## **Trailer Emulator**



LT - Left turn signal, Red Light

TL - Tail / running lights, Red Light

RT - Right turn signal, Red Light

12V - 12 volt battery supply line, Red Light

BK - Electric trailer brakes, Red Light

BU - Backup lights, Red Light

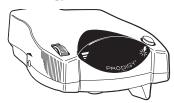
## **User's Guide**

The Trailer Emulator requires the ground and 12 volt battery line to be properly connected in order to check the electric brake circuit.

- 12 volt light on the emulator will be lit as soon as the emulator is connected to the tow vehicle's plug. If this does not happen see Troubleshooting Chart.
- The RT, LT, TL and BU lights will light on the emulator as those functions are activated on the tow vehicle. If this does not happen see *Troubleshooting Chart*.
- The **BK** light on the emulator should be off until the brake control is activated. **NOTE:** The trailer emulator *is not an exact trailer load* so the light displays on various brake controls will respond differently.

The following can be expected with Tekonsha Brake Controls:

90185 - **Prodigy**®



90155 – Primus<sup>™</sup> 90155-CLR – Primus<sup>™</sup>



80750 - DigiTrac<sup>®</sup> II



80550 - Pilot®



Brake Control's display should show:

- .c With trailer emulator connected and no manual slide activation ("c" indicates connection to the trailer).
- Varying voltage displayed from 0-13 as manual is activated with the power knob full on.

9030 – Voyager® 9035 – Voyager XP®



80510 - AccuTrac®



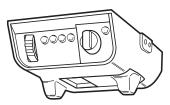
 $80500 - POD^{\otimes}$ 



Brake Control's display should show:

- GREEN with trailer emulator connected with no manual slide activation.
- GREEN to varying colors of RED trailer emulator connected and manual slide activated.

9055 - Sentinel®

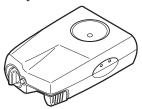


Brake Control's display should show:

■ Level LED is GREEN - with trailer emulator connected with no manual slide activation.

■ Level light changes color from GREEN to RED and the other FOUR RED lights should light in progression - trailer emulator connected and manual slide activated.

9040 – Envoy® 9045 – Envoy® SX



Brake Control's display should show:

- GREEN with trailer emulator connected with no manual slide activation.
- GREEN to varying colors of RED trailer emulator connected and manual slide activated.

## **Troubleshoting Chart**

Condition	Probable Cause
Trailer Emulator connected to tow vehicle:	
- <b>12V LED</b> is <i>NOT</i> lit on Trailer Emulator.	Bad ground or incorrect wiring in tow vehicle connector. No 12 volt battery power supplied to connector.
- LT LED is NOT lit on Trailer Emulator NOTE: Applies for LT, RT, TL and BU LEDs.	Bad ground or incorrect wiring in tow vehicle connector. Loose or poor connection in circuit under test.
- <b>BK</b> is <i>NOT</i> lit on Trailer Emulator when <u>manual slide / touch pad</u> is activated, but <b>12V LED</b> is lit.	Bad ground or incorrect wiring in tow vehicle connector. Poor ground on Brake Control. Brake Control goes into a limit mode. Gain adjustment on Brake Control is set to minimum, adjust gain to maximum and retest using manual.
- <b>BK</b> is <u>NOT</u> lit on Trailer Emulator when <u>Brake</u> <u>Pedal</u> is depressed, but <b>12V LED</b> is lit.	If using brake pedal, Tekonsha's inertia activated controls require vehicle movement to activate sensor. Apply the manual switch and see if <b>BK LED</b> lights. (SEE NOTE)

## Note:

The following two methods are available to test the **Automatic response** of the Tekonsha brake control with the Trailer Emulator.

- 1. Vehicle in Motion Method
  - Connect Trailer Emulator to vehicle.
  - Properly adjust the Level of the brake control.
  - Drive vehicle and apply brake pedal, the brake control's light should indicate a braking event.

- 2. Aggressive Level Method
  - Connect Trailer Emulator to vehicle.
  - Properly adjust the Level of the brake control.
  - · Adjust Level setting toward Aggressive.
  - The brake control's light should indicate a braking event.
  - When finished with test remember to adjust the brake control's level back to desired tow setting.

