Raven Products Release Notes 2014

Raven Viper 4 - HMC # 693794

Product	Rev#	Date Released	Change Description
Viper 4	2.0.3.14	5/9/14	Fixes for display crashing
			Fixes for Sidekick Pro initial setup
	1.0.4	11.15.13	Added initial support for the following languages:
			Spanish, Portuguese, French, German, and Russian.
			Added profiles for Hagie Sprayers.
	1.03	10.1.13	New Product Release

Raven Viper Pro - HMC # 693401

<u>Product</u>	Rev #	Date Released		<u>Change Description</u>
Viper Pro	3.7	3.25.13	•	Reconstruction of sidekick Pro diagnostics screen
			•	Multiple enhancements to the handling of
				granular application with the ability for advanced
				bin-chaining, bin cleanout, and inter-bin delays.

Raven Envizio Pro / Envizio XL- HMC # 693321 / 693638

Product	Rev #	Date Released	Change Description
E-Pro / XL	3.7	12.11.13	HAS NOT BEEN TESTED BY HMC ENGINEERING
	3.6	07.02.13	SmarTrax MD Support
			Weather Station Support
			Prescription map rate bump
			Low speed mode enhancement with granular control
	2.3	07.08.10	Many additional features, but must have an activation key -
			must contact Raven support if software version is below
			2.3.

SCS 5000 - HMC # 693667

<u>Product</u>	Rev#	Date Released		<u>Change Description</u>
SCS 5000	2.0	6.1.12	•	This software does not have the "Hagie" Branded Logo

SCS 4600 -HMC # 690986

Product	Rev #	Date Released	Change Description
riouuct	KEV #	Date Released	<u>Change Description</u>

SCS 4600	2.0	6.1.12	•	No details listed
	1.90	12.15.10	•	New diagnostic screen for use with SideKick Pro
			•	PSI or RPM will display next to the product it is
				associated with on the run screen (if a RPM or PSI
				sensor is installed)
			•	Speed data now saves in data log files

SCS 460 - HMC # 690490

Product	Rev #	Date Released	<u>Change Description</u>
SCS 460			Nothing on website??
			•

Product Control Node - identifier "p279" - HMC # 693674

<u>Product</u>	Rev #	Date Released		Change Description
PCN	2.20.26	5/9/14	•	Fixes issue with speed calibration setting being lost
				on power cycle
	2.20.07	4.10.13	•	CanBus integration with HMC sprayer MY 2014
			•	Known issues - SCS 5000 does not function correctly
				when holding the "increase or decrease" button.

Single Product Node-identifier "p149" - HMC # 693404

<u>Product</u>	Rev #	<u>Date Released</u>		Change Description
SPN	1.54	5.6.13	•	Older SPN node (Gen I) - no release notes from Raven.

Single Product Node-identifier "p293" - HMC # 693404

<u>Product</u>	<u>Rev #</u>	Date Released		Change Description
SPN	2.15.07	7.11.13	•	Newest SPN node (Gen II) - no release notes from
				Raven.

Boom Sense Node-identifier "p143" - HMC # 693403

Product Rev # Date Released Change Description	
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BSN 1.70.02 5.20.13 • Single Boom Sense node – no release notes from	om Raven.
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SmarTrax 3D - identifier "p269" - HMC # 693552

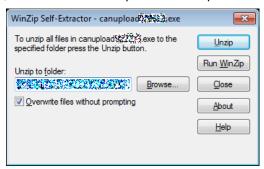
Product	Rev #	Date Released		<u>Change Description</u>
3D	6.02.09	5/9/14	•	
	6.0.17	6.22.13	•	SmarTrax steering node software. Modifications for front mounted booms.
	5.8.06	12.16.11	•	Initial software release for front mounted sprayers.

Hagie SideKick PRO- identifier "p359" - HMC # 701459

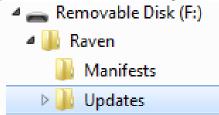
<u>Product</u>	Rev #	Date Released		Change Description
SideKick	1.21.04	9.4.13	•	New Software for Pumps

Downloading CANbus Firmware Updates

- 1. Download the CANbus software from www.hagiehelp.com
- 2. Once download is complete, locate the file and open the "canupload" self extracting file.



