iQView
User's Guide
(v. Gasoline)

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IQView Indicators, Keys and Navigation:

A Liquid Crystal Display screen will show virtual gages, soft key prompts, control screens, and diagnostic information.

SOFT KEYS:

The Soft Key response will depend on the prompt that is displayed on the LCD screen next to the soft key.

LED DISPLAY:

Five Light Emitting Diodes (LED) will show key functions of the iQView and engine operation.

HARD KEYS:

The Hard Key response is assigned to one key with one operation; the HOME key is one of these keys.

LED Display:

LED: Labeled PWR – Color; Blue

Indicates whether there is Power to the iQView.

LED Labeled 1 – Color; Green

Indicates the status of the Forward valve signal.

LED Labeled 2 – Color; Green

Indicates the status of the Reverse valve signal.

LED Labeled ALM – Color; Amber

Indication of an Engine alarm from the CAN

LED Labeled FLT – Color; Red

Indication that a Fault has been identified on the CAN

HARD Keys

Throttle DOWN Turtle

HOME

Throttle UP Rabbit

Hard Keys

HOME:

Pressing the HOME key will return the operator to the HOME screen.

The Turtle and the Rabbit Keys:

If the Hard Keys are enabled on the unit, these Hard Keys will control throttle function.

SPECIAL PROMPTS:

Signal:

This Signal from Engine Status indicator will confirm that the iQView is receiving a speed signal from the engine. This signal is required for nominal operation.

This prompt will display the type of signal that has been set in Tach Mode.

MAG - Magnetic Pick-up type signal.

CAN – Controller Area Network type signal.

NONE - No speed signal of any mode is sensed at the iQView.

If NONE is displayed, this is not normal operation.

SPECIAL PROMPTS

AutoFeed:

This status indicator will confirm that the iQView AutoFeed section is:

ON: The auto feed is enabled.

OFF: The auto feed is not enabled.

MAN: The auto feed is under the MANUAL control of the DEVICE I/O section.

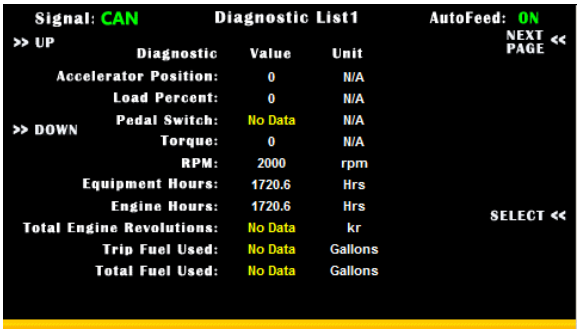
DIAGNOSTICS using SOFT Key Navigation:

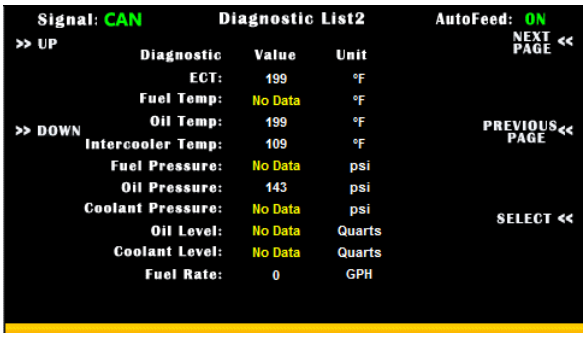
DIAGNOSTICS:

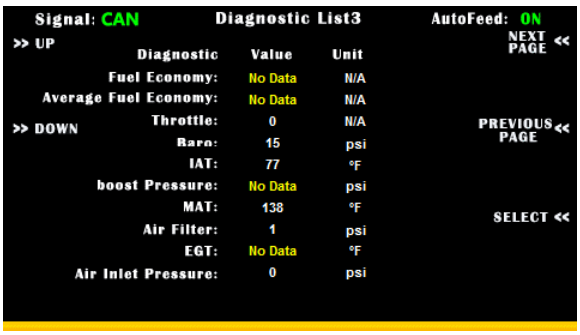
From the HOME screen, pressing the Soft Key to the left of the >>DIAGNOSTIC prompt will send the user to the Diagnostic pages.

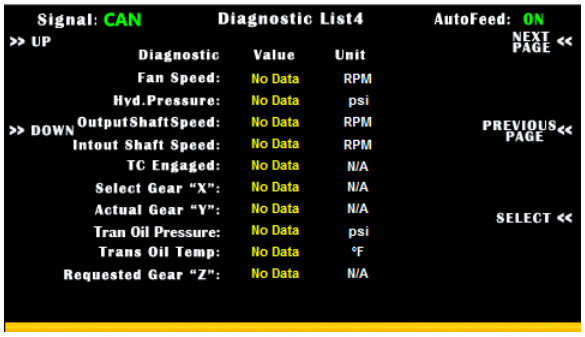
To exit any diagnostic screen, press the HOME button.

