TESCO METERING

OPERATIONS MANUAL

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE) TEST SYSTEM

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE) TEST SYSTEM OPERATIONS MANUAL

TESCO METERING

© 2024 TESCO - The Eastern Specialty Company

All Rights Reserved.

Specifications are subject to change without prior notice.

Revision: 2.1

TESCO – The Eastern Specialty Company

925 Canal Street Bristol, PA, 19007

Phone: 215.228.0500

support@tescometering.com

instrument.tescometering.com

LIMITED WARRANTY & LIMITATION OF LIABILITY

TESCO warrants to the original purchaser that it will correct all defects in material and/or workmanship in the instrument, test equipment or software covered by this warranty (herein called "PRODUCT"), provided that TESCO is notified of such defect within the warranty period (set forth below) in accordance with paragraph four of this Warranty.

WARRANTY PERIOD. The warranty period shall begin on the date of shipment of the PRODUCT or the date of the issuance of this warranty certificate, whichever is later. If no warranty period is specified below and signed by an authorized DISTRIBUTOR of TESCO, the Warranty Period shall be one (1) year. In no event shall this Warranty remain in effect for more than the stated Warranty Period plus two (2) months after the date of shipment. TESCO's sole obligation and the purchaser's sole remedy under this Warranty is limited to repair or replacement, at TESCO's option, free of charge, F.O.B. TESCO's factory at Bristol, PA of any workmanship and/or part which in TESCO's sole judgment displays evidence of defect. On-site Warranty repairs will be made when in TESCO's judgment the PRODUCT cannot practically be shipped to TESCO's factory. Any modifications, additions or upgrades made to the PRODUCT or control software after this warranty becomes effective shall not extend the term of this warranty.

COVERAGE. The warranty set forth above shall be applicable only if the PRODUCT:

1. Is used for the specific purpose for which it was intended;
2. Is operated in accordance with instructions, if any, supplied by TESCO;
3. Has not been modified, neglected, altered, tampered with, vandalized, abused or misused, or subjected to accident, fire, flood or other casualties;
4. Has not been repaired by unauthorized persons;
5. Has not had its serial number altered, defaced or removed;
6. Has not been connected, installed or adjusted other than in accordance with the instructions, if any, furnished by TESCO.

The warranty set forth herein DOES NOT APPLY to defects resulting from ordinary wear, tear and usage, or any cause, similar or dissimilar, not resulting solely from defective material and/or workmanship.

The Warranty set forth herein shall NOT be effective unless:

1. Notice of defect is given to TESCO by phone, fax, email, or mail as soon as the defect is discovered.
2. Notice of defect contains the following information: PRODUCT serial number, PRODUCT model number, date of original installation, and an accurate and complete description of the defect including the exact circumstances leading to the defect.
3. The defective PRODUCT or part is returned only upon authorization from TESCO as evidenced by the issuing of a Return Merchandise Authorization (RMA) number, and that the transportation charges are prepaid (except that TESCO may, at its option, appoint a qualified DISTRIBUTOR to make field inspections of the PRODUCT for which purpose the purchaser shall permit such DISTRIBUTOR to enter upon its premises and examine the PRODUCT).
4. The Return Merchandise Authorization (RMA) number is written on the shipping label and all paperwork defective PRODUCT or part.
5. The defective PRODUCT or part is returned in the original packing or packing approved by TESCO

TESCO is not responsible for drayage charges, damages or labor costs incurred in conjunction with failure, removal, or reinstallation of any PRODUCT, all of which shall be at the purchaser's expense. TESCO is not responsible for special, incidental, or consequential damages, whether resulting from breach of warranty, negligence, or any other reason.

TESCO manufactured parts will be available for a minimum period of at least two years after the manufacture of a PRODUCT has been discontinued.

TESCO will provide original purchaser during the Warranty Period, unlimited telephone consulting time for the purpose of PRODUCT trouble shooting/servicing and for the first thirty (30) days of the Warranty Period, unlimited telephone consulting time for the purpose of PRODUCT/software application.

THE WARRANTY CONTAINED HEREIN IS IN LIEU OF ALL OTHER WARRANTIES AND TESCO MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OR CONDITION, DESIGN, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ANY OTHER MATTER.

No other Warranty, express or implied, is authorized by TESCO, and no DISTRIBUTOR of TESCO or any other person has any authority to amend, extend, modify, enlarge, or otherwise alter the foregoing warranty and disclaimers in any way whatsoever, except as provided for in an Extended Limited PRODUCT Warranty Agreement.

TABLE OF CONTENTS

1.0 INTRODUCTION 1

1.1 Introduction 2

1.2 Contacting TESCO 2

1.3 General Safety Summary 2

1.4 Description of Safety-related Icons 3

1.5 Product Features 3

1.5.1 Key Features 3

1.5.2 Standard Features – T4350 3

1.5.3 Standard Features – PL4000 3

1.6 General Specifications 4

1.6.1 Measurement Capabilities 4

1.6.2 Measurement Accuracy 4

1.6.3 Physical 4

1.6.4 Dimensions 5

1.6.5 Environment 5

1.7 About this Operations Manual 5

2.0 SETUP & INSTALLATION 6

2.1 Introduction 7

2.2 Unpacking and Inspection 7

2.3 Set up, Airflow and Cooling Considerations 7

2.3.1 Setup and Placement 7

2.3.2 Airflow 8

2.3.3 Cooling considerations 9

2.4 Main & Auxiliary Power Supply 9

2.5 Connection and Power-Up 9

2.5.1 Sequence of Test Connection and Power-Up 10

2.5.2 Power-Down and Sequence of Disconnection 10

3.0 FUNCTIONALITY 11
3.1 Introduction 12
3.2 Panel Features 12
3.2.1 T4000 Front Panel 12
3.2.2 T4000 Side Panel 13
3.2.3 T4000 Navigation Keys 13
3.2.4 PL4000 Front Panel 14
3.2.5 PL4000 Rear Panel 14
3.3 Graphical User Interface (GUI) 15
3.3.1 GUI Screen Sections 15
3.3.2 MAIN MENU 15
3.3.3 MANUAL TESTING 16
3.3.4 TEST SEQUENCES 20
3.3.5 DATABASE 23
3.3.5.1 NEW CHARGER INFORMATION 23
3.3.6 SETTINGS MENU 25
3.3.7 GENERAL OPTIONS 26
3.3.7.1 USER INFO 26
3.3.7.2 TESTING OPTIONS 27
3.3.7.3 CALIBRATION OPTIONS 27
3.3.8 SYSTEMS MENU 28
3.3.8.1 TEMPERATURE INFO 28
3.3.8.2 CONFIGURATIONS INFO 29
3.3.8.3 SYSTEM CALIBRATION 31
4.0 MAINTENANCE 32
4.1 Introduction 33
4.2 Cleaning the Instrument External Surface 33
4.3 Repair / Parts Replacement / Recalibration 33

1.0 INTRODUCTION

1.1 Introduction 2
1.2 Contacting TESCO 2
1.3 General Safety Summary 2
1.4 Description of Safety-related Icons 3
1.5 Product Features 3
1.5.1 Key Features 3
1.5.2 Standard Features – T4350 3
1.5.3 Standard Features – PL4000 3
1.6 General Specifications 4
1.6.1 Measurement Capabilities 4
1.6.2 Measurement Accuracy 4
1.6.3 Physical 4
1.6.4 Dimensions 5
1.6.5 Environment 5
1.7 About this Operations Manual 5

1.1 Introduction

TESCO's Electric Vehicle Supply Equipment (EVSE) Test System is a complete system that consists of the EVSE Tester and Programmable Load, which tests the accuracy of energy delivery using a transactional mode compatible with HB44 provisions. The EVSE Tester tests AC Level 1 and Level 2 systems up to 80 amps maximum current. For complete freedom and test automation, add the PL4000 Programmable Load, a dedicated load emulator solution providing no-load and adjustable-load modes. Any compatible EV can also be used as the test load by using the appropriate optional cable. The Proximity and Pilot Control signal exchanges are fully verified for compliance with protocol requirements. The EVSE's GFCI can also be tested by applying a programmable line-earth fault current up to 200mA.

1.2 Contacting TESCO

For Technical Support or Calibration/Repair, please call 215.228.0500.

You can also send an email to **support@tescometering.com** with any questions.

To view, print, or download the latest manual supplement, visit **instrument.tescometering.com**.

1.3 General Safety Summary

This manual contains information and warnings that must be observed to ensure safe operation and keep the TS400 in a safe condition. Operation or service in conditions or in a manner other than specified could compromise safety. For the correct and safe use of this device**, it is essential that both operating and service personnel follow accepted safety procedures in addition to the safety precautions specified**, including PPE guidelines.

In this manual, a **WARNING** identifies conditions and actions that pose hazard(s) to the user, while a **CAUTION** identifies conditions and actions that may damage the T4000 or the test equipment.

WARNING

To avoid electrical shock, personal injury, or fire hazard:

- **Both devices, T4000 and PL4000 must not be switched ON if it is damaged or suspected to be faulty.**
- **Do not operate the device in wet, condensing, dusty, or explosive gas conditions.**
- **If the equipment is used in a manner not specified in this manual, the protection provided by the T4000 and the PL4000 may be impaired.**
- **Whenever it is likely that safety protection has been impaired, the devices must be made inoperative and be secured against any unintended operation. Inform qualified maintenance or repair personnel.**
- **Safety protection is likely to be impaired if, for example, the T4000 displays visible damage or fails to operate normally.**

1.4 Description of Safety-related Icons

ICONS	DESCRIPTION
	Risk of danger. Important information. See manual.
	Hazardous voltage. Risk of electrical shock.

