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# TripTek

Motor Coach Trip Computer

## Operator's Manual

MODEL 3100-X

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## **Trademarks**

**Sawtooth Embedded Systems is a registered trademark, and TripTek is a trademark of Sawtooth Embedded systems, Inc.**

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**Patented**

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## **Overview**

**TripTek is a trip computer designed for motorhomes. By receiving data from both the electronic engine computer and fuel sender, the computer collects, analyzes, and saves vehicle data in memory and then displays trip information on the rear vision monitor.**

## **Description**

**TripTek is comprised of three parts: a keypad, computer (behind dash), and utilization of the rear vision monitor for display. It is designed with simplicity in mind, with five function keys, each having a single function.**

## **Display**

**To make efficient use of the data collected, and to best serve an actual vehicle trip, the system offers the operator four separate screens, TODAY, LEG, TRIP & COACH DATA.**

**The TODAY screen is designed to give you daily information. It provides miles to scheduled destination, time to destination, miles traveled, time traveled, fuel miles available, and average MPG. As an option it will also give you both inside and outside coach temperature.**

**The LEG screen is designed to give you information from fill to fill or for a trip. It provides average MPH, time traveled, miles traveled, gallons used (by engine), average MPG, and gallons in tank.**

**The TRIP screen is designed for long term data tracking for a complete trip or longer. It provides average MPH, hours traveled, miles traveled, gallons used (by engine), average MPG, and current MPG.**

**The COACH DATA screen is designed to give you both coach and engine/transmission performance and operational data. It provides gears select & monitor, turbo boost, engine temperature, trans. temperature, road speed, average MPG, and odometer.**

# Keypad Keys

(Maintain rear vision monitor in “on” position to display trip data)

The **VIEW** key displays the four screens, TODAY, LEG, TRIP, & COACH DATA. By pressing this key, with the monitor on, the computer will sequence through the four data screens and one blank screen. The system is also designed to sequence forward or backward depending on the keypad end pressed. After fifteen minutes, with no user activity, data on current screen will go blank to protect the monitor.

The **SCREEN** key will turn the rear vision image on or off.

Working the **VIEW** and **SCREEN** keys together will give you the following options:

**Data on picture:** The ability to view a data screen and still see the rear vision image.

**Data only:** View data screen only with a dark background for great contrast.

**Picture only:** View rear vision image only.

**Standby:** A dark screen to protect monitor.

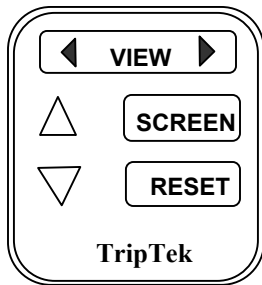
The **RESET** key will zero all the data on the currently viewed screen.

The **△** and **▽** keys set miles to be traveled today. Holding down a key will scroll through numbers. This is operational only on the TODAY screen.

# Operating the TripTek Computer Model 3100

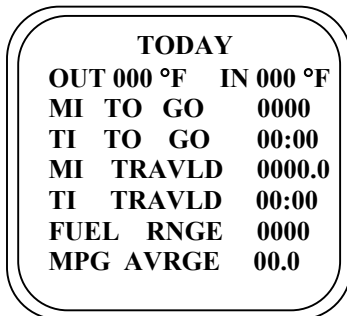
Turn the ignition switch ON.

Turn the rear vision monitor ON. The picture will be displayed.



Press the **SCREEN** key on the keypad to eliminate the rear vision image, if desired. To re-display the image, press **SCREEN**.

**Note:** If the vehicle is put into reverse, the rear vision system will override the computer and clear TripTek data from the screen until the transmission is taken out of reverse.



Press the **VIEW** key on the keypad. The “TODAY” screen will display on the backup monitor.

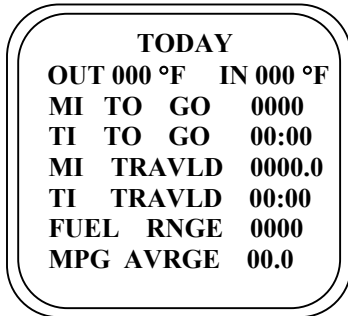
**Note:** If there is no interaction with the keypad for at least fifteen minutes, information on the screen will turn off.

0's on the screen represent the maximum available digits.

Data may precede text on some systems.

# Today Screen

The TODAY screen is designed to give you daily information.



**OUT/IN TEMP:** Outside and inside coach temperature (optional).

**MILES TO GO:** Remainder of miles to travel to scheduled destination.

**TIME TO GO:** Approximate time to scheduled destination utilizing “MILES TO GO” and “MPH AVERAGE”.



**MI TRAVELED:** Miles traveled since “TODAY” screen reset.

**TIME TRAVLD:** Time traveled since “TODAY” screen reset.

**FUEL RANGE:** Approximate miles available with remaining fuel. Utilizes “MPG AVERAGE” and “GAL IN TANK” (Approx.). Will be less if other equipment (i.e. generator) is being utilized.


**MPG AVGERAGE:** Average miles per gallon since “TODAY” screen reset.

Press **RESET** and follow screen instructions to zero out “TODAY” screen.

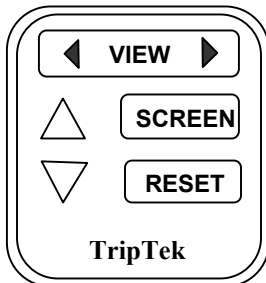
Using the up  and down  keys, set the miles you will travel today. The longer the key is held down, the faster the number will scroll. Miles can be changed throughout the day.

