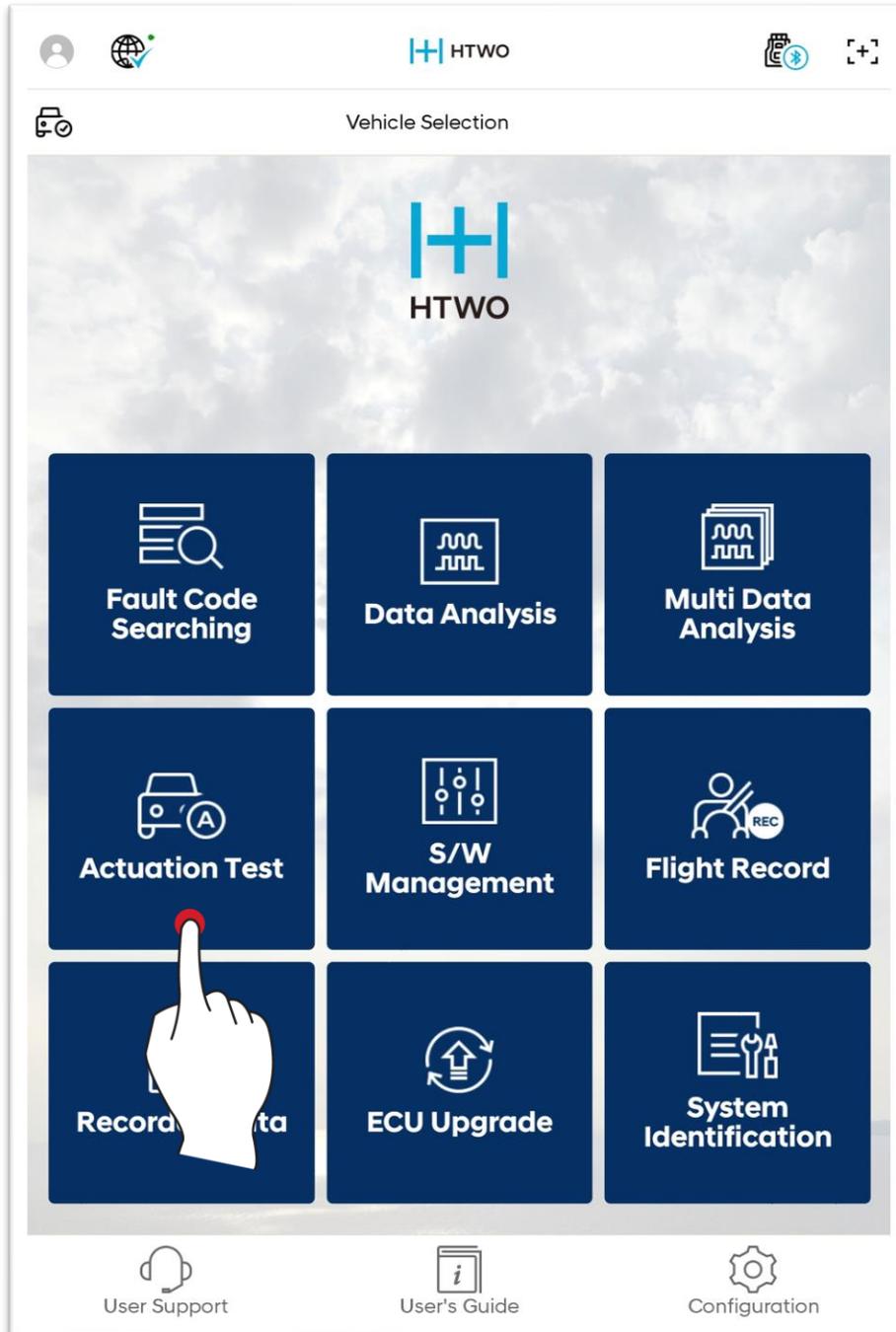


Actuation Test

This is a function of performing forced self-driving and stopping various actuators installed on vehicles through a control module, which can inspect the normal driving status of parts.



Actuation Test

It displays Actuation Test Item supported on the selected vehicle and operates the selected actuator manually.

