

CANfigurator User Guide V1.18



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CANfigurator – User Guide

This guide will help you use the CANfigurator software. It will show you how to install the application and how to use it to configure, update the FMS interface, capture messages on the CAN network, as well as view the RS232 output of the FMS interface.

1. Installation

To install be CANfigurator application, you need a computer with the following:

- Operative system: Windows XP, Windows 7, or Windows 8;
- Minimum 1GHz processor;
- Minimum 5MB HDD space;
- Minimum 512MB RAM memory;
- Local serial port serial or USB-RS232 adaptor;
- A serial cable.

1.1. Installation of CANfigurator Application

To install the CANfigurator application, please ask for the latest version of the software from <u>support@cango.ro</u> or visit the website <u>www.cango.ro/files/CANfigurator_setup_V1.18.exe</u>.

You will receive an executable file. Run the CANfigurator_setup_Vx.y.exe file and follow the installation instructions.

Caution!

If you already have installed another version of the software, it is preferable to first uninstall the old version (the installation program will ask this automatically).



With the CANfigurator version V1.18 when the software will have a new update version, the software will warn you that there is a new version available and this window will pop up when you will open the software.





1.2. Installation Steps

1) Select the directory where you wish to install the application.

🚰 Setup - CANfigurator	- • •
Select Destination Location Where should CANfigurator be installed?	
Setup will install CANfigurator into the following folder.	
To continue, click Next. If you would like to select a different folder, c	ick Browse.
C:\Program Files\CANfigurator	Browse
At least 2.6 MB of free disk space is required.	
Next	> Cancel

2) Select if you want to create a shortcut on the Desktop

🔂 Setup - CANfigurator	
Select Additional Tasks Which additional tasks should be performed?	
Select the additional tasks you would like Setup to perform while installing CANfigurator, then click Next.	
Additional icons:	
Create a desktop icon	
< Back Next >	Cancel



3) Display of the installation information

🔂 Setup - CANfigurator	• •
Ready to Install Setup is now ready to begin installing CANfigurator on your computer.	
Click Install to continue with the installation, or click Back if you want to review or change any settings.	
Destination location: C:\Program Files (x86)\CANfigurator Additional tasks: Additional icons: Create a desktop icon	*
٠	
< Back Install (Cancel

4) Progress of the installation process

🔂 Setup - CANfigurator	• 💌
Ready to Install Setup is now ready to begin installing CANfigurator on your computer.	
Click Install to continue with the installation, or click Back if you want to review or change any settings.	
Destination location: C:\Program Files (x86)\CANfigurator Additional tasks: Additional icons: Create a desktop icon	*
٠	
< Back Install C	Cancel



5) Successful installation of the CANfigurator application





2. Using the CANfigurator Application

CAN figurator application must be run with Administrator rights. It will automatically ask for the permission of the administrator.

2.1. Registration Request

CANfigurator application needs a 'License KEY'. This key is obtained by sending 'CODE for register' in an email addressed to <u>support@cango.ro</u>, specifying the company information. You will receive a 'License KEY' which you will input and then press the 'Register' button.

CANfigurator registering	
CODE for register :	ABB34646
License KEY:	000000000000000000000000000000000000000
Paste Regist	ter E <u>X</u> IT
Please send a email Support@can	with the code : go.ro

If the next window appears, then the code is not correct and you have to input it again or repeat the previous step.

CANfigurator	×
Licence KEY invalid !	
	ОК

If the next window appears then the code is correct. From now on you can use the CANfigurator application.

CANfigurator	×
Congratulation for registering, please enjoy !	
	ОК



2.2. Using the Application

The home page includes the following components:

- 1) Main menu: functionalities and settings of the application.
- 2) Tab set: functionalities of the application.
- 3) Status bar: information on the functionalities of the application.

🌾 CANGO - CANfigurator						
File Settings CAN bus Update						
Serial frames	Repeat time	Start delay time	CAN baudrate	UART baudrate	- Frame mask	
	2		CAN buddiate	OART Buddhate		
	2	•	33300	2400	Engine Speed	
Spreadsheet	0	0	50000	4800		
T1 frame (instants)	0	0	@ \$2200	0600		
T2 frame (totals)	0	0	03300	0 3000	Service Distance	
T5 frame (tacho)	0	0	◎ 100000	19200	Vehicle Distance	
T6 frame (mils)	0	0	◎ 125000	38400	Engine Hours	
Reserved	0	0	@ 250000	57600	Fuel Consumption	
Reserved	0	0	230000	0 57000	Vehicle Weight	
Reserved	0	0	◎ 500000	115200 1 15200 1 1	🔽 Engine temp	
Reserved	0	0	◎ 1000000	Handshake	V Fuel Level	
			AutoBaud		Vehicle ID	
Get config from device	- Calibration coeffi	cients		Ambient Temp		
Calibration coefficients Speed		cients	Field separator		Driver ID	
	1.000000		, Prefix [NULL] Suffix		Fuel Economy, Fuel Rate PTO Engagement Total Fuel High Resolution reserved reserved	
Land an Generation Gla	Fuel consumptio					
	1.000000					
Save configuration file						
Default configuration			[CR][LF]		√ reserved	
	CanGo EMS interfac	ce - version			✓ reserved	
Exit	ver HW:333-1211 9	SW:344-1211-CNG-T	ACHO-F0 11939 v3	3.0-sha334811a	reserved	
			SIG SHUSSHUILD	reserved		
CONNECTED on C	COM4	(CANGO - CANfigura	ator V1.18	13/10/2014 12:15	

2.2.1. Main Menu

Menu	Submenu	Comments		
File	EXIT	Existing the application		
	FMS interface	Settings for the FMS interface		
Settings	Serial port	Settings of the serial port for the connection of the PC to the interface		
	Always on top	Makes the FMS interface stay on top of other applications		
CANhua		Switch's to the "CAN bus input" tab, for the capture and play function of the		
CAN DUS		FMS interface		
Update Switch's to the "Update" tab, for updating of the FMS interface				



2.2.2. Serial Port Settings

- List of the COM ports of the computer. Here you select the serial port used to make the connection to the FMS interface;
- 2) Select the speed of the serial port;
- 3) 'Refresh' button: refreshes the COM list;
- 4) 'CONNECT' button: connect to/disconnect the serial port;
- 5) 'Close' button: closes the window;
- 6) 'Handshake' setting for the serial port;
- 7) 'AUTO detect' button: automatic detection of the FMS interface (connection to all available serial ports and to all the speeds of the serial ports. This operation will take longer, so please be patient).



Caution!

Please connect to the serial port connected to the FMS interface before performing any operation. The default settings of the interface are: 115200bps, no Handshake.



2.2.3. Connecting to the FMS Interface

To connect to the FMS interface, you have to follow the steps below:

- 1) Power the FMS interface by connecting power of the interface;
- 2) Connect the interface to the RS232 port of the computer or to a USB-RS232 converter;
- 3) Start the CANfigurator application with administrator rights;
- 4) Select the 'Settings' menu and then the 'Serial port' submenu;
- 5) Select the serial port and the speed;
- 6) If necessary, also check 'Handshake';
- 7) Press the 'CONNECT' button, which will change to 'DISCONNECT';
- If all is ok, then the status bar of the application will show a green indicator and the text 'CONNECTED on COMx'.

Caution!

The 'AUTO detect' button can be used to show the speed and the com port where the FMS interface is connected. This process takes a little longer, so please be patient.

2.2.4. Serial Port Connection Error

To read or configure the FMS interface, it must be connected to the selected serial port through a regular serial cable. In case of error, the window below will appear:



If the FMS interface does not answer to the commands, the following window will appear. Please reset the FMS interface, select another serial port or try the 'AUTO detect' button.





2.2.5. FMS Interface Configuration

In this tab you can configure the FMS interface:

- The type of serial frames for the serial output;
- The repetition times and offset times of the serial frames;
- The CAN bus baud rate and select auto baud rate;
- The RS232 serial port baud rate and handshake;
- The type of information for 'Readable table' and 'Spreadsheet';
- Calibration coefficients of speed and fuel consumption;
- The separation character between the frame values;
- The prefix and suffix of the serial frames.

You can see the interface configuration by pressing the 'Get config from the device' button. Caution: the previous values will be rewritten and the interface version will be updated.

To save the configuration to the interface, press the 'Set config to device' button.

Various configurations can be saved ('Save configuration file' button) and loaded ('Load configuration file' button), or you can go back to the initial values ('Default configuration' button).

Please note, when you save configuration file it will also save the CAN baud rate so do not have only one CAN figuration file for all the vehicles or select the 'AutoBaud' option. There are some firmware's (F4, F8, T0, C0) that are read-write firmware so do not select the 'AutoBaud' option on this cases.

