ToCOM User manual

http://www.obdtester.com/tocom



PRELIMINARY BETA VERSION

		🧟 ToCOM - Diagnostic	program for Toyota			- • • ×
			ТоСОМ			
		тосом	Main menu			
		Main menu	rVehide Diagnostics			
ToCOM - Diagnosti					ToCOM 0.1.	5084
ToCOM	ToCOM Control Unit Selection		Select Control Unit			
	Control Unit Selection		Auto-scan		Copyright (c) 2005-2011	SECONS s.r.o.
Control Unit Selection			OBD-II Connector Location			
Model selection	Powertrain Chassis Body Infotainment					Itester.com/tocom
Main menu	Slind Spot Monitor Mast					
	Section 2017 Start Start Start					
	🗇 CAN Gateway		- Miscellaneous functions		the second s	
	Solution Door		Settings			
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	🥪 Main Body		Exit		- Stretting State	123
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	🗇 Sliding Roof		-	0	.000 km/h	
	<< Go Back		Go >>		0.000 - 0.000	
					0.11	
		0.07			0.09	
		0.03			0.05	
		0.01			0.03	
		-0.03			-0.01	
		-0.05			-0.03	
		-0.09			-0.07	
		-0.11			-0.09	
		3x3 View	List View Pause Graph	Start logging	g << Go Back	

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SECONS Ltd. is not liable for damages caused by using of ToCOM software.

Please read carefully this user manual before using the ToCOM software.

Before using the software please read license agreement.

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http://www.obdtester.com/tocom

1 Introduction

Thank you for purchasing the ToCOM diagnostic interface and software. ToCOM is professional tool for diagnostics of Toyota, Lexus and Scion vehicles. Please read carefully this User Manual before using the product.

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We hope you'll find our products useful. In case you have any questions, problems or feedback please contact as at <u>support@secons.com</u>. We're here to help!

1.1 Key features

- Support for wide range of ECUs and models
- Easy connection via smart USB to OBD2 interface
- Designed to maintain compatibility with dealer tool
- Automatic ECU recognition
- Automatic vehicle scan
- ECU Identification
- Fault code (DTC) reading
- Fault code clearing
- Freeze frame
- Monitor function (Engine readiness)
- Measured values / live data
- Live data recording
- Diagnostic protocol printing
- Actuator tests
- Control unit customization
- Control unit adjustments ("utility" function)

The ToCOM system works with Toyota/Lexus/Scion and other Toyota-Manufactured vehicles.

List of supported vehicles and control units can be found at the link below: <u>http://www.obdtester.com/tocom-eculist</u>

1.2 Software updates

Software updates in diagnostic version are available for free. You can download them at <u>http://www.obdtester.com/downloads</u>. Before download starts, you are asked for user name and password.

USER NAME = serial number of your diagnostic interface. PASSWORD is blank.



The serial number can be found in settings of ToCOM after performing test interface, or on a silver label of your diagnostic interface.

We recommend you to maintain software up-to-data, because updates provides support for new ECUs and fix various ToCOM issues.

ToCOM user manual

2 ToCOM software and driver installation

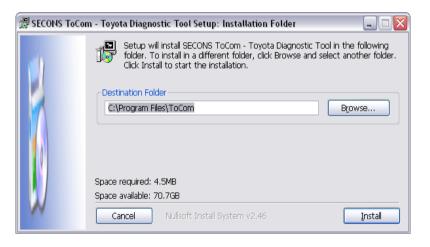
2.1 Microsoft Windows operating System

- 1. Insert ToCOM installation CD to your CD-ROM drive
- 2. Run installation file ToComSetup.exe
- 3. Choose language for the installer

Installer	Language	
1	Please select the language of the inst	aller
	English	~
	OK Canc	el

4. Choose your destination folder for ToCOM and click *Install* button and after successful installation click *Close* button.

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ToCOM drivers are automatically updated during the ToCOM installation. When prompted to install "unsigned" drivers, click on *Install this driver software anyway* (Microsoft® Windows® 7) or *Continue Anyway* (Microsoft® Windows® XP).

Windows can't verify the publisher of this driver software	Hardware Installation The software you are installing for this hardware:
 Don't install this driver software You should check your manufacturer's website for updated driver software for your device. Install this driver software anyway Only install driver software form other sources may harm your computer or steal information. 	ELM-USB Interface has not passed Windows Logo testing to verify its compatibility with Windows XP. (<u>Tell me why this testing is important</u> .) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
✓ See details	[Continue Anyway] STOP Installation

Microsoft® Windows® will automatically install drivers when you plug-in the ToCOM to USB port. Driver installation isn't required for operation on GNU/Linux system.