- 3. Select the "Browse..." button and use the browser to select the USB flash drive used with the Raven OS device.
- 4. Select the root directory of the USB flash drive and select the Unzip button to extract the CAN firmware to the drive. For example, "F" is the drive letter assigned in the following graphic:



4. Remove the USB flash drive from the home or office computer.

Import CAN Node Updates

To import CAN node firmware updates from a USB flash drive:



- Insert a USB flash drive used with the Raven OS device and containing the CAN node updates to be imported.
- 2. Touch the Administrator or User panel along the top of the main panel display to expand the panel.
- 3. Select the File Manager utility and touch the USB manager tab.
- 4. Touch the USB drop down and select the connected USB flash drive from which to import files.
- 5. Touch the file type drop down and select the "CAN Node Update" option.
- 6. Touch the Next button in the lower, right corner of the USB manager tab. The USB flash drive and folder structure will be displayed.
- 7. Use the displayed browser to locate and select the "canupload" folder downloaded from the Raven web site. Node update files currently stored on the USB flash drive will be displayed in the lower portion of the USB manager tab.

For Example.

"USB Drive Name" > canupload



- 8. It is recommended to touch the Select All option at the top of the file list to import all node updates from the USB flash drive. Node updates may be removed or deleted after the CANbus hardware update process has been completed.
 - Alternatively, touch the box displayed to the left of the node update file name to import only a specific node update if the file name is known.
- 9. With at least one CAN node update file selected, select one of the following import actions:
 - •Copy create a duplicate of the selected information on the Raven OS device, or



•Move - import the selected information to the Raven OS device and remove the information from the USB flash drive.

The Import Files prompt will be displayed.

- **10.** Verify the list of files to be imported is correct. If the list requires further configuration, touch the Cancel button in the upper, right corner of the display to return to the USB Manager tab.
- 11. Touch the Import button to begin the file transfer process.

Installing CANbus Firmware Updates

To apply a firmware update to a CANbus system component:



- 1. Touch the Administrator or User panel along the top of the main panel display to expand the panel.
- 2. Select the System Manager utility and touch the Hardware Update tab.

3. In the upper portion of the Hardware Update tab, select a specific node to be updated.

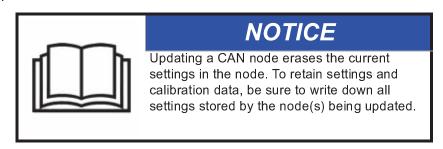
Note: It is recommended to take note of the program number (PGM #) for the node selected. In case of problems with the node update, this number will be required to select the appropriate program number for recovering the node. If problems should arise please contact Hagie Customer Support at 800-247-4885.

- 4. Next, use the Versions Available scrolling list to select the appropriate update to apply to the selected CANbus node.
- 5. Touch the Apply Update button to update the CANbus firmware on the selected node. The Raven OS device will install the selected firmware update. Repeat the process to update any other CANbus nodes as necessary or required.
 - If a problem is encountered during the firmware update process, please contact Hagie Customer Support at 800-247-4885.

E Updating CAN Nodes via the Envizio Pro

Envizio Pro field computers with software version 2.2 or higher and CAN firmware version 10 or higher are capable of programming nodes on the CANbus directly through the field computer and connected cabling using a USB flash drive with the CAN Update program.

Note: Before trying to update a CAN node, make sure the node is communicating properly over the CANbus. If the node is not communicating properly, the field computer will be unable to update the node.



CAN node updates will be made available periodically on the Raven Applied Technology web site:

www.ravenhelp.com

Note:

The .hex update file must be located in a folder labeled "CANupload" on the root of the USB flash drive (e.g. "G:\canupload") used with the field computer. If the update files are downloaded from the Raven web site, the required file structure will be created when the files are extracted.

To Update CAN Nodes

Important: DO NOT remove power or unplug any cabling connections during the node update process. It is recommended to start the machine and keep the engine running during the update process to maintain constant power over the CANbus system. If the update process fails to complete the update successfully, the node may become unresponsive. Unresponsive nodes will need to be returned to Raven for repairs.

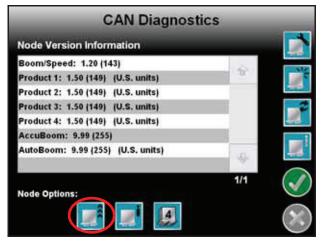
1. Start the field computer and touch the Information icon in the upper, right corner of the Home screen.



2. Touch the icon on the About Envizio Pro screen to display the CAN Diagnostics screen.

Note: The current CAN Firmware version is displayed on the CAN Diagnostics screen.

- 3. Insert the USB flash drive with the required .hex files into an available USB port on the field computer.
- 4. On the CAN Diagnostics screen, select a node to update and then select the to begin the CAN Update Program.



5. The Updates screen displays a list of available node updates. This screen also displays the firmware version to which each node will be updated if the update is applied.