💔 CANGO - CANfigurator						
File Settings CAN bus	Update					
Settings CAN bus input RS232 Output Update						
Serial frames	Repeat time	Start delay time	CAN baudrate	UART baudrate	Frame mask	
Readable table	0	0	33300	2400	🕢 Engine Speed	
Spreadsheet	0	0	© 50000	. 1000	Acc. pedal Engine Load	
T1 frame (instants)	30	0	0 50000	© 4800	TCO	
T2 frame (totals)	30	15	83300	9600	CCVS	
T5 frame (tacho)	0	0	◎ 100000	19200	Service Distance	
T6 frame (mils)	0	0	@ 125000	28400	Vehicle Distance	
Received	0	0	0 125000	0 38400	Engine Hours Eval Consumption	
Reserved	0	0		S7600	Vehicle Weight	
Percented	0	0	500000	115200	Engine temp	
Reserved	0	0	100000	Handshake	V Fuel Level	
Reserved		Ľ			Vehicle ID	
Get config from device			AutoBaud		Ambient Temp	
	Set config to device Calibration coeffic Speed		Field separator		 ✓ Driver ID ✓ Fuel Economy, Fuel Rate 	
Set config to device						
	Evel consumptio		, Deofix		✓ PTO Engagement	
Load configuration file	1.000000			Total Fuel High Resolution		
Save configuration file	_100000		Cuffin		v reserved	
Default configuration						
			[civiler]		v reserved	
	CanGo FMS interfa	ace - version			reserved	
Exit	ver,HW:333-1211,	SW:344-1211-CNG-1	TACHO-F7_MB_HEA	VY_v3.3.0-sha334811	reserved	
					reserved	
CONNECTED on C	COM4	(CANGO - CANfigura	ator V1.18	13/10/2014 12:22	

CANGO[®]

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If the UART baud rate is changed when setting the device configuration, the software will warn you with the message bellow. Press 'Yes' to change the serial port connection baud rate to the selected baud rate or press 'No' to continue with the same baud rate.

Error	×
8	Serial Port Baud change detected in the uploaded configuration! Do you want to also change the Baud Rate setting to configured value? Choose Yes if you want to communicate further with configured device. Choose No if you want to configure another device.
	C Yes No

2.3. Capturing Messages on the CAN Bus

The messages on the CAN bus are captured on CAN1 cables or on the CANGOclick of the FMS interface. To start the capturing of CAN messages, press the 'CONNECT' button. The data captured can be saved in a file if you select the 'capture in file' option.

💱 CANGO - CANfigurator		
File Settings CAN bus Update		
Settings CAN bus input RS232 Output U	date	
DD MM YYYY Time IdLen	D Len Data	
13-10-2014 12:25:10.404 29 OC	F0 04 E2 8 FF FF FF 2C 02 FF FF FF	
13-10-2014 12:25:10.404 29 OC	F0 03 E2 8 FF 00 00 FF FF FF FF FF	
13-10-2014 12:25:10.416 29 18	FE 6C E2 8 00 00 C0 00 FF FF 00 00	
13-10-2014 12:25:10.416 29 18	FE F1 E2 8 FF 47 00 OC FF FF FF FF	
13-10-2014 12:25:10.41/ 29 16	FE F2 E2 G 00 00 FF FF FF FF FF FF	
13-10-2014 12:25:10.041 29 18	FE EA E2 8 OF 00 00 FF FF FF FF FF	
13-10-2014 12:25:10.041 29 18	FE EE E2 8 28 FF FF FF FF FF FF FF	
13-10-2014 12:25:10.041 29 18	FE FC E2 8 FF FF FF FF FF FF FF	
13-10-2014 12:25:10.042 29 18	FE F5 E2 8 FF FF FF FF FF FF FF	
13-10-2014 12:25:10.042 29 18	FE E5 E2 8 00 00 00 00 FF FF FF FF	
13-10-2014 12:25:10.042 29 18	FE 6B E2 8 2A 2A FF FF FF FF FF FF	
13-10-2014 12:25:10.042 29 18	FD D1 E2 8 FF 30 32 30 30 FF FF FF	
Discounter Conture in file		
		Frames Count
START PLAY 🔲 Play by file		1450 Clear
CONNECTED on COM4	CANGO - CANfigurator V1.18	13/10/2014 12:25



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If after pressing 'CONNECT' to make the connection with the interface the following window appears, please reset the interface and make the connection again



The FMS interface will automatically check for the CAN bus network and will select the following options:

- Select between the CANgoclick or CAN1 wires;
- Select the CAN baud rate;
- Select if the FMS interface is in read-only or read-write mode;
- Selects if the Play feature is available or not.

After making the automatic selection the FMS interface will make a report to show the correct configuration to connect to this CAN network.



If after pressing 'CONNECT' to make the connection with the interface the following window appears please try to connect the CAN1 wires or the CANGOclick to other CAN network.



If after pressing 'CONNECT' to make the connection with the interface the following window appears please contact <u>support@cango.ro</u> to get the last update of the firmware.





2.4. Viewing the RS232 Output

To view the RS232 output of the FMS interface, press the 'START' button. This will show you how the data is being transmitted from the RS232 port.

To save the data in a file, press the 'Save log' button and insert the name of the file. If you wish to delete the date, press the 'CLEAR' button.

The 'Clear stored data' button resets all data stored on the FMS interface (odometer, operating hours, ..). By pressing the 'Request #T2 frame' you can see the T2 frame.