2.2 Microsoft Windows 8 driver installation

Installing drivers on Windows 8 usually requires a special procedure. In such case please follow the steps below:

- 1. Press Windows Key + R
- 2. In the window that appears, type: "shutdown.exe /r / o / f / t 00"
- 3. Press "OK" button
- 4. The System will restart to a "Choose an option" screen
- 5. Select "Troubleshoot" from "Choose an option" screen
- 6. Select "Advanced options" from "Troubleshoot" screen
- 7. Select "Windows Startup Settings" from "Advanced options" screen
- 8. Click "Restart" button
- 9. System will restart to "Advanced Boot Options" screen

10. Select "Disable Driver Signature Enforcement" (press number on keyboard for option shown on screen)

11. Once the system starts, install the APM / FTDI / Arduino drivers as you would on Windows 7

1

Windows Vista & 7 required signed all .sys files (we use usbser.sys shipped by Microsoft with valid digital signature). Final version of Windows 8 requires also signed .inf file (which is not in our case). The above procedure helps to override unsigned .inf file. Once driver is installed, the program will work properly.

Pre	ess a number to choose from the options below:
υ	se number keys or functions keys F1-F9.
	1) Enable debugging
į	2) Enable boot logging
	3) Enable low-resolution video
	4) Enable Safe Mode
	5) Enable Safe Mode with Networking
	6) Enable Safe Mode with Command Prompt
	7) Disable driver signature enforcement
8	3) Disable early launch anti-malware protection
9	9) Disable automatic restart after failure
	Press F10 for more options
Ρ	ress Enter to return to your operating system



2.3 Interface busy issue [Microsoft Windows]

In case you receive error "Interface busy" while testing your interface, please make sure:

- 1. You're not running any modem, mobile phone, or printer monitoring application that blocks "COM ports" from being used by other applications.
- 2. You're not running Hella Gutmann software on the same PC. Process called "GMPortal.exe" prevents SECONS diagnostic applications from properly accessing the diagnostic interface. You may temporarily resolve this problem by running "Windows Task Manager", right-clicking on GMPortal.exe process in "Processes" tab and selecting "End process".
- 3. Software modem drivers do not block COM ports.
- **4.** You have selected correct COM port (use "Device manager" button to find port number under "Ports (COM & LPT)" group.

2.4 GNU/Linux System

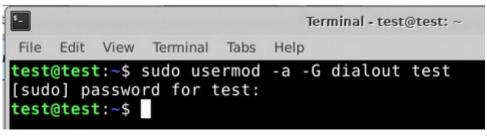
Our diagnostic application are tested to work under Linux. The applications can be run under Linux, BSD or Apple OS/X on Intel x86 using Wine environment. The installer and applications perform fully automated installation under these operating system.

Important information:

- Only Ubuntu distribution 19.10 or later is supported using this guide, however other distributions that meet our requirements may work. For more information see <u>www.ubuntu.org</u>
- The diagnostic application runs under Wine which must be installed on the system. For more information see <u>www.WineHQ.org</u>
- Bluetooth connection is NOT supported natively on Linux (however with some effort you might be able to get it running, just instead of /dev/ttyACMx device use /dev/rfcommx.
- It is highly recommended to try the diagnostic application first under Microsoft Windows operating system to get familiar with it.

Installation procedure:

1. Wine 4.0 or later on an x86 system is required. You can install Wine on Ubuntu using "sudo apt install wine"). You can verify Wine version by running "wine –version" from terminal. If you are running 64-bit system you must have 32bit libraries installed (which is usually done automatically when installing Wine from repositories). Other Debian-derived distributions use similar commands.



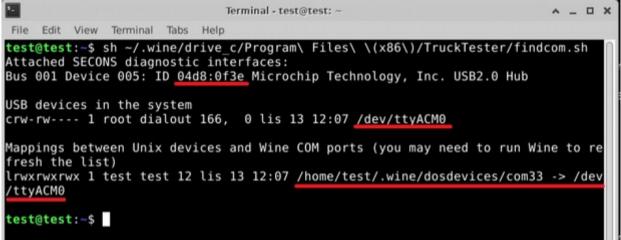
2. Add users who need to access the diagnostic interface to the 'dialout' group. Type "sudo

usermod -a -G dialout username" (replace 'username' with you username, in the screenshot we have used 'test' user)

