

# Touch Screen Users Manual

# 2008 TESLA ROADSTER



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## Three types of screens

Different types of screens are displayed when the vehicle is charging, driving, or parked:

- Charge screens are displayed when the charge port door is open.
- **Parked screens** are displayed when the **vehicle is on** and the **handbrake is engaged**.
- Drive screens are displayed when the vehicle is on, the handbrake is not engaged, and the charge port door is closed.

Parked



## Settings

Use Settings screens to customize various vehicle behaviors and Touch Screen features. You can set a security PIN, program the third button on the key fob, set up a button to control a garage door, define acceptable tire pressures, specify which drive screens are displayed, and more. See pages 11-15 for details.



# Charge

The Charge screen displays charging status. You can also access charge settings from this screen. For details on charge settings, see pages 8-9.







## Up to 6 drive screens

When the vehicle is on, the handbrake is not engaged, and the charge port door is closed, the Touch Screen displays up to six Drive screens. You can move through these screens using the arrow buttons:

- Standard
- Energy
- Trip\*
- Performance
- Clock
- Vitals\*

The first screen you see when driving will be the one that was displayed the last time you were driving. You can select the drive screens you want displayed—see See Set Active Drive Screens on page 12.

\*By default, the Trip and Vitals screens are not displayed.

By touching the RANGE button, you can display the estimated remaining mileage based on how you've been driving for the last 40 miles (EST RANGE) or based on an optimum mileage that can be achieved if driving conditions are ideal (IDEAL RANGE).

# Standard

The Standard screen provides an estimate of remaining driving distance based on the vehicle's current charge level. This screen also provides the outside temperature, date and time, the direction you're heading, and approximate elevation.



# Energy

The Energy screen displays the average energy in Wh (watt hours) used per mile. You can display this average over 5, 15, or 30 miles.



You can scale the graph to show energy usage over 5, 15, or 30 miles. Alternatively, you can use kilometers (see page 13).

# Performance

Touch the REAL TIME/PEAK button to switch the display between two types of bar graphs. REAL TIME displays solid bars that represent the vehicle's current performance. PEAK displays outlined bars that represent maximums achieved so far in the current drive session since you first selected the PEAK performance screen.



Real Time



Peak



In addition to distance and accrued driving time, the Trip screen summarizes net energy used and energy used per mile for the current trip. To reset these values, touch RESET TRIP on this screen or hold down the vehicle's trip odometer button (located on the steering column behind the starter switch). Touching the RESET TRIP button also resets the Trip value displayed on the vehicle's instrument panel, and vice versa. See page 12 for details on how to reset the time. You can also display the time in 24 hour format.

If the temperature of the motor, P.E.M. (Power Electronics Module), or battery is too high, the vehicle protects itself, and you will see an alert on the Touch Screen. Similar to a temperature gauge on a conventional vehicle, the Vitals screen displays a visual temperature representation. Blue indicates a normal temperature, yellow indicates the subsystem is getting warmer than usual, and red indicates that the subsystem is hot. When a subsystem gets too warm, the vehicle protects itself by limiting power.

## **Charge Screens**

When you open the vehicle's charge port door, the Touch Screen displays the Charge screen. The Charge screen displays the charge status and the currently selected charge settings. It also displays the familiar battery graphic, driving range, and estimated battery level that is also displayed on the Standard Drive screen.

#### Charge Status -

The following messages inform you of the charge status:

- Charging Normal charging is in progress.
- Done Charging Charging is complete.
- Topping Off Charge Automatic charging is in progress because the fully charged vehicle has been sitting for a while. To maintain a full charge, a plugged in vehicle periodically tops itself off.
- Recovery Charging Recovery charging is in progress (after excessive discharge).
- Charge Pending A charge is pending and will begin automatically. A charge is considered pending if the charge is scheduled to begin at some point in the future (see Timing on the opposite page) or when the battery is either warming or cooling to prepare for charging.
- Stopped Charging Charging has stopped because either you have pressed the STOP button, or an error condition has occured while charging. When you press START, or when the error condition has been cleared, charging will continue.

If you have entered a price for your – electricity costs using the Charge Settings screens, the cost of the charge will be displayed on this line.



These three lines display:

- Type of charge session (in this case, Standard)
- Timing of the charge (charging can begin either when the vehicle is plugged in, or at a specifically scheduled time)
- Voltage available from the electrical source (220V), amount of current being used (55 amps), and amount of current available (70 amps)



You can initiate "top off" charging manually.



Touch this button on the main Charge screen to access charge settings. You can also access charge settings when the charge port door is closed by using the first Settings screen (which available from the main Parked screen).

You can schedule charging to begin at a specific time.

#### Current

You can limit the amount of current the vehicle draws when plugged in. The default current is 70A (amps) but you can decrease this to 60A, 48A, 40A, 32A, 24A, 16A, or 12A in case the circuit you are using can't supply the default amount.

#### **Charge Mode**

The vehicle is set up to charge in Standard mode, which balances mileage and performance demands in favor of battery longevity. However, if desired, you can change the charge mode to:

- Storage To preserve battery longevity, use this mode when the vehicle is plugged in and you plan to not drive it for two weeks or more. At this setting, the battery is maintained at a reduced charge level.
- Range In addition to providing a higher level of charge, this setting allows the battery to be discharged to a lower level. It also limits the vehicle's power by 50% and maximizes driving distance.
- Performance This setting provides faster acceleration under most circumstances, and allow the battery to be charged to a higher level.