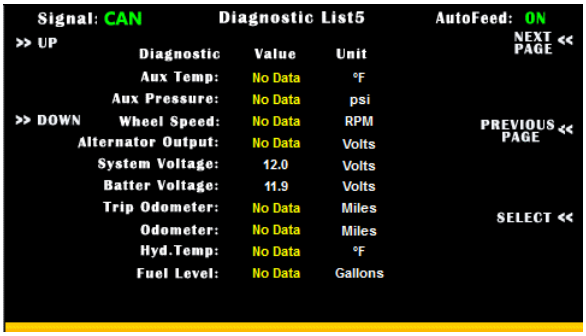
There are seven (7) DIAGNOSTIC Pages or Lists available.

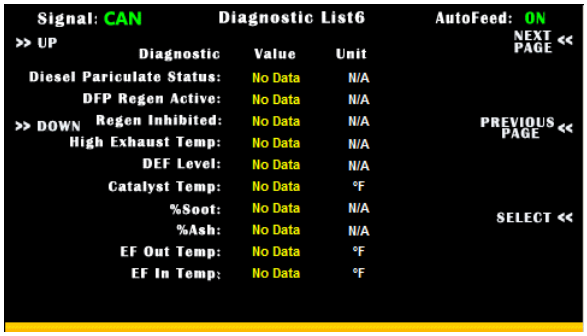


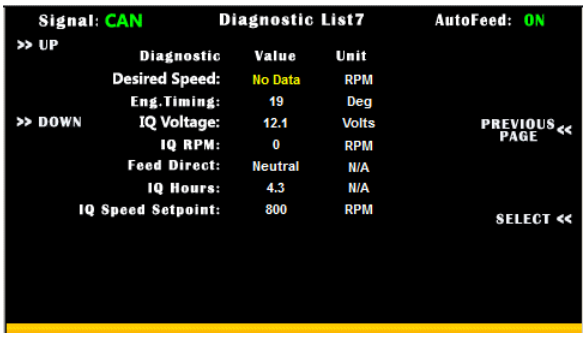






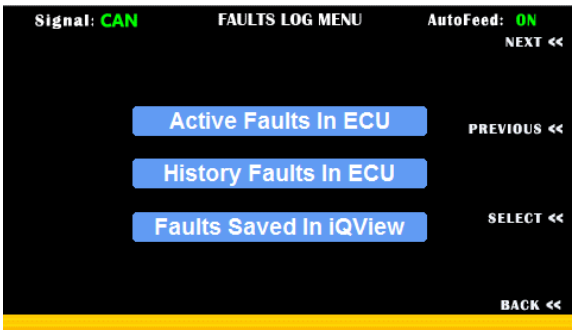






FAULTS:

Pressing the soft key to the left of >>FAULTS will displays Faults detected on the CAN:



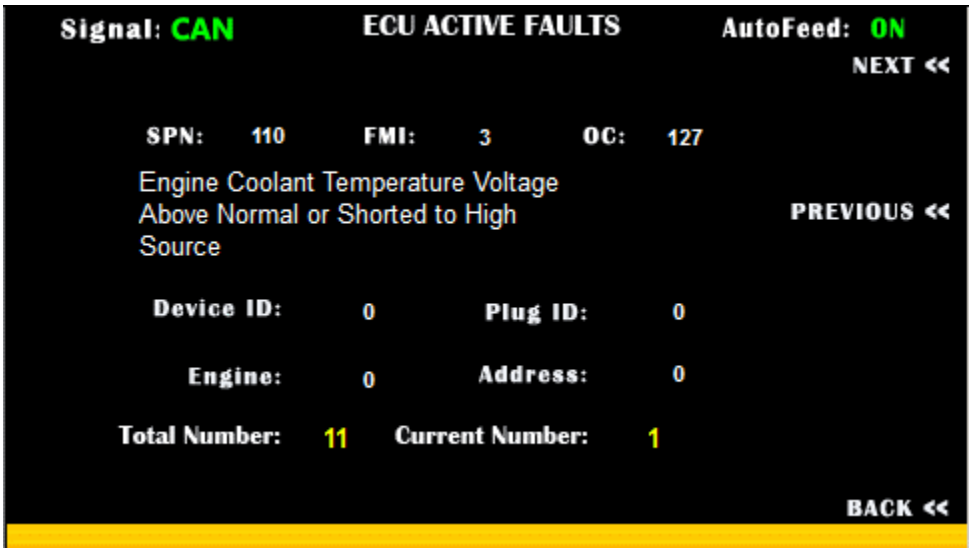
When activated, the menu will allow reads from the Engine Control Unit (ECU).