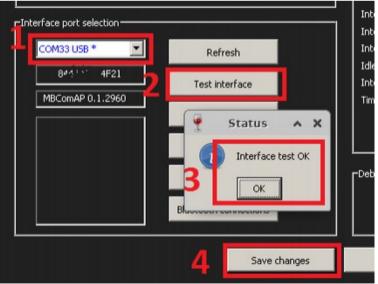
SECONS

- 3. Log off from Xwindow session and login again.
- **4.** Install the diagnostic applications (either using correct file manager association or from terminal, e.g. "wine ~/Downloads/PoCOMsetup.exe"). After the installation you should see the diagnostic application icon on the desktop and in start menu.
- 5. Now you need to figure out assignments between emulated "COMx" ports and respective Unix devices. For this we have created diagnostic script called "findcom", which you can run in terminal using comand "sh ~/.wine/drive_c/Program\ Files\ \ (x86\)/APPNAME/findcom.sh" (replace APPNAME with actual diagnostic application

name, such as BimCOM, PoCOM, FCOM, TruckTester, etc.)



6. When you know COM port used in Wine (in the screenshots com33), configure the diagnostic application and test the interface



- 7. Save settings and you should be ready to go.
- 8. Optional. To override Wine's default device mapping, run wine regedit and create string



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entries in HKEY_LOCAL_MACHINE\Software\Wine\Ports where the entry name is the Windows device name and the entry value is the path to the Unix device. To make COM1 the first USB-attached serial port, create an entry with the name COM1 and the value /dev/ttyACM0. After editing the registry, shut down Wine with wineserver -k and the next time Wine runs a program, your changes will take effect.

3 First steps

- 1. Connect ToCOM interface to your computer.
- 2. Connect ToCOM interface to OBD-II connector in the vehicle. You can use picture gallery for find it, available from main menu *OBD-II Connector Location* button

SECONS

τοርοι	Data Link Connector Location Find DLC	
Find DLC fain menu	Choose a car from this tree to view OBD-II connector location	
	Avalon 2005	
	a Avalon	
	✓ Aygo 2007	
	Camry	
	✓ Celica 1997	
	of Celica €	
	Corolla 2003 CDE	
	✓ Corolla	
	✓ Echo	
	🚔 Highlander	
	✓ LandCruiser 2002	
	√ LandCruiser	
	Ge Back	ow Image



3. Set-up ToCOM application

Select *Settings* in ToCOM main menu and configure interface port. After clicking on *Refresh* button, software should find port to which is ToCOM interface connected. Choose this port. Click on *Test Interface* to make sure everything is OK, you should see *Serial number* (now hidden in white line).



- 4. Save settings and return to main menu.
- 5. Turn ON the ignition, but don't start the engine.
- 6. Select control unit by clicking on Select Control Unit button.
- 7. Select exact vehicle model.
- 8. In a new window, choose control unit to connect to.

ToCOM - Diagnostic p	FoCOM Model selection			foCOM - Diagnostic program for Toyota ToCOM Control Unit Selection	
Hodel Selection Main menu	Toyota Lexus Scion Peugeot Citroen Vancei Camry Camry HV Camry(Asia) Camry(Brazil) Camry(Brazil) Camry(EUR Camry(EUR) Cossok Lexus	2009 2010 2011 2012 2013 2013 2AR-FE 2GR-FE	^ Sek	trout Units If wetchen If wetchen menua If wetchen If wetche	

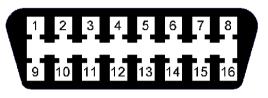
4 Diagnostic connectors used in Toyota vehicles

Location of OBD-II and manufacturer-specific (OBD-I) connectors is available in DLC location database available from the ToCOM main menu.

4.1 OBD-II (DLC3)

1	9	Ignition +12V
2	10	-
3	11	-
4	12	-
5	13	TC
6	14	HS CAN Low (CANL)
7	15	ISO9141 L-Line
8	16	Battery voltage
	3 4 5 6 7	2 10 3 11 4 12 5 13 6 14 7 15

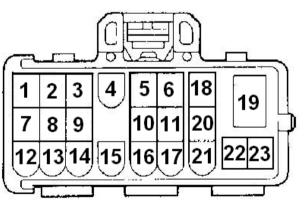
Standard OBD2 connector is used usually since 1996 models to present.



It is possible to read blink code on older vehicles by connecting terminals TC and CG and then turning ignition ON. Then you can read faultcode(s) from the P/S warning light on instrument cluster (combination meter).

