

ENGINEERING
TOMORROW



User Manual

Service Tool Screens

JS1 PVE Joystick



Revision history

Table of revisions

Date	Changed	Rev
October 2016	First edition	0101

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JS1 PVE Joystick Service Tool screens

The PVE Joystick Service Tool Screens are intended to be used with the PVE Guide Application (Part Number 70198078Vxxx.lhx). The screens were developed to support the PVE Guide application, so that the Developer/User can monitor Joystick data and set EE variables (if desired). The Service Tool (.p1d) consists of nine different screens:

- PVE Summary
- Prop 1/PVE 1 Detail
- Prop 2/PVE 2 Detail
- Prop 3/PVE 3 Detail
- Prop 4/PVE 4 Detail
- Prop 5/PVE 5 Detail
- Pushbutton Detail
- Set System Variables
- PVE Fault Summary

The PVE Summary screen is the Default screen and when opened should be displayed.

Application download note

When downloading the PVE application the Application *Type* may need to be entered in order to complete the download process. If during the download the PLUS+1® Service Tool requires the Application Type (for the PVE PLUS+1® GUIDE application), the type is *Joystick*.

Inspector	
Description:	JS1-H_PVE
System ID:	
Type:	Joystick
Version	

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PVE Summary screen

The **PVE Summary** screen is used to display (in quick visual representation) the status of the current connected PVE Joystick.

Select the **PVE Summary** screen.

This will be the default screen when the opening the 70201197Vxxx.P1D file and will provide an overview/status of the JS1 CAN joystick.

The Summary screen will indicate which Proportional inputs and Buttons have been configured on the JS1 and will also show the current status of the PVE joystick.

Software The Software section will display the Application Version, the current Node Address and Identity Number of the PVE Joystick.

System Variables This section indicates the Joystick Configuration, PVE Feedback Voltage, Power Supply Volts and the button to change to the Set System Variables page.

Prop Inputs/PVE Drivers If configured, the Proportional Inputs/PVE Drivers will indicate the Prop Input (Axis position: -10000 to 10000), Driver Out (Command: Min% to Max%, typically 2500 to 7500) and Prop/Driver/Config Fault status. If the PVE is configured for a Proportional Input, then the **Prop x/PVE x Detail** button will be available. The button changes screens to the Prop/Driver Detail page.

Pushbutton Inputs The Pushbutton Detail button changes screens to the detail page.

Fault Summary The PVE Fault Summary button changes screens to the Fault Summary page.

JS1 Outputs PVE/Neutral Switch/Output Enable section will indicate the commanded value for the specific PVE output. This block will also indicate the PVE Neutral Switch Output value and the PVE Output Enable value.

Digital Outputs will indicate the status of the PB outputs (PB1 thru PB12) and will also indicate the status of Prop 1 & Prop 2 direction switches.

PVE Template Version This is the version of the Software Template that was used to create the PVE Guide Application.

From the **PVE Summary** screen, additional screens can be navigated. The **Set System Variables**, **Prop x/PVE x Detail**, **Pushbutton Detail**, and **PVE Fault Summary** screens can be accessed via the buttons on the **PVE Summary** screen.

The **Set System Variables**, **Prop x/PVE x Detail**, **Pushbutton Detail**, and **PVE Fault Summary** screens can be accessed via the buttons on the **JS1 PVE Summary** screen.

PVE Summary screen

The screenshot displays the 'PVE Summary' interface. On the left is a 3D model of a joystick. The main area is divided into several sections:

- Software:** App Version (111), Node Address (0x33), Identity Number (70198078).
- System Variables:** PVE Joystick Type (Extended), Power Supply Volts (13.600), PVE Feedback Volts (13.642), Power Fdbk Volts InRange (In Range).
- Prop Inputs Scaled/PVE Drivers:** Five drivers (1-5) each showing Prop Scaled (0.00), Driver Out (50.00), and status (No Prop Fault, No Driver Fault, Hwd Present).
- Pushbutton Inputs:** Pushbutton Detail.
- JS1 Outputs:** PVE/Neutral Switch/Output Enable, PVE1-4 Outputs (50.15), PVE5 Output (50.15), PVE Neutral Switch Output (Off), PVE Output Enable (Enabled).
- Digital Outputs:** PB1-PB12 (Off), Prop 1/2 Direction Sw A/B (Off).
- Fault Summary:** PVE Fault Summary, PVE Template Version (1.00).

The Danfoss logo is visible in the top right corner of the interface.