The screenshot shows the 'Actuation Test' interface for a vehicle. The top bar displays the vehicle model 'HTWO/2022/3rd Generation FC(95kW)' and the selected component 'FCU1_REAR (9)'. A table lists various sensors with their current values and units. Below this is a playback control bar with a timer at 00:00:00/00:00:52 and buttons for Start and Save. A second table lists 21 test items, including 'Air Pressure Control Valve Control', 'Fuel Block Valve Control', 'Fuel Supply Valve Control', 'Fuel Drain Valve Control', and 'Fuel Drain Valve Heater Control'. A 'Stop' button is located at the bottom of the interface. Red circles with numbers 1 and 2 highlight the 'Air Pressure Control Valve Control' row and the 'Stop' button, respectively.

Sensor Name	Value	Unit	Link Up
Air Temperature Sensor Value(Stack Outlet)	-34	'C	
Air Temperature Sensor Voltage(Stack Outlet)	0.7	V	
Air Flow Sensor Value	24	-	
Air Flow Sensor Temperature Value	-41	'C	
Air Flow Sensor Humidity Value	10	%	
Air Pressure Sensor Value	77	-	

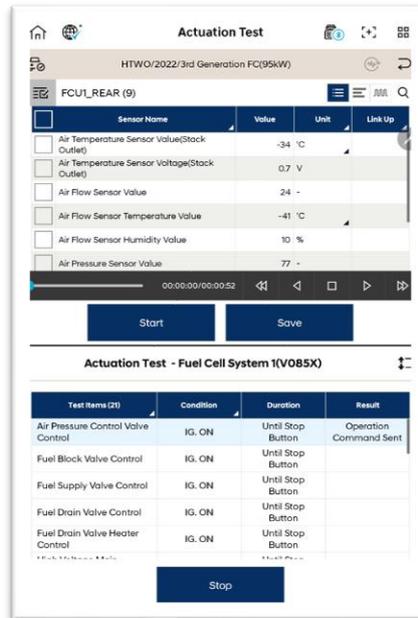
Test Items (21)	Condition	Duration	Result
Air Pressure Control Valve Control	IG. ON	Until Stop Button	Operation Command Sent
Fuel Block Valve Control	IG. ON	Until Stop Button	
Fuel Supply Valve Control	IG. ON	Until Stop Button	
Fuel Drain Valve Control	IG. ON	Until Stop Button	
Fuel Drain Valve Heater Control	IG. ON	Until Stop Button	

Data Analysis Mode

It displays the input/output value of sensor data when the user performs Actuation Test

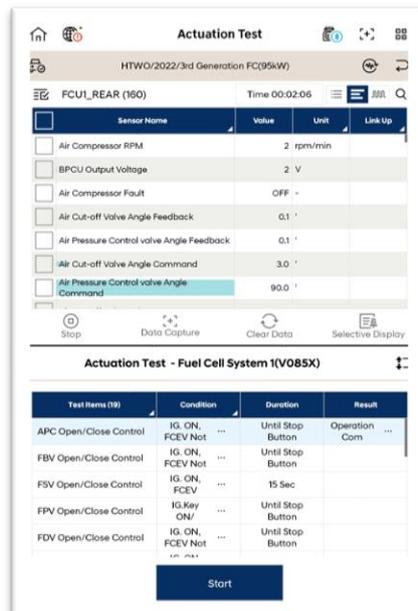
Text Mode

This indicates the sensor data as text format.



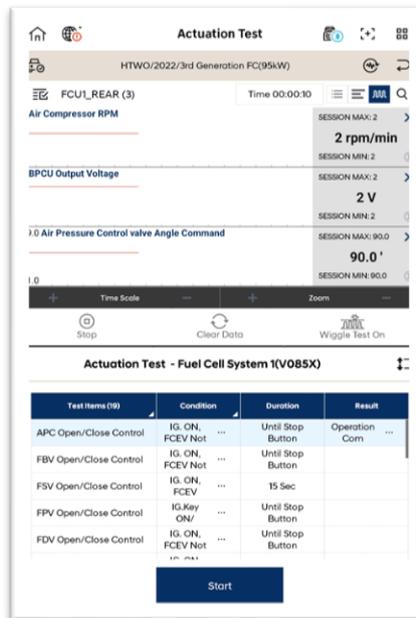
Bar Graph Mode

This indicates the sensor data as a bar graph format.



