

PLEASE READ FIRST



(NEW 2011 VERSION)

Main features:

engine control system, the user can set different types of crankshaft independent
Signal output (for all models of the computer-driven)

automatic transmission input and output shaft signal simulation

pin connector commonly used automatic computer tips

directly into the waveform data set

crankshaft computer automatically set the signal waveform data

time to test the independent six-channel injection

engine speed signal output

speed signal output (Hall signal, magnetic signal)

three, four-channel ABS wheel speed signal output

diesel electronic control system testing

EGR solenoid valve driven

electromagnetic valve clearance of carbon cans

speed table-driven

driven blower control module

idle valve driver

12V \ 24V stepper motor drive (four-, six-lane)

12V \ 24V servo motor drive

injector drive

driven hydraulic solenoid valve

ignition module drive

parking sensor (ultrasonic) sensor-driven

Automatic Shift Valve Driver
Shift Quality Valve Drive
hydraulic valve driver
water temperature, intake air temperature, outdoor temperature, evaporation
temperature sensor signal simulation box
oxygen sensor signal simulation (manual)
oxygen sensor signal simulation (auto signal)
throttle signal simulation
Simulation of carbon can remove the solenoid valve
EGR solenoid valve analog
air flow meter, air pressure sensor (analog, digital) signal simulation
Simulation of the ignition coil
Simulation Injector
idle speed stepper motor simulation (four-, six-lane)
A \ C relay simulation
pump relay simulation
radiator fan relay simulation
audio signal output, power amplifier driver
automatic transmission shift valve, shift quality valves, hydraulic control valve
simulation
fuel injection pulse width measurement
Central locking server simulation
burglar resistance simulation
all of the output signal overload protection
High-Power 5V \ 12V \ 24V voltage output
user extensions

Instrument specific parameters:

output waveform can be set: five-channel arbitrary waveform output settings, which can crank out 1 ° angle signal, the signal sub-cylinder, 1 cylinder TDC signal, cam signal, the phase accuracy. Models for all the world's crankshaft, camshaft signal simulation; also applies to all the world's automatic transmission input and output shaft signal simulation; ABS three, four-channel wheel speed signal simulation; computer settings waveform, the network lifetime free upgrades, At the same time long-wave data can be stored within the memory;

Output: magnetic signals, the Hall signal, optical signal;

actuator drive: drive current 3A, 1% ~ 99% duty cycle continuous adjustment, continuously adjustable frequency;

sensor signal simulation: resistance 100Ω ~ 10000Ω voltage 0V ~ 5V × 3
0V ~ 1V

simulation-driven actuator: 54 simultaneous output channels

stepper motor drive: current 1A, applicable to all vehicles with four lines, six lines (12V \ 24V) stepper motor drive;

Output current: 5V-5A \ 12V-5A \ 24V-3A

Device can be used:

Dynamic diagnosis of automotive sensors, automotive engine, transmission, ABS, air conditioning, anti-theft and other computer repair, car model-driven teaching aids, research and development in automobile production;

This instrument applies to Germany, the United States, Japan, Korea, China-made mini-cars and dozens of thousands of vehicles;

Instrument Packing List:

sensor signal simulation expert Gold Edition 1 set

write waveform data line 1

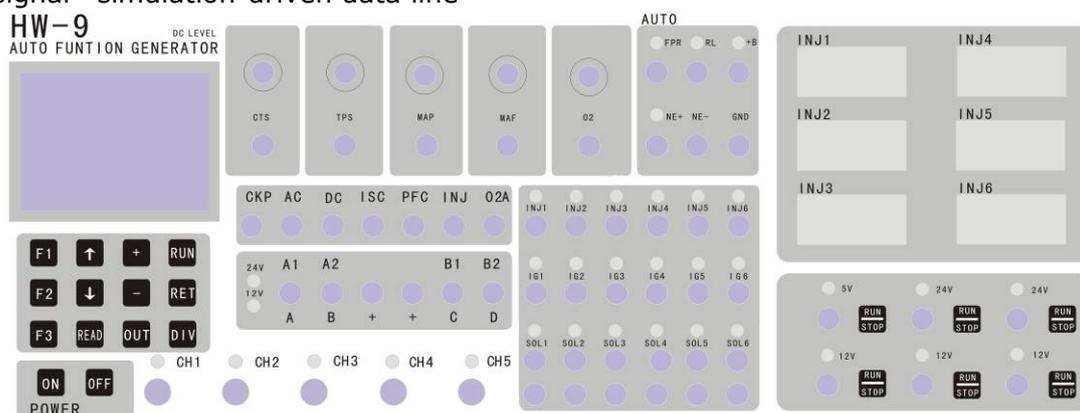
Power Line 1

Wave Connection 3

a computer data disc

instrument manual 1

signal simulation-driven data line



About the control panel:

Injector and fuel injection time measurement simulation

INJ1: a tank of fuel injector and fuel injection time (ms)

INJ2: two-cylinder fuel injector and fuel injection time (ms)

INJ3: three-cylinder fuel injector and fuel injection time (ms)

INJ4: Four-cylinder fuel injector and fuel injection time (ms)

INJ5: five-cylinder fuel injector and fuel injection time (ms)

INJ6: six-cylinder fuel injector and fuel injection time (ms)

Analog output

CTS: the temperature sensor signal simulation 0 ~ 10K

TPS: EGR valve position, throttle position sensor signal simulation 0 ~ 5V

MAP: Simulation of the intake pressure sensor signal 0 ~ 5V

MAF: Simulation of air flow meter signal 0 ~ 5V

O2: oxygen sensor signal simulation of 0 ~ 1V (manual adjustment)

O2A: Simulation of the oxygen sensor signal conditioning (signal 1-1V automatic change)

Digital signal output

CKP: Crankshaft signal

AC: AC Signal

DC: DC signal

Actuator drive

ISC: Idle Speed Control Valve Drive

PFC: ignition coil driver

INJ: injector drive

A1 \ A2 \ B1 \ B2: four-wire stepper motor driver

A \ B \ + \ + \ C \ D: six-wire stepper motor drive

Simulation of the ignition coil and ignition module

IG1: a tank simulation of the ignition coil and ignition module (positive \ negative trigger)

IG2: two-cylinder ignition coils and ignition module simulation (positive \ negative trigger)

IG3: three-cylinder ignition coils and ignition module simulation (positive \ negative trigger)

IG4: Four-cylinder ignition coils and ignition module simulation (positive \ negative trigger)

IG5: five-cylinder ignition coils and ignition module simulation (positive \ negative trigger)

IG6: six-cylinder ignition coils and ignition module simulation (positive \ negative trigger)

Solenoid valve analog:

SOL1: Coil 1

SOL2: coil 2

SOL3: Coil 3

SOL4: Coil 4

SOL5: Coil 5

SOL6: Coil 6

Automatic Terminal Tips

FPR: pump relay simulation

RL: relay simulation

+ B: 12V power output
NE +: crankshaft signal + output
NE-: crank signal - output
GND: Negative Power Supply

Multi-channel signal generator

CH1: Hall (optical) sensor output signal 1
CH2: Hall (optical) sensor output signal 2
CH3: magnetic sensor signal 1 output (isolated)
CH4: magnetic sensor signal 2 output (isolated)
CH5: magnetic sensor signal 3 output (isolated)

Key features:

F1: shortcut keys: General Signal Generator
F2: shortcuts: According to the model selection
F3: shortcut keys - 5V, 12V, 24V power supply all closed
↑: Menu Up
↓: Down Menu
+: Signal enhancement
-: Signal is reduced
RUN: running \ sure
RET: Return
READ: Read five-channel signal data crankshaft
OUT: crankshaft signal output
DIV: stepper motor operating voltage 12V \ 24V switch

POWER: Power switch



Rd arbitrary wave signal analog output Features

Rd arbitrary wave signal functional block diagram and working principle of
Introduction:

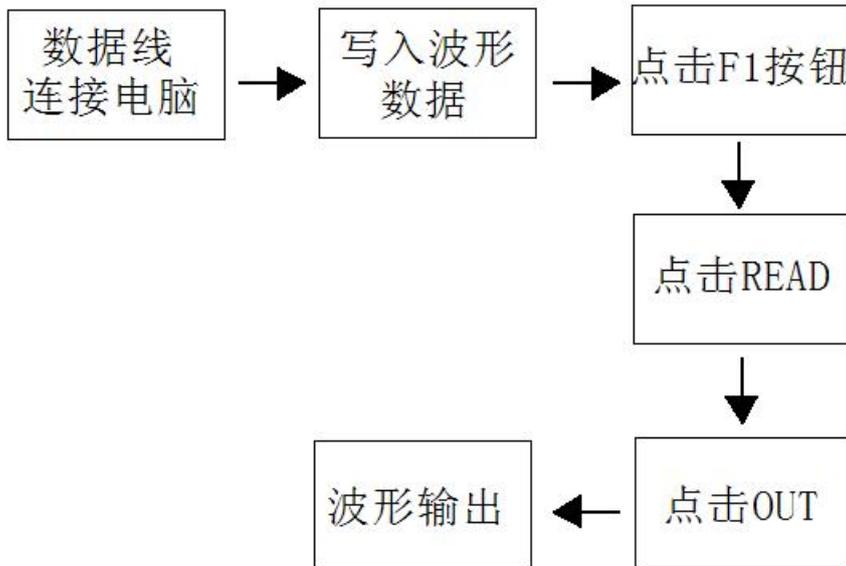
The function of the PC machines for the operating platform, and through the joint control of CPU and memory has generated Rd arbitrary wave signal output, which can produce various models of the crank signal is present; automatic transmission input and output shaft signal; ABS III, IV channel wheel speed signal; and have the waveform storage function.

Arbitrary wave signal generation are based PC, the operating software as the base waveform editor, and an adjustable reference oscillator frequency signal for the synchronization signal, by determining the number and the reference oscillation signal level changes to the output waveform settings.

The "Channel 1, Channel 2" for the square-wave output, mainly used to simulate the

Hall, photoelectric crankshaft, camshaft signal. "Channel 3, Channel 4, Channel 5" as the isolated AC signal output, used to simulate the magnetic-electric crankshaft camshaft signal.

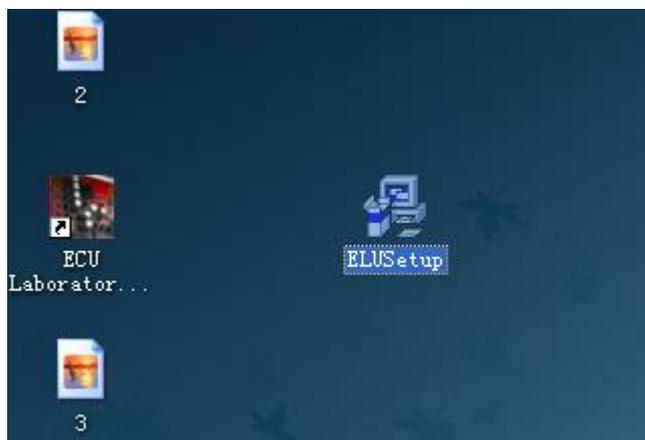
Instrument specific steps:



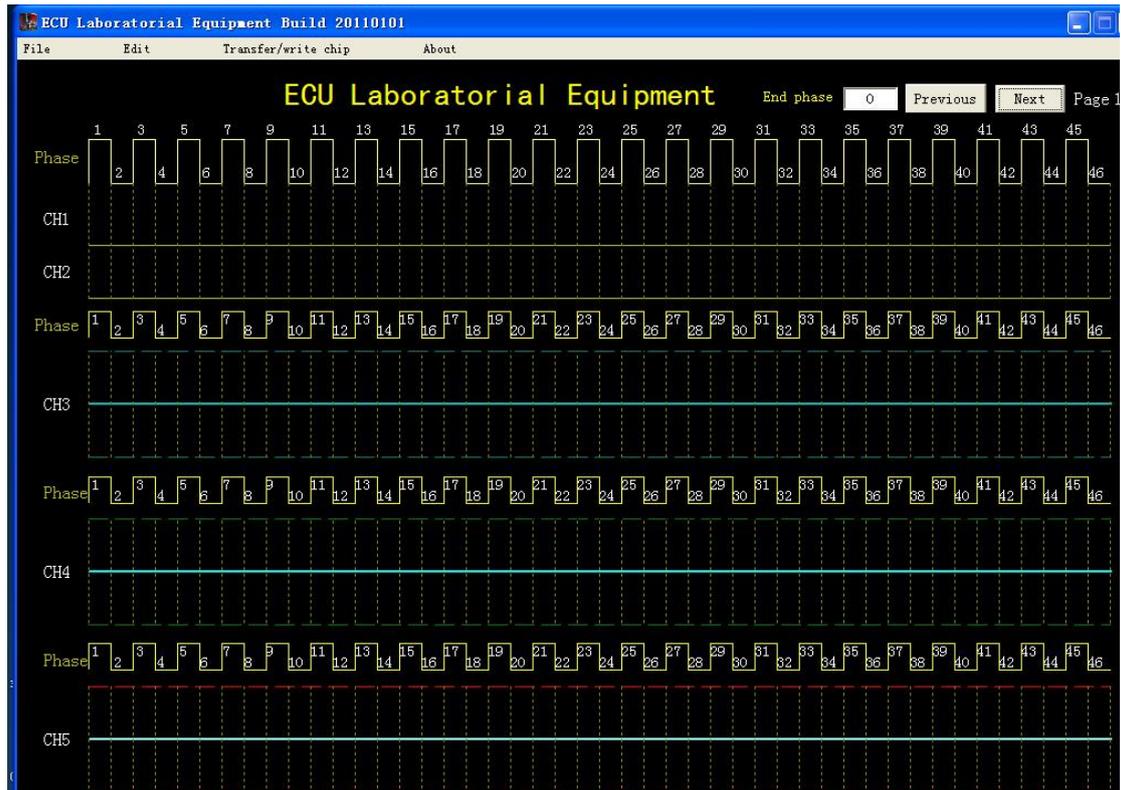
(connect computer—write signal wave data---click F1----click read---click OUT—output signal wave

Waveform set software installation and use:

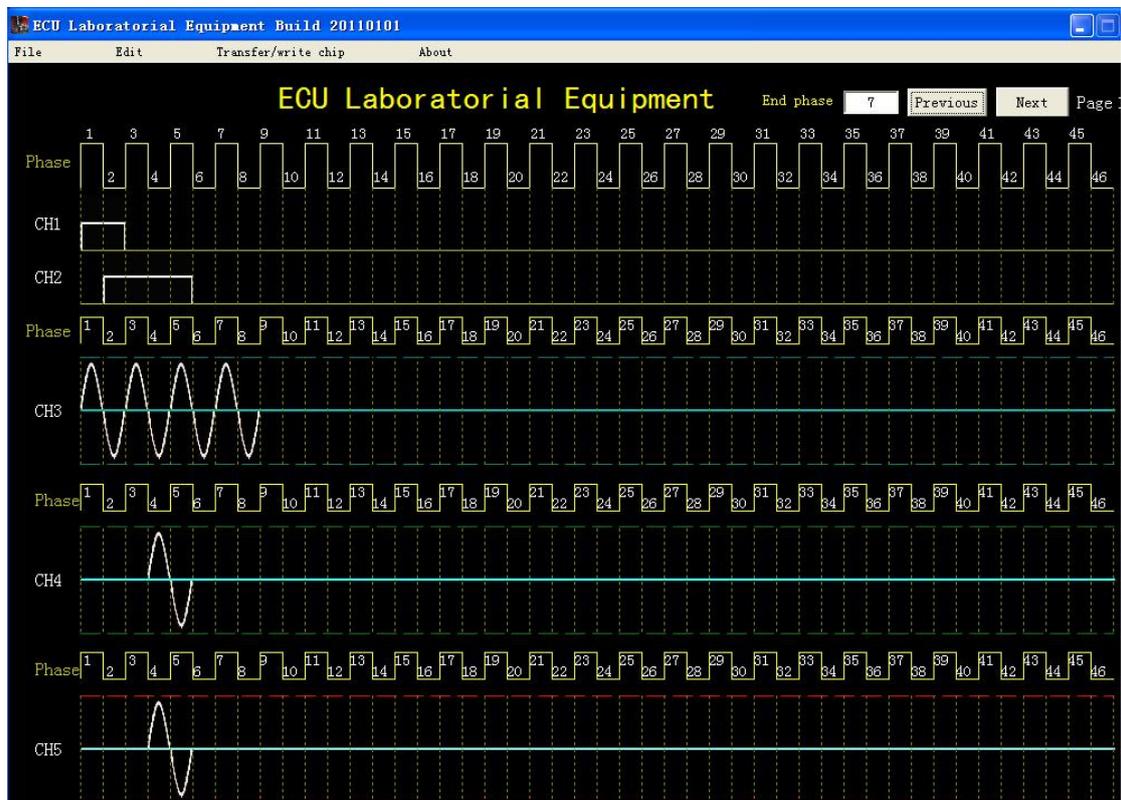
1, the first simulation experts onboard the CD into the computer drive, and open. The "ELUSetup" file to your desktop, and double-click the file, the program installed.