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Software

Log data: The Software section displays data/information about the PVE Guide application. The values indicated are controlled by the guide developer.

Item	Type	Range	Description
App Version	Autotype	0-999	Version number for the Guide Application. This is the responsibility of the Guide Developer to maintain and adjust if necessary. Default (template) value = 1
Node Address	U8	0-255	CAN Source Address of the PVE controller. The value is displayed as a hexadecimal value. Default (template) value = 0x33 (51 dec)
Identity Number	U32	0-2097151	CAN Identity Number of the PVE controller (32 bit value type, but for J1939 NAME data only 21 bits are used). Default (template) value = 0

PVE Summary screen

System Variables

Log data: The System Variables section displays system data/information about the PVE PLUS+1® GUIDE application.

Item	Type	Range	Description
Joystick Configuration	BOOL	FALSE = 0 (Basic) TRUE=1 (Extended)	Displays the current Joystick Configuration. The Boolean value is either Extended (TRUE) or Basic (FALSE) joystick configuration. Basic config mode (FALSE)—Both the Joystick Commands and PVE outputs are scaled between non-adjustable values. Proportional input commands are scaled between -10000 to 10000. PVE Outputs are scaled between 2500 (25%) to 7500 (75%). For example; when the Proportional Input command is -10000, then corresponding PVE Output command is 2500 (25%). When the Proportional command is +10000, then the corresponding PVE Output command is 7500 (75%). Extended config mode (TRUE)—Both the Joystick Commands and PVE outputs are scaled between adjustable (EE parameters) values for the specific Prop Input/PVE Output. Default value = FALSE (Basic Joystick Configuration)
PVE Feedback Voltage	BOOL	FALSE = 0 (Disabled) TRUE=1 (Enabled)	Displays the current PVE Feedback Voltage configuration setting. Disabled —When Disabled (TRUE), there is no additional scaling of the PVE output and it is a function of the Battery voltage. Enabled —When Enabled (FALSE), the PVE Output is scaled based on a ratio of the PVE Power Feedback voltage and the Supply Voltage. Default (template) value = Enabled
Power Supply Volts	U16	0-37.500 Vdc	Displays the current PVE Feedback Voltage configuration setting. Disabled —When Disabled (FALSE), there is no additional scaling of the PVE outputs and they are a function of the Battery voltage. Enabled —When Enabled (TRUE), all of the PVE Output is scaled based on a ratio of the PVE Power Feedback voltage and the Supply Voltage. Default: Enabled
PVE Feedback Volts	U16	0-37.500 Vdc	Voltage (Vdc) value of the Power Supply Feedback input (X100p15). This value is used to scale the PVE output when the Power Feedback is Enabled. Units = Vdc, resolution = 0.001

Screen navigation buttons

Item	Description
Set System Variables	Navigate to the Set System Variables screen.

Prop Inputs/PVE Drivers

The following data will be displayed only if the PVE is configured for that specific Proportional Input.

Log data: The Prop Inputs/PVE Drivers section displays data about each of the (5) Proportional Inputs/PVE Drivers.

Item	Type	Range	Description
Prop X - Prop Input	S16	-10000 to +10000	Displays the current value of the Proportional Input command. Range: -10000 to +10000, Resolution 0.01 %
Prop X - Driver Out	U16	0 to 10000	Displays the current output value of the PVE Driver. Range: 0 to 10000, Resolution 0.01 %

PVE Summary screen

Log data: The Prop Inputs/PVE Drivers section displays data about each of the (5) Proportional Inputs/PVE Drivers. (continued)

Item	Type	Range	Description
Prop Fault	BOOL	FALSE = No Prop Fault TRUE = Prop Fault	Proportional Fault status is a common fault and indicates if the Proportional Input has faulted due to either a Voltage Too High, Voltage Too Low, Redundancy or Calibration condition. If a Prop fault exists, then the PVE Output should be set to neutral. No Prop Fault = No active Proportional faults Prop Fault = An active Proportional fault condition exists.
Driver Fault	U16	0x0000 = No Fault 0x8001 = Input Command Too Low 0x8002 = Input Command Too High	Driver Fault status is a Fault output from the PVE Driver function block. Driver Faults reported can be Input Command value Too High or an Input Command value Too Low. No Fault = No active Proportional faults Input Command Value Too High = Input Command is Too High Input Command Value Too Low = Input Command is Too Low
Hwd Present	BOOL	FALSE = Output Hwd Not Present TRUE = Output Hwd Present	Hardware Present indicates if the Output Hardware is present on the PCBA.

