establish communication with the Raven receiver. GM will then temporarily re-configure the Raven receiver for optimum communication settings for use with an external Raven lightbar. Both receiver output ports (port A and port B) will be set to a 19200 baud rate along with NMEA messages GGA and VTG activated at a 5Hz or 10Hz update rate. Forward A to B and Forward B to A will also be set on the receiver (this is required in order for GM to control an external Raven lightbar). The settings for the configuration of the receiver are not saved in the receiver. After removing power from the receiver and then re-powering, the receiver will default back to its original settings prior to the Auto GPS Setup configuration. **Note: If this option is chosen, GM will automatically perform the auto GPS setup for a Raven receiver each time GM is started.**



Auto GPS Setup Failed: is an indication that GM could not establish communication with a DGPS receiver.

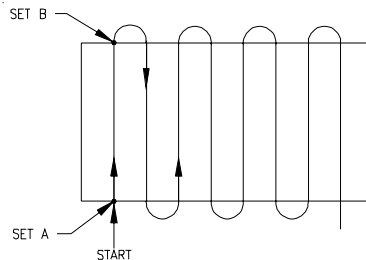


SETTINGS

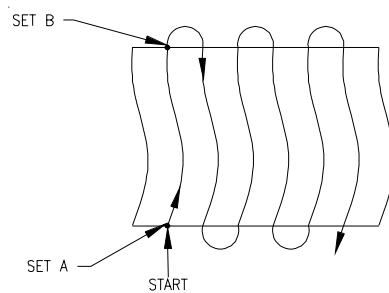
Swath Pattern: Press “Swath Pattern” button to scroll through the available options. Swath options are listed below:

Swath Pattern	Straight AB
Boom Width	40.0 ft
Flags	0 of 8 Set
Return To Main Menu	More Settings

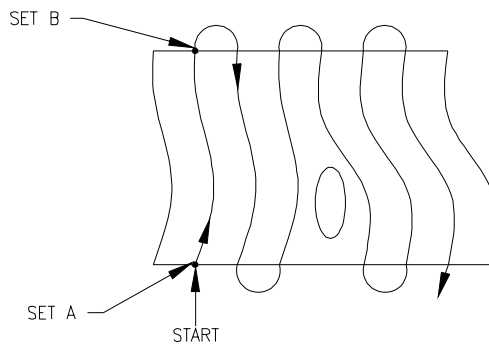
- * **Straight AB:** Guidance for straight back and forth swathing based on the first pass (two button presses required on first pass, no swath to swath button presses after the first pass). Press the “Set A” button to begin Swath # 1. Continue to drive to the end of Swath # 1 then press “Set B”. Swath # 2 will be assigned according to the direction turned after the “Set B” button is pressed. All consecutive swaths will be based on the original A-B points.



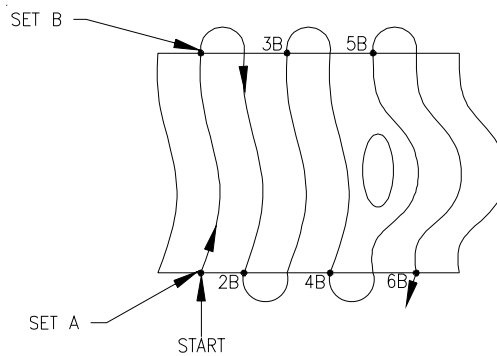
- * **Contour Fixed:** Guidance for curved swath patterns based from the first pass (two button presses required on first pass, no swath to swath button presses after the first pass). Press the “Set A” button to begin Swath # 1. Continue to drive the contoured swath and press “Set B” at the end of swath # 1. All consecutive swaths will be based on the contour pattern of the first pass.