💱 CANGO - CANfigurator	
File Settings CAN bus Update	
Settings CAN bus input RS232 Output Update	
0-00:00:56:000 EngSpeed 0:000 rpm Accel 0:0 % Load 0:0 % TCO 0.0 km/h MD 0 OS 0 DI 0 TP 0 HI 0 EV 0 DI:0/0/0 D2:0/0/0 Speed 0:00 km/h CC:0 BR:0 CS:0 PTO:0 Service 0 km Distance 93802:609 km EngHours 222:85 h FuelC 45027:53 L Weight 0 kg (n) 0 kg (n) 0 kg (n) EngTemp 0 degr FuelLev 0.0 % VehD * Ambient temp:: n/a degr Driver ID:n/a,n/a Fuel Economy: Rate: 0.00 L/h, Inst. economy: n/a km/L PTOEN: 0 HRLFC: 45027:53 L FMS: 2.0 Diag:0 Req:0	
STOP Save log CLEAR EXIT request #T2 frame Clear stored data 0.000 Set	odometer
CONNECTED on COM4 CANGO - CANfigurator V1.18 13	3/10/2014 12:33

When the odometer is not present on the CANbus network this parameter will be calculated by the FMS interface using speed. You can set this parameter using the window bellow.

93802.000	Set odometer



2.5. Update Interface Firmware

To update the FMS interface firmware:

- 1) Go to "Update" tab;
- 2) Press "Load Update File" Button to select the updating tab;
- 3) Press the "Update" button and wait for the updating to be complete.

💱 CANGO - CANfi	gurator				
File Settings C/	AN bus Update				
Settings CAN bu	s input RS232 Output	Update 1			
UPD upgrade file	for FMS interface				
Z:\Support\FW	release\GENERIC\!NEW	VERSIONS\v3.3.0\F0_J193	9_v3.3.0-sha334811	a.upd	
5.	2 .oad update file	Upload	3	Check Online	TIX

If the window below appears, then check the connection with the FMS interface or restart the interface



If the update process was completed, the following window appears:

Informati	ion	×
1	UPDATE SUCCESS	FUL !!!
	V OK	



The update process is assisted by a progress bar.

💱 CANGO - CANfigurator		1 23		
File Settings CAN bus Update				
Settings CAN bus input RS232 Output U	pdate			
UPD upgrade file for FMS interface				
Z:\Support\FW_release\GENERIC\!NEW VE	RSIONS\v3.3.0\F0_J1939_v3.3.0-sha334811a.upd			
Load update file	Upload Check Online			
(13/10/2014 12:37:08) Entering in CFG mode ! (13/10/2014 12:37:08) CANGO FMS ir ferace detected ver HW:333-1211, SW:344-1211-CNG-TACHO-FO_11939_v3.3.0-sha334811a (13/10/2014 12:37:08) DEVICE version is : C 339 LL EASE WAIT (13/10/2014 12:37:08) Open and reading the UPD file				
CONNECTED on COM4	CANGO - CANfigurator V1.18 13/10/2014	12:37		

NOTE:

After the firmware update, the device will return to the default settings and configuration. This will reset the baud rate to 115200 b/s, if the UART baud rate was set different then the default settings you need to change the baud rate to be able to communicate again.



2.5.1. Hard Reset

Sometimes the FMS interface will need to have a 'Hard Reset' of the system to be able to update a new firmware. Instruction to make a 'Hard Reset':

- 1) Go to the 'Update' tab
- 2) Choose a firmware with 'Load update file' and then press update button.
- 3) It will appear the following 'Error' window.
- 4) Follow de instruction written 'Error' window
 - Disconnect the interface from the power supply;
 - Press the 'OK' button;
 - Connect the power supply to the FMS interface.

CANGO - CANfigurator File Settings CAN bus Update Settings CAN bus input RS232 Output Up UPD upgrade file for FMS interface Z:\Support\FW_release\GENERIC\!NEW VEF Load update file [13/10/2014 12:38:25] Entering ir [13/10/2014 12:38:30] ERROR : N [13/10/2014 12:38:30] Try to enter [13/10/2014 12:38:30] Try to enter	pdate RSIONS\v3.3.0\F0_J1939_v3.3.0-sha334811a.upd If you want force upgrade please follow the next steps: 1. disconnect the power of FMS interface 2. press OK 3. connect the power of FMS interface The time out is 20 sec ! Please wait Please check serial connection !!!	
CONNECTED on COM4	CANGO - CANfigurator V1.18	T 13/10/2014 12:38

NOTE:

After the firmware update, the device will return to the default settings and configuration. This will reset the baud rate to 115200 b/s, if the UART baud rate was set different then the default settings you need to change the baud rate to be able to communicate again.