



FX1000 Auto Scanner User Manual

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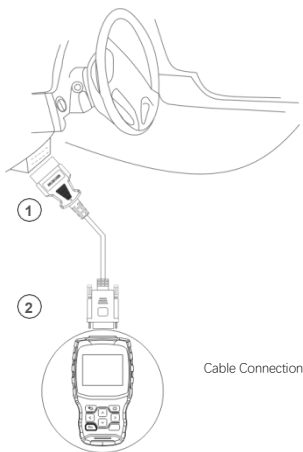
1 Technical Specifications

1	Screen Display	3.5" Color	2	Dimension (LxWxH)	24x16x11cm
3	Gross Weight	0.8kg	4	OS Platform	Linux
5	Card Memory	16G	6	Input Voltage	DC 12V

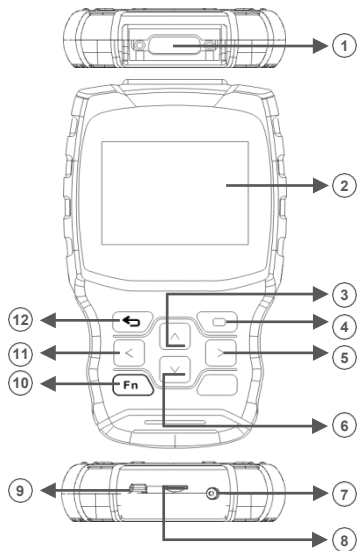
2 Standard Accessory Kits

1	Nylon tool bag	2	FX1000 main unit
3	Main cable with OBDII-16	4	USB cable
5	User Manual		

3 Cable Connection for On-Board Diagnosis



4 Ports & Keys Definitions



1	For main cable connection	2	3.5" color display
3	Up button	4	OK button
5	Right button	6	Down button
7	For power supply	8	For SD card inserting
9	For USB cable connection	10	FN key
11	Left button	12	ESC button

5 FN Key Definition (3-in-1 functional Key)

FN #1 (Multi Select & Cancel)

During the vehicle diagnosis if more items need to be selected, press the FN key, the target item will be selected.
Press FN key again, the selected target will be canceled.

DataStream	
IGN RUN STRART SW	On
IGN START SW	Off
Ignition Start Switch Filter	Off
√ MAP Vacuum	0.00(In Hg)
√ Map Volts	4.92(Volts)

FN #2 (Active & Deactivate the keyboard)

Activate the keyboard and input the necessary message.
Press FN key again, the keyboard will be hidden.

Input channel number											
0	1	2	3	4	5	6	7	8	9	.	BACK
Q	W	E	R	T	Y	U	I	O	P	.	ENTER
A	S	D	F	G	H	J	K	L)	.	UP
Z	X	C	V	B	N	M	/	*	(_	LE DN RI
abc			SPACE								

FN #3 (Tab Key)

Different operation areas can be switched between each other by pressing the FN key during the special testing.

Auto Shutdown (ASD) Relay	
Auto Shutdown (ASD) Relay Control State	
Off	F1
On	F2
Toggle	F3
BACK	F1
	F2

Press FN key, the display area will be highlighted as above.
Press the up and down button to view more information.

Auto Shutdown (ASD) Relay	
Auto Shutdown (ASD) Relay Control State	
Off	F1
On	F2
Toggle	F3
BACK	F1
	F2

Press FN key, the function area will be highlighted as above.
Press the left and right button to actuate more test.

6**Main Menu**

Diagnose



OBDII



Settings



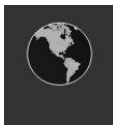
About

Diagnose Access diagnostic functions menu

OBDII Access OBDII functions menu

Settings Access the system setting menu

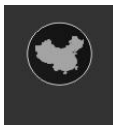
About Access information menu

7**Diagnose - Region Selection**

American



Asian



Chinese



European

Note: Only one region area will be showed on the device.

8 Diagnose - Vehicle Coverage



Acura



Daewoo



Chrysler



BMW



Ford



Volkswagen

Note: Only one brand will be showed on the device.

Please note that the FX1000 is a vehicle-specific car diagnostic tool. Therefore, it only supports vehicles of a specific car group, which depends on the pre-installed car brand software. For the blank version machine, please contact us to install your selected car brand software.