4.2 Check connector (DLC1)

Pin		
1	Fp	
2	W	Engine blink code output
3	E1	Battery -
4	Ox1	
5	AB	
6	TH/ O	
7		
8	TE1	Engine blink code
9	TE2	
10	CC2	Second lambda sensor diagnostic
11	TC	ABS L ABS, traction control, Height Control and other system diagnostic



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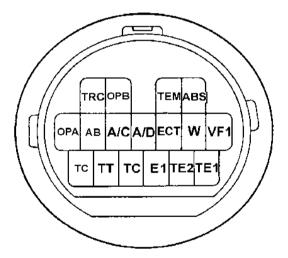


		codes
12	+B	Battery +
13	VF1	
14	VF2	
15	OX2	
16	TS	
17	TT	
18	TEM	
19	IG-	Ignition Pulse output
20	OP2	
21	OP3	
22	WA	ABS K
23	WB	

4.3 TDCL (DLC2)

TDLC (DLC2) has same signal meaning as Check connector.

It is possible to read blink code on older vehicles by connecting terminals TC and CG and then turning ignition ON. Then you can read faultcode(s) from the P/S warning light on instrument cluster (combination meter).



5 Connecting to control units

5.1 Model selection

Before is connection to control units (or performing auto-scan) possible, vehicle model selection is required.

Correct selection of vehicle model and year is essential for proper diagnostic functions.

Incorrect model selection may result in wrong or incomplete live data, improper function of actuator tests and coding functions, possibly resulting in damaged car components.

Toyota		Â.	2009	
Lexus			2010	
Scion		Е	2011	
Peugeot			2012	
Citroen			2013	
Hongoi				
Camry		*	2AR-FE	
Camry HV			2GR-FE	
Camry(Asia)				
Camry(Brazi	I)			
Camry(EUR)				

5.2 Multiple ECU variants

Some control units may have multiple variants. In case variant cannot be detected by ToCOM, window asking to choose correct ECU type is displayed.

SECONS

🧟 ToCOM - Diagnostic	: program for Toyota 📃 🗉 🔀				
тосом	Toyota Avensis (EUR) Unrecognized Control Unit				
Unrecognized Control Unit Selection Model selection Main menu	The connected control unit has several possible variants. Please select correct ECU type from the list below. If incorrect ECU type is selected, fault code reading and live data may not work (but are safe to use) and running actuator tests / coding / configuration (customization) may damage the control unit and/or other parts.				
	Save ECU Information Show ECU Identification				
SECONS	<< Cancel Use selected ECU >>				

Hint: You can verify correct ECU was selected by looking at live data or if expected coding operations are present.

5.3 Toyota ECU naming terminology

Engine and Autotransmission Electronic Diesel Control	Engine control unit (including diesel engines), also controlling A/T on older vehicles (no individual AT ECU)
Combination meter	Instrument panel cluster
Automatic Trans-axle	Autotransmission
Body	

5.4 Communication protocols

ToCOM supports these communication protocols:

Protocol	Diagnostic bus	Production
ISO9141	ISO9141	1991 - 2001
KWP2000-9600	ISO9141	1996 – present
KWP2000-10400	ISO9141	1996 – present
ISO15765	CAN-BUS (ISO 11898)	2005 – present
ISO15765 GW	CAN-BUS (ISO 11898)	2005 – present
ISO14229 UDS	CAN-BUS (ISO 1198)	2015 – present

6 Auto-Scan

This function scans for all known ECUs in selected vehicle, and shows the list of ECUs present in vehicle along with number of present or stored fault codes (DCTs).

ToCOM - Diagnosti	ToCOM Auto-Scan Results	
Auto-Scan Results	Control Unit	Ver. 0.1.6591 DTC Count
Model selection Main menu	Airbag	0
	Selectric Power Steering	0
	🧇 Anti Brake-Lock System	1
	S Instrument cluster	0
	Air conditioning	1
	Navigation System	3
	Cruise Control	0
	Sensine	0
	Selectric Parking Brake	0
	Search Main Body	0
SECONS	< Go Back Print report Copy to clipboard	Connect >>

7 Diagnostic functions

You can connect to ECU by choosing control unit from list of ECUs in selected vehicle or autoscan listing.

Diagnostic menu is divided into three parts. Basic functions, Advanced functions and Expert functions.