1.5 Product Features

1.5.1 Key Features

- Accurate Energy Measurement
- Uses EVSE Connectors: J1772 (CCS1), Tesla (**TBD**), CHAdeMO (**TBD**)
- Innovative GUI on a 7” LCD Screen
- Lightweight, water-tight, crush-proof, and dust-proof case
- All chargers, test sequences, and test results are stored in internal database
- Compatible with EV charging protocols: SAEJ1772, SAEJ2847, DIN70121, and TESLA AC

1.5.2 Standard Features – Tester

	GRAPHICAL USER INTERFACE Displayed on a 7”, 1024x600, high brightness, daylight readable LCD
	ETHERNET 100 BaseT with support for: Web Services, Remote Control, Database Access
	USB PORTS 2X USB TypeA with support for: Device, External Memory Storage, WiFi, Keyboard, Mouse
	GPS (GLOBAL POSITIONING SYSTEM) Integrated GPS system provides location information for automatic determination of test site and database access.
	GFCI (GROUND FAULT CIRCUIT INTERRUPTER) Provision is provided to test the GFCI functionality the EVSE (0 – 200ma).
	RS232 Legacy port for specialized test configurations.
	INTERNAL BATTERY 99.6WHr Li-Ion removeable battery
	PL INTERFACE Provides communications and power to a Programmable Load (PL4000-001, PL4000-101).

1.5.3 Standard Features – Programmable Load

	AC LEVEL 1 Provides appropriate load current required up to 32A
	AC LEVEL 2 Provides appropriate load current required up to 50A.
	PROGRAMMABLE LOAD CURRENT MODES Capable in handling different testing modes: No Load (NL), Starting Load (SL), Light Load (LL) & Full Load (FL).
	EV COMMUNICATION PROTOCOL **AC**: Control Pilot + Proximity Detection

1.6 General Specifications

1.6.1 Measurement Capabilities

PARAMETERS	DATA
Voltage	AC – Up to 3 channels 60VAC to 350 VAC isolated DC – One channel 60 to 1000VDC
Current	AC – Up to 3 channels 0.2 to 80 Amps fully isolated DC – One channel 1.0 to 200A fully isolated
Power	Active Energy, Reactive Energy, Apparent Energy
Harmonics	Harmonics to the 50th

1.6.2 Measurement Accuracy

PARAMETERS	DATA
AC Voltage	(60V to 350), 0.05% of reading (3 Phase)
AC Current	(0.2A to 80A), 0.05% of reading ± 0.005 Amp (3 Phase)
AC Phase	±0.01 degrees
AC INSTRUMENT, WHrs	±0.08% of reading ± 0.002 Wh
DC Voltage	(60V to 1000V), 0.05% of reading
DC Current	(1.0A to 20A), 0.1% of reading ± 0.01 Amp (20A to 200A), 0.05% of reading ± 0.01 Amp
INSTRUMENT, WHrs	(1.0A to 20A), 0.1% of reading ± 0.01 Wh (20A to 200A), 0.05% of reading ± 0.01 Wh

1.6.3 Physical

PARAMETERS	DATA
Display	7” Super high contrast, 1000nit color display with bonded glass optical filter/protector
I/O	• Ethernet • 2X USB 2.0 Type A (peripherals such as keyboard, mouse, memory stick, barcode scanner) • 1X USB 2.0 Type B (connection to PC)
Power	±0.01 degrees
AUX Power	±0.08% of reading ± 0.002 Wh
GPS	±0.05% of reading

1.6.4 Dimensions

PARAMETERS (T4000)	DATA
Length	21.2” (53.84 cm)
Width	16” (40.64 cm)
Height	10.6” (26.92 cm)
Weight	≈44 lbs (≈19.95 kg)

PARAMETERS (PL4000)	DATA
Length	16.9” (42.9 cm)
Width	16.3” (41.4 cm)
Height	26” (66.04cm)
Weight	≈63.9 lbs (≈29 kg)

1.6.5 Environment

PARAMETERS	DATA
Operating Temp (Min / Max)	-4°F to 122°F (-20°C to 50°C)
Storing Temp (Min / Max)	-22°F to 140°F (-30°C to 60°C)

1.7 About this Operations Manual

This manual provides complete information for setting up and operating the T4000. This document instructs the user on the following operations of the T4000:

- Setup and Installation
- Front, Side, and Rear Panel Features
- Graphical User Interface (GUI)
- Operating Procedures
- Instrument Maintenance

2.0 SETUP & INSTALLATION

2.1 Introduction 7

2.2 Unpacking and Inspection 7

2.3 Set up, Airflow and Cooling Considerations 7

2.3.1 Setup and Placement 7

2.3.2 Airflow 8

2.3.3 Cooling considerations 9

2.4 Main & Auxiliary Power Supply 9

2.5 Connection and Power-Up 9

2.5.1 Sequence of Test Connection and Power-Up 10

2.5.2 Power-Down and Sequence of Disconnection 10

2.1 Introduction

This chapter provides instructions for unpacking and installing the instrument.

Read this chapter before you operate the instrument. Instructions for cable connections can be found here.

2.2 Unpacking and Inspection

The instruments are shipped in a container designed to prevent damage during shipping.

Inspect the instruments carefully for damage, and immediately report any damage to the shipper. A packing list is included in the packaging. When you unpack the instruments, check for all the standard equipment listed and check the shipping order for any additional items ordered. Report any shortage to the place of purchase, to your distributor, or directly to TESCO.

2.3 Set up, Airflow and Cooling Considerations

2.3.1 Setup and Placement

The instruments are designed to be used sitting on the ground, as long as there is sufficient space to allow adequate ventilation. The instruments can be vertically oriented as well. Please see suggested placement per setup.

Figure 2.3a Suggested EVSE Test System Setup sitting on the ground

Figure 2.3b Suggested Vertical Oriented Setup

2.3.2 Airflow

WARNING

Note of the instrument's airflow as indicated in the illustration below. PL4000 air outflow can be extremely hot particularly when testing at higher load current or power. Please allow back space of at least 2 meters for the PL4000 air outflow.

2.3.3 Cooling considerations

CAUTION

Damage caused by overheating may occur if the area around the air intake is restricted, the intake air is too warm, or the air filter becomes clogged.

The inlet and exhaust holes must be clear of obstruction. The air entering the instrument must be between -20 °C and 50 °C. Make sure that exhaust from another instrument is not directed into the fan inlet. Check and clean the air filter every 30 days or more frequently if the Instrument is operated in a dusty environment.

2.4 Main & Auxiliary Power Supply

The instrument can be powered by its internal rechargeable battery or auxiliary AC line. The battery is capable of up to 8 hours of continuous operation. The battery charge status icon can be seen in the top right corner of the EVSE Tester's LCD screen.

Fully charging the battery may require up to 5 hours and may be done with the unit on or off.

The auxiliary power source is protected by a 6A fuse in L1 & L2 individually. An AC line power cord is provided.

WARNING

To avoid electrical shock, personal injury, or fire hazard, connect the factory supplied power cord to a properly grounded AC power outlet to charge the unit when not being used with an EVSE charger.

Do not charge the unit when it is connected to an EVSE charger.

2.5 Connection and Power-Up

The instrument's connector employs a "make first, break last" system where upon insertion, the ground connection is established first before making power connection and maintain ground until after power connections are broken. This system helps ensure a safer connection.

2.5.1 Sequence of Test Connection and Power-Up

1- Connect the COMBITAC of PL4000 to the LOAD & CONTROL connector of the Tester.

2- Connect the Coupler of EVSE to the J1772 connector of the Tester.

3- To Power ON, press the POWER button for at least 2 seconds.

2.5.2 Power-Down and Sequence of Disconnection

WARNING

T4000 should be turned off properly before the connectors are disconnected.

1- To turn off T4000, return to Main Menu and press the power button for at least 2 seconds. A dialog box appears to confirm shutdown.

2- Disconnect the Coupler of EVSE from the CCS1/ChaDemo/Tesla inlet of Tester.

3- Disconnect the CombiTac of PL4000 from the LOAD & CONTROL inlet of Tester.