Screen navigation buttons

Item	Description
Prop x/PVE x Detail	Navigate to the specific Proportional Input/PVE screen.

Pushbutton Inputs

Log data: No specific data is being logged for the Pushbutton Inputs (on the Summary Screen).

Item	Description
Pushbutton Detail	Navigate to the Pushbutton Detail screen.

Fault Summary

Log Data: No specific data is being logged for the Fault Summary (on the Summary Screen).

Item	Description
PVE Fault Summary	Navigate to the PVE Fault Summary screen.

PVE Summary screen

JS1 Outputs

The following data will be displayed only if the PVE is configured for that specific Proportional Input.

Log Data: The PVE/Neutral Switch/Output Enable section displays PVE output value for each of the (5) Proportional Inputs/PVE Drivers. The Digital Outputs section displays the Output status for each of the 12 Pushbuttons and Direction 1 and 2 switches.

Item	Type	Range	Description
PVE 1 Output to PVE 5 Output	U16	0 to 10000	Displays the current output value of the PVE Driver. If the PVE Feedback Voltage is Disabled, then the PVE Output is not scaled. If the PVE Feedback Voltage is Enabled, then the PVE Output is scaled based on the ratio of the PVE Power Feedback Voltage and the Supply voltage. Range: 0 to 10000, Resolution 0.01 %
PVE Neutral Switch Output	BOOL	FALSE = Off TRUE = On	Displays the current value of the PVE Neutral Switch. All of the PVE Outputs must be in the Neutral position w/directional switches (low) in order for the PVE Neutral Switch Output to be Off. If any PVE Output is active, then the PVE Neutral Switch Output will be On. Range: Off or On
PVE Output Enable	BOOL	FALSE = Off TRUE = On	Displays the current value of the PVE Output Enable. The PVE Output Enable will be Off, if any of the Prop Faults are active OR the Power Feedback Voltage is Out Of Range. Range: Off or On
PBx Output	BOOL	FALSE = Off TRUE = On	Displays the Output status for each of the 12 Pushbuttons and Direction 1 and 2 switches. Range: Off or On

PVE Template Version

Item	Type	Range	Description
PVE Template Version	U8	0 to 255	Displays the version of the PVE Simple Application template. The template version is within a locked block and can not be adjusted. This value is different from the Application Software version. Range: 0 to 255

Prop X/PVE X Detail screen

The **Prop X/PVE X Detail (Proportional Inputs/PVE Outputs 1 -5)** screen is used to display more detailed data and EE (Non-Volatile memory) values for the each Proportional Inputs/PVE Outputs. Data is displayed for the Proportional Input, PVE Driver and also has the EE (Non-Volatile memory) values for that specific Proportional Input/PVE Output.

The screen shot below is shown for the **Prop 1/PVE 1 Detail**. Prop/PVE 2-5 screens have the same layout.

The screenshot displays the 'Prop 1/PVE 1 Detail' configuration screen. It is divided into several sections:

- Proportional Input 1:** Includes 'Enable' (Enabled), 'Position Command' (0.00), 'Invert' (Disabled), and 'Proportional Direction Switch Inputs' (Direction_1A and 1B are Off). It also shows 'Proportional Input Faults' with counts for 'Input Voltage Too Low', 'Input Voltage Too High', 'Prop Calibration Fault', and 'Redundancy Voltage Fault'.
- PVE Driver 1:** Shows 'Prop Input Scaled Command' (0.00%), 'PVE Output' (50.09%), 'PVE Driver Command' (50.00%), 'PVE Control Block Enable' (Enabled), 'PVE Driver Status' (0x0000 = Status OK), 'PVE Driver Faults' (0x0000 = No Fault), and 'Joystick Invert - Non-Volatile Memory' (Not Invert).
- Graph:** A line graph titled 'PVE Output' showing the relationship between 'Prop Input Scaled Command' (x-axis, -100.00% to 100.00%) and 'PVE Output' (y-axis, 20.00% to 80.00%). Key points on the curve are labeled: PVE_MaxCmnd_Pctx100_B (80.00%), PVE_MaxCmnd_Pctx100_A (25.00%), PVE_NeutOffset_Pctx100_B (50.01%), and PVE_NeutOffset_Pctx100_A (49.99%).
- JS1-H PVE Extended - Non-Volatile Memory:** A grid of settings for 'Joystick Max Pct B', 'Joystick Max Pct A', 'PVE MaxCmnd Pctx100 B', 'PVE MaxCmnd Pctx100 A', 'PVE NeutOffset Pctx100 B', and 'PVE NeutOffset Pctx100 A', each with a 'Current Value' and a 'Download' button.
- Summary:** 'Set Prop1/PVE1 NV Defaults' (SET Valve1 Defaults) and 'PVE1 EE Range Faults' (No Fault).