Graph Mode

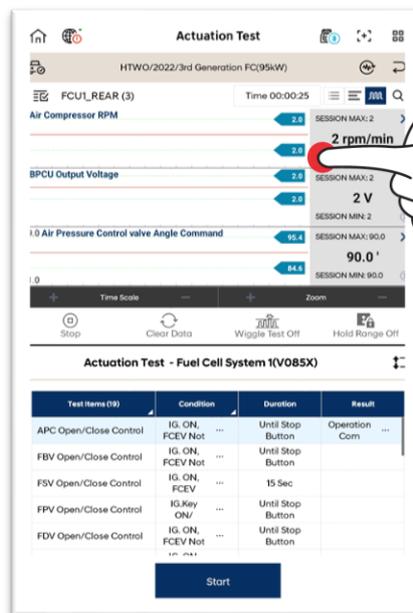
This indicates a selected sensor data as a graph format.



Graph Mode – Function Button

Wiggle Test On / Off

When Wiggle Test function is switched ON, the user can configure a desired data maximum/minimum value, and receive a notification if the sensor value exceeds or falls below the standard value.

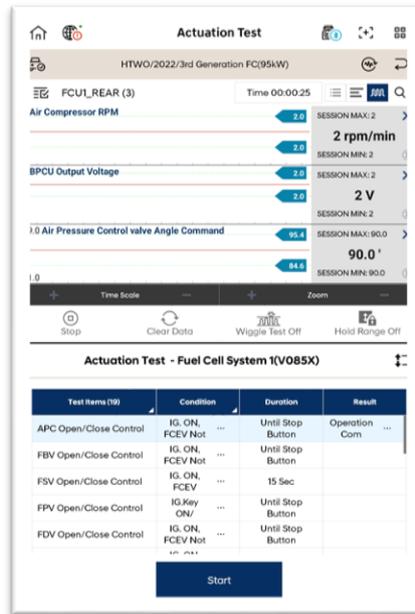


Configure the value by dragging the cursor.

 If you mute or volume is low, you may not hear an audible alarm.

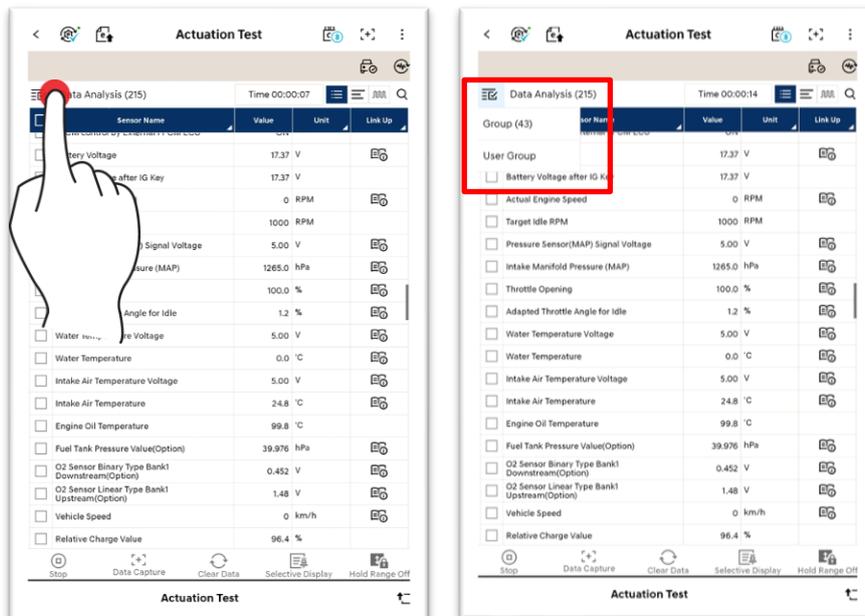
Wiggle Test On – Hole Range On

If Hold Range is switched ON, it only shows the sensor values that exceed or fall below the standard value.



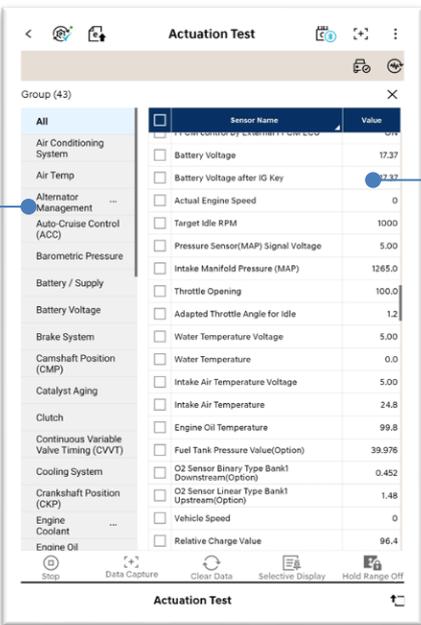
Group/User Group

Through  button on the top-left corner, the user can use Group/User Group function.