3.0 FUNCTIONALITY

3.1 Introduction 12

3.2 Panel Features 12

3.2.1 T4000 Front Panel 12

3.2.2 T4000 Side Panel 13

3.2.3 T4000 Navigation Keys 13

3.2.4 PL4000 Front Panel 14

3.2.5 PL4000 Rear Panel 14

3.3 Graphical User Interface (GUI) 15

3.3.1 GUI Screen Sections 15

3.3.2 MAIN MENU 15

3.3.3 MANUAL TESTING 16

3.3.4 TEST SEQUENCES 20

3.3.5 DATABASE 23

3.3.5.1 NEW CHARGER INFORMATION 23

3.3.6 SETTINGS MENU 25

3.3.7 GENERAL OPTIONS 26

3.3.7.1 USER INFO 26

3.3.7.2 TESTING OPTIONS 27

3.3.7.3 CALIBRATION OPTIONS 27

3.3.8 SYSTEMS MENU 28

3.3.8.1 TEMPERATURE INFO 28

3.3.8.2 CONFIGURATIONS INFO 29

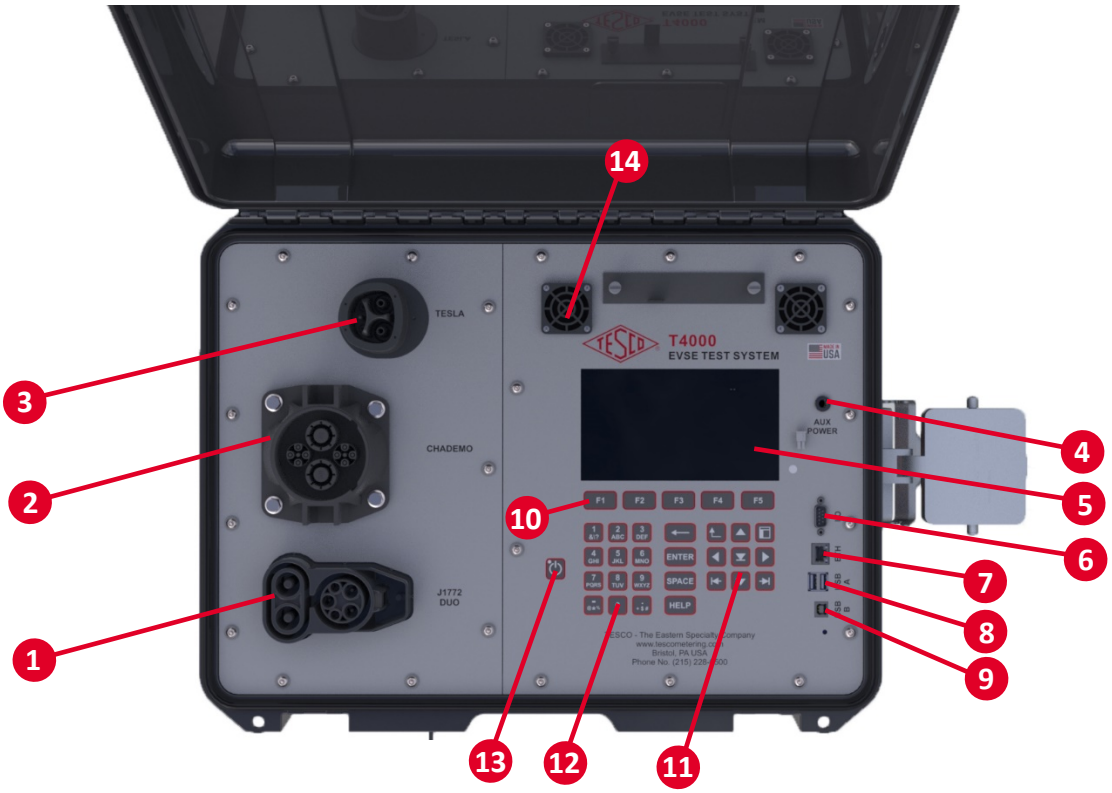
3.3.8.3 SYSTEM CALIBRATION 31

3.1 Introduction

This chapter is a reference for the functions and locations of the T4000'S front panel and side panel features and provides brief descriptions of each feature for quick access. **Please read this information before operating the T4000.**

3.2 Panel Features

3.2.1 T4000 Front Panel



#	NAME
1	J1772 DUO port
2	CHADEMO port
3	TESLA port
4	Auxiliary Power
5	7", 1024x600, high brightness, daylight readable LCD
6	RS232 Com Port
7	Ethernet Com Port
8	USB A Port
9	USB B Port
10	Function Keys
11	Navigation Keys
12	Alphanumeric Keys
13	Power Button
14	Airflow Inlet

Table 3.2.1. T4000 Front Panel Sections

3.2.2 T4000 Side Panel

#	NAME
1	**AC Connectors**
2	**DC Connectors**

Table 3.2.2. T4000 Side Panel Sections

3.2.3 T4000 Navigation Keys

SYMBOL	DESCRIPTION
▲ ▼	• Selects the NEXT or PREVIOUS menu item • Moves the **SELECTED LINE** UP or DOWN • Selects an Item from a dropdown menu
◀ ▶	• Moves the cursor left/right of the current character in text boxes. • Moves the selection left/right of the current selected cell in tables.
⇤ ⇥	Selects the NEXT or PREVIOUS **TAB** item.
⧉	Moves the focus from one section of the screen to another
←	Deletes the previous character.
↰	Returns to the previous screen.
F1 F2 F3 F4 F5	Function keys
⏻	Power button. Hold down to turn the device on until the LED lights up and wait for a few seconds for the screen to load.
ENTER ↓	Selects a response.
SPACE	
HELP	

3.2.4 PL4000 Front Panel

#	NAME
1	Power Status Indicator
2	Communication Status Indicator
3	Load Status Indicator
4	Left Fan for Load Heaters (Big Fan 1)
5	CombiTac Connector
6	Strap Handle
7	CombiTac Conduit Holder
8	Right Fan for Load Heaters (Big Fan 2)
9	Fan for Variable Load (VL) Controller (Small Fan)

Table 3.2.4. PL4000 Front Panel Sections

3.2.5 PL4000 Rear Panel

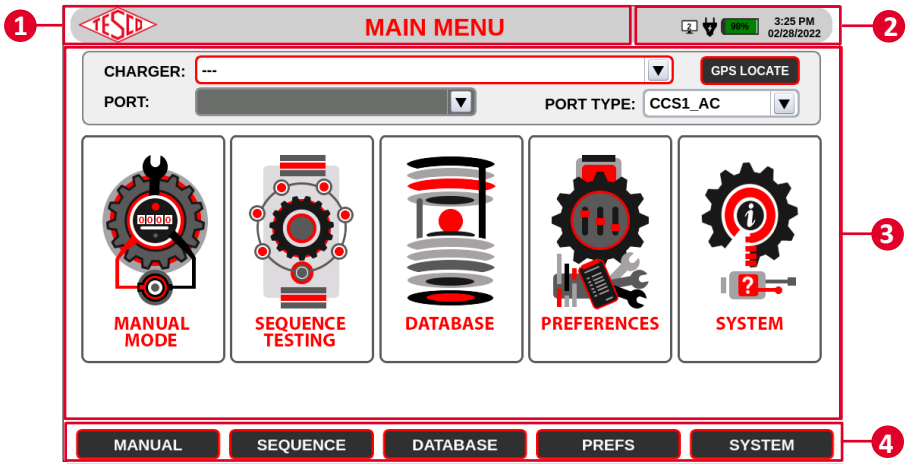
#	NAME
1	DC Circuit Breaker
2	AC Circuit Breaker
3	Air Exhaust of Variable Load
4	Left Exhaust for Load Heaters (Big Fan 1)
5	Right Exhaust for Load Heaters (Big Fan 2)

Table 3.2.5. PL4000 Rear Panel Sections

3.3 Graphical User Interface (GUI)

3.3.1 GUI Screen Sections

The user interface is divided into four sections. In the screen, any field or button that is grayed out cannot be changed or accessed by the user.

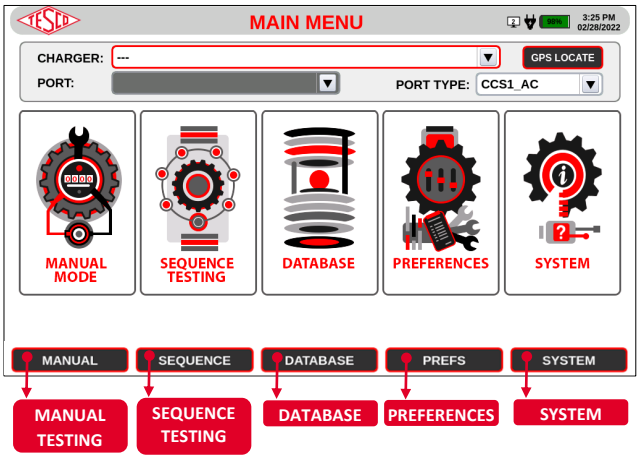


NUMBER	DESCRIPTION
1	Screen Title
2	Status Bar
3	Screen Data
4	Function Buttons

Table 3.3.1. EVSE Testwer GUI Sections

3.3.2 MAIN MENU

SCREEN	DESCRIPTION



MAIN MENU

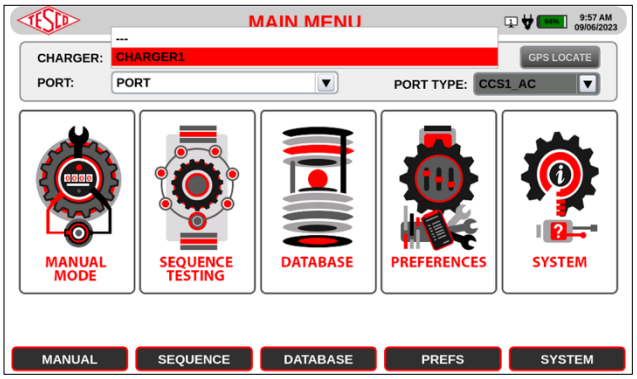
The main menu contains the primary functions of the EVSE Tester. Press a function key to access a menu item.