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Prop X/PVE X Detail screen

Proportional Input X (Proportional Inputs 1 to 5)

Log Data: The Proportional Input X section displays detailed status information on the specific Proportional Input.

Item	Type	Range	Description
Enable	BOOL	FALSE = Disabled TRUE = Enabled	Displays the Enable/Disable status of the Proportional Input. If Enabled, the Proportional Input will be scaled and will drive a PVE Output. Range: Disabled or Enabled
Invert	BOOL	FALSE = Disabled TRUE = Enabled	Displays the status of the Proportional Input Invert EE setting for that proportional Input. If the EE setting is set to Invert, then the Proportional Command is inverted within the Guide application prior to the PVE scaling logic. Range: Disabled or Enabled
Position Command	S16	-10000 to +10000	Displays the current value of the Proportional Input command. Range: -10000 to +10000, Resolution 0.01 %
Direction "X"A	U8	0 to 3	Displays the current status of the Direction Switch "X"A position. 0 = Off 1 = On 2 = Error 3 = Not Avail
Direction "X"B	U8	0 to 3	Displays the current status of the Direction Switch "X"B position. 0 = Off 1 = On 2 = Error 3 = Not Avail
Input Voltage Too Low	BOOL	FALSE = Fault Inactive TRUE = Fault Active	Displays the Input Voltage Too Low fault status for the Proportional Input. Range: Fault Inactive or Fault Active
Input voltage Too Low Fault Count	U8	0 to 255	Indicates the fault count for the Input Voltage Too Low fault.
Input Voltage Too High	BOOL	FALSE = Fault Inactive TRUE = Fault Active	Displays the Input Voltage Too High fault status for the Proportional Input. Range: Fault Inactive or Fault Active
Input voltage Too High Fault Count	U8	0 to 255	Indicates the fault count for the Input Voltage Too High fault.
Prop Calibration Fault	BOOL	FALSE = Fault Inactive TRUE = Fault Active	Displays the Prop Calibration fault status for the Proportional Input. Range: Fault Inactive or Fault Active
Prop Calibration Fault Count	U8	0 to 255	Indicates the fault count for the Prop Calibration fault.
Redundancy Voltage Fault	BOOL	FALSE = Fault Inactive TRUE = Fault Active	Displays the Redundancy Voltage fault status for the Proportional Input. Range: Fault Inactive or Fault Active
Redundancy Voltage Fault Count	U8	0 to 255	Indicates the fault count for the Redundancy Voltage fault.

Prop X/PVE X Detail screen

PVE Driver X (PVE Drivers 1 to 5)

Log Data: The PVE Driver X section displays detailed status information on the specific PVE Driver.

Item	Type	Range	Description
Prop Input Scaled Command	S16	-10000 to +10000	Displays the scaled Proportional Input command that feeds into the Guide - PVE Driver block. This value is the Proportional Command after the Joystick Max Pct scaling limits have been applied. For the Basic Joystick Config, the Max Pct scaling limits are -10000 and +10000. For the Extended Joystick Config, the Max Pct scaling limits are based on the EE (Non-Volatile) settings. Range: -10000 to +10000, Resolution 0.01 %
PVE Driver Command	U16	0 to 10000	Displays the current output value of the PVE Driver. This is the PVE Driver Command after the PVE Max Commands have been applied. For the Basic Joystick Config, the Max Pct scaling limits are 2500 and 7500. For the Extended Joystick Config, the PVE Max Command Pct scaling limits are based on the EE (Non-Volatile) settings. Range: 0 to 10000, Resolution 0.01 %
PVE Output	U16	0 to 10000	Displays the current output value of the PVE Driver. If the PVE Feedback Voltage is Disabled, then the PVE Output is not scaled. If the PVE Feedback Voltage is Enabled, then the PVE Output is scaled based on the ratio of the PVE Power Feedback Voltage and the Supply voltage. Range: 0 to 10000, Resolution 0.01 %
PVE Control Block Enable	BOOL	FALSE or TRUE	Displays the enable status of the PVE Driver. If Disabled, then the PVE Output is set to Neutral. If Enabled, then the PVE Output is allowed to deviate from Neutral. Range: False or True
PVE Driver Status	U16	0 to 65535	Bitwise code to indicate the PVE Driver status 0x0000 = Status OK 0x8008 = Plus Max/Plus Start/Minus Max\Minus Start\Neutral value Out Of Range.
PVE Driver Faults	U16	0 to 65535	Bitwise code to indicate the PVE Driver Fault status 0x0000 = No Fault 0x8001 = PVE Driver Input Command Too Low 0x8002 = PVE Driver Input Command Too High