2, the installation is complete, double click the desktop icon, the following interface:

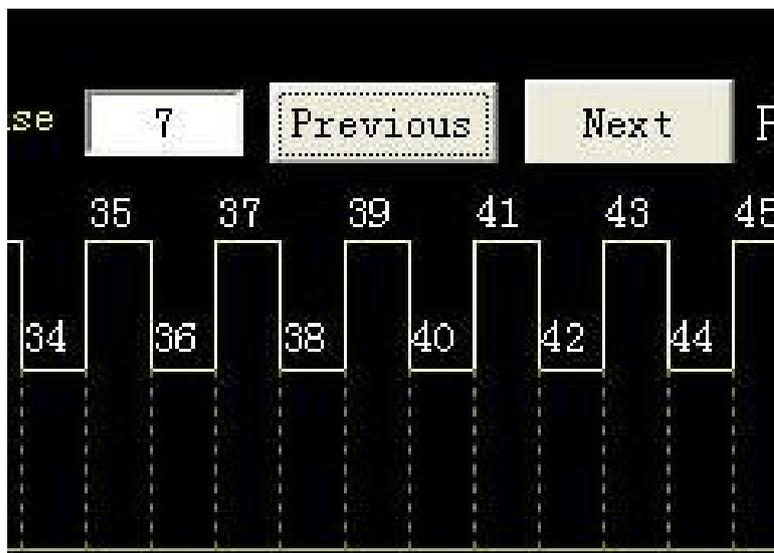


5, the operation after the waveform editing interface.