Active Faults in ECU; that are now occurring.

History Faults in ECU; earlier faults and have been cleared.

Faults Saved in iQView; the last ten faults are saved here (both historical and active.)

FAULTS: LOG



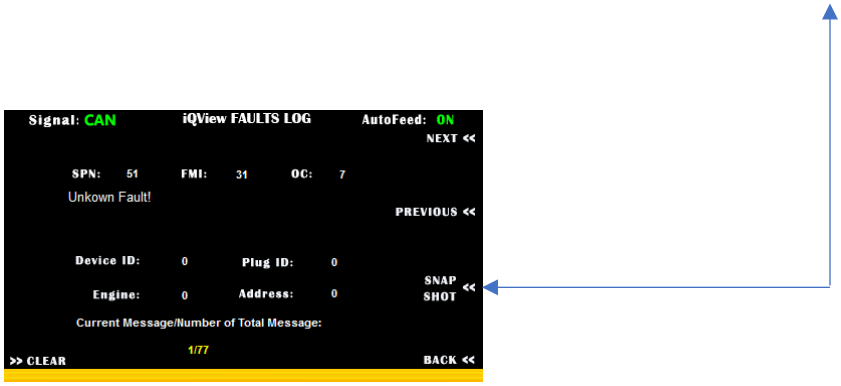
Faults on the CAN will appear on the ECU ACTIVE FAULTS page.

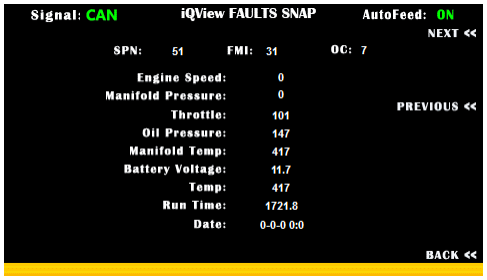
SPN: – Suspect Parameter Number; defined by the CAN J1939

FMI: – Fault Mode Indicator; defined by the CAN J1939

OC: – number of Occurrences accumulated by the identified fault.

Available from the iQView FAULTS LOG, pressing the soft key to the right of SNAP SHOT<< will save information about the condition of the engine and store this information to the memory of the iQView.





TARGET SPEED

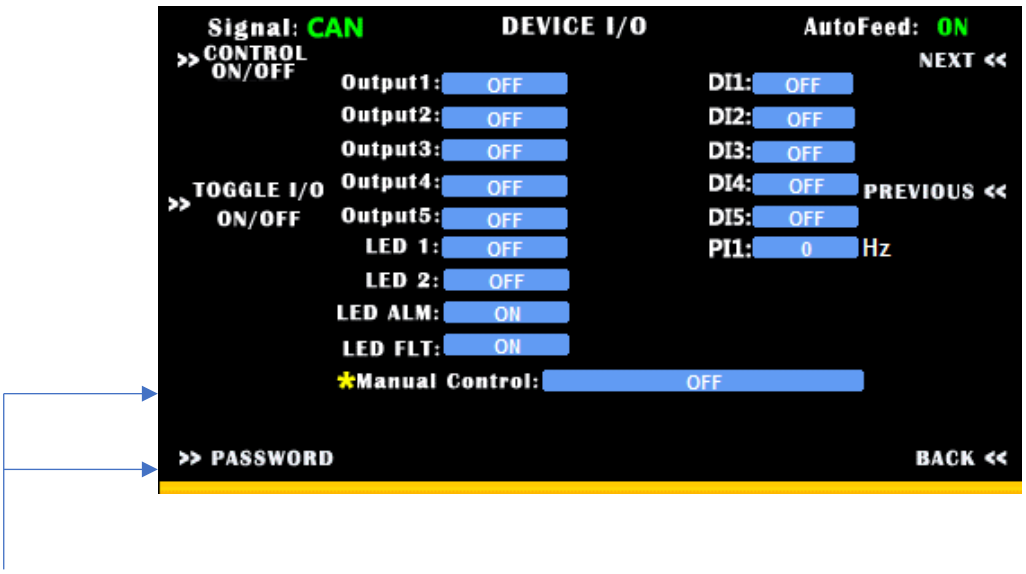
Pressing the Soft Key to the right of SPEED<< prompt will display the TARGET SPEED menu.