Non-Volatile Memory (Proportional Inputs/PVE Outputs 1 to 5)

[See the diagrams shown for Prop 1/PVE 1 Detail \(Prop X/PVE X Detail screen on page 10\) for a graphical explanation on the EE Names \(Item column in the following table\).](#)

Parameter Data

Item	Type	Range	Description
Joystick Max Pct B	S16	5000 to 10000	Sets the Max Joystick Command Pct scaling limit for the positive direction. The EE logic will only allow the value to be set between the range values. Anything outside of the range will be declared as an error and the value will be set to the Default. Range: 5000 to 10000, Resolution 0.01 % Default: 10000
Joystick Max Pct A	S16	-5000 to -10000	Sets the Max Joystick Command Pct scaling limit for the negative direction. The EE logic will only allow the value to be set between the range values. Anything outside of the range will be declared as an error and the value will be set to the Default. Range: -5000 to -10000, Resolution 0.01 % Default: -10000

Prop X/PVE X Detail screen

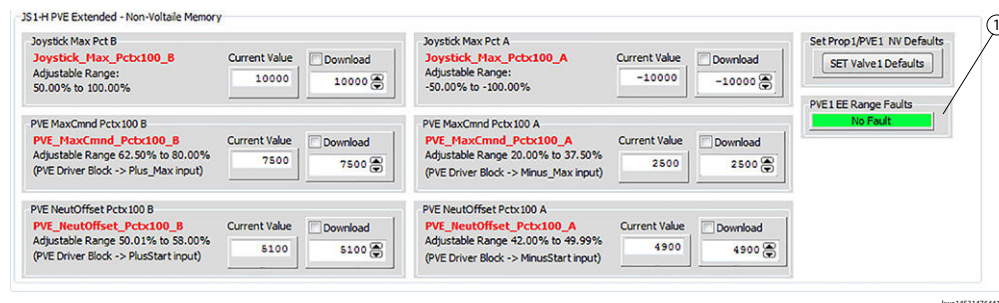
Parameter Data (continued)

Item	Type	Range	Description
PVE MaxCmd Pctx100 B	U16	6250 to 8000	Sets the Max Command Pct scaling limit for the PVE Output Command. The EE logic will only allow the value to be set between the range values. Anything outside of the range will be declared as an error and the value will be set to the Default. Range: 6250 to 8000, Resolution 0.01 % Default: 7500
PVE MaxCmd Pctx100 A	U16	2000 to 3750	Sets the Min Command Pct scaling limit for the PVE Output Command. The logic will only allow the value to be set between the range values. Anything outside of the range will be declared as an error and the value will be set to the Default. Range: 2000 to 3750, Resolution 0.01 % Default: 2500
PVE NeutOffset Pctx100 B	U16	5001 to 5800	Sets the Max Joystick Command Pct scaling limit for the negative direction. The logic will only allow the value to be set between the range values. Anything outside of the range will be declared as an error and the value will be set to the Default. Range: 5001 to 5800, Resolution 0.01 % Default: 5100
PVE NeutOffset Pctx100 A	U16	4200 to 4999	Sets the Max Joystick Command Pct scaling limit for the negative direction. The logic will only allow the value to be set between the range values. Anything outside of the range will be declared as an error and the value will be set to the Default. Range: 4200 to 4999, Resolution 0.01 % Default: 4900
Joystick Invert Prop	BOOL	FALSE = Not Invert TRUE = Invert	Inverts the Proportional command before it is scaled/processed. Range: FALSE = Not Invert, TRUE = Invert

Non-Volatile Memory—PVE X EE Range Faults (Proportional Inputs/PVE Outputs 1 to 5)

If an EE value has been changed to a value that is outside the range settings for that particular EE variable (and then downloaded), a common EE Range Fault will be generated. The resulting EE value will also be set to the Default value. See [Non-Volatile Memory \(Proportional Inputs/PVE Outputs 1 to 5\)](#) on page 12, for the corresponding Default values of the EE variables.