ToCOM - Diagnosti	c program for Toyota		
ТоСОМ	Engine and Autotran Control Unit Diagnost	nsmission Camry tics	
Control Unit Diagnostics	Control Unit Identification		
Control Unit Selection	Toyota,	Camry,MCV,1MZ-FE,2001 - ZZE	,1FE,2001
Model selection	J		
Main menu	Basic functions	Advanced functions	Expert functions
	Read Fault Code Memory	Actuators activation	Configuration / Customization
	Clear Fault Codes	Monitor(Readiness)	
		Go Back, Close session	

7.1 Control Unit Identification

This function is used to display only identification data provided by the ECU, for example:

- Calibration Identification
- Model code
- Engine

ОМ	Engine Avensis (EUR) Control Unit Identification			Ver. 0.
tion	ECU Name		Engine	ver. u.
	Protocol		CAN	
esults	VIN Code		SB1EG76L90	
on	Calibration Identification		305G1000	
	Calibration Verification Number		DAEFD6F4C5F	191C2
	Model Code		ZRT27#	
	Engine Code		2ZRFAE	
	Model Year		2015	
	Number of cylinders		4	
	Fuel Type		Gasoline	
Tra	Transmission Type		MT	
	Destination		W	
ONS	< Go Back	Save ECU Information	Copy Values	Print Values

You can print identification by clicking *Print Identification* button or you can copy it to clipboard by clicking *Copy Identification*.

"Save ECU information" is used to save all ECU diagnostic data (not flash memory) to a XML file. This file is useful for further ToCOM improvements and debugging. It can also be used to recover improperly coded ECU. It is highly recommended to save this file before performing any configuration operation on the ECU.

7.2 Read fault code memory

This function allows you to read and display diagnostic trouble codes saved in control unit memory.

SECONS

💀 ToCOM - Diagnosti	c program for Toyota 💿 🗉 🔀
ТоСОМ	Engine and Autotransmission Camry Fault Code Memory
Fault Code Memory Control Unit Diagnostics Control Unit Selection Model selection Main menu	P0100 Mass or Volume Air Flow (MAF) Circuit: Malfunction Current DTC, Historic DTC P0110 Intake Air Temperature (IAT) Circuit: Malfunction Current DTC, Historic DTC - Freeze Frame P0115 Engine Coolant Temperature (ECT) Circuit: Malfunction Current DTC, Historic DTC P0120 Throttle Pedal Position Sensor/Switch A Circuit: Malfunction Current DTC, Historic DTC P0505 Idle Control System: Malfunction Current DTC, Historic DTC P0505 Idle Control System: Malfunction Current DTC, Historic DTC P0505 Idle Control System: Malfunction Current DTC, Historic DTC P0505 Idle Control System: Malfunction Current DTC, Historic DTC P0505 Idle Control System: Malfunction Current DTC, Historic DTC Present DTCs: Print fault codes Print fault codes Print fault codes Print fault codes Copy Codes to Clipboard Print fault codes Copy Codes to Clipboard

7.3 Clear Fault Codes

This function clears fault code stored in ECU memory.

Fault codes might appear again or under some conditions isn't possible to clear fault codes at all. It's possible that in the presence of some faults control unit doesn't allow to clear fault codes or fault is in no time written back to memory.

It is recommended to read memory by clicking Re-read fault codes button again.

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7.4 Freeze Frame

Freeze Frame (also known as Snapshot or Environment data) function display selected measured values as present at occurrence of selected diagnostic fault code (DTC). This function is available from fault codes window.

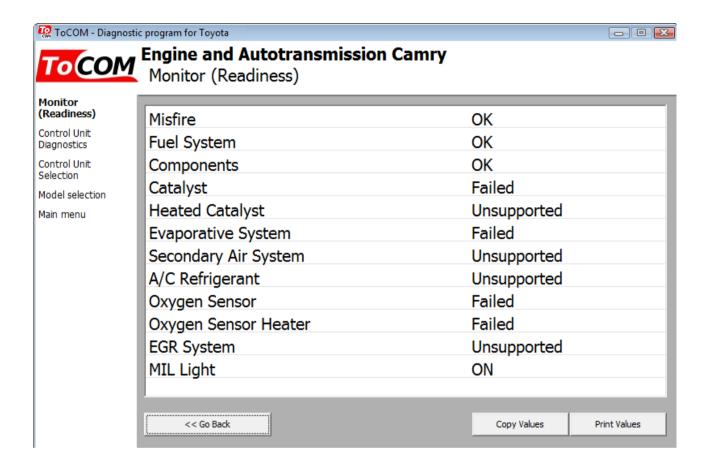
SECONS

ToCOM - Diagnostic	program for Toyota Engine and Autotransmission Camry Freeze Frame		
Freeze Frame Fault Code Memory Control Unit Diagnostics Control Unit Selection Model selection Main menu	Fuel System No.1 Fuel System No.2 CALC Load Coolant Temperature Short Fuel Trim #1 Long Fuel Trim #1 Engine SPD Vehicle SPD Intake Air	Open loop Unused 0.000 % -40.000 'C -0.040 % -0.040 % 0.000 rpm 0.000 km/h -40.000 'C	
	<< Go Back	Copy Values Pr	rint Values

7.5 Monitor (Readiness)

The function is available only on engine control units. Displays status of engine.