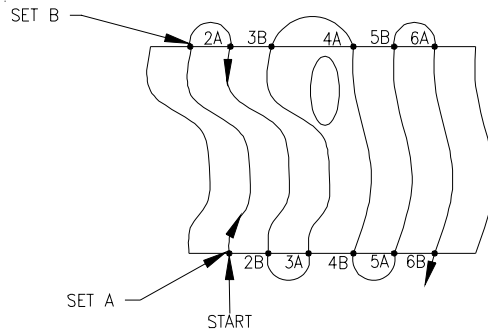
- * **Contour 0 Button:** Guidance for curved swath patterns based from the last pass driven (two button presses required on the first pass, no swath to swath button presses after the first pass). Press the “Set A” button to begin Swath # 1. Continue to drive the contoured swath and press “Set B” at the end of swath # 1. All consecutive swaths will be based on the last pass driven. **Note: Must drive past the end of the swath before turning to the next swath.**



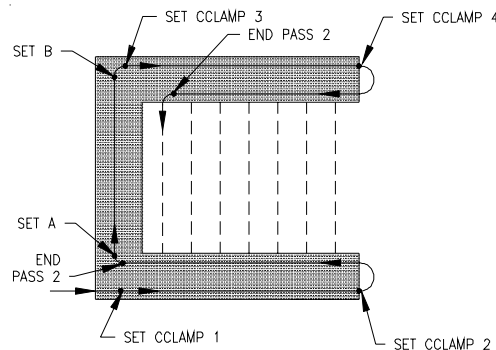
- * **Contour 1 Button:** Guidance for curved swath patterns based from the last pass driven (two button presses required on the first pass, then one button press on the end of each consecutive pass). Press the “Set A” button to begin Swath # 1. Continue to drive the contoured swath and press “Set B” at the end of swath # 1. Swath # 2 will be based on the path driven in swath # 1. At the end of Swath # 2, press the “Set 2B button. Swath # 3 will be based on the path driven in Swath # 2. Continue these steps for each consecutive swath.



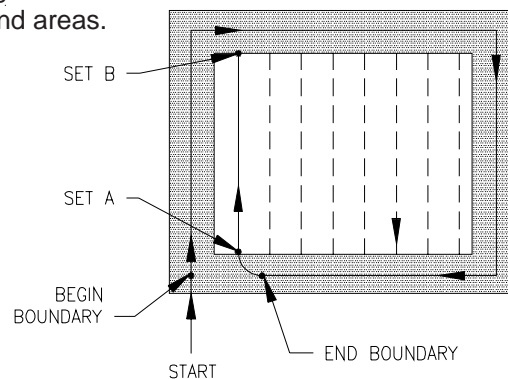
- * **Contour 2 Button:** Guidance for curved swath patterns based from the last pass driven (two button presses required on each pass). Press the “Set A” button to begin Swath #1. Continue to drive the contoured swath and press “Set B” at the end of swath #1. Swath #2 will be based on the path driven in Swath #1. Press “Set 2A” at the beginning of Swath #2. At the end of Swath #2, press the “Set 2B” button. Swath #3 will be based on the path driven in Swath #2. Continue these steps for each consecutive swath.



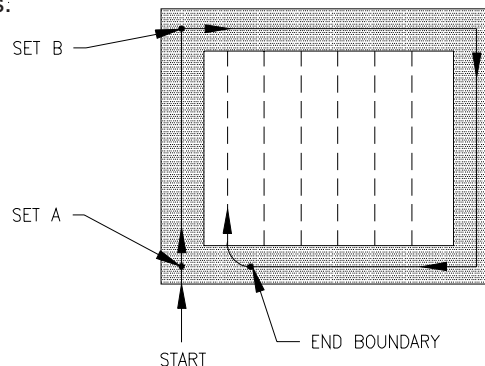
- * **C Clamp:** Straight pattern swathing with a double headland area on two opposite sides of the field. Enter field in direction of double headlands. Press “Set CClamp 1” and drive to the end of the 1st headland pass and press “Set CClamp 2”. Turn back towards the 1st pass. Press “End Pass 2” at the end of the 1st double headland. Then turn towards the direction in which A-B guidance is desired. Swath #1 starts after “Set A” is pressed. Continue to the end of Swath #1 and press “Set B” (guidance through the field will be based on the original A-B points). Turn towards the next headland area and press “Set CClamp 3”. Continue to drive to the end of the headland pass and press “Set CClamp 4”. Turn back towards the 2nd pass for the double headlands and GM will provide guidance down this pass. At the end of the 2nd double headland area press “End Pass 2”. Then turn towards Swath #2, GM will provide guidance based on the original A-B points. GM will give a “distance to headland” countdown when approaching or leaving the headland areas.



