Quick Reference Sheet HMI Systems - CAN Create v2



Create a CAN Protocol for PKU Switchpack

Select Switches tab to configure Connect Window Help Connect \rightarrow Open Connect To CAN Number of switches on device • PKU2X00 Window Open Message Window... CAN start bit position for each switch (Tx/Rx) Select Messages tab for Open Message Log Window... Momentary/Latching (2, 3, or 4) states • Open BLE Window... CAN IDs • Open Terminal Window... Message length . Messages Switches States Palette Outputs Brightness Open Programming Window... Message rates Open 560VPC Window... 8 Switches Baud rate Switch #1 • Open 568WICD Window... Open PKU2X00 Window... Transmit State: (Module → CAN) Message Bit Index: 8 States: Momentary -0000 Radio Control Mask: Below is an example of Peer To Peer J1939 CAN IDs Switchpack has source address OE Controller has source address 01 Receive State: (CAN → Module) Messages Switches States Palette Outputs Brightness States: Four Message Bit Index: 8 • Transmitted Message: (Module → CAN) CAN ID: 18EF010E 8 Bytes: Note: If Eight or Sixteen states are selected, the LED state is controlled directly by the "Receive State". The "Active When" and "Applies To Switches" conditions are ignored. Period: 500 ms On Change: 50 ms Active States: Received Message: (CAN → Module) State #1, Off CAN ID: 18EF0E01 State #2, Solid Red ID Mask: 03FFFFFF On the right side of the Switches area you can view the active states of each switch CAN Speed: 250kbps Ŧ The image below shows the state configuration for each switch

Configure Switch States

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Select States tab to				
Connect states to buttons				
• Configure when states are activa	ted			
Configure LED properties for each	1 state			
ages Switches States Palette Outputs Brigh	ness			
Switch State: State #2, Solid Red				
Active When:	Applies To	Switches	:	
Transmitted State: Don't Care 💌	v	V	1	
Received State:				
LED State:				
Color: #1 - Red	•			
Deskishi (ar				
	•			
Stude: C-It-I				
Style. Solid				
Speed: 1				

Brightness Settings

	Messages	Switches	States	Palette	Outputs	Brightness	
Individual brightness control for the normal and backlight states of the LEDs Set bit position and length for each	← Brig	htness Contr Primary Brigh Bit Index Bit Count Backlight Bri Bit Index Bit Count	ols: ttness: : 0 ghtness: : 0 :: 0 :) = Disable) = Disable	d) d)	

Save Configuration

ĺ	File					
		New				
		Open				
	Save					
	Save As					
	Close					
File <u>n</u> ame:		ButtonConfig	.eep			
Save a	as <u>t</u> ype:	Intel Hex Files	(*.eep)			

Save configuration as a .eep file to load onto the switchpack

Program the Module

Connect	Window	Help						
Connect To CAN								
Oper	Open Message Window							
Open Message Log Window								
Oper	Open BLE Window							
Oper	Open Terminal Window							
Open Programming Window								
Program Verify Interrogate Read								
File Name:								
eep								

- □ Verify Checks device/config compatibility
- Interrogate Check firmware on device
- Program send configuration to device
- Read Pull configuration off device

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 Make sure the connection status indicates that you have an active connection (blue border)



View CAN Traffic - Verify Configuration

Connect		Window	Help			
-	Conn	ect To CAN				
	Open	Message W	indow			
	Open Message Log Window					
	Open BLE Window					
	Open Terminal Window					
	Open	Programmi	ng Window			

Receive:							
Message	Length	Data	Period	Count			
📝 18EF010Eh	8	00 71 00 00 00 00 00 00	203	2263			

- View the active CAN traffic from the switchpack
- CAN data should change as buttons are pressed
- The controller will need to interpret this message and send a response message to activate the LEDs
 - See sections "Create CAN Protocol..." and "Configure Switch States"
- The lower section of the Messages window can be used to send CAN messages back to the switchpack to simulate a response to active the LEDs.