Target Speed menu will allow RPM changes using fractions of FULL rpm as a starting point; or the target speed can be a customized user defined set of values.

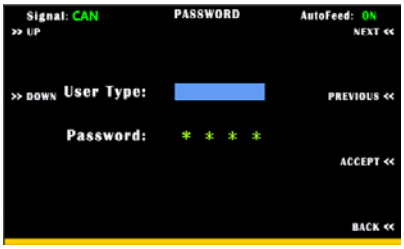
DEVICE I/O, (Device Input / Output)

Pressing the soft key to the right of the DEVICE I/O << prompt

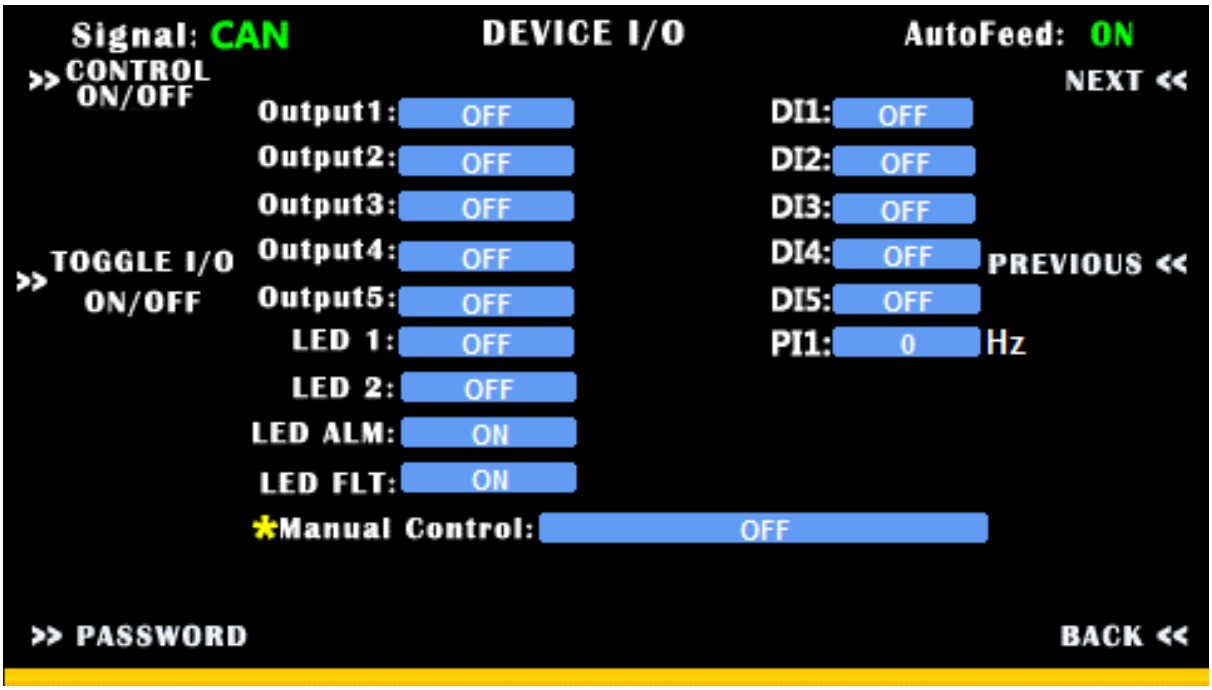
will display the DEVICE I/O menu.



This menu is protected by a password and will lead to the password page for user input. Specific lines needing a password are found with an asterisk.



DEVICE I/O, (Device Input / Output)



OUTPUTS:

In Manual control, after the password has been accepted, the user can troubleshoot system operation by manually controlling the state, ON or OFF, of the output circuits, the valve signals, and the operation of the LED indicators.