FUNCTION KEYS

F1	MANUAL	Perform a manual test.
F2	SEQUENCE	Perform a sequence test.
F3	DATABASE	View information on the following: • EVSE • Test Results • Test Sequences
F4	PREFS	View and change settings.
F5	SYSTEM	View system information.

3.3.3 MANUAL TESTING

SCREEN	DESCRIPTION

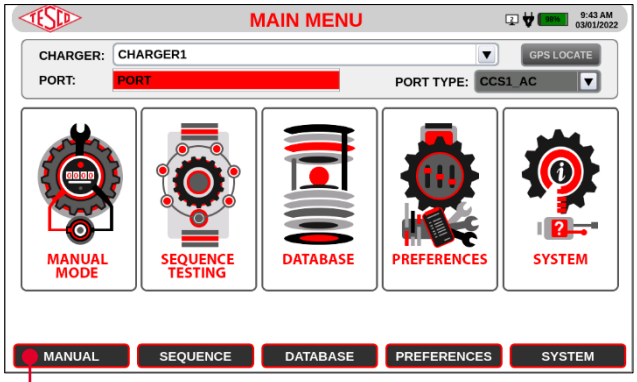


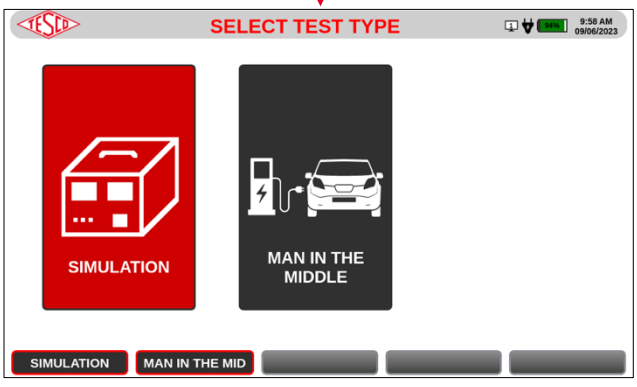
CHARGER INFORMATION

Before proceeding to Manual Testing, select the necessary charger details first.

INPUT FIELD:

CHARGER	Charger name
PORT	Port Number
PORT TYPE	Type of Connector
GPS LOCATE	

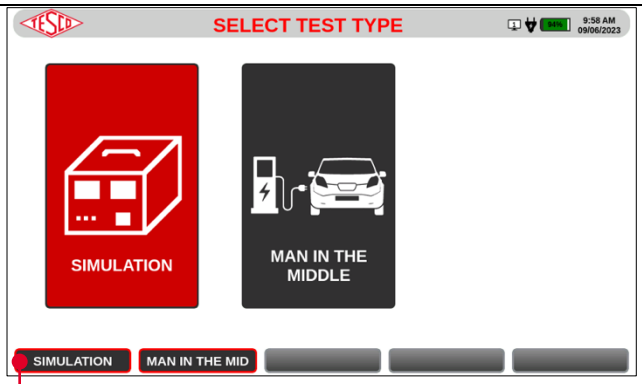




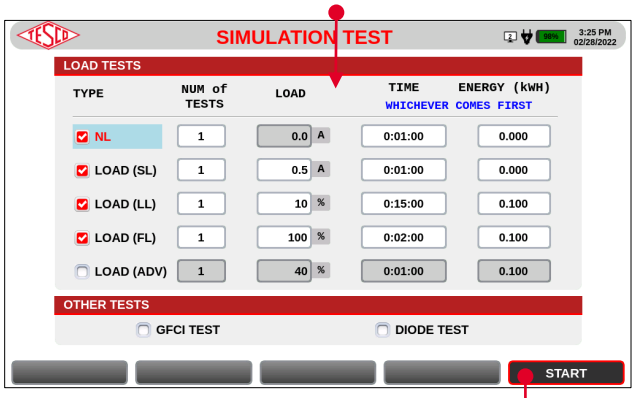
SELECT TEST TYPE

FUNCTION KEYS

F1	**SIMULATION**	Select SIMULATION test type.
F2	**MAN IN THE MID**	Select MAN IN THE MIDDLE test type.
F3		
F4		
F5		



SIMULATION TEST



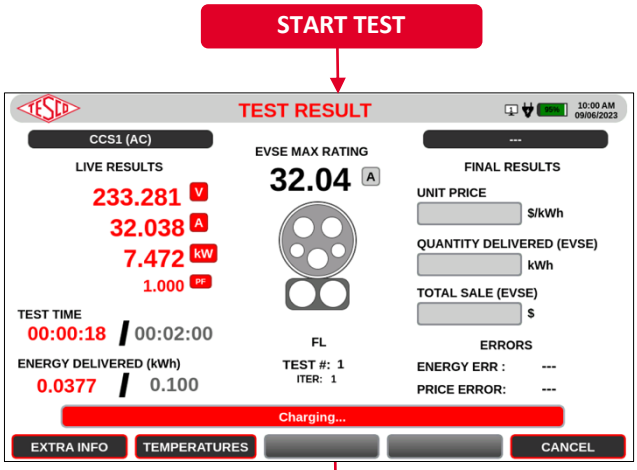
START TEST

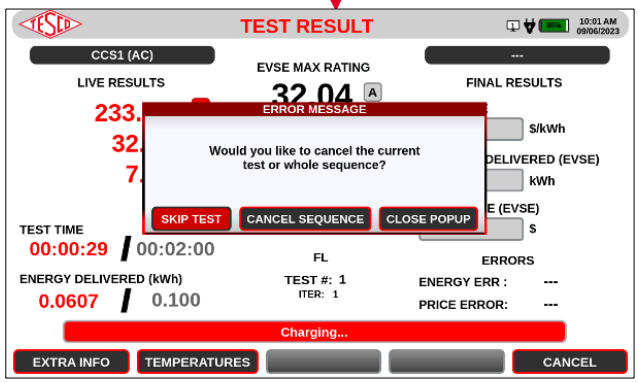
SIMULATION TEST

- NL - No current flowing
- SL – 0.5A – 2.9A
- LL – 5% - 15% of the EVSE Max Current Rating
- FL - 85% - 100% of the EVSE Max Current Rating
- ADV – 1% - 100% of the EVSE Max Current Rating
- GFCI TEST
- DIODE TEST

**Note*

Users have the option to set either a timeout duration or a target energy level. Entering a value of zero indicates no timeout or no target energy will be set. If both values are provided, the test will end when either the timeout is reached or the target energy level is achieved, whichever occurs first.



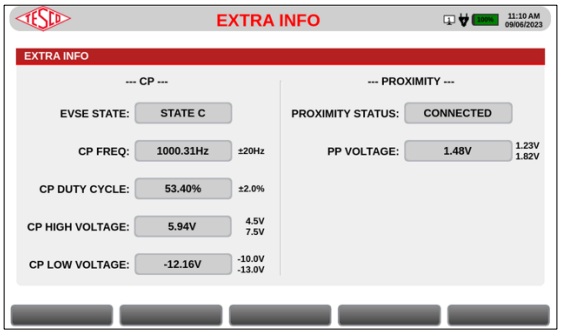


Once 'START' was clicked. The Test Result Page will then be displayed.

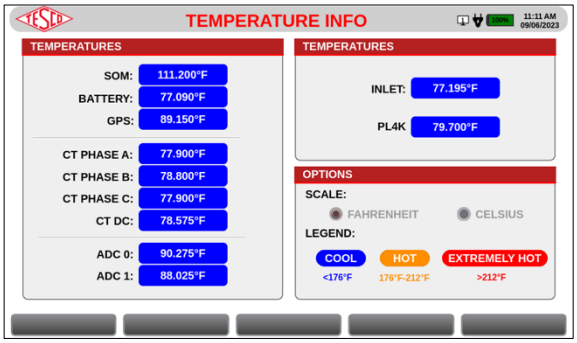
FUNCTION KEYS

SKIP TEST	Skip the test and proceed to the next test in the sequence.
CANCEL SEQUENCE	Cancel the whole sequence.
CLOSE POPUP	Close the Error Message popup.

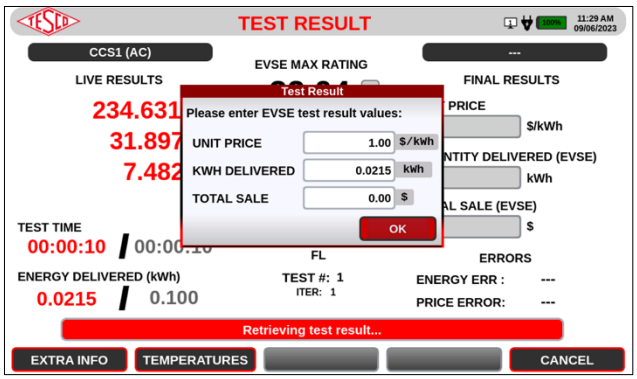
Note: If a user wishes to cancel, they can press F5 (CANCEL), which will trigger a popup. In this popup, they have the option to either Skip the current test that's running, Cancel the entire sequence, or simply close the popup.



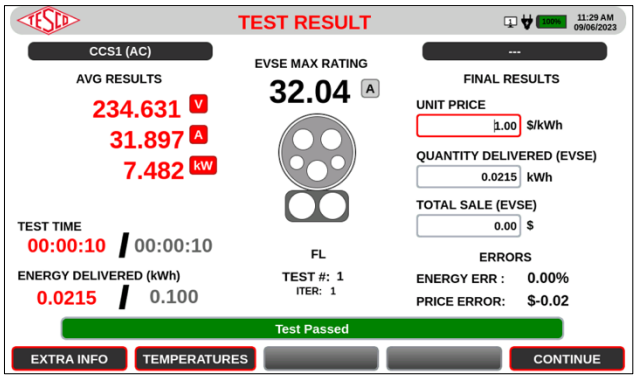
While a test is in progress, a user can press F1 (EXTRA INFO) to access CP & Proximity information.



Additionally, pressing F2 (TEMPERATURES) allows them to view the temperatures of various components.

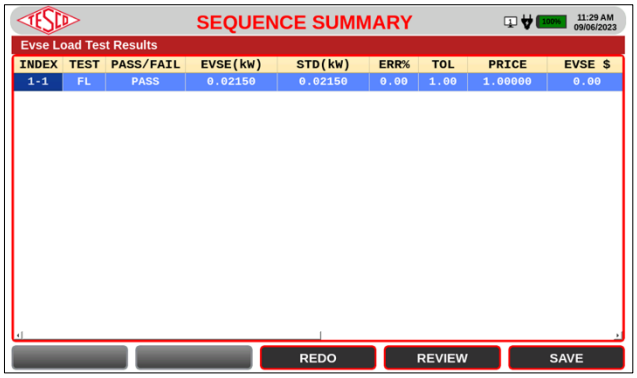


Once the test is complete, a "Test Result" popup box will appear, allowing the user to enter the test result values from the EVSE charger.

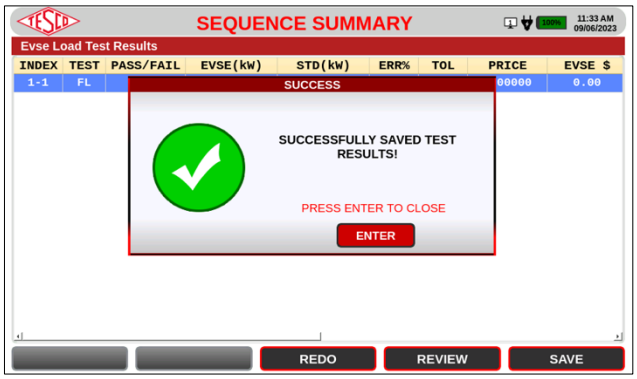


Upon entering the result values, the final results will be displayed.

Click 'Continue' to advance to the next test. If this is the final test, you will be directed to the Sequence Summary Page.

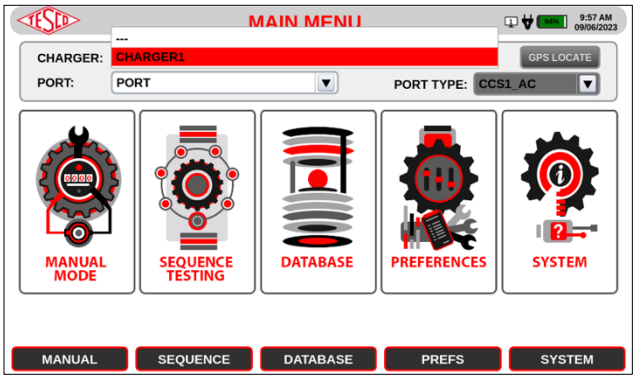


Users have the option to either redo a specific test by pressing F3 (REDO), view additional test results with F4 (REVIEW), or save the test result using F5 (SAVE).



3.3.4 TEST SEQUENCES

SCREEN	DESCRIPTION

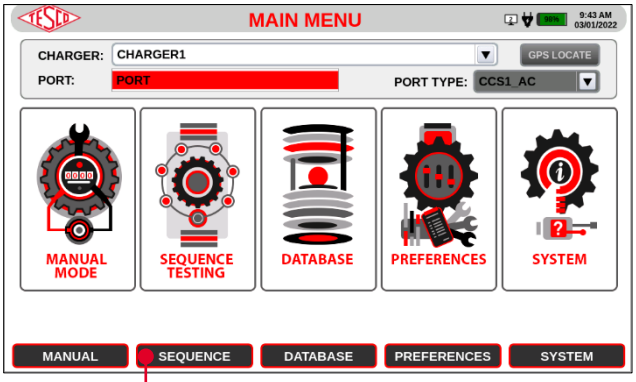


CHARGER INFORMATION

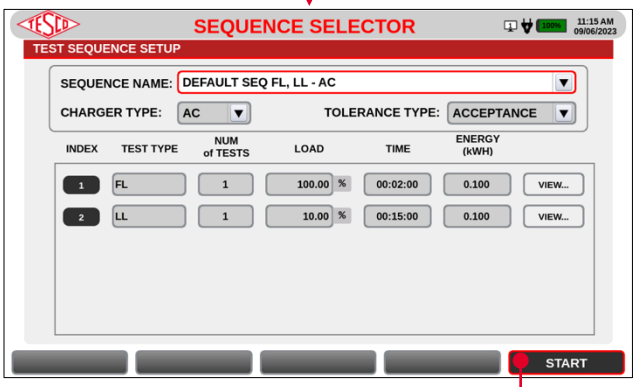
Before proceeding to Manual Testing, select the necessary charger details first.

INPUT FIELD:

CHARGER	Charger name
PORT	Port Number
PORT TYPE	Type of Connector
GPS LOCATE	



Press F2 (SEQUENCE).
This will bring up the Sequence Selector page, where you can choose a sequence by selecting its name from the Sequence Name dropdown box.

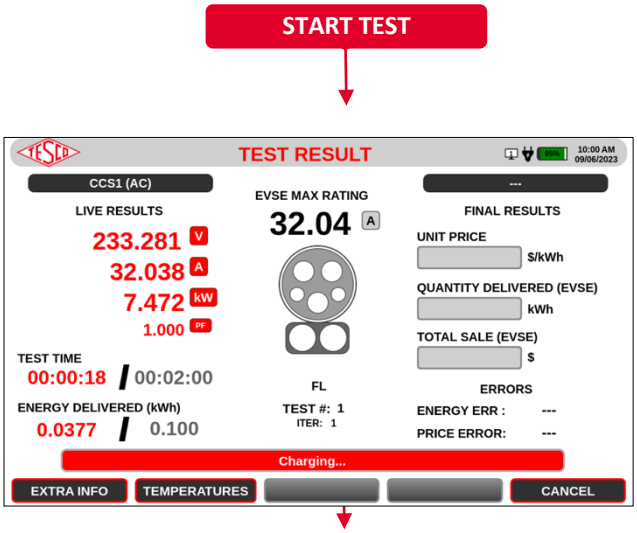


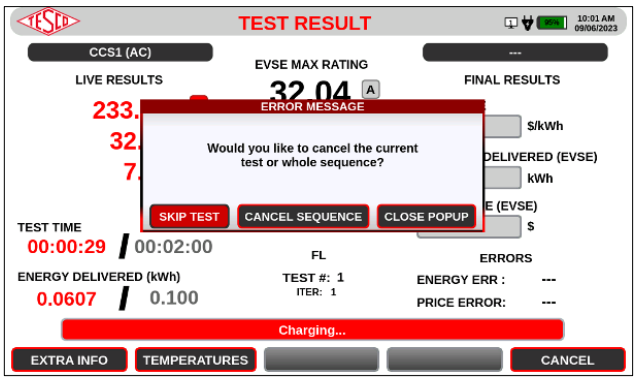
SELECT TEST TYPE

FUNCTION KEYS

F1	**SIMULATION**	Select SIMULATION test type.
F2	**MAN IN THE MID**	Select MAN IN THE MIDDLE test type.
F3		
F4		
F5		

Click on 'START', and the Test Result Page will then be displayed.



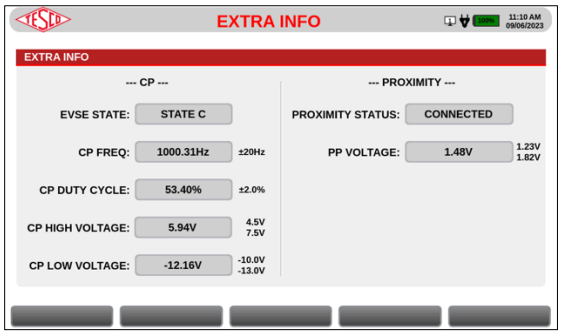


Once 'START' was clicked. The Test Result Page will then be displayed.

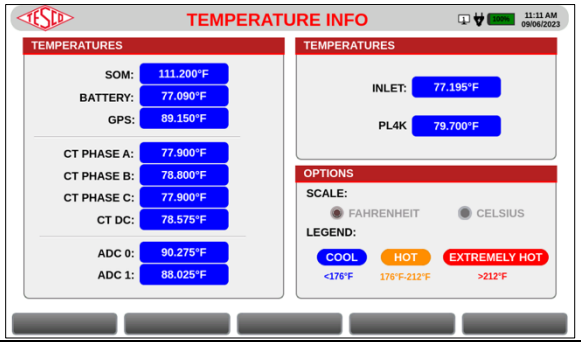
FUNCTION KEYS

SKIP TEST	Skip the test and proceed to the next test in the sequence.
CANCEL SEQUENCE	Cancel the whole sequence.
CLOSE POPUP	Close the Error Message popup.