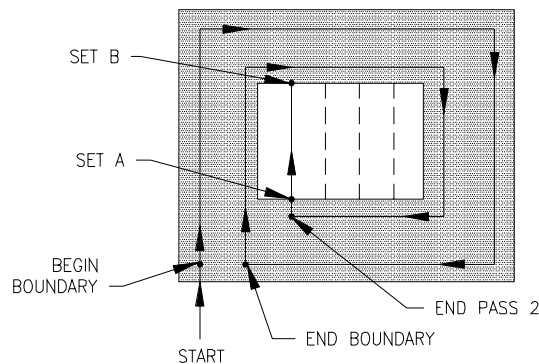
- * **Headlands Separate:** Guidance based on straight A-B swathing with a headland area around the boundary of the field (the A-B points can be set either during the headland pass or after the headland is completed). Press “Begin Boundary” to start the headland perimeter. Continue to drive around the perimeter of the field (GM will automatically record the path that is driven for the headland area). Press “End Boundary” at the point when the headland boundary is complete or GM will automatically end the boundary once its position is within one boom width from the beginning boundary point. Press the “Set A” and “Set B” buttons to mark the A-B line to provide guidance for consecutive swaths through the field. GM will give a “distance to headland” countdown when approaching or leaving the headland areas.



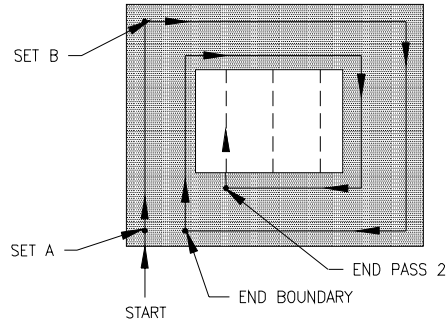
- * **Headlands Combined:** Guidance based on straight A-B swathing with a headland area around the boundary of the field (the A-B points are set with the headland area). Swath #1 (and beginning boundary) begins after “Set A” is pressed. Continue to drive to the end of Swath #1 then press “Set B”. Then continue to drive that boundary of the field (GM will automatically record the path that is driven for the headland area). Press “End Boundary” at the point when the headland boundary is complete or GM will automatically end the boundary once its position is within one boom width from the beginning “Set A” point. Guidance for consecutive swaths will be based on the original A-B points that were set. GM will give a “distance to headland” countdown when approaching or leaving the headland areas.