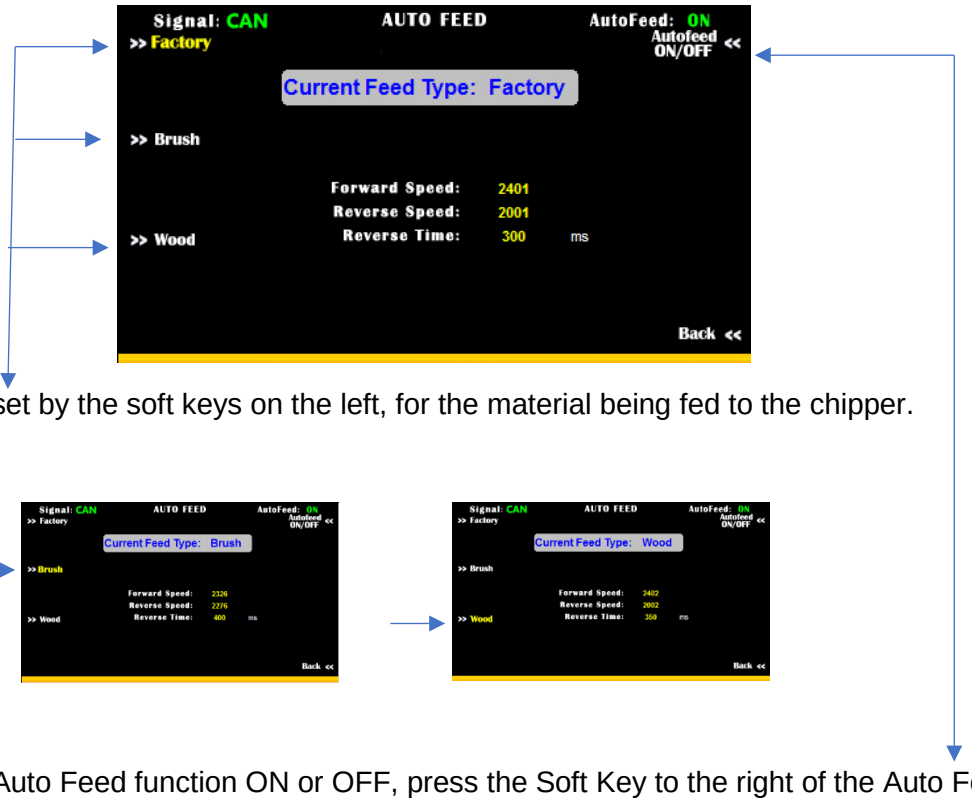
INPUTS:

The inputs, labeled DI1 through DI5, are always available and the iQView will show the status, as ON or OFF.

PI1 is specifically assigned to Magnetic Pick-up diagnosis, by displaying the frequency of the signal source, in cycles per second also known by the abbreviation Hz.

AUTO FEED:

Pressing the soft key to the right of the AUTO FEED<< prompt will display the Auto Feed menu:



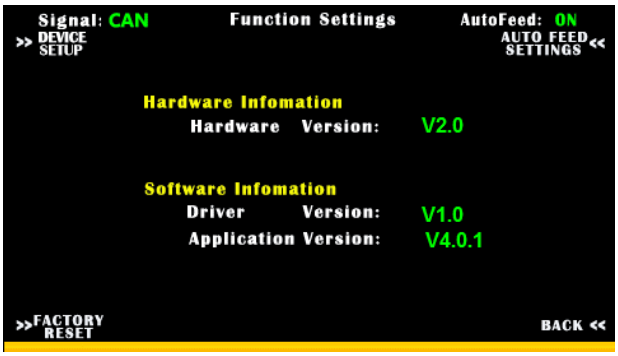
Select the preset by the soft keys on the left, for the material being fed to the chipper.

(Also)

To switch the Auto Feed function ON or OFF, press the Soft Key to the right of the Auto Feed ON/OFF << prompt, which is available on all three of the current feed pages.

CONFIG:

Press the soft key to the right of the CONFIG<< to enter the Function Settings menu



Press the soft key associated with the prompted element you wish to configure

Configure Options:

Device Set-up

Set-up the general operation of the iQView

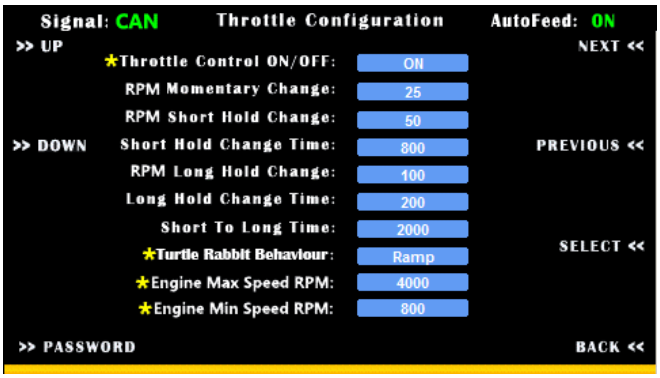
Auto Feed Settings

Set-up the specific operation of the Auto Feed

Function Settings: Throttle Configuration

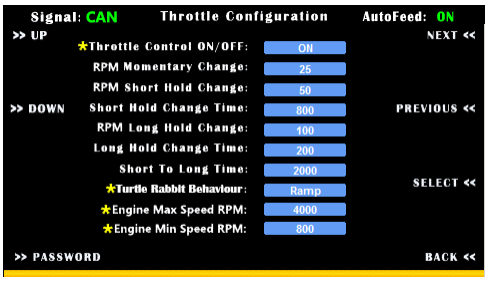
Press the soft key to the left of >>DEVICE SETUP to configure the iQView

Throttle Control menu:



Note: this is a password protected menu:

Throttle Configuration:



Throttle Control ON/OFF:

This will determine if the throttle control is is being used by the iQView. The two settings are ON and OFF. When it is set to OFF the iQView will not broadcast any signals to reach any target set speed. The other menu functions for the throttle control are disabled and are not visible or selectable on screen. When it is set to ON this will enable the iQView to send the throttle set point on the CAN BUS. This parameter is configurable by the user access control.

RPM Momentary Change:

This is the amount of RPM the momentary press will change the target set speed. This is configurable between 25 RPM to 150 RPM. The default value is 100 RPM

RPM Short Hold Change:

This is the amount of RPM the short hold press will change. Configurable between 100 RPM and 300 RPM. Default is 250 RPM.

Short Hold Change Time:

This is the amount of time the button needs to be held to start a short hold change. Configurable between 100 ms to 999 ms. Default is 300 ms

RPM Long Hold Change:

This is the amount of RPM the long hold press will change. This will be configurable between 300 RPM and 999 RPM. Default is 500 RPM.

Long Hold Change Time:

This is the amount of time the button needs to be held to start a long hold change. Configurable between 100 ms and 999 ms. Default is 200 ms.

Short to Long Time:

This is the default time that will be used to change from a short hold to a long hold. Configurable from 1000 ms to 3000 ms. Default is 2000 ms.

Turtle Rabbit Behaviour:

Ramp is an incremental change of RPM and Quick Jump is a quick change of RPM

Engine Max Speed RPM:

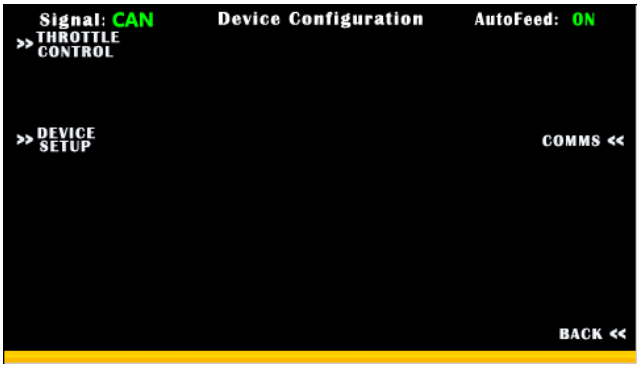
This parameter is the scaling of the Rabbit and Turtle buttons, and is configurable under the User Access Control. Default is 4000 RPM. Maximum is 8000 RPM. Raising the Engine Maximum Speed RPM manually will not effect a change the maximum RPM of the engine which is set and governed by the engine controller.

Engine Min Speed RPM:

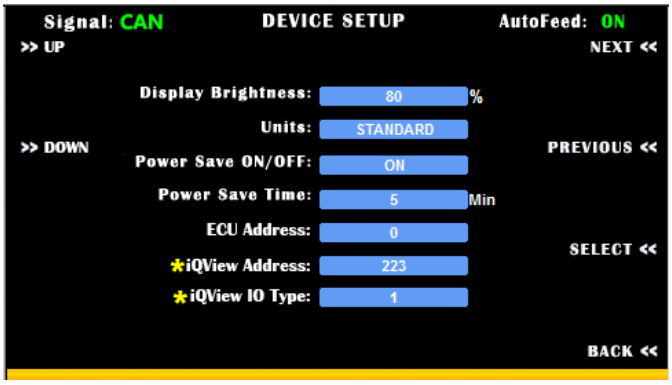
This parameter is the scaling of the Rabbit and Turtle buttons and is configurable with the User Access Control. Default is 800 RPM. Maximum is offset to Max RPM.

Function Settings: Device Setup

Press the soft key to the left of >>DEVICE SETUP to configure the iQView



Device Setup menu:



Display Brightness: will control the LCD Screen in percentage of full brightness output.

Units: Switches between STANDARD and METRIC units displayed.