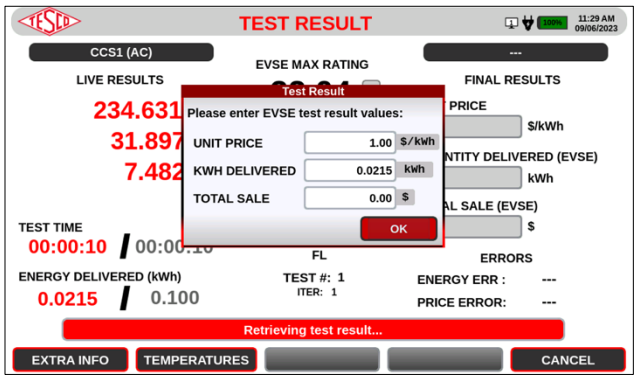
Note: If a user wishes to cancel, they can press F5 (CANCEL), which will trigger a popup. In this popup, they have the option to either Skip the current test that's running, Cancel the entire sequence, or simply close the popup.



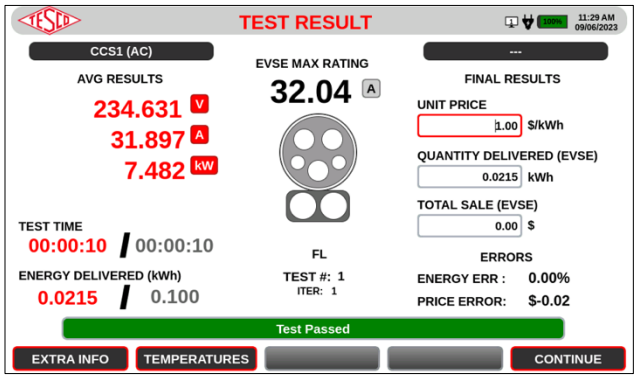
While a test is in progress, a user can press F1 (EXTRA INFO) to access CP & Proximity information.



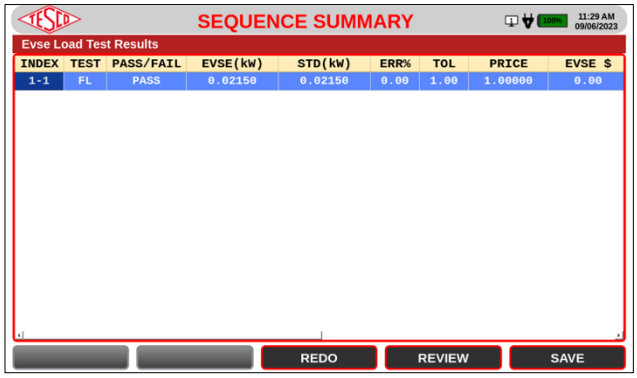
Additionally, pressing F2 (TEMPERATURES) allows them to view the temperatures of various components.



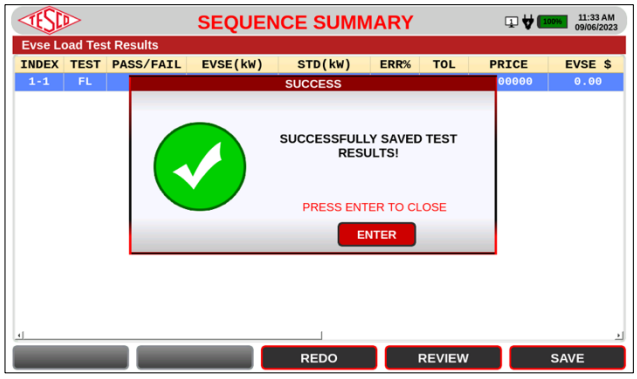
Once the test is complete, a "Test Result" popup box will appear, allowing the user to enter the test result values from the EVSE charger.



Upon entering the result values, the final results will be displayed.

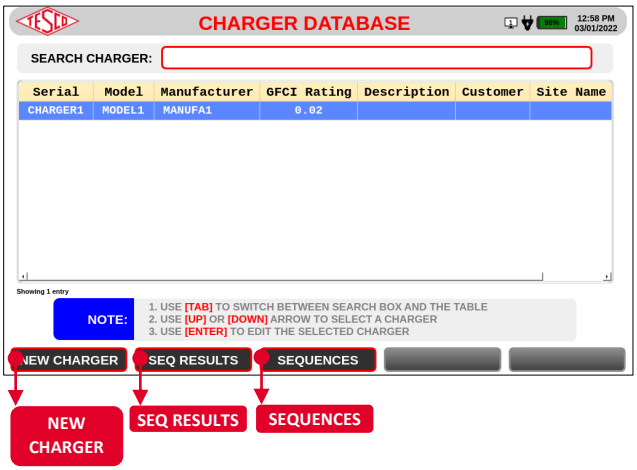


Click 'Continue' to advance to the next test. If this is the final test, you will be directed to the Sequence Summary Page.

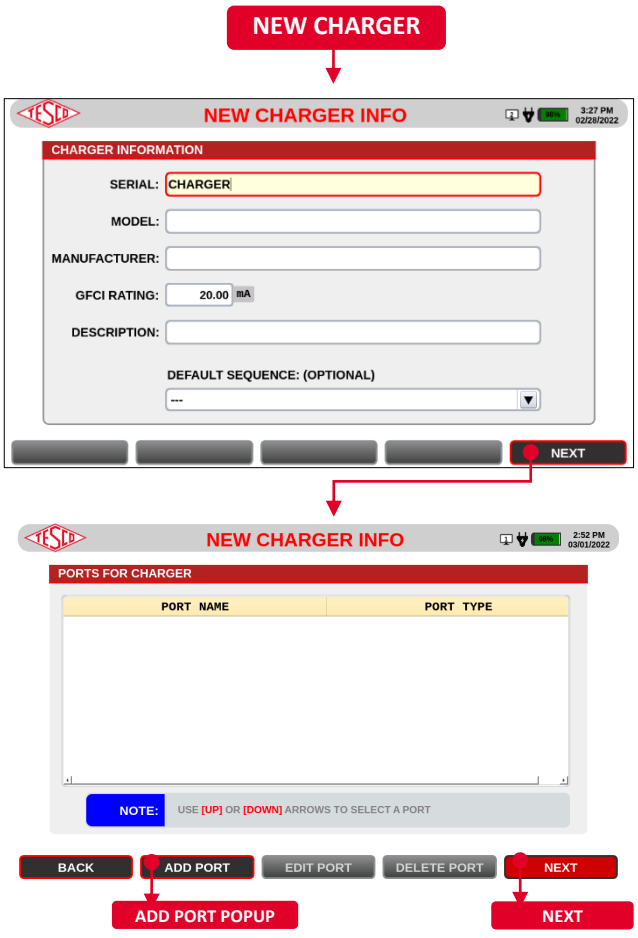


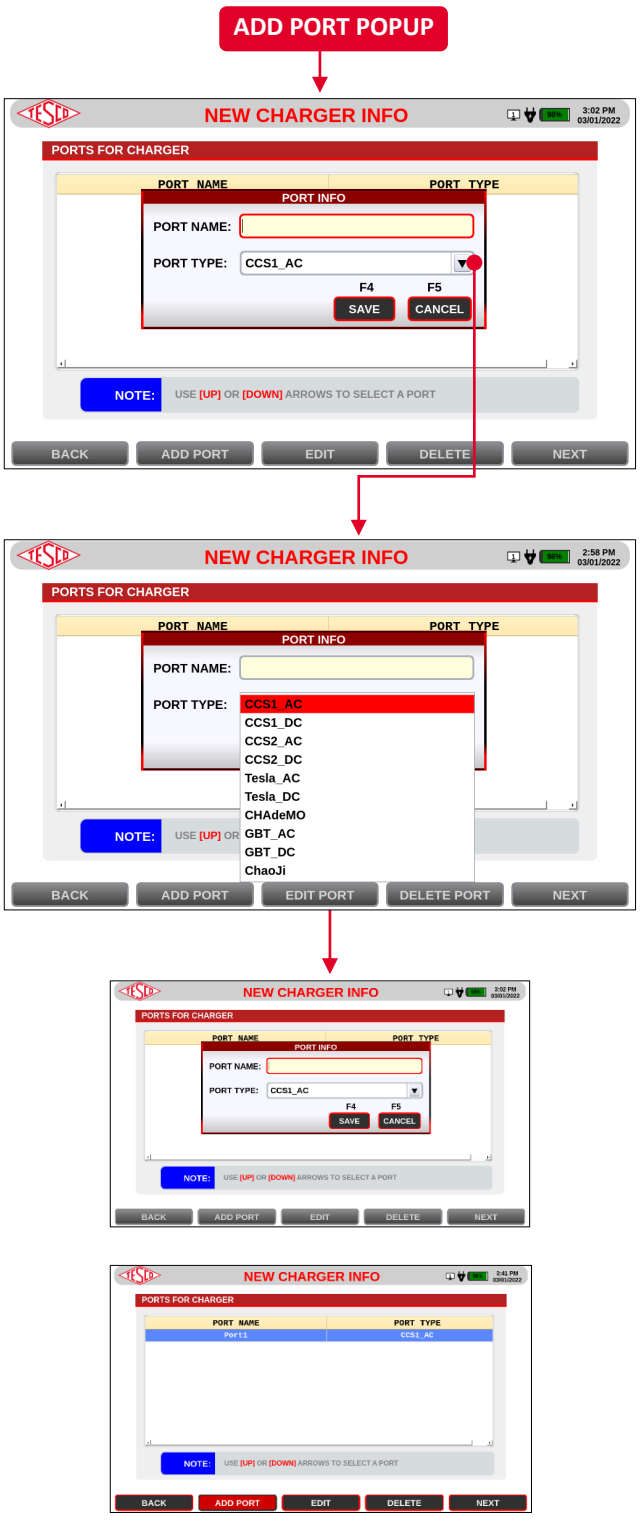
Users have the option to either redo a specific test by pressing F3 (REDO), view additional test results with F4 (REVIEW), or save the test result using F5 (SAVE).