Group

It forms a group of sensor data items to express only relevant data.



Group list

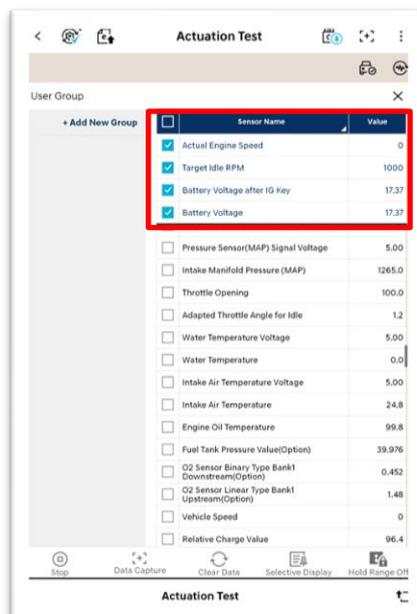
Grouped sensor data list

Sensor Name	Value
Actual Engine Speed	0
Target Idle RPM	1000
Battery Voltage after IG Key	17.37
Battery Voltage	17.37
Pressure Sensor(MAP) Signal Voltage	5.00
Intake Manifold Pressure (MAP)	1265.0
Throttle Opening	100.0
Adapted Throttle Angle for Idle	1.2
Water Temperature Voltage	5.00
Water Temperature	0.0
Intake Air Temperature Voltage	5.00
Intake Air Temperature	24.8
Engine Oil Temperature	99.8
Fuel Tank Pressure Value(Optional)	39.976
O2 Sensor Binary Type Bank1 Downstream(Optional)	0.452
O2 Sensor Linear Type Bank1 Upstream(Optional)	1.48
Vehicle Speed	0
Relative Charge Value	96.4

User Group

The user can form or edit a group of desired sensor data items.