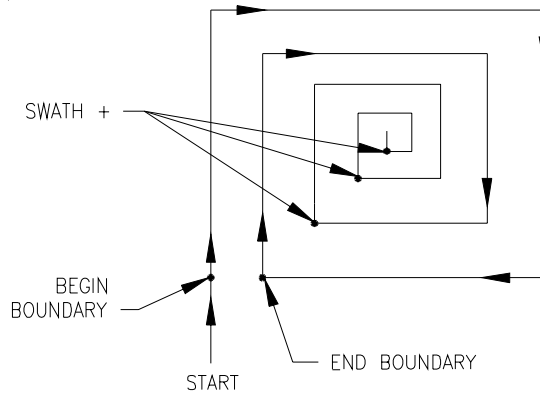
- * **Headlands*2 Separate:** Guidance based on straight A-B swathing with a double headland area around the boundary of the field (the A-B points can be set either during the headland pass or after the headland is completed). Press “Begin Boundary” to start the headland perimeter. Continue to drive around the perimeter of the field (GM will automatically record the path that is driven for the headland area). Press “End Boundary” at the point when the headland boundary is complete or GM will automatically end the boundary once its position is within one boom width from the beginning boundary point. GM will then provide guidance for the 2nd headland boundary. Continue to drive the boundary and press “End Pass 2” for ending the 2nd headland pass or GM will automatically “End Pass 2” once its position is within one boom width from the beginning of the 2nd boundary. Press the “Set A” and “Set B” buttons to mark the A-B line. Guidance for consecutive swaths will be based on the original A-B points. GM will give a “distance to headland” countdown when approaching or leaving the headland areas.



- * **Headlands*2 Combined:** Guidance based on straight A-B swathing with a double headland area around the boundary of the field (the A-B points are set within the 1st headland area). Swath #1 (and beginning boundary) begins after “Set A” is pressed. Continue to drive to the end of Swath #1 then press “Set B”. Then continue to drive the boundary of the field (GM will automatically record the path that is driven for the headland area). Press “End Boundary” at the point where the headland boundary is complete or GM will automatically end the boundary once its position is within one boom width from the beginning “Set A” point. GM will give guidance for the 2nd headland boundary. Continue to drive the 2nd boundary and press “End Pass 2” at the end of the 2nd headland area or GM will automatically “End Pass 2” once its position is within one boom width from the beginning of the 2nd boundary. Guidance for consecutive swaths will be based on the original A-B points that were set. GM will give a “distance to headland” countdown when approaching or leaving the headland areas.



* **Spiral:** Guidance based on an outside boundary that continues to work towards the center of a field. Swath #1 begins after “Begin Boundary” is pressed. Continue to drive around the boundary of the field (GM will automatically record the path driven for the boundary area). Press “End Boundary” when the first boundary pass is complete (GM will automatically “End Boundary” if its position is within one boom width from the “Begin Boundary” point). Guidance for Swath #2 will be one width to the inside of the original boundary. “Swath +” and “Swath -” buttons will be present after the boundary has been closed. If “Swath +” is pressed guidance will be given to the next swath towards the inside of the field. If “Swath -” is pressed guidance will be given to the next swath towards the outside of the field. When at the end of Swath #2, user must press “Swath +” in order to initiate guidance for Swath #3, etc.



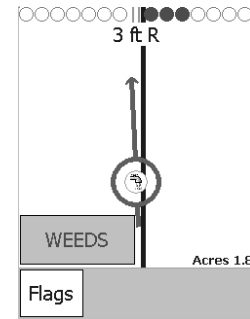
Boom Width: Displays the total boom width in feet (meters).

- * Press “Boom Width” button to either enter a new boom width or change the current boom width setting.

Enter Boom Width In Feet					
←	@	.	-	X	OK
		0	1	2	3
4	5	6	7	8	9

Swath Pattern	Straight AB
Boom Width	40.0 ft
Flags	2 of 8 Set
Return To Main Menu	More Settings

Flags: Displays # of flag points (8 available) that have been pre-set. The Flag points can be set during swath guidance by pressing the “Flags” button from the GM guidance screen. Then choose the desired flag from the pre-set choices. The flag points will be saved while the flag name is displayed on the guidance screen (color of the flag name will be red). To discontinue recording flag points press the flag name that is displayed. **Note: the SM as-applied map will not show the flags as they are marked. In order to see the flags on the map, user must open all layers of the file using desktop shapefile viewing software.**



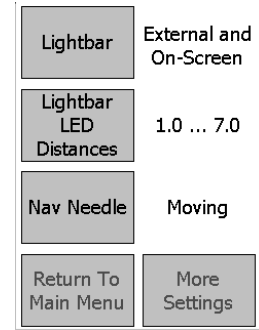
Press “Flags” button to enter set-up screen. From the “Flags” set-up screen the following button options will be available:

- * **Next** - Allows user to scroll through the 8 different flag names.
- * **Change Flag Name** - Allows user to create or change the name of a flag.
- * **Delete** - Will delete the flag name that is currently displayed.
- * **OK** - Saves any changes made and will return to the settings menu.
- * **Cancel** - Does not save changes and will return to the settings menu.

