

AN705 – Flashing Setpoint Files

Introduction

When setpoint files are updated by Axiomatic to work with customer specifications, a setpoint file flash may be required. Axiomatic's J1939 devices can be upgraded or flashed using the Axiomatic Electronic Assistant. The Axiomatic Electronic Assistant is available on the <u>Axiomatic website</u> as P/Ns: AX070502 or AX070506K.

Flashing Setpoint Files:

- 1. Save the setpoint file (a .xml file) on your computer drive.
- Ensure you have the latest release of the Axiomatic Electronic Assistant software. This software is obtained from the Axiomatic website at: <u>www.axiomatic.com</u>. From the website, go to the "EA & Other Configuration Tools" page, under the "Support" tab. To obtain the password for "EA & Other Configuration Tools" page, contact Axiomatic.
- 3. Open the Axiomatic Electronic Assistant program on the computer.

(1) Electronic Assistant				
Eile View Options Help				
1939 CAN Network	ECU	J1939 NAME	Address	J1939 Preferred Address Assignment

4. Click on the "Open CAN Port" button.

🕒 Electronic Assistant				
<u>File View Options H</u> elp		_		
Open CAN Port etwork	ECU	J1939 NAME	Address	J1939 Pr



AN705 Version 1.01

5. The Axiomatic Electronic Assistant will recognize the Axiomatic device.

(3) Electronic Assistant		
<u>F</u> ile <u>V</u> iew <u>O</u> ptions <u>H</u> elp		
🐏 😰 F		
□··· J1939 CAN Network	AX200000, 4 Channel Stra	
∎ECU AX200000, 4 Channel Strain Gauge #1	i General ECU Information	
	Setpoint File	
	B Bootloader Information	

6. Expand the J1939 CAN Network Folders by clicking on the + symbol.

🕒 Electronic Assistant	
<u>File View Options H</u> elp	
般 🎒 F	
Im J1939 CAN Network	AX200000, 4 Channel Stra
📥ECU AX200000, 4 Channel Strain Gauge #1	i General ECU Information
 i General ECU Information 	😰 Setpoint File
🗊 🗊 Setpoint File	B Bootloader Information
B Bootloader Information	

7. Highlight any of the setpoint group names from the list on the left-hand side of the menu.

Electronic Assistant				
<u>File View Options H</u> elp				
🐑 🔛 F				
	^	Setpoint Name	Value	Comment
E. EC AAZUUUU, 4 Channel Strain Gauge #1		SP Tare Input Response	0	Normal On/Of
i General ECU Information		SP Pullup/Pulldown Resistor	0	Pullup/down C
🚊 🖅 Setpoint File		SP Debounce Time	10	ms
SP Miscellaneous SP Tare Button		SP Use Digital Outputs as Feedback	1	Digital Output
		SP Long Press Time to Enter/Exit Calibration	2500	ms
ST Strain Gauge Input 1		SP One-Press Operation	5	Zero All Strain
SP Strain Gauge Input 2		SP Two-Press Operation	6	Set Overall Min
SP Strain Gauge Input 3		SP Three-Press Operation	7	Set Overall Max
SP Strain Gauge Input 4		SP Four-Press Operation	0	Operation Not
SP Digital Output		SP Timeout Between Presses	1000	ms
SP Constant Data List				
SP Conditional Block 2				



AN705 Version 1.01

8. Click on "Open Setpoint File".

Electronic Assistant				
Eile View Options Help				
	^	Setpoint Name	Value	Comment
ELEC AA200000, 4 Channel Strain Gauge #1		SP Tare Input Response	0	Normal On/Off
i General ECU Information ⊡-ഈ Setpoint File		SP Pullup/Pulldown Resistor	0	Pullup/down Off
		SP Debounce Time	10	ms
		SP Use Digital Outputs as Feedback	1	Digital Output
		SP Long Press Time to Enter/Exit Calibration	2500	ms
SP Strain Gauge Input 1		SP One-Press Operation	5	Zero All Strain Gauge
SP Strain Gauge Input 2		SP Two-Press Operation	6	Set Overall Minimun
SP Strain Gauge Input 3		SP Three-Press Operation	7	Set Overall Maximur
SP Strain Gauge Input 4		SP Four-Press Operation	0	Operation Not Used
SP Digital Output		SP Timeout Between Presses	1000	ms