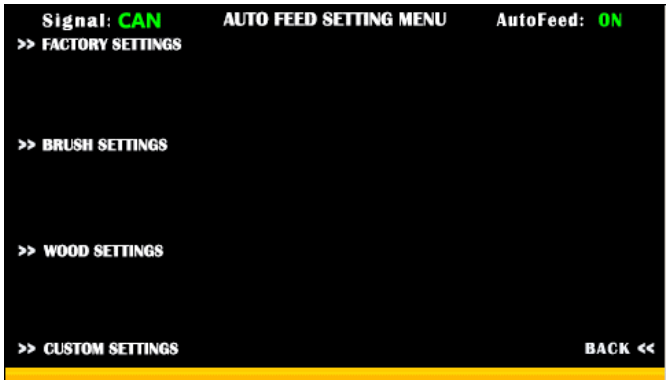
Power Save ON/OFF: Turns the LCD screen OFF after the set input on the Power Save Time line.

Power Save Time: is the set period of time the LCD screen is ON before it will switch OFF, pressing any key will restore the LCD.

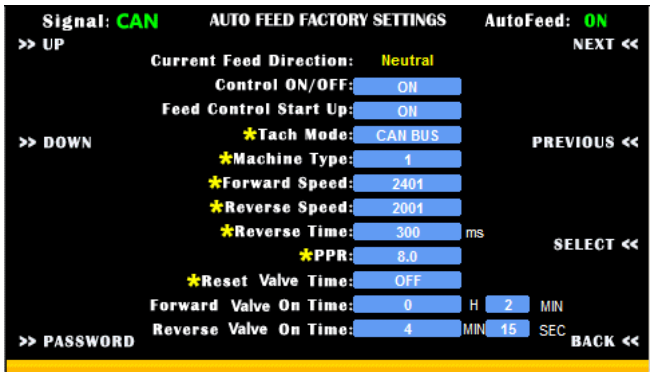
Warning: Do not change the default settings or values of the ECU Address, the iQView Address, or the iQView IO Type; the iQView will not operate correctly if these parameters are altered.

Function Settings Auto Feed

Press the soft key to the right of AUTO FEED SETTINGS to configure the Auto Feed



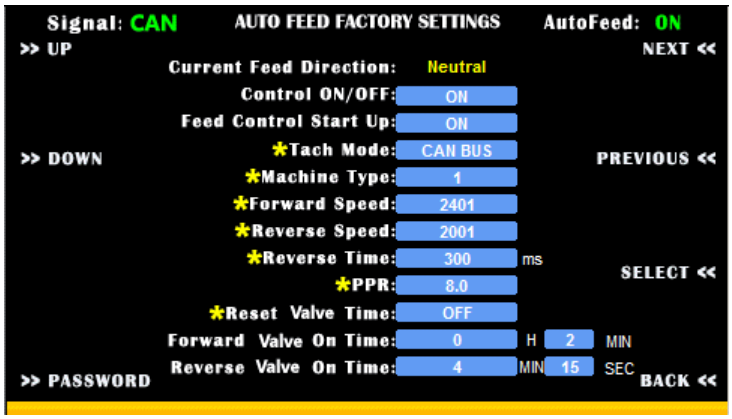
Press the soft key to the left of >> FACTORY SETTINGS to change factory presets.



This is a password protected menu.

The lines protected by a password are displayed with an asterisk (*).

Auto Feed Factory Settings:



Current Feed Direction:

This prompt displays the current direction of the feed wheels.

Control ON/OFF:

This command will turn Auto Feed functions ON or OFF.

Feed Control Start Up:

This command will allow the operator the option of having the Auto Feed ON or OFF when the engine is started and the iQView is powered.

Tach Mode:

This command will allow the switching of the signal source from a CAN BUS signal to MAG PICKUP signal, or some other compatable analog signal

Machine Type:

This is the command for the valve output signals to be configureable for valve solenoids that are active from a high signal (power) or valve solenoids that are active at a low signal (ground). Type 0 will operate active low signals and Type 1 will operate active high signals.

Forward Speed:

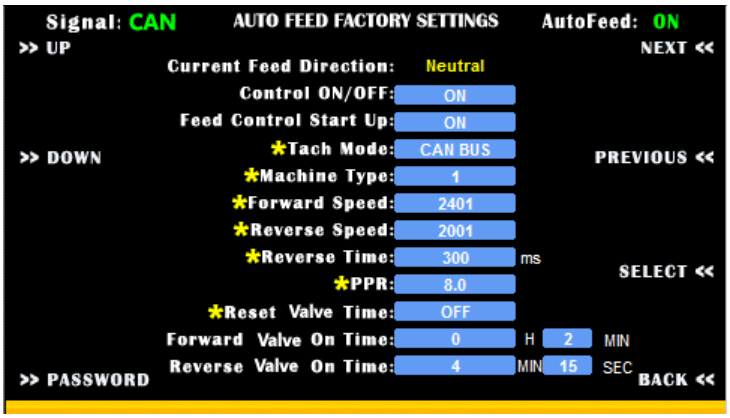
The Forward Speed is the set RPM that will set the feed wheels forward toward the chipper teeth. Configurable between 1200 RPM to Max RPM, of the engine, in 1 RPM increments.