Next	1: WEEDS
Change Flag Name	Delete
OK	Cancel

Lightbar: press this button to scroll through the Lightbar options.

- * “On-Screen”: Directional LED’s (similar to an external lightbar) will be displayed on the GuideMate guidance screen. (GM will not control the display of an external lightbar.)
- * “External”: Direction LED’s will be displayed on an external Lightbar only (not on the GM guidance screen). (GM will control the external lightbar display, as well as set the swath guidance points.) **Note: GuideMate Interface box (IFB2) is required, as well as forward messaging on Raven receiver.**
- * “External and On-Screen”: GuideMate will control the display of an external Lightbar, as well as display direction LED’s on the GM guidance screen. **Note: GuideMate Interface box (IFB2) is required, as well as forward messaging on Raven receiver.**
- * “No Lightbar”: Direction LED’s will not be present on the GM guidance screen, and GM will not control the display of an external lightbar.

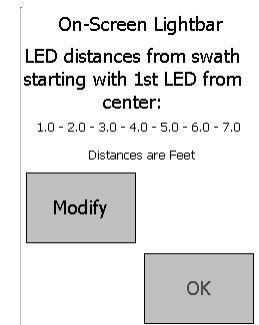


Lightbar LED Distances: Allows user to modify the distances that correspond to the LED’s that are displayed on the GM guidance screen (this does not effect the LED’s on an external lightbar). Default settings are “1.0 ... 7.0” (each LED will represent 1 foot).

Press the “Lightbar LED Distances” button to display the distance that each LED represents. Press the “Modify” button to change the LED distance values. Seven distance values (each separated by a dash) must be entered. See example below:

1.0 - 2.0 - 3.0 - 4.0 - 5.0 - 6.0 - 7.0

Press “OK” to save any changes and/or return to the settings menu.



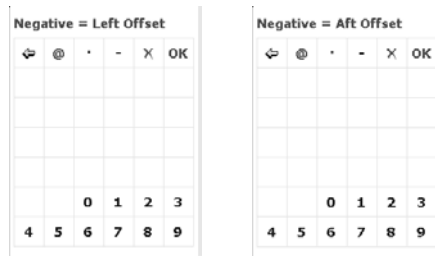
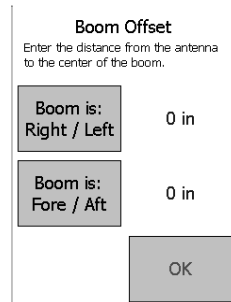
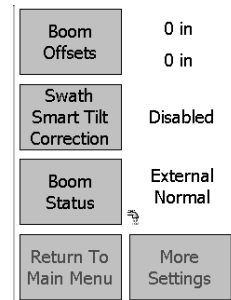
Nav Needle: Allows user to change the navigation needle setting to either “Moving” or “Stationary”.

- * “Moving” - Course Direction Indicator (CDI) will move/turn corresponding to the direction being driven. The “swath” line remains vertical on guidance screen (the swath line will move either towards the CDI or away from the CDI according to user’s position in relation to the center of the swath).
- * “Stationary” - CDI will always remain in a vertical position. Direction changes will cause the “swath” line to move on the guidance screen in relation to the CDI’s position.

Boom Offsets: Displays center of boom location in relation to the mounted antenna’s location in inches (cm).

Press the “Boom Offsets” button to make changes to the settings.