American **Vehicle coverage:**
GM, FORD, CHRYSLER

Asian **Vehicle coverage:**
TOYOTA, LEXUS, HONDA, ACURA, NISSAN, INFINITI, HYUNDAI, KIA, MITSUBISHI,

Chinese **Vehicle coverage:**
BYD, CHANA, CHEYR, GEELY, GWM, LIFAN, etc

European **Vehicle coverage:**
BMW, MERCEDES-BENZ, CITROEN, PEUGEOT, VOLVO, LANDROVER, JAGUAR,

9 Diagnose - Vehicle Identification

CHRYSLER	
1	Automatic selection
2	Manual selection
3	Service function

1. Automatic selection

The diagnostic system features the latest VIN-based Auto VIN Scan function to identify CAN vehicles in just one touch, which allows the technician to quickly detect vehicles, scan all the diagnosable ECUs on every vehicle and run diagnostics on the selected system.

2. Manual selection

This mode of vehicle selection is menu driven; you can make a series of choices. Each selection you make advances you to the next screen. A Back button returns you to the previous screen. Exact procedures may vary somewhat by various vehicles being serviced.

3. Service function

This section describes the main functions for vehicle service.

10 Diagnose - Control Unit Selection

Control Unit	
1	Powertrain Control Module
2	Transmission Control Module
3	Anti Lock Brakes
4	Electrical Parking Brake
5	Body Controller
6	Electric Power Steering

Control unit screen displays all controllers available on the vehicles.

The controllers listed on the menu do not mean that they are installed on the vehicle.

To select a system for testing, you need to scroll with the arrow keys to highlight Control Unit from the menu and press OK key.

11 Diagnose - Function Selection

Powertrain Control Module	
1	ECU Information
2	Read fault code
3	Clear fault code
4	Read data stream
5	Actuator test
6	Special function

Manually locate a required control system for testing through a series of choices. Follow the menu driven procedures and make proper selections, the application guides the user to the proper diagnostic function menu based on selections.

The Function Menu options vary slightly for different vehicles. The function menu may include:

1. ECU Information — provides the retrieved ECU information in detail. An information screen opens upon selection.
2. Read fault code — displays detailed information of DTC records retrieved from the vehicle control module.
3. Clear fault code — erases DTC records and other data from the test vehicle's ECU.
4. Read data stream — retrieves and displays data stream and parameters from the vehicle's ECU.
5. Actuator test — provides specific subsystem and component tests. This selection may appear as Actuators, Actuator Test, or Function Tests, etc, and the tests options vary depending on the manufacturer and model.
6. Special function — perform various component adaptations, allowing you to recalibrate or configure certain components after making repairs or replacement.

12 Diagnose - ECU Information

Control Unit	
Model Year	2010.00
ECU Part No	68045613AE
Body Style	Station Wagon
Vehicle Line	RT
VIN-Original	2D4RN4DE0AR

The function retrieves and displays the specific information for the tested control unit, including unit type, version numbers and other specifications.

The sample Vehicle Information screen displays as above.

13 Diagnose - Read Fault Code

Fault code list	
P0522	Engine Oil Pressure Sensor
U0141	Low Communication with IPM(FCM/TIPM) [Active]
P0685	ASD/Main Control Circuit [Active]
P0627	Fuel Pump Control Circuit/ Open

This function retrieves and displays the DTCs from the vehicle's control system.

The Fault code list screen varies with different vehicle tested.

On some vehicles, freeze frame data can also be retrieved for viewing.

The sample Read Codes screen displays as above.

14 Diagnose - Clear Fault Code

Clear Fault Code	
Do you want to erase all the fault code (s)?	
<input type="button" value="YES"/>	<input type="button" value="NO"/>

After reading the retrieved codes and making appropriate vehicle repairs, use this function to clear fault code.

15 Diagnose - Data Stream

DataStream	
Current Fuel Shutoff	ASD
SKIM VRA Invalidate Key Received Fault Posted	False
NGC Should Shut Off Fuel	Fuel On
SKIM VATA Has Completed IGN RUN START SW	On

When this function is selected, the screen displays the data list for the selected module. The available items for selected control module will vary by vehicles. The parameters will be displayed in the order that they are transmitted by the ECM. Therefore, variation among vehicles is possible.

16 Diagnose - Actuator Test

Actuator Test	
1	Fuel Injector #1 Control State
2	Fuel Injector #2 Control State
3	Fuel Injector #3 Control State
4	Fuel Injector #4 Control State
5	Fuel Injector #5 Control State
6	Fuel Injector #6 Control State

The Actuator Test function is used to access vehicle-specific subsystem and component tests. Available tests vary depending on the manufacturer, year, and model, and only the available tests will be displayed in the menu.

During an active test, the tester outputs commands to the ECU in order to drive the actuators.

This test determines the integrity of the system or parts by reading the engine ECU data, or by monitoring the operation of the actuators, such as switching a solenoid, relay, or switch, between two operating states.