3.3.5 DATABASE

SCREEN	DESCRIPTION
	The database contains the list of Chargers **FUNCTION KEYS** F1 NEW CHARGER F2 SEQ RESULTS F3 SEQUENCES F4 F5

3.3.5.1 NEW CHARGER INFORMATION

SCREEN	DESCRIPTION
	Create new CHARGER information or edit an existing one. Saved information will be stored in the database. **DATA** SERIAL MODEL MANUFACTURER GFCI RATING DESCRIPTION DEFAULT SEQUENCE **FUNCTION KEYS** F1 F2 F3 F4 F5 NEXT — Proceeds to the new next screen. **FUNCTION KEYS** F1 BACK — Return to the previous screen. F2 ADD PORT — Adds new port F3 EDIT PORT F4 DELETE PORT F5 NEXT — Proceeds to the new next screen.



DATA

PORT NAME	Charger ID info
PORT TYPE	Manufacturer of the charger.

FUNCTION KEYS

F4	**SAVE**	
F5	**CANCEL**	

Ports List Popup

Shows a list of ports assigned to the charger. Also, allows to add ports.

FUNCTION KEYS

F1	**BACK**	Returns to the previous screen
F2	**ADD**	Adds new item in the list of ports
F5	**DONE**	

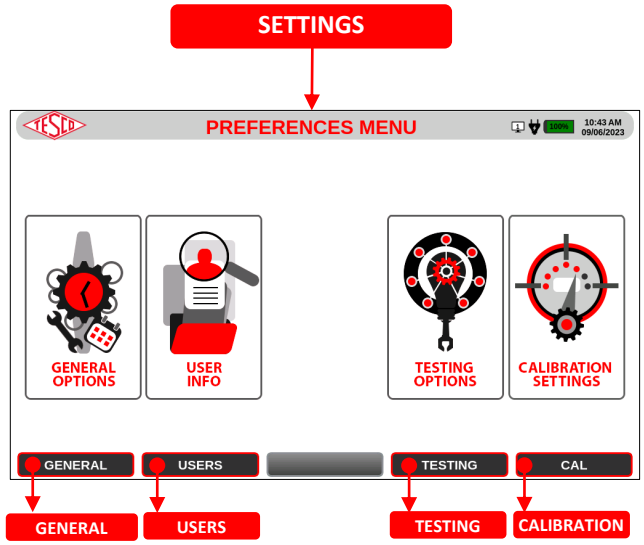
New Port Info Popup

Shows a list of ports assigned to the charger. Also, allows to add ports.

FUNCTION KEYS

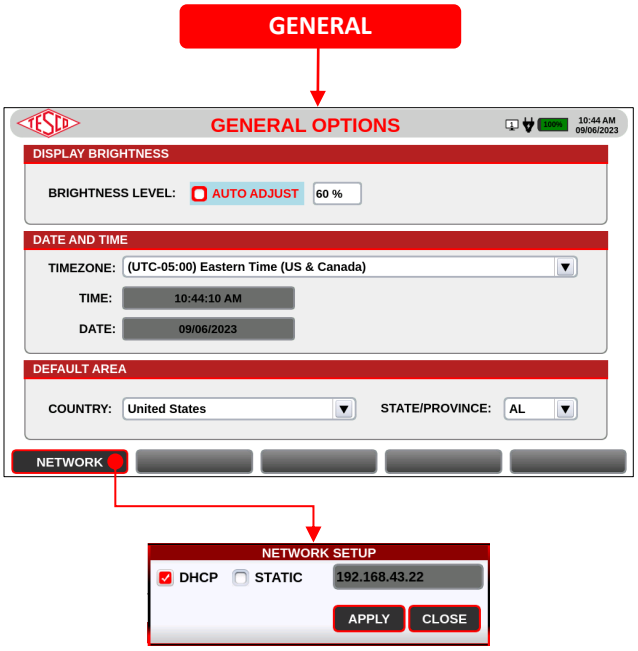
F1	**CANCEL**	
F5	**DONE**	

3.3.6 SETTINGS MENU

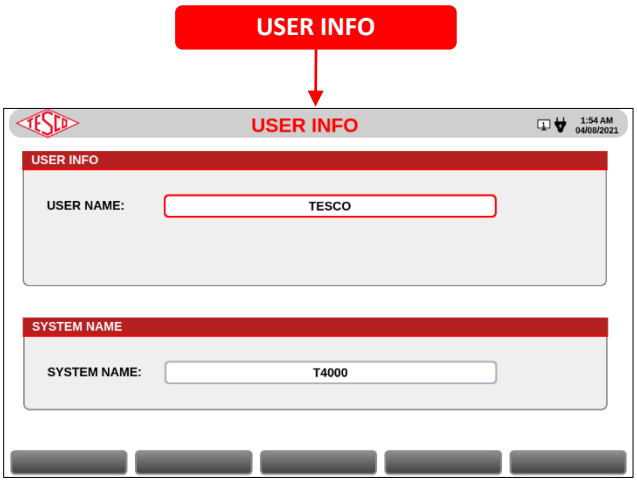
SCREEN	DESCRIPTION
	**FUNCTION KEYS**

F1	GENERAL	View/Edit general options.
F2	USERS	View/Edit user options.
F3		
F4	TESTING	View/Edit testing options.
F5	CAL	View and set calibration notification.

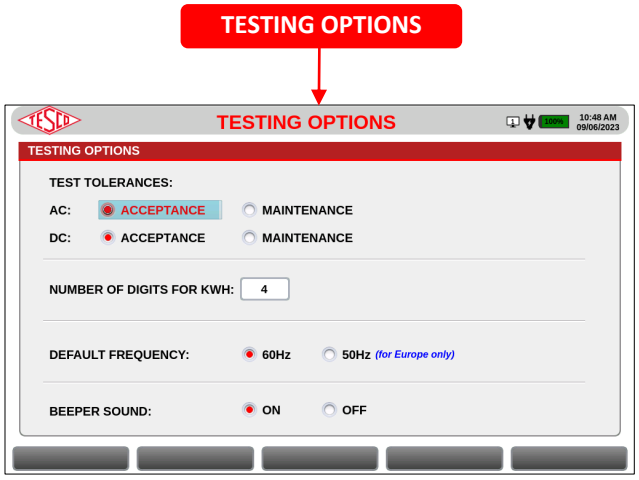
3.3.7 GENERAL OPTIONS

SCREEN	DESCRIPTION
	View general options such as brightness level and date and time. Changes will be automatically saved upon input. **FUNCTION KEYS** F1 – **NETWORK** – View and change network settings. F2 F3 F4 F5 ***Network Options*** Choose whether to automatically acquire an IP address or set a defined value. **FUNCTION KEYS** **APPLY** – Apply changes. **CLOSE** – Close Network Setup popup.

3.3.7.1 USER INFO

SCREEN	DESCRIPTION
	View and change username and system name. Changes will be automatically saved upon input. **FUNCTION KEYS** F1 F2 F3 F4 F5

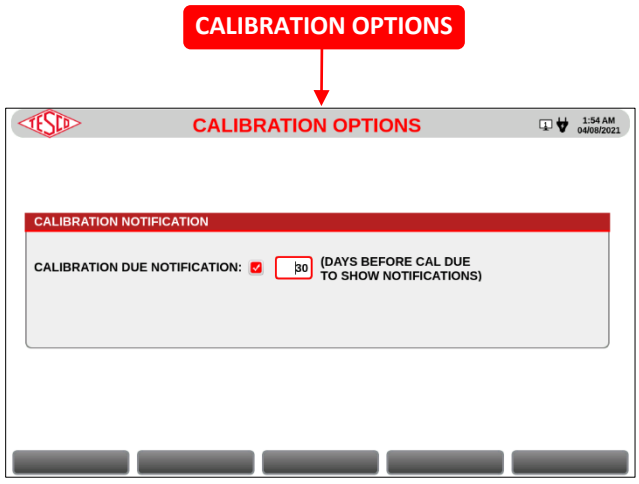
3.3.7.2 TESTING OPTIONS

SCREEN	DESCRIPTION
	View and change testing options by setting a time delay between tests in a sequence. The user can also choose not setting a delay so the tests will proceed immediately one after another. Changes will be automatically saved upon input.