Reverse Speed:

The Reverse Speed is the set RPM that will stop the forward motion of the feed wheels, to start the reverse time. Configurable between 1050 RPM to (Forward Speed RPM – 150 RPM) in 1 RPM increments.

Reverse Time;

The Reverse Time is the time the Reversing Valve is active setting the feed wheels reverse from the chipper teeth. Configurable between 50 ms to 3000 ms in 50 ms increments.



PPR:

PPR or Pulses Per Revolution. In the Tach Mode, set for MAG PICKUP signal, the PPR value is set for the number of signals provided for every revolution on the the device providing the signal. This could be the number of teeth on a fly wheel or the frequency of an alternator.
Configurable between 0.5 PPR to 255.0 PPR in 0.5 PPR increments.

Reset Valve Time:

ON or OFF will reset any accumulated time on the forward and reverse valves to 0 H 0 MIN 0 SEC.
If reset previous values are not retrievable.

Forward Valve On Time:

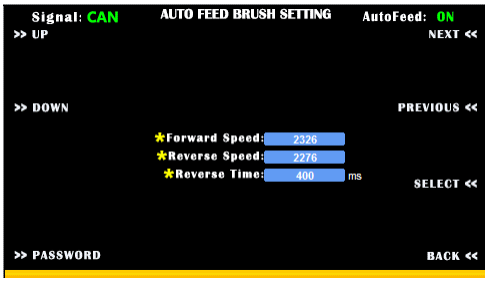
This is the time the forward vales are sent a signal from the iQView.

Reverse Valve On Time:

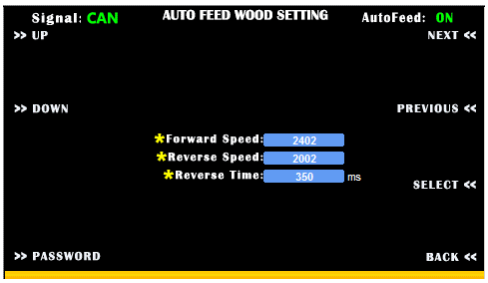
This is the time the reverse valves are sent a signal from the iQView.

Function Settings Auto Feed

Press the soft key to the left of >> BRUSH SETTINGS to customize brush chipping.

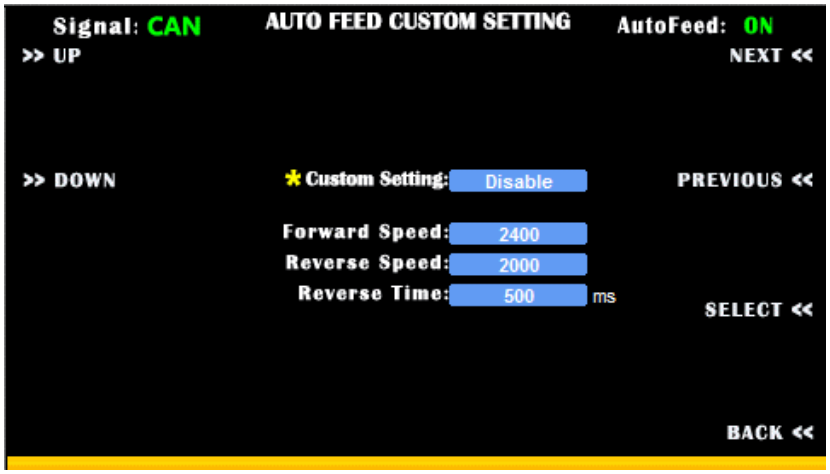


Press the soft key to the left of >> WOOD SETTINGS to customize wood chipping.



Function Settings Auto Feed Custom:

Press the soft key to the left of the >> CUSTOM SETTINGS key for the user to customize an Auto Feed setting.



FACTORY RESET:

If desired or required, a full factory reset is avialible here at this soft key!

Engaging the Factory Reset will return the iQView to the settings programmed by the Factory.

HOME

At any time or place press the HOME hard key, to return the HOME.