9. Browse on the computer to find the setpoint file previously saved. Select the file and click on "Open".

🚯 Open						\times
Look <u>i</u> n:	SL20-110 PAI	MI	•	← 🗈 💣 📰 ◄	,	
Quick access	Name	^ Channel Strain Gauge #1	Setpoi	Date modified 3/10/2020 12:03 P	M)	Type KML
Desktop						
Libraries						
This PC						
Network						
	<					>
	File <u>n</u> ame: Files of <u>type</u> :	AX200000, 4 Channel Stra Setpoint Files (* xml)	ain Gauge	#1 Setpoin 💌	<u>O</u> pen Cance	el l



AN705

Version 1.01

10. The setpoint viewer window will open automatically. The setpoint file can be reviewed before flashing. A comparison can also be made between the settings currently saved in the device and the setpoint file to be loaded. To perform this comparison, click on the "Compare" action button at the top of the setpoint viewer and select "Compare Programmable Setpoints".

Compare Program	mable Setpoints	
Electronic Assis	tant	
ECU Setpoint File		
ECU Name: AX200000, 4 Channel Strair	n Gauge #1	
Setpoint File: S:\Technical Support\Logs\	2020\SL20-110 PAMI\AX2	00000, 4 Channel Strain Gauge #1 Setpoints.xml
CU Identification		
CU J1939 NAME (PGN 60928): 0X8000E6	00145C8AB4 - 64-bit ECU	Identifier
Field Name	Value	Description
Arbitrary Address Capable	0X01	Yes
, adding , address superior		
Industry Group	0000	Global
Industry Group Vehicle System Instance	0x00	Global -
Industry Group Vehicle System Instance Vehicle System	0X00 0X00 0X00	Global - Non-specific system
Industry Group Vehicle System Instance Vehicle System Reserved	0X00 0X00 0X00 0X00	Global - Non-specific system
Industry Group Vehicle System Instance Vehicle System Reserved Function	0x00 0x00 0x00 0x00 0x00 0xE6	Global - Non-specific system -
Industry Group Vehicle System Instance Vehicle System Reserved Function Function Instance	0x00 0x00 0x00 0x00 0x00 0xE6 0x00	Global - Non-specific system - -
Industry Group Vehicle System Instance Vehicle System Reserved Function Function Instance ECU Instance	0X00 0X00 0X00 0X00 0XE6 0X00 0X00	Global - Non-specific system - - #1 - First Instance
Industry Group Vehicle System Instance Vehicle System Reserved Function Function Instance ECU Instance Manufacturer Code	0X00 0X00 0X00 0X00 0XE6 0XE6 0X00 0X00	Global - Non-specific system - #1 - First Instance Axiomatic Technologies
Industry Group Vehicle System Instance Vehicle System Reserved Function Function Instance ECU Instance Manufacturer Code Identity Number	0X00 0X00 0X00 0XE6 0X00 0X00 0X00 0X00	Global Non-specific system #1 - First Instance Axiomatic Technologies Unique ECU network ID number
Industry Group Vehicle System Instance Vehicle System Reserved Function Function Instance ECU Instance Manufacturer Code Identity Number	0X00 0X00 0X00 0X00 0XE6 0X00 0X00 0X00	Global Non-specific system
Industry Group Vehicle System Instance Vehicle System Reserved Function Function Instance ECU Instance Manufacturer Code Identity Number	0X00 0X00 0X00 0X00 0XE6 0X00 0X00 0X00	Global Non-specific system #1 - First Instance Axiomatic Technologies Unique ECU network ID number
Industry Group Vehicle System Instance Vehicle System Reserved Function Function Instance ECU Instance Manufacturer Code Identity Number ECU Address: 0X82 - Reserved for future as	0X00 0X00 0X00 0XE6 0X00 0X00 0X00 0X0A2 0X1C8AB4 signment by SAE, but ava	Global - Non-specific system - #1 - First Instance #1 - First Instance Axiomatic Technologies Unique ECU network ID number ailable for use by self configurable ECUs
Industry Group Vehicle System Instance Vehicle System Reserved Function Function Instance ECU Instance Manufacturer Code Identity Number ECU Address: 0X82 - Reserved for future as ECU ID (PGN 64965 - ECUID):	0000 0000 0000 0000 0000 0000 0000 0000 0000	Global - Non-specific system - #1 - First Instance Axiomatic Technologies Unique ECU network ID number ailable for use by self configurable ECUs