- * Press “Boom is: Right / Left” to set the distance of the center of the boom in relation to the antenna’s location across the direction of the machine movement. If the center of the boom is to the left of the antenna, the measurement will be a negative number and require a minus sign.
- * Press “Boom is: Fore / Aft” to set the distance of the boom in relation to the antenna’s position along the direction of machine movement. If the center of the boom is behind the antenna (or Aft), the measurement will be a negative number and require a minus sign.

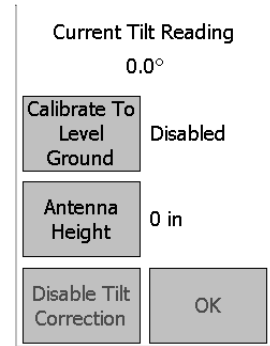


Press “OK” to return to settings menu.

Swath Smart Tilt Correction: Displays status of tilt correction (either “Disabled” or “Enabled”). **Note: To activate this feature GM must be used with an external Raven tilt lightbar (the lightbar must have the tilt compensation hardware).**

Press “Swath Smart Tilt Correction” to enter tilt set-up screen.

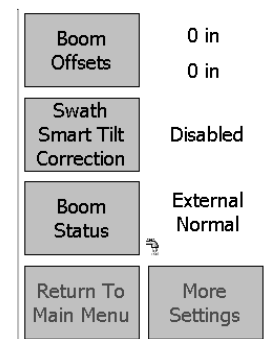
- * “Current Tilt Reading” - Will display angle of tilt in degrees.
- * “Calibrate To Level Ground” - Press this button when the boom is in a level position (0.0 degrees).
- * “Antenna Height” - Press this button to enter the antenna height in inches (cm) in relation to ground level.
- * “Disable Tilt Correction” - Press the button to disable tilt correction feature and return to settings menu.
- * Press “OK” to return to settings menu.



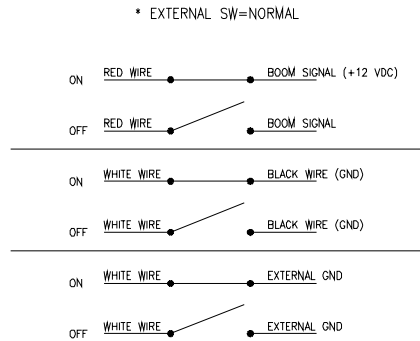
Note: The external tilt lightbar must also be calibrated using its remote “button box”. Please refer to the Raven lightbar user manual for calibration instructions.

Boom Status: Displays the control mode options in which GM and SM will recognize boom status. Press the “Boom Status” button to scroll through the choices.

- * “External Normal”: boom status can be controlled by connecting the single boom sense line (red wire) on interface cable to an external boom input line (+12VDC=boom on, 0VDC=boom off).
Note: if using with a Raven console, connect the red wire to the orange/white wire from the Raven console cable. Or boom status can be controlled by using the two boom sense lines (black=Grd & white=signal) on interface box (if white signal wire is grounded →boom = on; if white signal wire is not grounded →boom = off).

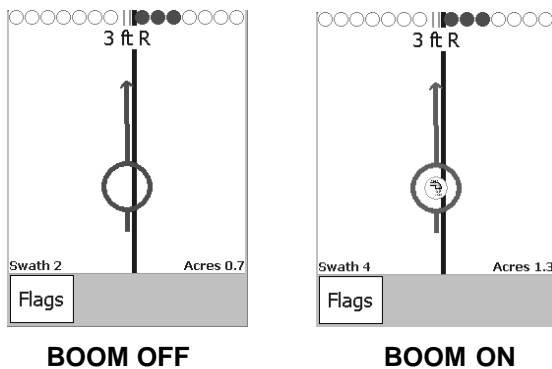


See wiring diagram below. **Note: if faucet with water is displayed on guidance screen GM and SM recognize that the boom status is on. Also, if CDI is red →boom status is off, if CDI is dark green →boom status is on.**



* “External Inverted”: Boom Status control is opposite of “External Normal” wiring options (opposite of the wiring diagram above).