1. In User Group screen, select the sensor data items to be grouped.



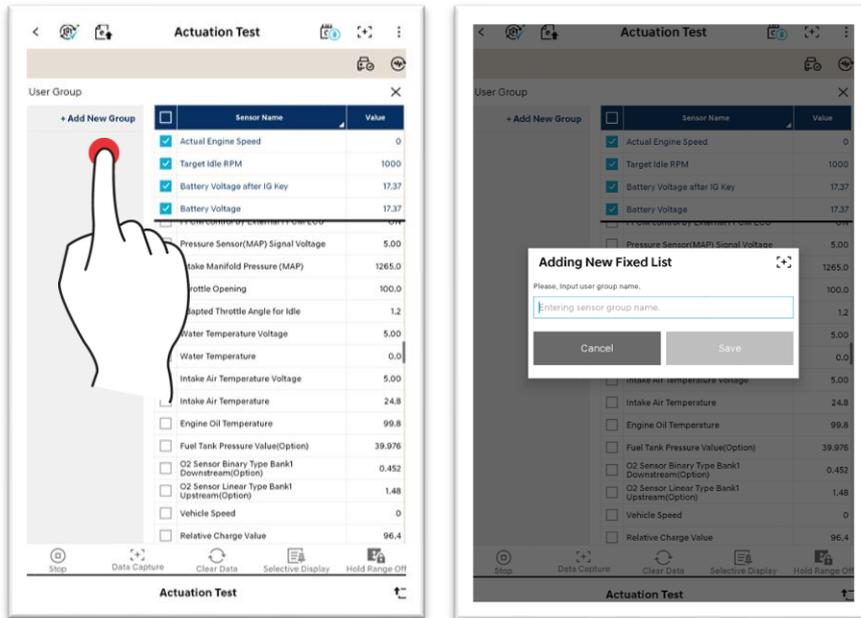
Actual Engine Speed 0

Target Idle RPM 1000

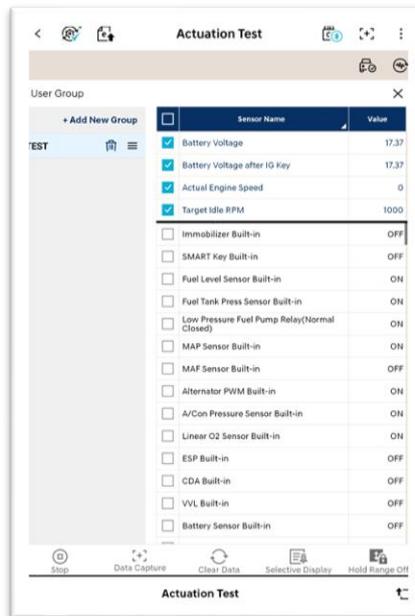
Battery Voltage after IG Key 17.37

Battery Voltage 17.37

2. Once selection of items is made, form a group through 'Add a New Group'.



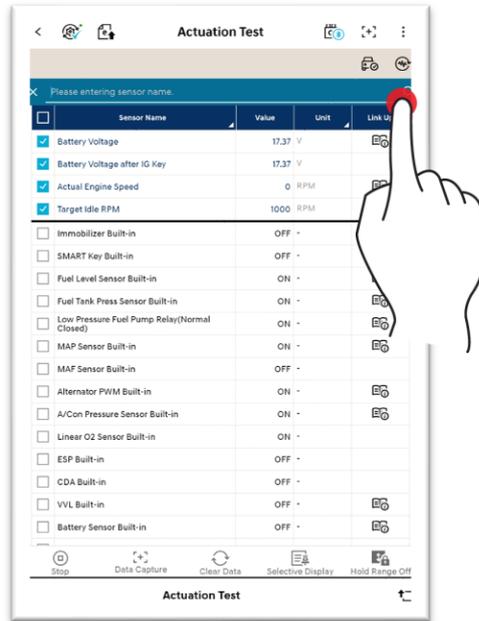
3. The group formation is completed.



		You can delete the formed group.
		You can change the group order.

Search

You can search the sensor data by entering a search word and touching .

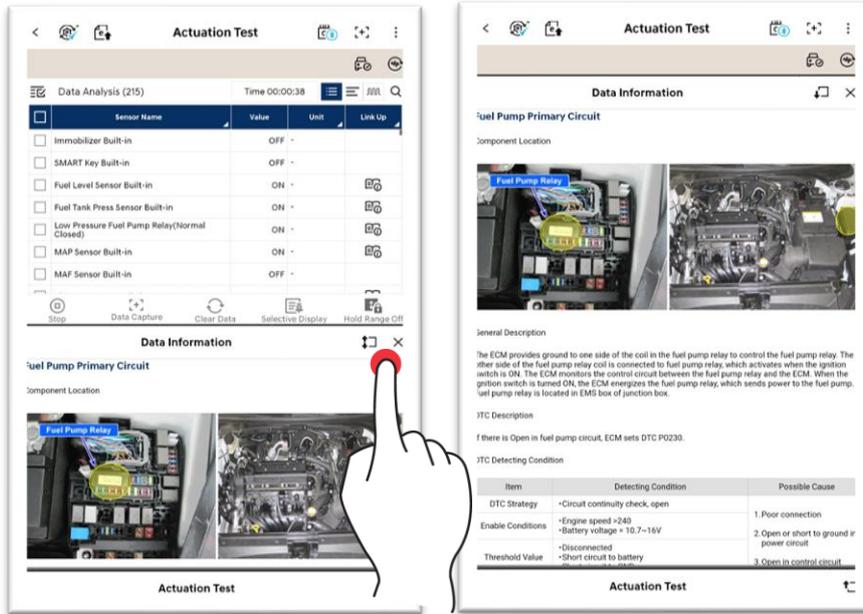


Bottom Function Buttons

 Stop	This function collects sensor data values over a certain period of time, and stops the sensor data values. 'Start' and 'Stop' buttons operate in turn.
 Data Capture	This captures the sensor data screen.
 Clear Data	This initializes the collected sensor data values, and recollects them.
 Selective Display	This only shows the sensor values of the sensor data items, which were selected based on needs. The entire sensor data values are shown when Fixed Output function is turned off.
 Recorded Data	This function analyzes the saved sensor data file. This is linked to Saved Data Analysis function.

Screen Control

1. You can spread or fold the screen by dragging  button upwards or downwards.



2. You can maximize/minimize the items in Graph Mode.