PVE 1 EE Range Faults



1. Common EE out of Range Fault

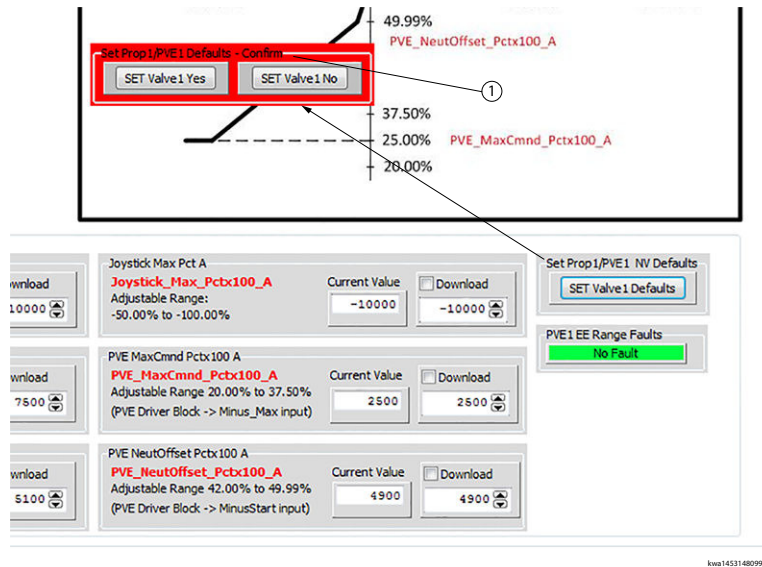
Non-Volatile Memory—Set Valve X Defaults (Proportional Inputs/PVE Outputs 1 to 5)

The PLUS+1® Service Tool user has the option to set the Non-Volatile Memory values back to their respective default values. This can be done on an individual Proportional/PVE Output or on a system level. The following describes setting the defaults for an individual Prop X/PVE X Output.

Prop X/PVE X Detail screen

Within the Non-Volatile Memory section is the button for resetting the specific default values for that Proportional Input/PVE Output. When the **Set Valve X Defaults** button is selected, the default confirmation window will be displayed (pop-up). The user has 10 seconds to confirm or deny the default request. After 10 seconds the window will disappear and defaults will not be set.

Set Prop 1/PVE1 Defaults – Confirm



1. When the **Set Valve 1 Defaults** button is selected, a confirmation window will appear to either confirm or deny the Set Defaults. If no confirmation (either "Yes" or "No") has been made within 10 seconds, then the window will disappear and the defaults will NOT be set.

Pushbutton Detail screen

The **Pushbutton Detail** screen is used to display more detailed data for the each Pushbutton.



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Status information

Those buttons that are not configured are listed as: *Not Avail.*

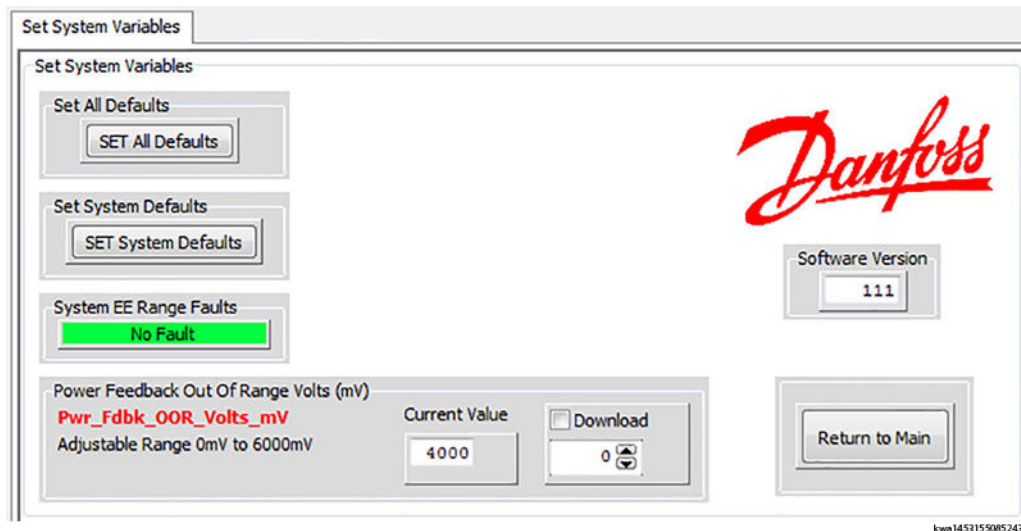
Log Data: The Pushbutton Detail section displays status information about each Pushbutton.