11. To flash the setpoint file to the unit, click on the "Program" button and select "Program Setpoints into ECU". A progress bar will pop up.

🙉 Setpoint File V	ewer			×		
File View Prog	am Compare					
	Program Setpoints into ECU					
Electr	onic Assist	tant				
ECU Set	point File	Gauge #1				
Setpoint File:	S:\Technical Support\Logs\2	020\SL20-110 PA	MI\AX200000, 4 Channel Strain Gauge #1 Setpoints.xml			
ECU Identi ECU J1939 NAI	fication IE (PGN 60928): 0X8000E60	0145C8AB4 - 64-	bit ECU Identifier	1		
	Field Name	Value	Description			
Arbitr	iry Address Capable	0X01	Yes			
	naustry Group	0000	Giobai			
Vehic	le System Instance	0000	-			
	/ehicle System	0X00	Non-specific system			
	Reserved	0X00	-			
	Function	0XE6				
F	Inction Instance	0X00	-			
	ECU Instance	0X00	#1 - First Instance			
M	anufacturer Code	0X0A2	Axiomatic Technologies			
	dentity Number	0X1C8AB4	Unique ECU network ID number			
ECU Address: 0X82 - Reserved for future assignment by SAE, but available for use by self configurable ECUs ECU ID (PGN 64965 - ECUID):						
· · ·	Field Name		Value			



AN705

Version 1.01

F				
AN Network ^ Setp	ooint Name	Value	Comment	
Setpoint File Viewer				×
ile View Program Compare				
Electronic Assis	tant			
ECII Setnoint File				
CU Name: AX200000. 4 Channel Strai	n Gauge #1			
etpoint File: S:\Technical Support\Logs\	2020\SL20-110 PAMI\AX20	0000, 4 Channel S	Strain Gauge #1 Setpoi	ints.xml
Cludentification				
Condeminication			_	
CU J1939 NAME (PC	Parameters from File		×	
Field				
Arbitrary Ac		1		
Indust	Cancel	1		
Vehicle System Instance	0X00		-	
Vehicle System	0X00	Non-	specific system	
Reserved	0X00		-	
Function	0XE6			
Function Instance	0X00		-	
ECU Instance	0X00	#1 -	First Instance	
Manufacturer Code	0X0A2	Axiom	atic Technologies	
Identity Number	0X1C8AB4	Unique EC	U network ID number	
ECU Address: 0X82 - Reserved for future as	signment by SAE, but ava	ilable for use by se	elf configurable ECUs	
ECU Address: 0X82 - Reserved for future as ECU ID (PGN 64965 -ECUID):	ssignment by SAE, but ava	ilable for use by se	elf configurable ECUs	

12. Once the unit has been flashed with the setpoint file, the following pop-up message will appear.





AN705

Version 1.01

Version	Date	Authors	Comments
1.00	December 16, 2020	Greg Laronde / Sue Thomas	Initial Release
1.01	July 6, 2023	Kiril Mojsov	Legacy Updates & Marketing Review