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- +

0.000 km/h

Pause Graph Start logging <<< Go Back

7.6 Measured values

Available live data depend on installed ECU type and it's current configuration.

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🧟 ToCOM - Diagnostic program for Tovota

Control Unit

Control Unit Selection

Iodel selecti

TOCOM Engine and Autotransmission Camry Measured Values - Graph View

Complete

3x3 View List View

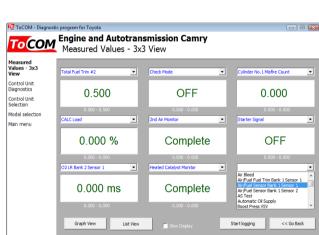
7.6.1 **Graph View**

This function displays two measured values (also known as live data or sensor values) simultaneously. Measured parameters can be chosen from selectors at the top of the window.

Buttons – and + allow to accelerate or decelerate speed of graph.

7.6.2 **Display 3x3**

For measuring 9 value simultaneously, click on 3x3 View button.



7.6.3 **Display list**

То measure all available values simultaneously, click List view button.

The refresh rate in list display may be very slow on older vehicles, mainly if ECU supports a lot of values.

COM	Engine and Autotransmission Cam Measured Values - List View	ry	
ed - List			
	2nd	OFF	
nit cs	2nd Air Monitor	Not Available	
Init	2nd Air Monitor	Complete	
n	3rd	OFF	
lection	4th(M)/Drive	OFF	
nu	A/C Cut Signal	ON	
	A/C Magnetic Clutch	OFF	
	A/C Monitor	Not Available	
	A/C Monitor	Complete	
	A/C Signal	OFF	
	AS Test	Complete	
	Air Bleed	OFF	
Ai	Air/Fuel Fuel Trim Bank 1 Sensor 1	-0.040 %	
	Air/Fuel Sensor Bank 1 Sensor 1	0.000 V	
		0.000 V	
	Air/Fuel Sensor Bank 1 Sensor 2	0.000 V	_

7.6.4 Save to log

Measured values can be saved/logged to a file by clicking Start logging button. The log file is standard csv file and it is compatible with VagScope or can be imported to Microsoft Excel or OpenOffice Calc.

7.6.5 Actuators activation

This function can activate actuators and perform some actuators actions.

ToCOM - Diagnosti	C program for Toyota C Program for Toyota C Progra
Actuators Tests Control Unit Diagnostics Control Unit Selection Model selection Main menu	 Fan Motor Fuel Pressure Up VSV Fuel Pump Fuel Pump Relay Fuel Shutoff Valve for Delivery Pipe
	Run Test << Go Back Measured values

Please note that range of actuators depends on installed ECU type and it's current configuration.

Actuator tests are of these types:

- Start / Stop (or ON / OFF) actuator: you can turn component on and off. Example: MIL Light actuator
- Actuators with states: You can choose between states to control component(s). Example: A/F Control
- Value-controlled actuators: You can enter any desired value within specified range. Example: IAC Duty, Injector volume

On most ECUs it is possible to view live data using "Measured values" button while actuator is active.



Please make sure you understand consequences of activating ECU components. Also make sure that activation conditions (engine idle, engine running, etc.) are met. Always consult all tests with car repair handbook.

7.7 Coding and programming functions (Utility)

This function is used to perform various operations on the control unit, such as re-coding installed components, re-setting ECU adaptation values, performing checks, etc.

Important notice: Current ToCOM version may also display coding/utility functions that do not apply to currently connected ECU (e.g. diesel coding functions are shown for petrol ECU). Please consult service manual(s) before performing any coding function. We're working on resolution of this issue.

ToCOM - Diagnosti	c program for Toyota	
ТоСОМ	Engine Avensis (EUR) ECU Programming/Coding	
ECU		Ver. 0.1.6591
Programming/Co	Supply pump initialization	Â
Control Unit Diagnostics	Pilot Quantity Learning Values Reset	
Auto-Scan Results	Catalyst Record Clear	
Model selection Main menu	Pilot injection learn	
	Reset of O2/air fuel ratio (air/flow) sensor	E
	Electric Throttle Learning	
	Injector Read (Denso CR25)	
	Injector Write (Denso CR25)	
		1
SECONS	<< Go Back	Go >>



Important notice: this function is currently under development, new functions are added as time allows. In case you need some function that is not present in the latest version, please provide data as described at the end of this manual.