6. Touch the Accept oicon to start the update.

Note: If the field computer cannot communicate with the selected node, the CAN Update Program will display an error. Troubleshoot the node and retry the update.

7. The field computer begins communicating with the selected node to update. If communication is successful, the field computer will begin the update by erasing the node's memory.

Note: The field computer may take several minutes to prepare and apply the software update to the node. If errors are encountered during the process, re-apply the node update.

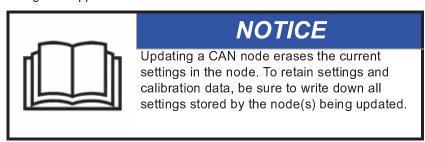
8. To update other nodes via the CANbus repeat step 6 through 7.

D Updating CAN Nodes via the Viper Pro

Viper Pro field computers with software version 3.0 or higher and CAN firmware version 16 or higher are capable of programming nodes on the CANbus directly through the Viper Pro using a USB flash drive with the CAN Update program.

Note:

Before trying to update a CAN Node, make sure the node is communicating properly over the CANbus. If the node is not communicating properly, the Viper Pro will be unable to update the node. It is recommended to keep the machine engine running during the update process to ensure proper voltage is supplied to the CANbus nodes.



The CAN Update program and node updates are available on the Raven web site:

www.ravenhelp.com

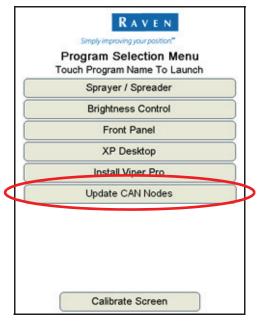
To Update CAN Nodes

1. Start the Viper Pro and access the Program Selection Menu screen.

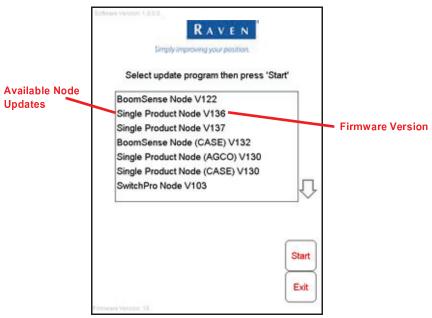
Note: If the field computer is already powered up, touch the **Menu** button and select **Exit**. Select the **Exit** to **Menu** option on the Exit Viper screen.

2. Insert the USB flash drive with the CAN Update program and required .hex files into an available USB port on the Viper Pro field computer.

3. On the Program Selection Menu screen, select the option labeled "**Update CAN Nodes**" to begin the CAN Update Program.



4. The Update CAN Nodes screen displays a list of available node updates. This screen also displays the firmware version to which each node will be updated if the update is applied.



5. Touch the node update to apply.





Up to five single product nodes may be used in some applications. If more than one node is on the system, the node selection buttons will be displayed below the update list.

- 6. To start the node update:
 - a. If a non-product node (i.e. Boom Sense/Speed, AccuBoom, AutoBoom Node) is selected, Touch the **Start** button in the lower right corner of the screen to begin the update.
 - b. For single product control nodes, select the **Node** button corresponding to the product node to update.
 - For product controller nodes, select the first available node channel to which the controller node is assigned.

Note: If the Viper Pro cannot communicate with the selected node, the CAN Update Program will display an error. Troubleshoot the node and retry the update.

7. The Viper Pro begins communicating with the selected update. If communication is successful, the Viper Pro will begin the update by erasing the node's memory.

Note: The Viper Pro may take several minutes to prepare and apply the software update to the node.

8. When the update is completed, Viper Pro will display a Programming Complete prompt. Touch the **OK** button to continue.

Note: If errors are encountered during the node update re-apply the node update.

9. To update other nodes via the Viper Pro CANbus repeat step 5 through 8.

Node Recovery Mode

Note:

The node program number will be required to properly recover the node. If the program number is unknown, contact a local Raven dealer or the Raven Technical Support Center for additional assistance with appropriate program numbers for recovering a CANbus node.

To attempt to recover a CANbus node on which a failed update has occurred:

- 1. From CAN Update screen, touch the Recov. button in the lower, left corner of the display.
- 2. Disconnect the rectangular connectors on the node for approximately 5 seconds to cycle power to the node. Ensure any status LEDs are off or stop flashing before reconnecting the node.

3. On the field computer, touch the versions field and use the scrolling list to select the appropriate node program to reset the node. The node program and version numbers will be displayed in the following format:



4. Touch the Start button to attempt to recover the node. If the node recovery fails, or for additional support, contact a local Raven dealer.