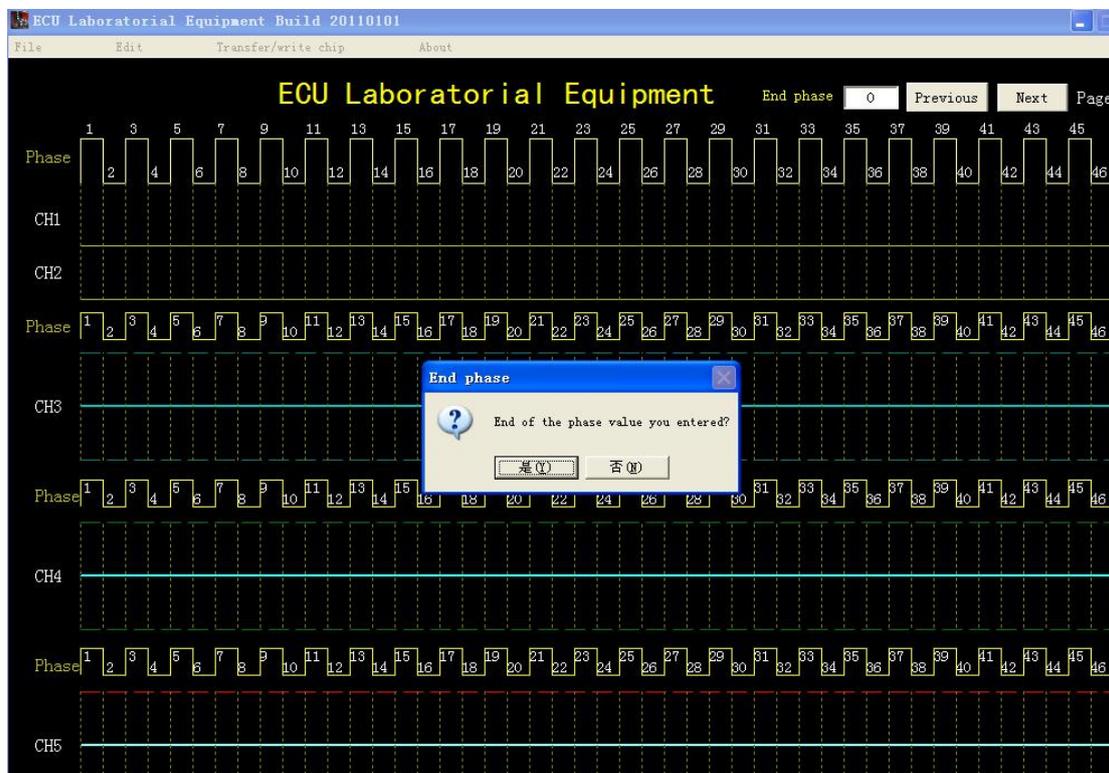


6, according to different models, you can configure the interface in the wave zone free of any settings you need to set the waveform, in which Channel 1, Channel 2 is mainly used for two-channel square-wave set, the other three channels is mainly

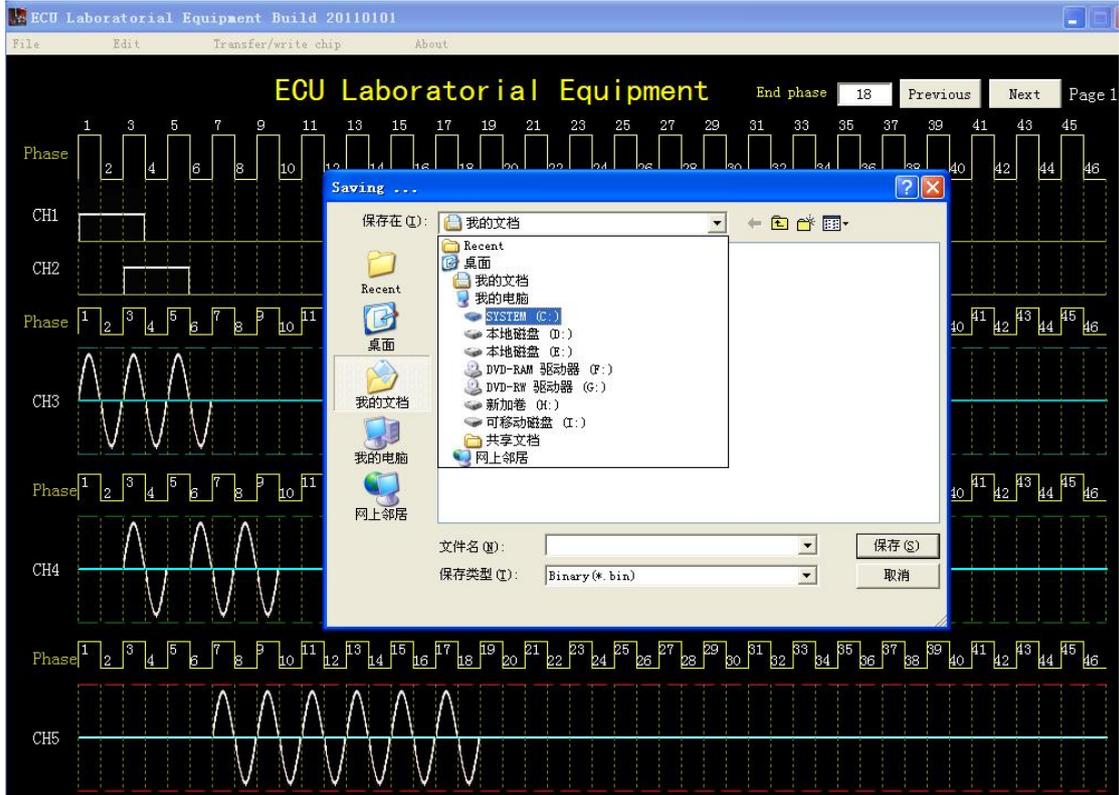
used for sine wave configuration. After the waveform set in the "End phase" menu, enter the wave at the interface we set "phase map" of where the end (that is, the end of the waveform position) can also be said to be the end of the crankshaft position signal a turn, and then the new cycle. For example: the drawing of the output waveform in the "phase diagram" the end of the 7 position, and repeat the cycle. We in the "end phase" menu, type 7. If a waveform set is not enough, click "Next" to continue with the waveform set.



7, after the end of the waveform settings, click the "Save" to save the settings of the waveform.



8, click the "Save", the pop up screen, select the file path, click the "Save" button.



Part of the engine computer wave file:

