



AMPRO 

**SCR DOSER TESTING
MACHINE**



Chapter I Product Introduction

SCR urea pump controller is perfectly compatible with Windows and Android operating system.

The test software can be installed on any Windows and Android device.

SCR urea pump controller can automatically identify the connected test equipment, and can turn on/off this function in the system settings, Available in two form factors.



Chapter II Functional Introduction

1.main interface

1)Interface can select urea pump, sensor, system settings, online upgrade, user manual functions



2) Urea pump model selection interface, you can choose different urea pumps for testing



SCR aftertreatment test system

● Connectec

⏪ Return



Tenneco 1.5/6.0



CNHTC(Electric) 2014



CNHTC(Air assist) GB4



Emitec (YuChaiSanLi)



Emitec (Cummins) (24V)



Emitec (Cummins) (12V)

SCR aftertreatment test system

Connectec

Return



WeiFu (24V)



WeiFu (12V)



PowerGreen



KaiLong (Round head)



KaiLong (Square head)



KDS



3)Sensor selection interface, different sensors can be selected for testing

SCR aftertreatment test system

Connectec

Return



NOx sensor (24V)



NOx sensor (12V)



Temperature/Level sensor



Exhaust gas temp sensor

2. Urea pump test

The screenshot displays the KDS control interface. At the top, the title 'KDS' is centered, with a 'Connected' status indicator and a 'Return' button on the right. A red vertical line points to the top center of the interface. The left sidebar contains a menu of test options: 'Function test' (highlighted in green), 'Component test', 'Standby', 'build pressure', 'Emptying', 'small flow inj', 'mid flow inj', and 'large flow inj'. The main display area shows three data fields: 'Supply volt.' with a value of '23.9 V', 'System current' with a value of '0.0 mA', and 'Dosing rate'. Below these fields is a 'Test Run Time' display showing '00:00'. On the right side, there is a 'Service Help' button with left and right arrow icons.

1)Functional testing

A)Standby

Urea pump will stop function test in standby mode

B)Pre injection pressure build-up

After clicking the "pre-injection pressure" button, the SCR controller will carry out the operation of air evacuation and pressure establishment in the pipeline.

C)Clean (purge)

After testing, before dismantling the urea pipeline, you need to click the "Clean (Purge)" button. The SCR controller will control the urea pump to perform the cleaning operation, and the urea pump and urea solution in the pipeline will be purged into the urea box.。

D)Large/Medium/Small Flow Injection

After successful pressure building, click "large flow injection", "medium flow injection" and "small flow injection" to observe the injection of urea solution.

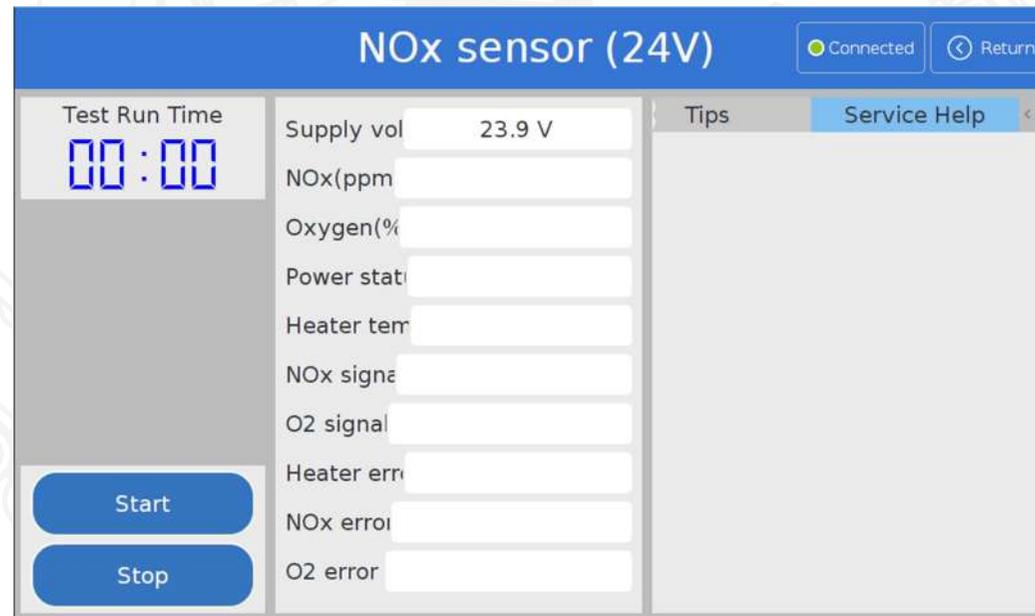
1Component testing

Component testing can only be done in standby mode

2 Message hint

Display error, warning, prompt and fault information, etc.

3. Nitrogen and Oxygen Sensor Testing



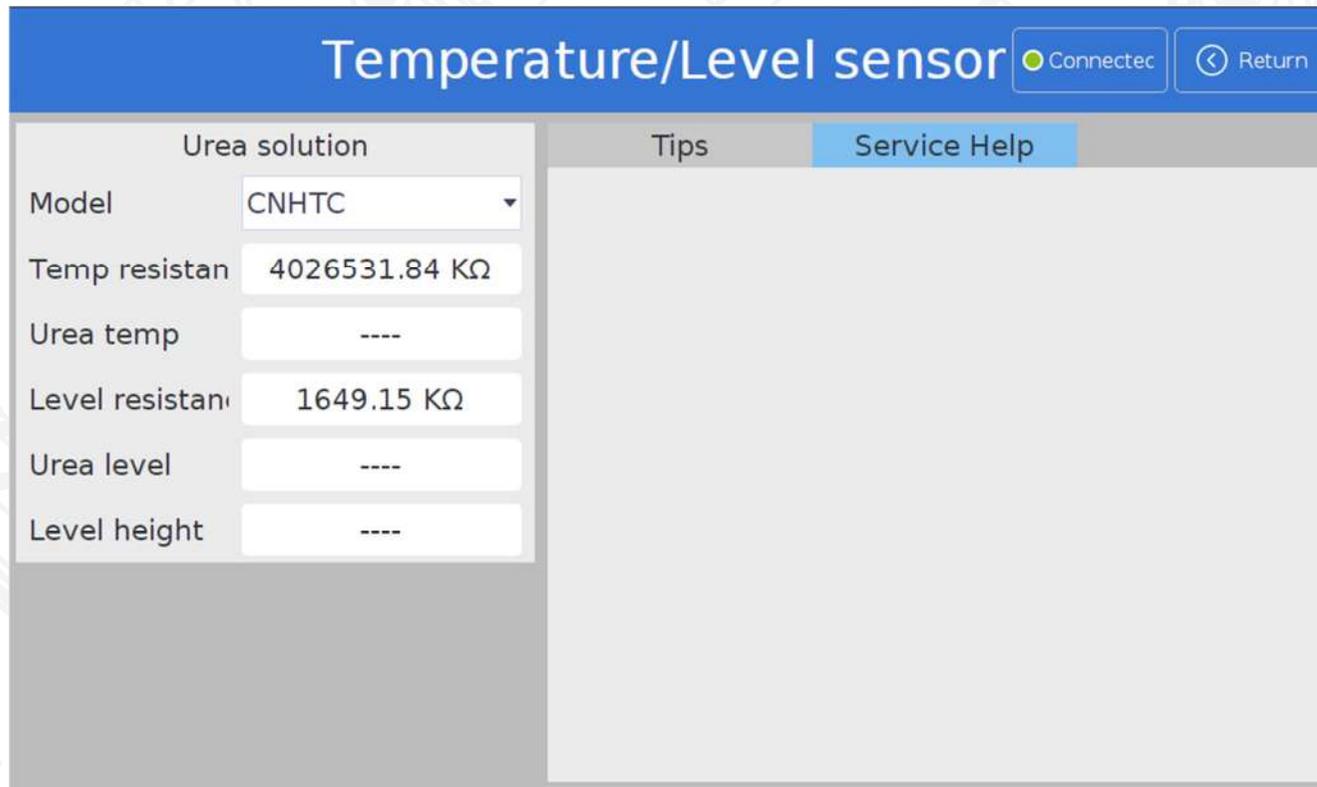
1) After connecting the oxynitride sensor, click the "Start" button to start the test. Nitrogen and oxygen sensors will be heated first. After about one minute, they will be heated to a certain temperature and stop heating. The oxygen concentration and nitrogen oxide concentration around the sensor will be

measured. The whole testing process is 5 minutes.

2) Whether the nitrogen and oxygen sensor is damaged or not can be judged according to the measured "oxygen concentration (%)" and "NO x (ppm)". In air environment, the oxygen concentration is about 20%, and the range of NO x ppm is 0-30.

Note: When testing the nitrogen and oxygen sensor, it will be heated automatically. It is strictly forbidden to touch the metal part of the sensor to avoid scalding. Do not splash water or liquid on the sensor to avoid damaging the sensor

4. Measurement of Liquid Level/Temperature Sensor



The screenshot displays a software interface for a Temperature/Level sensor. The title bar reads "Temperature/Level sensor" and includes "Connectec" and "Return" buttons. The main content is divided into two sections: "Urea solution" and "Tips/Service Help".

Urea solution	
Model	CNHTC
Temp resistanc	4026531.84 K Ω
Urea temp	----
Level resistanc	1649.15 K Ω
Urea level	----
Level height	----

The right section has two tabs: "Tips" and "Service Help". The "Service Help" tab is currently selected and is empty.

1)The liquid level and temperature sensor are used to measure the resistance value of the sensor, and then convert it into urea temperature and liquid level height.

2)When testing the liquid level sensor, the sensor can be removed from the urea box and slid the float manually. At the same time, whether the liquid level resistance changes or not can be observed.

5. Testing of Exhaust Temperature Sensor

Exhaust gas temp sensor Connectec Return

Exhaust gas temperature

Temp sensor

Temp resistan

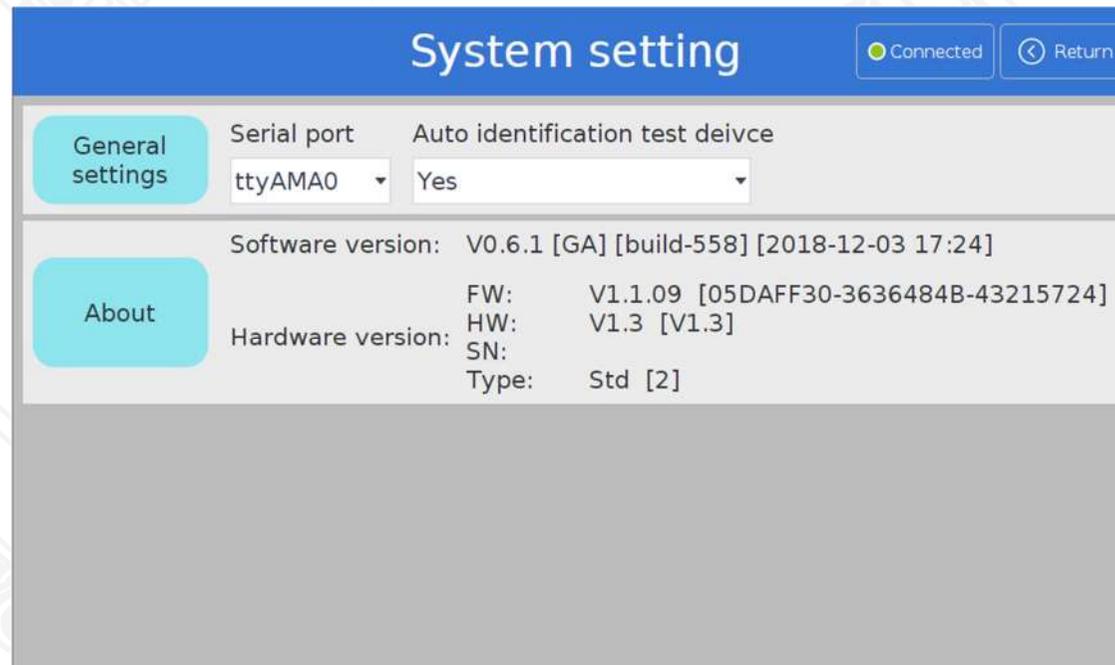
Gas temp

Tips **Service Help**

1)The detection of the temperature sensor is also to test the resistance of the sensor, and then convert the resistance value to the temperature value according to the type of sensor.

2)Currently supports 3 types of temperature sensors: PT100, PT200, PT1000

6. System setup



1) Android version software connects SCR controller via Bluetooth

Bluetooth connection steps:

A) Click the "Scan" button to scan peripheral Bluetooth devices

B) After selecting the device in the Bluetooth device list, click the Connection Button. For the first pairing, you need to input PIN code (1234)

2) Windows version software connects SCR controller via USB cable or Bluetooth

7. Online upgrade

The screenshot displays the 'Online Upgrade' interface. At the top, there is a blue header with the title 'Online Upgrade', a 'Connected' status indicator (a green dot), and a 'Return' button. Below the header, the interface is divided into three main sections:

- Server:** A light blue button labeled 'Server' is followed by a dropdown menu currently set to 'China Server'.
- Application:** A light blue button labeled 'Application' is followed by 'Current Ver V0.6.1' and 'Lastest Ver V0.6.1'. A progress bar shows '0%' completion. An 'Update' button is located to the right.
- Firmware:** A light blue button labeled 'Firmware' is followed by 'Current Ver V1.1.09' and 'Lastest Ver V1.1.09'. Two progress bars both show '0%' completion. An 'Update' button is located to the right.

Both applications and firmware support online upgrades..

8. User's Manual

The interface can slide left and right to turn pages.

SCR DOSER TESTING MACHINE



AMPRO TESTING MACHINES

Tel : +91-11-25775600

Mob. +91 9811890900

info@amproindia.com

amproindia.com.amproindia.in

Head Office

CB-152, 2nd Floor, Ring Road, Naraina, New Delhi - 110028, India



Delhi / Ahmedabad / Raipur / Hyderabad / Jabalpur / Navi Mumbai