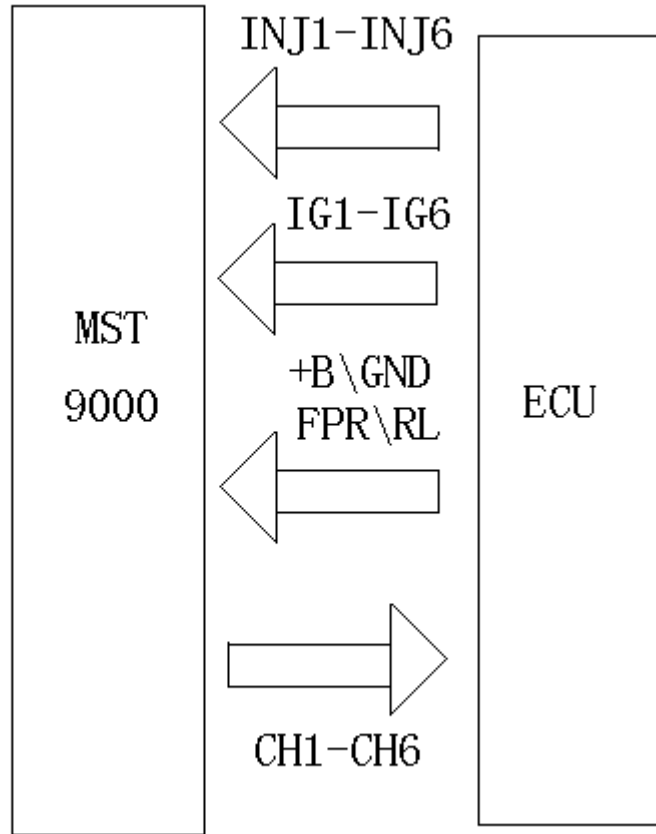


## **MST9000 AUTO SIGNAL operation steps**

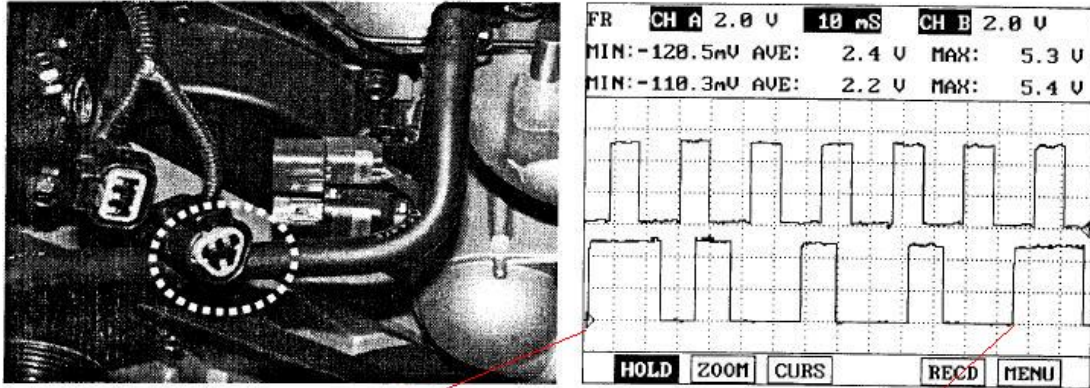
- 1, Click the button “F1”
- 2, Based on the ECU Terminal diagram of the related car models, accordingly connect the fuel injector driving signal to MST-9000 INJ1—INJ6;
- 3, Connect ECU ignition driver signal to the IG1-IG6 of MST-9000;
- 4, Connect ECU oil pump relay signal, power line, wire to MST-9000 FPR/+B/GND.
- 5, Connect MST-9000 crankshaft and camshaft signal CH1-CH6 to ECU crankshaft and camshaft signal;
- 6, Edit the ECU crankshaft signal by special waveform software, and write the data by USB interface.
- 7, Click the button “READ”, and then click the “out”, the complete crankshaft signal will put out via CH1-CH6.

8, Click the button “RUN”, and then the power source terminal +B output 12v power, now the CUP starts to work.



### **How to set crankshaft signal?**

Find out the phase diagram of ECU crankshaft and camshaft signal.