Item	Type	Range	Description
Pushbutton X - Status	U8	0 to 3	Displays the current status of the Pushbutton. 0 = Off 1 = On 2 = Error 3 = Not Available
Pushbutton X – Button Enabled	BOOL	FALSE =Disabled TRUE = Enabled	Displays the Enable status of the Pushbutton. The Pushbutton must be Enabled in order for the button actuation logic (Guide Code) to function. Disabled – button actuation logic is disabled. Enabled – button actuation logic is enabled and button command will drive the Pushbutton output. Note: This value is based on if the Pushbutton is configured as a part of the Joystick.

Set System Variables screen

The Set System Variables screen is used to change specific System Non-Volatile (EE) variables or to set System Defaults or All Application Defaults.

Set System Variables screen



System Non-Volatile Memory (EE) Variables

System Non-Volatile Memory (EE) Variables

Item	Type	Range	Description
Power Feedback Out Of Range Volts	U16	0 to 6000	Sets the Out Of Range Limit for the Power Feedback Voltage. If the difference between the Power Feedback Voltage input and the Supply Voltage input exceeds the Out Of Range Limit, then the OOR fault is detected, and the PVE Output Enable is set to FALSE (should disable all of the PVE Outputs). The EE logic will only allow the value to be set between the EE range values. Anything outside of the range will be declared as an error and the value will be set to the Default. Range: 0 to 6000, Resolution 1mV Default: 4000

Set System Variables—System EE Range Faults

If the Power Feedback Out Of Range value has been changed to a value that is outside of its range limits (and then downloaded), a System EE Range Faults will be generated. The resulting EE value will also be set to the Default value. See table in topic [System Non-Volatile Memory \(EE\) Variables](#) on page 16, for the corresponding Default values of the EE variables.

Set System Variables screen

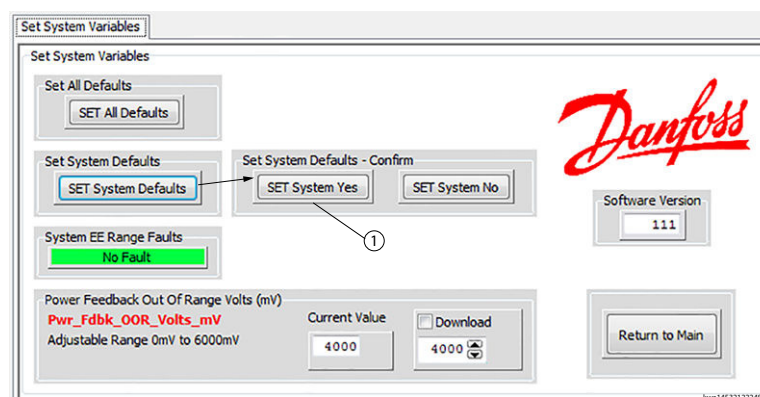
Set System Variables—Set System Defaults

The PLUS+1® Service Tool user has the option to set the reset either the System parameters or reset all of the PVE parameters back to their respective default values. Within the Set System Variables screen are buttons for resetting either just the System Variables (Extended Joystick Config, Power Feedback Disable, Power Feedback Out Of Range Volts) or resetting all of the PVE EE variables back to their respective default values.

Set System Defaults

When the **Set System Defaults** button is selected, the Default confirmation window will be displayed (pop-up). The User has 10 seconds to confirm or deny the default request. After 10 seconds the window will disappear and defaults will not be set.

Set System Defaults—Confirm



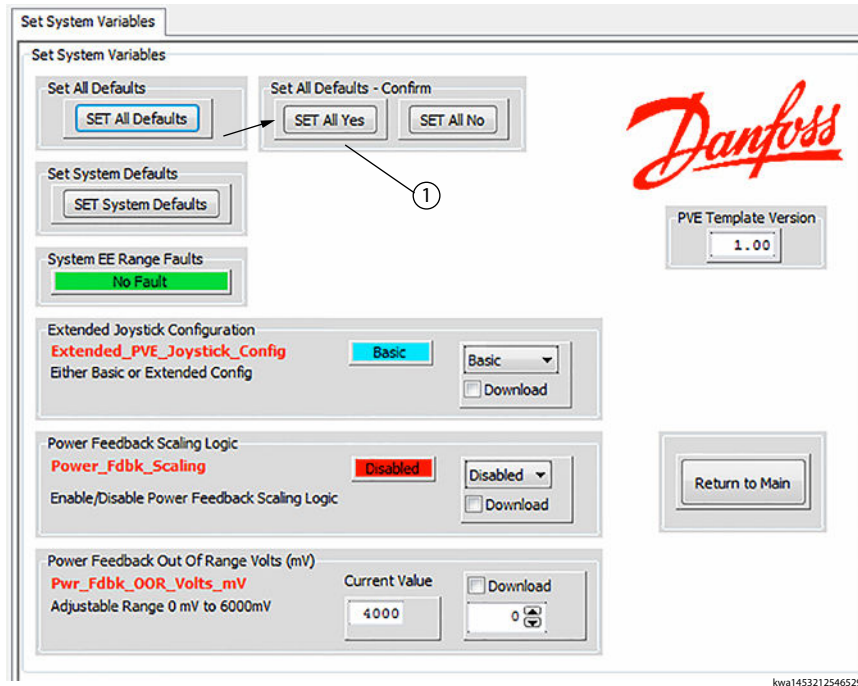
1. When the **SET System Defaults** button is selected, the confirmation window will appear to either confirm or deny the set defaults. If no confirmation (either "Yes" or "No") has been made within 10 seconds, then the window will disappear and the defaults will NOT be set.

Set All Defaults

When the **Set All Defaults** button is selected, the Default confirmation window will be displayed (pop-up). The User has 10 seconds to confirm or deny the default request. After 10 seconds the window will disappear and defaults will not be set. If "Yes" is selected all the EE defaults will be reset (*Proportional Input EE variables, PVE Output EE variables, etc*).

Set System Variables screen

Set All Defaults—Confirm



1. When the **SET All Defaults** button is selected, the confirmation window will appear to either confirm or deny the set defaults. If no confirmation (either "Yes" or "No") has been made within 10 seconds, then the window will disappear and the defaults will NOT be set.

PVE Fault Summary screen

The **PVE Fault Summary** screen is used to provide fault status for the PVE Joystick (Proportional Inputs/PVE Drivers, Pushbuttons and System Faults).

Proportional input and Pushbutton configuration

If a Proportional Input is not enabled on the Joystick, the Fault data will not be shown. If a Pushbutton is not configured, the Button status will indicate: *Not Avail.*

The screenshot displays the 'PVE Fault Summary' interface. At the top left, the title 'PVE Fault Summary' is shown. The main area is divided into several sections:

- Prop1/Driver1 Faults:** Proportional 1 Faults (No Prop Fault), Driver 1 Faults (No Driver Fault), PVE1 Output Present (Hwd Present), PVE1 EE Range Faults (No Fault).
- Prop2/Driver2 Faults:** Proportional 2 Faults (No Prop Fault), Driver 2 Faults (No Driver Fault), PVE2 Output Present (Hwd Present), PVE2 EE Range Faults (No Fault).
- Prop3/Driver3 Faults:** Proportional 3 Faults (No Prop Fault), Driver 3 Faults (No Driver Fault), PVE3 Output Present (Hwd Present), PVE3 EE Range Faults (No Fault).
- Prop4/Driver4 Faults:** Proportional 4 Faults (No Prop Fault), Driver 4 Faults (No Driver Fault), PVE4 Output Present (Hwd Present), PVE4 EE Range Faults (No Fault).
- Prop5/Driver5 Faults:** Proportional 5 Faults (No Prop Fault), Driver 5 Faults (No Driver Fault), PVE5 Output Present (Hwd Present), PVE5 EE Range Faults (No Fault).

On the right side, there is a 'Software Version' box showing '111', a 'System Status/Faults' box showing 'System EE Range Faults (No Fault)', and a 'Power Fdbk Volts InRange (In Range)' box. A 'Return' button is also present.

The bottom section, 'Pushbutton Status/Digital Output Hwd Present', contains 12 individual pushbutton status boxes (PB1 to PB12). Each box shows 'Button Status' (Off) and 'PB# Output Present' (Hwd Present). Below these are four 'Direction Switch' boxes (1A, 1B, 2A, 2B), all showing 'Hwd Present'.

The Danfoss logo is visible in the top right corner of the screen area.

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