Note: As “miles you will travel” change, “MILES TO GO” and “TIME TO GO” will also change accordingly.

Press **SCREEN** to turn rear vision image on or off.

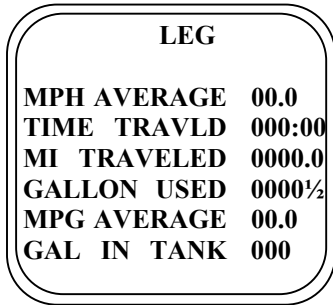
Press **VIEW**  to move to the “LEG” screen.

Note: To move forward or backward through the screens press the side of the **VIEW** key that displays chosen direction.



# Leg Screen

The LEG screen is designed to give you information from fill to fill.



**MPH AVERAGE:** Average miles per hour since “LEG” screen reset.

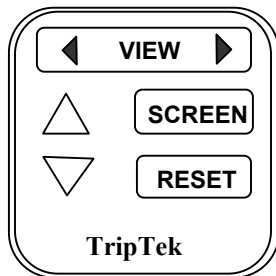
**TIME TRAVELED:** Time traveled since “LEG” screen reset.

**MI TRAVELED:** Miles traveled since “LEG” screen reset.

**GALLONS USED:** Gallons of fuel utilized by engine from the time of “LEG” screen reset. Data is received from engine computer.

**MPG AVERAGE:** Average miles per gallon since “LEG” screen reset.

**GAL IN TANK:** Approximate gallons in fuel tank.



Press **RESET** and follow screen instructions to zero out “LEG” screen.

Press **SCREEN** to turn rear vision image on or off.

Press **VIEW** ► to move to the “TRIP” screen.



# Trip Screen

The TRIP screen is designed for long term data tracking for a complete trip or longer.

TRIP		
MPH AVRGE		00.0
HR TRAVLD		0000
MI TRAVLD		00000
GAL USED		0000
MPG AVRGE		00.0
MPG CURNT		00.0

**MPH AVERAGE:** Average miles per hour since “TRIP” screen reset.

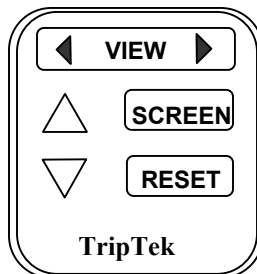
**HRS TRAVELED:** Hours traveled since “TRIP” screen reset.

**MI TRAVELED:** Miles traveled from time of “TRIP” screen reset.

**GALLONS USED:** Gallons of fuel utilized by engine from time of “TRIP” screen reset. Data is received from engine computer.

**MPG AVERAGE:** Average miles per gallon since “TRIP” screen reset.

**MPG CURRENT:** Instantaneous miles per gallon.



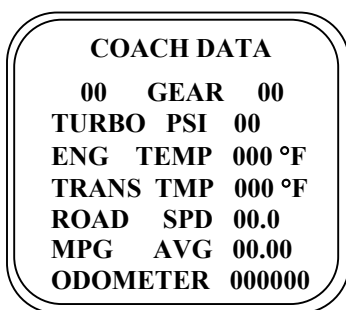
Press **RESET** and follow screen instructions to zero out “TRIP” screen.

Press **SCREEN** to turn rear vision image on or off.

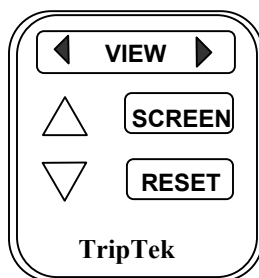
Press **VIEW** ► to move to the “COACH DATA” screen.

## Coach Data Screen

The COACH DATA screen is for coach and engine performance.



<b>GEAR:</b>	Transmission gears selected and attained.
<b>TURBO PSI:</b>	Turbocharger boost pressure
<b>ENG TEMP:</b>	Engine coolant temperature.
<b>TRANS TEMP:</b>	Transmission oil temperature.
<b>ROAD SPD:</b>	Current coach speed.
<b>MPG AVG:</b>	Average miles per gallon for life of coach.
<b>ODOMETER:</b>	Total distance traveled for life of coach.



Press **SCREEN** to turn rear vision image on or off.

Press **VIEW** ▶ to move to the blank screen.

Press **VIEW** ▶ again to return to the “TODAY” screen.

## **TripTek Product Warranty**

**Sawtooth Embedded Systems, Inc. (the Company) warrants the Triptek computer to be free of defects in material and workmanship under normal use and service maintenance for a period of 12 months. In the event the Computer shall prove to be defective in material or workmanship during said 12-month warranty period, Sawtooth will, at its option, repair or replace the Computer, at no charge to Customer except as set forth below. All replaced parts and equipment shall become the property of Sawtooth Embedded Systems.**

**This limited warranty does not apply to any damage to the Computer resulting from accident, physical or electrical misuse or abuse, improper installation, alteration, any use contrary to its intended function, unauthorized service (i.e. service by anyone other than the Company or its authorized service personnel), fire, flood, lighting, or other acts of God.**

**This warranty limits the Company's liability to the repair or replacement of the product. The Company shall not be responsible for removal and/or reinstallation charges, loss or damage in transit and shipping and mailing costs to the warranty service location.**

**The Company reserves the right to make changes or improvements in its products without incurring any obligation to similarly alter products previously purchased.**



**SAWTOOTH EMBEDDED SYSTEMS**

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