“Manual: Use UpKey”: Boom status control is activated by using the UpKey on the PDA itself [press UpKey once to turn boom on (CDI will be dark green), press UpKey again to turn boom off (CDI will be red)]. Please see pictures below. **Note: while in the “Manual: Use UpKey” mode boom status can only be changed from the GuideMate guidance screen (boom status cannot be changed while viewing the SiteMate map).**



Remove Old Job Files: Displays current # of saved jobs.

Press “Remove Old Job Files” to enter the options screen. Then press “Continue” to select the number of days of job history to keep. The older job files will be deleted.

Units: Displays current mode, either in “English” or “Metric”.

- * Press the “Units” button to change modes.

Language: Displays the language in which GM software is displayed.

- * Press the “Language” button to scroll through the choices. **Note: English will be the only choice available. Subsequent software releases will have multiple languages to choose from.**

Remove Old Job Files	30 Saved Jobs
Units	English
Language	English
	Return To Main Menu

START JOB

- * **“New Job Name”:** allows user to assign a new job name.
- * **“Open Existing Job”:** allows user to select a previous job from the displayed list.
- * **“Cancel”:** return to GuideMate home screen.
- * **“Start Job”:** enters into “Confirm Settings” screen. If user does not assign a “New Job Name”, GM will assign a job name using the current date and time that is set on the iPAQ (JOB-MMDD-HHMM).

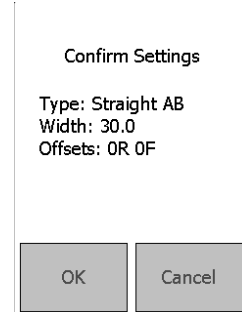
Job Name	
JOB-1024-1559	
New Job Name	Open Existing Job
Start Job	Cancel

Select Job From List	
JOB-1024-1525	Prev Page
JOB-1023-1446	
JOB-1023-1132	
JOB-1023-1119	
road rally	
	Next Page
OK	Cancel

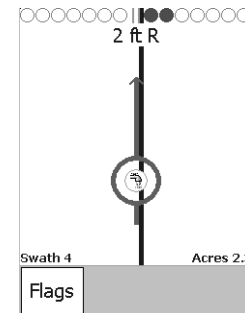
“Confirm Settings” screen will display the following:

- * Pattern (current swath pattern selected)
- * Width (current boom width programmed)
- * Offsets (current boom offsets programmed)

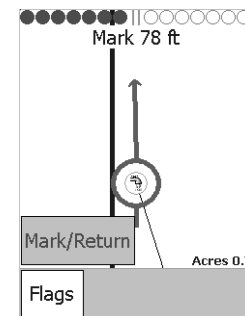
Press “OK” to start a new guidance job. **Please see the “Swath Pattern” descriptions within the “Settings” section for swathing instructions.**



While in the GM guidance screen, press the Flags button to access pre-set flags and/or the “Mark/Return” feature.



Mark/Return - After the “Mark/Return” button is pressed, GM will display distance back to the marked point, as well as show a line on the GM guidance screen to assist with returning to where the original point was marked. Press the “Mark/Return” button a second time to clear the “Mark/Return” mode.



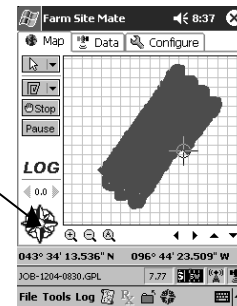
Once in the guidance mode of GM, user can press anywhere on the guidance screen to return to the GM options screen. Please find below the available buttons displayed on the GM options screen.