17 Diagnose - Special Function

Special Function	
1	Learn ETC
2	Engine
3	Cam Crank
4	Clear Learned Variable Line
5	Check PCM Odometer
6	

These functions perform various component adaptations, allowing you to recalibrate or configure certain components after making repairs or replacement.

18 Diagnose - Service Function

Oil Reset Service

This function allows you to perform reset for the Engine Oil Life system, which calculates an optional oil life change interval depending on the vehicle driving conditions and climates. The Oil Life Reminder must be reset every time the oil is changed, so the system can calculate when the next oil change is required.

Electric Parking Brake (EPB) Service

This function has a multitude of usages to maintain the electronic braking system safely and effectively. The applications include deactivating and activating the brake control system, assisting with brake fluid control, opening and closing brake pads, and setting brakes after disc or pad replacement, etc.

Tire Pressure Monitor System (TPMS) Service

This function allows you to quickly look up the tire sensor IDs from the vehicle ECU, as well as to perform TPMS programming and reset procedures after tire sensors are replaced.

ABS/SRS Service

This function allows you to perform various bi-directional tests to check the operating conditions of both the Anti-lock Brake System and the Supplemental Restraint System, such as Automated ABS Bleeding, SRS Pump Motor Test, and checking Module information, etc.

Steering Angle Sensor (SAS) Service

This service function allows you to perform calibration for the Steering Angle Sensor, which permanently stores the current steering wheel position as the straight-ahead position in the steering angle sensor EEPROM. On successful completion of the calibration, the steering angle sensor fault memory automatically cleared.

DPF Regeneration Service

This Diesel Particulate Filter service function performs the regeneration procedures which is the DPF cleaning operation to clear the blockage through continuous burning of the particulate matter captured in the DPF filter. If the DPF light on the vehicle comes on and you successfully complete a DPF regeneration cycle, you will notice the DPF light will automatically turn off.

19 OBDII Function

OBD2 Test	
[1]	Read Current Trouble Code
[2]	Clear Trouble Code
[3]	Read Current Data
[4]	Read Pending Trouble Code
[5]	Read Freeze Frame Data
[6]	Readiness Tests
[7]	Oxygen Sensor Test
[8]	Read System Information

This section describes the various functions of each diagnostic option:

1. Stored codes are the current emission-related DTCs from the ECM of the vehicle. OBD II/EOBD Codes have a priority according to their emission severity, with higher priority codes overwriting lower priority codes. The priority of the code determines the illumination of the MIL and the codes erase procedure. Manufacturers rank codes differently, so expect to see differences between makes.

2. This option is used to clear all emission-related diagnostic data such as, DTCs, Freeze frame data and manufacturer-specific enhanced data from the vehicle's ECM, and reset the I/M Readiness Monitor Status for all vehicle's ECM. A confirmation screen displays when the clear codes option is selected to prevent accidental loss of data. Select Yes to continue or No to exit.

3. This function displays the real time PID data from ECU. Displayed data includes analog inputs and outputs, digital inputs and outputs, and system status information broadcast on the vehicle data stream.

4. These are codes that were generated during the last drive cycle, but before the DTC actually sets, two or more consecutive drive cycles are needed. The intended use of this service is to assist the service technician after a vehicle repair and after clearing diagnostic information, by expect or see differences between makes.

5. Typically, the stored frame is the last DTC that occurred. Certain DTCs that have a greater impact on vehicle emission, have a higher priority. In these cases, the top prioritized DTC is the one for which the freeze frame records are retained. Freeze frame data includes a "snapshot" of critical parameter value at the time the DTC is set.

6. This function is used to check the readiness of the monitoring system. It is an excellent function to use prior to having a vehicle inspected for state emissions compliance. Select I/M readiness to display a sub menu with two choice.

7. Use this option to view the result of On-Board Monitor tests. The tests are useful after servicing or after erasing a vehicle's control module memory.

8. The option displays the vehicle identification number (VIN), the calibration identification, and the calibration verification number (VIN), and other information of the test vehicle.

20 Settings



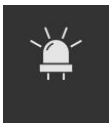
Language



Unit



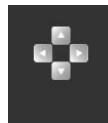
Beep



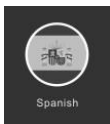
LCD Test



Logging



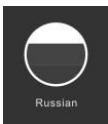
Key Test



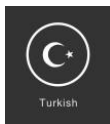
Spanish



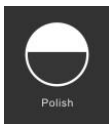
Hungarian



Russian



Turkish



Polish

- Language** Display multi-languages function menu. Total 9 languages optional. Only English languages be loaded before delivery
- Unit** Display unit setting menu. Metric and English units. Press OK to save the unit setting selection.
- Beep** Display beep setting menu. Beep includes: On and Off. Press OK to save the beep setting selection.
- Logging** Display logging setting menu. Record includes: On and Off. Press OK to save the setting selection. This function allows data recording during the car testing.
- Key Test** Display button function menu. Press the FN key for 2 seconds to quit the button test.
- LCD Test** Display LCD test function menu. Press ESC to quit the LCD test.