1 东风悦达起亚

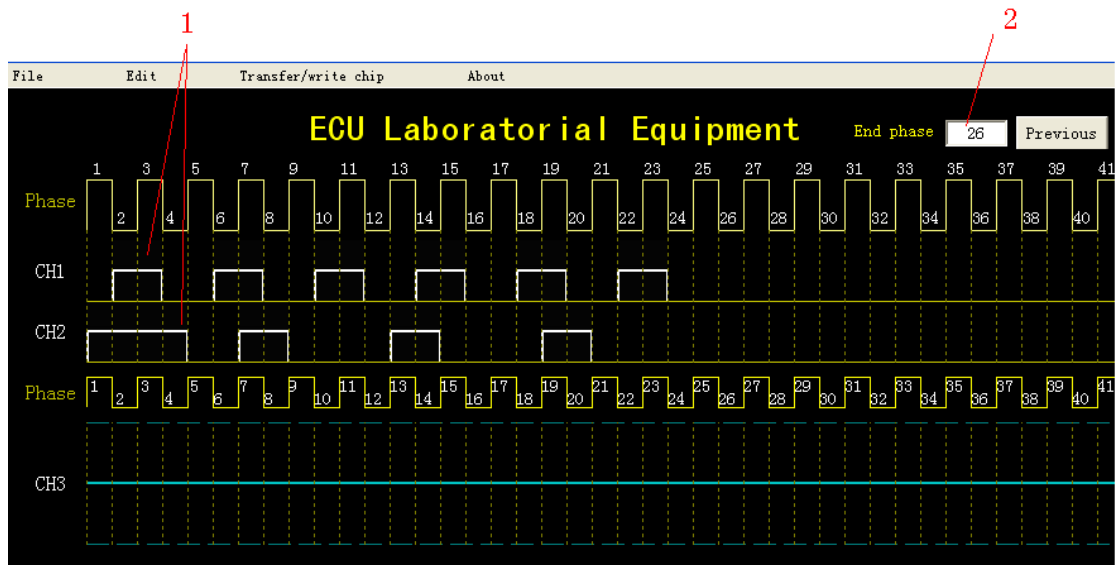
2

Attention: the phase diagram of crankshaft signal and camshaft must be a whole working cycle WAVEFORM, as the above showing:

Phase diagram analysis:

- 1, The camshaft signal starting point of engine one working cycle
- 2, The camshaft signal end point of engine one working cycle

B, Edit the Waveform in the waveform software as the above picture shows.



Notes: CH1/CH2 is Hall sensor signal output, CH3\CH4\CH5 is magneto electric sensor signal output

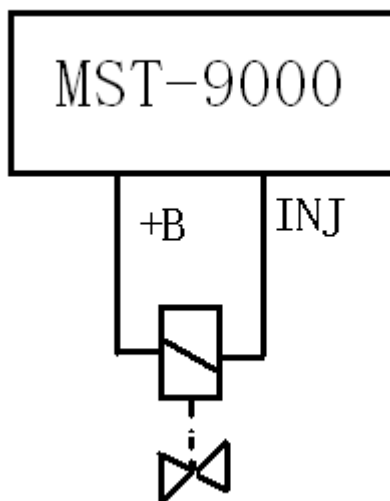
2, after waveform edition ends, in the “end phase” dialogue you need to enter a crankshaft signal value after a working cycle of engine.

Note: this data is generated based on the crankshaft signal located “Phase” value when it ends

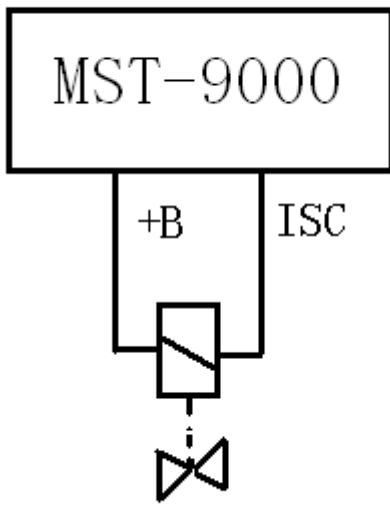
2.

C. Finally, write waveform into MST-9000 by USB data cable.

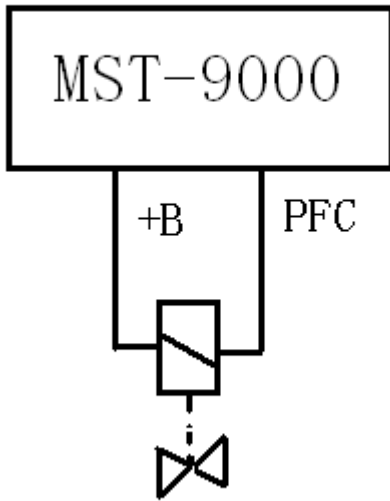
MST-9000 driver fuel injector connection method:



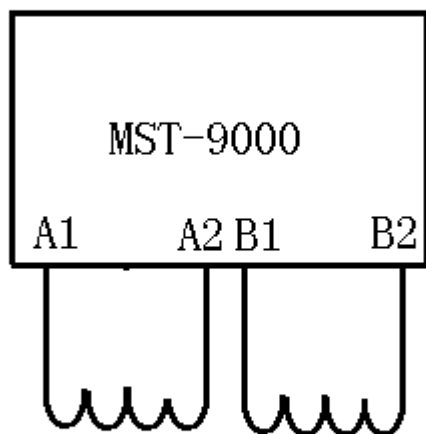
MST-9000 Driver Idle Control Valve connection method:



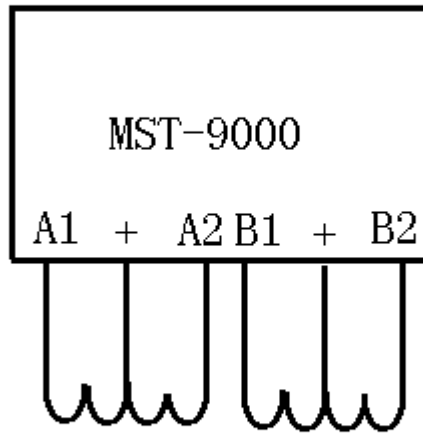
MST-9000 driver pressure control valve connection method:



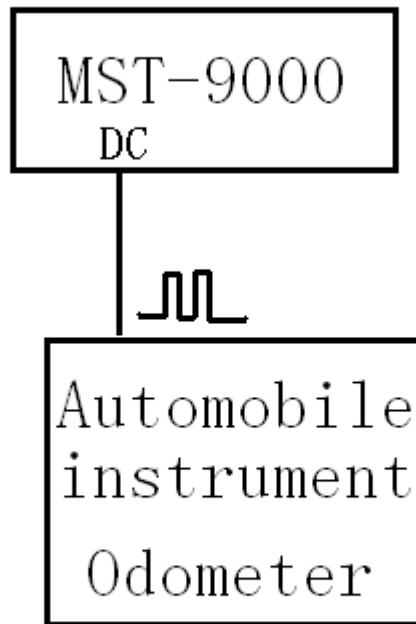
MST-9000 driver 4-line Step Motor connection method:



MST-9000 driver 6-line Step Motor connection method:

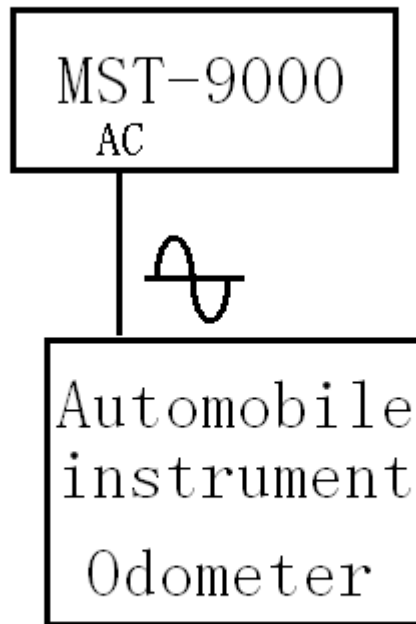


MST-9000 driver Km Table (Hall sensor):

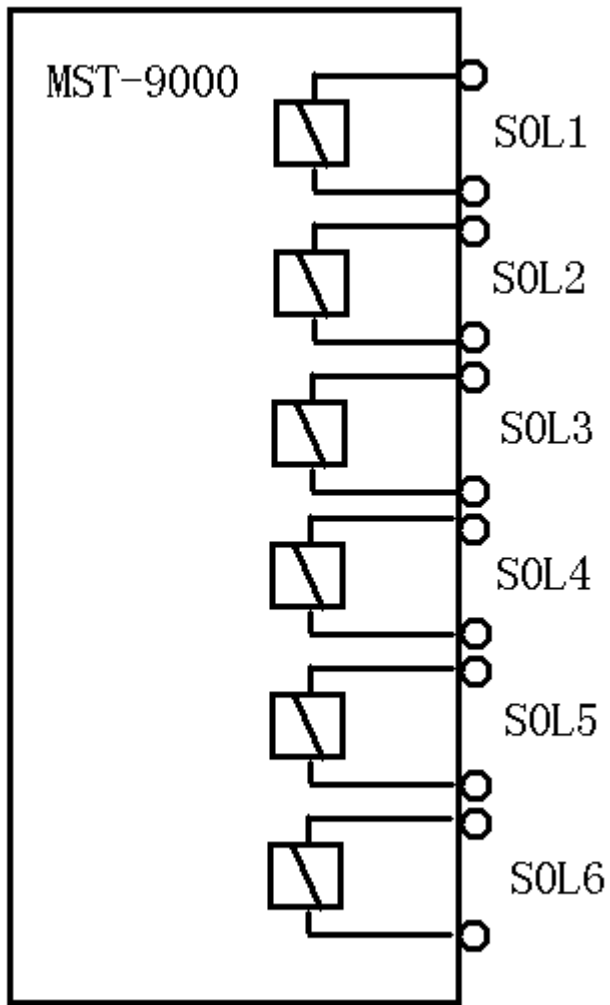


MST-9000 driver Km Table (magneto electric sensor):





MST-9000 independently output 6-channel electromagnetic actuator simulation, they are compatible with ABS control solenoids, automatic transmission shift solenoid valve, hydraulic adjustment solenoid valve, fuel injectors, ignition coils, carbon canister clearance solenoid valve, A \ C relays, fans and electrical appliances, and electromagnetic actuator simulation



:

MST-9000 analog temperature sensor, throttle position sensor, air flow meter, intake air pressure sensor, oxygen sensor and the connection method to connect with ECU.

