

AN715 – How to Disable Auto-Baud-Rate

Introduction

The purpose of this note is to assist you with turning off the Auto-Baud-Rate feature in Axiomatic products and lock the baud rate to a desired option.

Disabling Auto-Baud-Rate

1. Ensure the 'Automatic Baud Rate Detection' is enabled.



2. Power OFF your Axiomatic product and change the Electronic Assistant baud rate setting to the desired baud rate.

1939 CAN Network	ECU	J	1939 NAME	Address	J1939 Preferred Address Assignme
[🚯 CAN Interface Se	tup			×
	Hardware Interface	Module:			-
	Axiomatic USB-CAN	Converter	\sim		
	Axiomatic USB-CAN	Converter	ES	D CAN-USB	Converter
	Use First Availab	le	Lo	gical Networ	rk 0 🔹
	Converter Name &				
	USBCAN #2> Ac	tive	\sim		
	Axiomatic Ethernet-C	CAN Converter			
	Remote IP Address:	192.168.0.35			
	Remote Port:	4000	C	ommunicatio	on
		Port Type		Baud Rat	te: 500 kbit/s
			ГСР	J1939 5	500 kbit/s Baud Rate
	Group: 0	Channel: 1			



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3. Power ON the Axiomatic product, and connect by EA. The module should be detected by EA running at the desired baud rate. It has automatically detected the network baud rate by initial communication with service tool.

🐵 Electronic Assistant			_		×
Eile View Options Help					
J1939 CAN Network	ECU	J1939 NAME	Address	J1939 Pre	eferrec
i General ECU Information B Bootloader Information	ecv AX140600-03, LIN - J1939 CAN Converter #1	0X8000198014496D3C	0X80	Reserved	l for fu
Ready		_		500 kbi	t/s

Electronic Assistant				- 🗆 ×
e View Options Help				
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- SP Binary Function #10	^	Setpoint Name	Value	Comment
5P Binary Function #11		SP ECU Instance Number	0x00	#1 - First Instance
SP Binary Function #12		SP ECU Address	0x80	Reserved for future assignment by SAE, but available
SP Binary Function #13		SP Baud Rate	500	[kbit/s]
		SP Automatic Baud Rate Detection	No	Set to "No" once ECU is permanently installed on th
SP Binary Function #15		SP Slew Rate	High	Default "Low" at baud rate 250 kbit/s. Only "High".
		Sich hate		benant con at baad late cooking i only high t
-SP J1939 Network				
EP CAN Input Signal #1	Automatic Paud	Pate Detection Setur		×
CAN Input Signal #2	Automatic Baud	Rate Detection Setup		~
ER CAN Input Signal #3				
ER CAN Input Signal #4	Automa	is Revel Data Data ati ya 0, Na		
ER CAN Input Signal #5	Automa	tic Baud Rate Detection: 0 - No		~
EP CAN Input Signal #7		Default Value: 1 - Yes		Set Default
- P CAN Input Signal #8		Delan Falde. 1 165		Serbeladir
EP CAN Input Signal #9			- I	
ER CAN Input Signal #10				OK Cancel
ER CAN Input Signal #12				
wa Chini input Signal #12				

4. Change the 'Automatic Baud Rate Detection' setpoint = NO.



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- 5. Now, the converter is operating permanently at the desired baud rate CAN bus speed (until you activate the automatic detection again).

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	Binary Function #13	^	Setpoint Name	Value	Comment				
	Binary Function #14		SP ECU Instance Number	0x00	#1 - First Instance				
	Binary Function #15		SP ECU Address	0x80	Reserved for future assignment by SAE, but available for use by self configurable ECUs				
	SP Global Parameters		SP Baud Rate	500	[kbit/s]				
	EP CAN Input Signal #1		SP Automatic Baud Rate Detection	No	Set to "No" once ECU is permanently installed on the CAN network				
	SP CAN Input Signal #2		SP Slew Rate	High	Default "Low" at baud rate 250 kbit/s. Only "High", if baud rate > 250 kbit/s.				
	SP CAN Input Signal #3								
	SP CAN Input Signal #4								
	SP CAN Input Signal #5	\sim							
<		>							
Ready								500	cbit/s

6. End of procedure.



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Version	Date	Author	Comments
1.00	July 8, 2024	Bishoy Mansour	Initial release