21 About



Product Serial Number: FX3001001
Register Password: 4PERRFFA
Firmware Version: 8001.8003
System Software Version: 5.53
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About Display the machine system information.
System information includes: Register password, firmware version, system software version and company information

22 FAQ

Why cannot install FX-Series update client correctly?

Only Windows 7, 8, 10 supported.

BE SURE TO CLOSE ANTI-VIRUS SOFTWARE.

Why cannot I read out the serial number during the update?

The serial number cannot be read out under the USB mode. Connect the device to vehicle to read out the serial number.

Why cannot I download software package via the Update Client?

Please check the following settings:

- 1- Have you connected to PC with USB ?
- 2- Have you installed anti-virus wall ?

Note: We strongly recommend you to close the anti-virus software during the update.

Why doesn't the auto scanner power on?

If the auto scanner won't power on or operate correctly in any other way, follow the steps to check the connections:

- 1- Check the connector properly inserted to the socket.
- 2- Check the DLC pins bent or broken.
- 3- Clean the DLC pins if necessary.
- 4- Update the software.

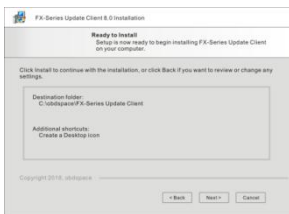
23

Login the website
[https://www.anceltech.com/
 support/download](https://www.anceltech.com/support/download)



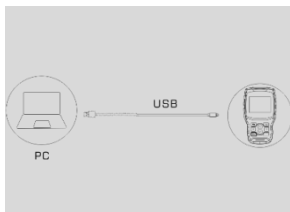
24

Install the FX-Serial
 Update Client



25

Cable Connection for
 Software update



26

Run FX-Serial Update Client



27

Make Registration for
 the First Use

28

Download the Latest
 Software Package



29 Software Update

The screenshot shows the ANCEL software update interface. At the top left, the ANCEL logo is displayed. Below it, the device ID 'FX1001001' and a language dropdown menu set to 'Russian' are visible. On the right side, there are two buttons: 'Update Selected' and 'Update All'. A checkbox labeled 'Click the button to display all history version' is located below these buttons. The main area contains a list of software packages for different car makes:

Car Make	Software Version	Release Date	Size	Action
ALFA ROMEO	ALFA 1.1	2017-7-02-21	2.41 MB	Download
FORD	AM FORD	2017-7-02-17	2.44 MB	Download
AUDI	AUDI 1.12	2017-7-02-17	5.37 MB	Download

Callouts provide the following instructions:

- Language Selection:** To select the required language by clicking the download arrow.
- Update Selected:** Click the button to update the selected software package.
- Update All:** Click the button to update all software package.
- Car Make Selection:** Click the square to select the car makes for software update.
- History Version:** Click the button to download history software version.

30 Warranty

12-Month Limited Warranty

ANCEL Corp. (the Company) warrants to the original retail purchaser of this ANCEL FX-1000 auto scanner, that should this product or any part thereof during normal consumer usage and conditions, be proven defective in material or workmanship that results in product failure within twelve (12) months period from the date of delivery, such defects will be repaired, or replaced (with new or rebuilt parts) with Proof of Purchase, at the Company's option, without charge for parts or labor directly related to the defects.

The Company shall not be liable for any incidental or consequential damages arising from the use, misuse, or mounting of the auto scanner. Some states do not allow limitation on how long an implied warranty lasts, so the above limitations may not apply to you.

This warranty does not apply to:

- A) Product subject to abnormal use or conditions, accident, mishandling, neglect, unauthorized alternation, misuse, improper installation or repair or improper storage;
- B) Products whose mechanical serial number or electronic serial number has been removed, altered or defected;
- C) Damage from expose to excessive temperatures or extreme environmental conditions;
- D) Damage resulting from connection to, or use of any accessory or other product not approved or authorized by the Company;
- E) Defects in appearance, cosmetic, decorative or structural items such as framing and non operative parts;
- F) Product damaged from external causes such as fire, dirt, sand, battery leakage, blown fuse, theft or improper usage of any electrical source.

IMPORTANT: All contents of the product may be deleted during the process of repair. You should create a back-up copy of any contents of your product before delivering the product for warranty service.