**Note:** Using the Range and Performance charge modes impact battery longevity. For more information on the charge modes, refer to the manual titled "Charging Your Vehicle," provided in your owners package.



#### Cost

Enter an appropriate kilowatts per hour cost to allow the Touch Screen to display the electricity cost at the end of each charge session. Refer to your home's utility bill to determine how much you are paying for electricity.

If you change the charge mode from the default "Standard" charge, one of the following symbols is displayed in the top right corner of all Drive screens and in the bottom center of the main Parked screen:

- 💲 Storage
- Range
- P Performance

To preserve the life of the Battery, **the Range and Performance charge modes automatically revert** back to Standard after 72 hours, when the vehicle's charge port door is opened, or when the vehicle has been driven over a tenth of a mile.

## **Parked Screens**

When the handbrake is engaged and the charge port door is closed, the Touch Screen displays the main Parked screen.

pressures, the values are not updated until you

turn the vehicle back ON



## **Settings Screens**



To display Settings screens, touch the wrench button on the main Parked screen. Touch the arrow buttons to move through the Settings screens.



Use the Setting screens to change various vehicle behaviors and Touch Screen features. For example, you can change charge settings, specify the drive screens that are displayed, set a security PIN, program a button on your key fob, and prepare your vehicle for safe transportation (see the Roadside Assistance Guide, provided in the owners package, for details on how to safely transport the vehicle).

## **Settings Screens**

# Settings Screen 1

Displays charge settings. These settings can also be displaying from the main Charge screen. See page 9 for details.

Settings: 1 of 3 Clock Charging Change the time or time format. Drive Screens Tire Monitor 1 of 3 EXIT **Tire Pressure Monitor** Set Active Drive Screens The tire monitor provides Clock warnings based on one of two

Standard Vitals Energy Trip DE -SELECT Performance OK

Specify which drive screens you want to include in the rotation of drive screens (see page 2). Follow these steps to make changes:

- Use the arrow buttons to highlight the desired screen name.
- Touch DESELECT. The button name changes to SELECT and the drive screen ٠ name appears in grey.



Alternate Comfort Limits (Pump to 25/36psi, F/R)



## **Tire Monitor**

The tire pressure monitoring system checks your tire pressure against pre-defined ranges. When a tire's pressure is below the range you select on this screen, the Touch Screen will display an alert.

Touch OK. ٠

## **Settings Screen 2**

The vehicle's security PIN activates or deactivates the vehicle's anti-theft alarm and Valet Mode. You can change the security PIN code. If you have not set a security PIN, you will be briefly prompted to create one each time you start the vehicle.



See the next page for details on how to set up a HomeLink® controller.

 The Touch Screen can display distance, temperature, and altitude in standard or metric format.



You can program the third button on your key fob to activate the vehicle's alarm, open the trunk, or operate a HomeLink\* device.

- Use the arrow buttons to move the flashing highlight frame to the desired item.
- Touch SELECT.
- Touch OK.

To program the button to operate a HomeLink<sup>®</sup> device, you must first set up the device by following the instructions on page 14. Devices that are set up are displayed on this screen. In the screen shown here, a device called "Home" has been set up. If a device has not been set up, this screen displays "HomeLink<sup>®</sup>: (N/A)".

## **Settings Screens**

## HomeLink<sup>®</sup>



You can set up the Touch Screen to control up to three HomeLink\* devices. After a HomeLink device has been set up, you can touch the HomeLink button on all primary screens to operate the device.

Here are some useful terms for configuring HomeLink® devices:

- Controller: the HomeLink® button that you touch to operate the device
- Transmitter: the hand-held mechanism you use to operate your device (for example, your garage door opener)
- Receiver: the device itself (for example, the garage door's lifting mechanism)

#### To add a controller

- Touch ADD. A message displays as the system is preparing to record.
- Follow the on-screen instructions asking you to point the handheld transmitter at the vehicle's left speaker, and touch and hold the transmitter's button.

Within a minute, the Touch Screen momentarily displays "Recording Complete" before displaying the Name Controller screen. If not, touch OK to try again, or EXIT to cancel the process.

- Depending on the type of HomeLink\* device you have, you may also be instructed to go to the receiver and press its training button. You will have 30 seconds to return to the Touch Screen and touch OK.
- Enter a name of up to 7 letters, then touch OK.
- Touch TEST to make sure the device operates. If it does, then touch SAVE. To discard the recording and start over, touch EXIT.

# Configure A HomeLink® Add Remove Rename Retrain

When you add a controller, it is displayed here and a HomeLink\* button is displayed on the Drive screens and the main Parked screen.

#### To remove a controller

- Touch REMOVE
- Touch the controller button you want to delete
- Touch OK to delete the controller or EXIT to abort the removal process

#### To rename a controller

- Touch RENAME
- Touch the controller button you want to rename
- Touch DELETE to remove unwanted letters.
- Enter the letters of the new name and touch OK

#### To retrain a controller

This lets you keep the name of a controller when you have replaced its associated HomeLink<sup>®</sup> device. The procedure is the same as To Add a Controller except you don't need to enter a name.



package.

## Alerts

On occasion, the Touch Screen displays an alert.

Touch the display to dismiss an alert.



If an alert remains active, this button will be displayed on most screens. Touch to re-display the alert.





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