- * **“Reset A-B”** - Allows user to clear current A-B guidance points and re-set new A-B points without closing the current job. After A-B points are cleared, return to swath guidance screen and set new A-B points for continued guidance.
- * **“Recal A-B”** - Allows user to adjust the A-B line reference and all successive swaths to this adjusted point. User must determine the precise corrected position of the current swath line and position the machine to that point. Then press “Recal A-B” then “Continue” to adjust the A-B line reference.
- * **“GPS Status”** - Allows user to view DGPS information. (see “GPS STATUS” section for additional details).
- * **“SiteMate”** - Allows user to enter the SiteMate software (for viewing as-applied maps, etc.) Please see the FarmWorks SiteMate user’s guide for additional details.



From SiteMate, click on the GuideMate icon (blue star located on the left portion of screen near the bottom) to return to the GuideMate options screen.

Note: SiteMate coverage is active if on the left side of SM screen “LOG” is bold.



- * **“Lightbar Brightness”** - Allows user to adjust the display screen brightness of an external lightbar.

“Preset 1 (Night)” - automatically sets the brightness of the external lightbar for nighttime operation.

“Preset 2 (Day)” - automatically sets the brightness of the external lightbar for daytime operation.

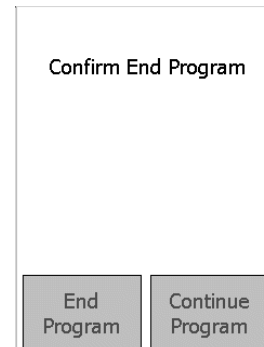
“Dimmer” and “Brighter” buttons allow user to manually adjust the brightness of an external lightbar. Continue to press either the “Dimmer” or the “Brighter” button until an acceptable level of brightness is displayed.



- * **“End Job”** - Allows user to close current guidance job and return to the GuideMate Home screen.
- * **“Return To Swath Guidance”** - Allows user to enter guidance screen with the Course Direction Indicator (CDI).

END PROGRAM

Will exit the GuideMate software program. Press the “End Program” button to close.



IPAQ INTERFACE INSTALLATION INSTRUCTIONS

063-0172-164

1. LIGHTBAR CONNECTOR HARDWARE

Remove the female jack screw on the lightbar DB9 connector and replace with the supplied screws and washers. See Figure 1.

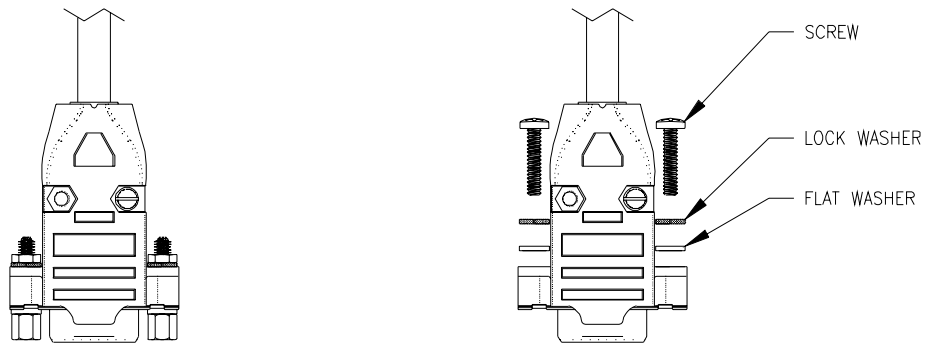


FIGURE 1

2. SOFTWARE

Receiver software must be revision 4.07 (or higher). Update as needed.
Lightbar software must be revision 2.3 (or higher). Update as needed.

3. PORT SETUP

Set ports A and B to 19200 baud.

Set output of receiver	FWD	A to B	Yes
	FWD	B to A	Yes

4. CABLES

Use cable 115-0171-215 Rev A (or later) with RPR 110.

Use cable 115-0171-272 Rev B (or later) with RPR 310/210.

Manual, Guidemate
12/02 REV B
016-0159-910