More information about programming functions is available at <u>www.obdtester.com/downloads</u>. Most common generic coding/utility functions are described below.

ToCOM user manual

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7.7.1 Check Mode

This function will do the following allow 2 trip logic DTCs to be set in one trip and tighten the DTC detection criteria so DTCs will set easier. To exit Check mode, cycle the ignition off for 20 seconds and back on.

7.7.2 Signal check

This function will set DTCs for the system that is selected. DTCs will be erased if normal operating conditions are confirmed.

7.7.3 Reset memory

This function is used to clear the learned memory of the ECU if the following components are replaced:

- ABS ECU

- ABS Yaw rate / G sensor

Vehicle is stopped and ignition is on

7.7.4 Inspection Mode

This function disables VSC and TRAC control systems.

7.8 ECU Configuration (Customization)

This function is used to configure (customize) ECU behavior, enable newly installed components, etc. ECUs that supports this feature displays a list of customizable parameters.

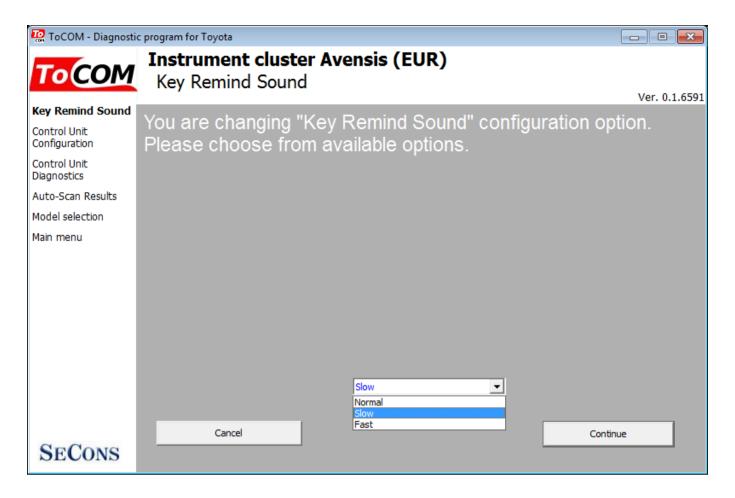
Please note that range of customizable parameters depends on installed ECU type and it's current configuration.

ToCOM - Diagnostic	program for Toyota	
ТоСОМ	Instrument cluster Avensis (EUR) Control Unit Configuration	
Control Unit		Ver. 0.1.6591
Configuration	Driver Side Seatbelt Warning Buzzer	ON
Control Unit Diagnostics	ECO Drive Indicator Light	ON
Auto-Scan Results	ECO Drive Indicator Zone	OFF
Model selection	Front Passenger Side Seatbelt Warning I	Buzz ON
Main menu	Key Remind Sound	Slow
	Lane Change Flashing Times Setting	3
	ODO Display Time After Ignition OFF Set	tting 30s
	Rear Seatbelt Warning Buzzer	ON
	Edit Hex Edit Rever	t to original Undo All Changes
SECONS	<< Go Back	Print Write configuration to ECU

ToCOM can change configurable options in development mode only. For more information about development mode please refer to section <u>Application Settings</u>.

Configuration writing is working only on CAN-BUS ECUs, KWP2000 is not supported at this moment.

To change selected option, please click on "Edit" and choose desired setting in the following window:



By clicking on continue you're prompted if selected data should be written to the ECU, by confirming the action configuration in ECU gets updated. Following successful write current configuration data are reloaded.

"Save ECU information" available from "Identification" window can be used to save all ECU diagnostic data including current configuration to a XML file. This file then can be used to recover improperly coded ECU. It is highly recommended to save this file before performing any configuration operation on the ECU.

8 Application Settings

ToCom Settings is accessible from main menu.

🙋 ToCOM - Diagnostic	c program for Toyota	
ТоСОМ	ToCOM Application Settings	Ver. 0.1.6674
Application Settings Main menu	Language Units type Window Scaling English Units type Expert Functions Expert Functions Expert Mode Development functions Interface port selection Refresh Test Interface Activate license Upgrade firmware Device Manager Bluetooth Manager	Protocol settings ISO9141 Protocol init idle time - Initialization timeout Keyword delay - Delay after init - Inter-byte delay - Inter-byte timeout - Inter-packet delay - Idle-packet delay - Inter-packet timeout - Timer - Restore Defaults
SECONS	Save Changes	Cancel Apply Changes

Language

Choose language of diagnostic application user interface in the drop down menu.