FUNCTION KEYS

F1		
F2		
F3		
F4		
F5		

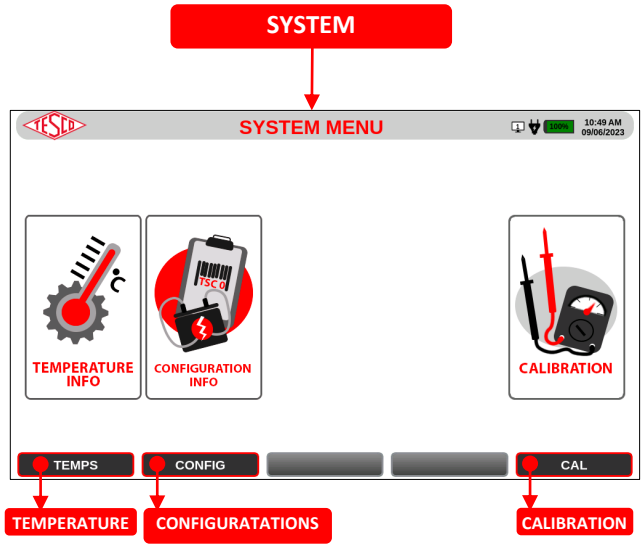
3.3.7.3 CALIBRATION OPTIONS

SCREEN	DESCRIPTION
	Set the number of days to remind the user about the calibration due.

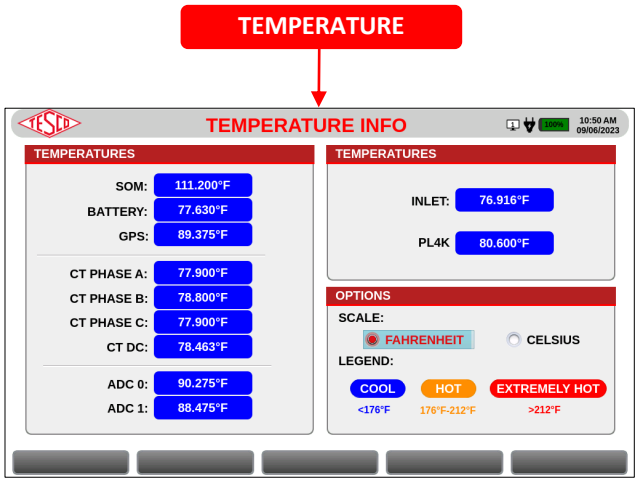
FUNCTION KEYS

F1		
F2		
F3		
F4		
F5		

3.3.8 SYSTEMS MENU

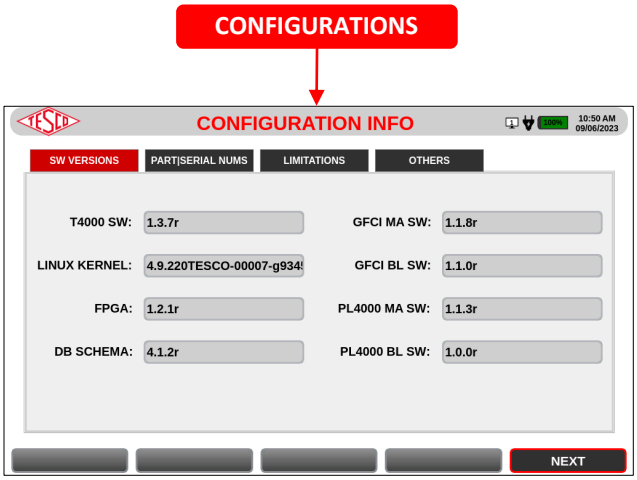
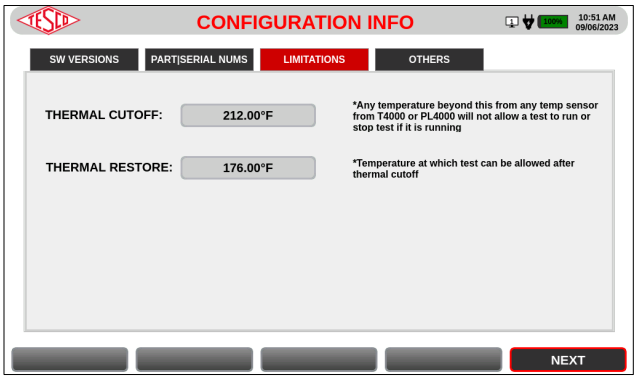
SCREEN	DESCRIPTION
	**NOTE:** Icons will still be changed. **FUNCTION KEYS** F1 TEMPS — View temperature measurements. F2 CONFIG — View configurations info. F3 — View board serial numbers. F4 — View software versions. F5 CAL — Perform calibration.

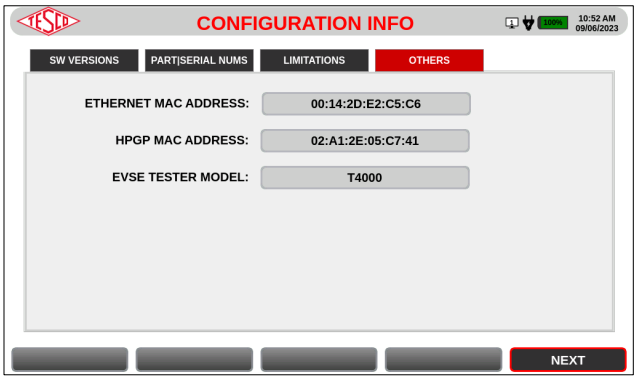
3.3.8.1 TEMPERATURE INFO

SCREEN	DESCRIPTION
	View temperature measurements of the device. The default unit of measurement is Fahrenheit. **FUNCTION KEYS** F1 F2 F3 F4 F5

+1 215 228 0500
support@tescometering.com
tescometering.com

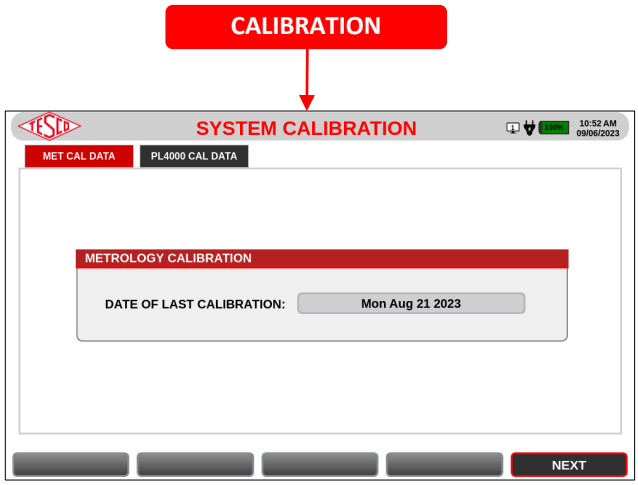
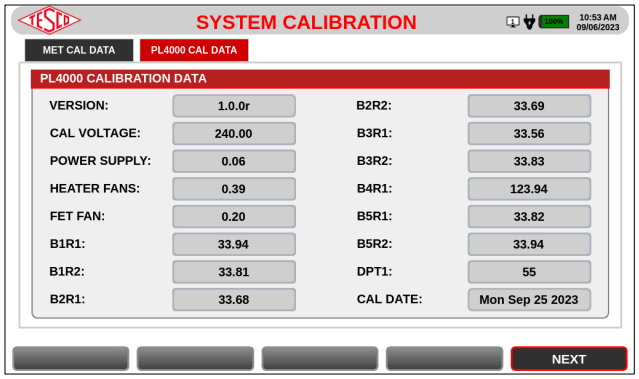
3.3.8.2 CONFIGURATIONS INFO

SCREEN	DESCRIPTION
 Software Version Tab	View thermal cutoff and thermal restore. **FUNCTION KEYS** F1 F2 F3 F4 F5
 Part | Serial Numbers Tab	
 Limitations Tab	


CONFIGURATION INFO
100%
10:52 AM
09/06/2023
SW VERSIONS
PART|SERIAL NUMS
LIMITATIONS
OTHERS
ETHERNET MAC ADDRESS:
00:14:2D:E2:C5:C6
HPGP MAC ADDRESS:
02:A1:2E:05:C7:41
EVSE TESTER MODEL:
T4000
NEXT

Others Tab

3.3.8.3 SYSTEM CALIBRATION

SCREEN	DESCRIPTION
 Metrology Calibration Data	View temperature measurements of the device. The default unit of measurement is Fahrenheit. **FUNCTION KEYS** F1 F2 F3 F4 F5 NEXT — Start calibration and view metrology graph.
 Programmable Load Calibration Data	

4.0 MAINTENANCE

4.1 Introduction 33

4.2 Cleaning the Instrument External Surface 33

4.3 Repair / Parts Replacement / Recalibration 33

4.1 Introduction

Most of the maintenance will be handled by the technical team from TESCO. The user can, however, perform the basic maintenance routine of cleaning the EVSE Test System's external surface.

4.2 Cleaning the Instrument External Surface

Clean the exterior of the EVSE Test System using a soft cloth slightly dampened with either water or a non-abrasive mild cleaning solution that is not harmful to plastics.

CAUTION

Do not use hydrocarbons or chlorinated solvents for cleaning. They can damage the plastic materials used in the Site Analyzer.

4.3 Repair / Parts Replacement / Recalibration

For the EVSE Test System's repair, parts replacement, and recalibration, directly contact TESCO through phone or email. See section **1.2 Contacting TESCO** for contact details. TESCO recommends recalibration on an annual basis. Further details can be found on the Calibration Certificate provided with your Site Analyzer.