Units type

You can choose metric or imperial unit system for measured values.

Expert functions

<u>Development functions</u> - Enables additional functions under development. This setting is not saved before program exit and will be cleared on every application start. Do not enable this option unless requested by SECONS support staff as these functions may be dangerous to use without proper instructions.

<u>Expert mode</u> – Enables additional functions such as special coding functions or additional configuration options. These functions are intended for experienced technicians and are provided on "AS IS" basis, with absolutely no guarantee. It is highly recommended to leave this option unchecked. This mode also eliminates some warning messages and questions.

Interface port selection

Refresh - this button refreshes COM port selection drop down list. Correct COM port number should be

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http://www.obdtester.com/tocom

already chosen after connecting diagnostic interface via USB to PC and clicking on *Refresh* button. If not, choose correct COM port number from the list. It is needed in order to perform successful interface test.

Test interface – before each use of program, please test proper function of your connected interface by clicking this button. After successful test, you can see a serial number of your interface displayed below the COM port field, then firmware version and information about active licenses.

Activate license – this button is used for activating new license/s to use the program or special functions. Internet connection is required. Standard license is already activated for all interfaces before purchase.

Upgrade firmware – use this button to upgrade firmware in your diagnostic interface every time after installing the latest software version (available at <u>www.obdtester.com/downloads</u>). Do not disconnect your interface during upgrading the firmware.

Device Manager – is used to finding out correct COM port number, or to reinstall drivers. Your device appears as "ELM-USB Interface (COMx)" under "Ports (COM & LPT)".

Bluetooth Manager – is a preparation to upcoming bluetooth feature. The button is currently inactive.

Protocol settings

You can set various timings for each communication protocol. This is advanced feature used for example when problems occur with connection to control unit caused by slower ECU response and the like.

Restore Defaults – this button restores all modified timings of all protocols to default values.

Changing protocol settings is not required before normal use of the program. You will be asked to make changes by our tech. support when solving your issue at <u>support@secons.com</u> if necessary.

Debug functions

By clicking on **Save Debug** button, you can capture the latest data from elapsed communication between control unit and program into one file. Providing this file is required only by our technical support. Based on these data, we are able to monitor the whole process of performed operation and its correctness.



Use of debug function is important for successful resolution of any program failure or verifying its causes. For more information on how to proceed, please read the following chapter <u>Reporting bugs</u> and <u>improvement requests</u>.

9 Reporting bugs and improvement requests

Our customers can take advantage of our full technical support for free. You can contact our technical support at support@secons.com with any technical questions and requests.

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To speed up resolution of program bugs or requirements to improve the program, please prepare the following data:

Reporting bugs

In case you encounter to failure of any program functions (eg fault codes reading/clearing, coding functions, connecting to ECU, test interface, ...), please, prepare the following data in your email:

- 1. Detailed description of failure
- 2. Vehicle description VIN code, model, manufacture year, motorization
- 3. Attach Debug Log this file captures data from the latest communication between program and ECU, so we can detect failure causes.
- 4. Attach Snapshot of tested ECU (if accessible) this file contains important information about tested control unit



How to create **Debug Log:**

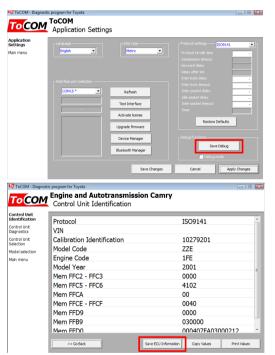
Once failure occurs, go back directly to settings in main menu (do not close the program). Click on "Save Debug" button. Name and save the file into well known directory in your computer.

Enable "Debug mode" check box only at our special request.



How to create ecu Snapshot:

After connection to tested control unit, click on "Control Unit Identification". In following screen, click on "Save ECU Information". Choose directory to save the file and confirm. Saving may take a few minutes.



Improvement requests

In case you miss some function or some function does not work sufficiently, please, prepare the following data in your email:

- 1. Detailed description of your improvement request
- 2. Vehicle description VIN code, model, manufacture year, motorization
- 3. Attach Snapshot of tested ECU this file contains important information about tested control unit
- 4. Attach Debug Log (in case that required function doesn't work properly). This file captures data from the latest communication between program and ECU, so we can detect failure causes.