DYVO®

DIAGNOSE FASTER

Quick Start Guide

WWW.DYVO.US

1

SAFETY WARNING:

DYVO is intended for 12V DC automotive circuits. **Never connect to any voltage above 18VDC. Never connect to AC Voltages.**

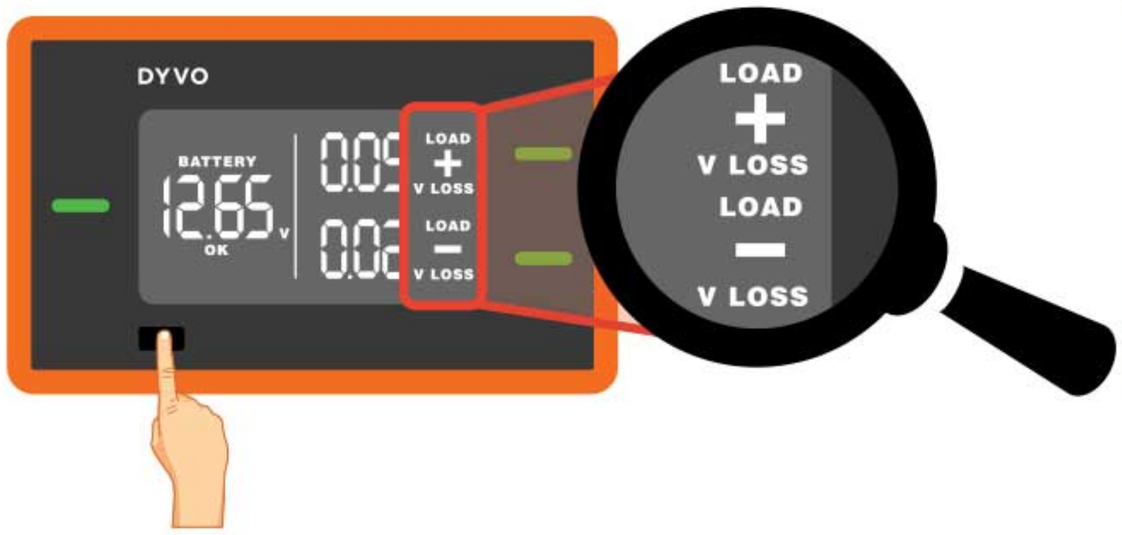
Connect the **DYVO 22'** Fused Test Lead to the left side of **DYVO**, labeled **'BATTERY'**. Connect the other end of the Test Lead **directly** to the vehicle's battery using the battery clamps.

RED ⊕ POSITIVE | **BLACK ⊖ NEGATIVE**

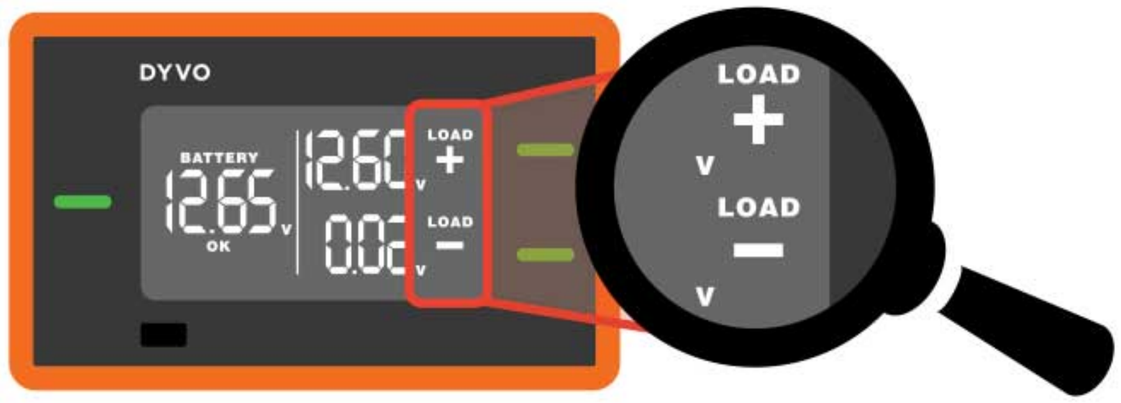
Connect the 5' red and black test leads to the right side of **DYVO**, labeled **'CIRCUIT'**. 5' test leads are compatible with all **DYVO** accessories.

2

QUICK PRESS the **MODE** button at any time to cycle between **'V LOSS'** and **'V' MODE**. This is personal preference. **'V LOSS'** is the default view. **CIRCUIT+** displays the difference between Battery+ and **CIRCUIT+**. In **'V'** view, **CIRCUIT+** displays the available voltage.

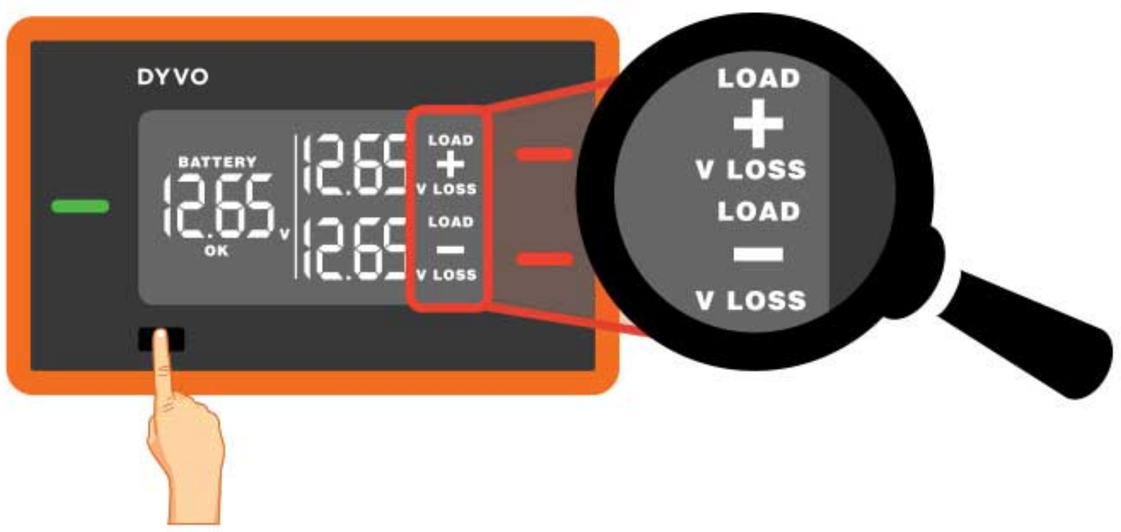


QUICK PRESS FOR V LOSS/V MODE

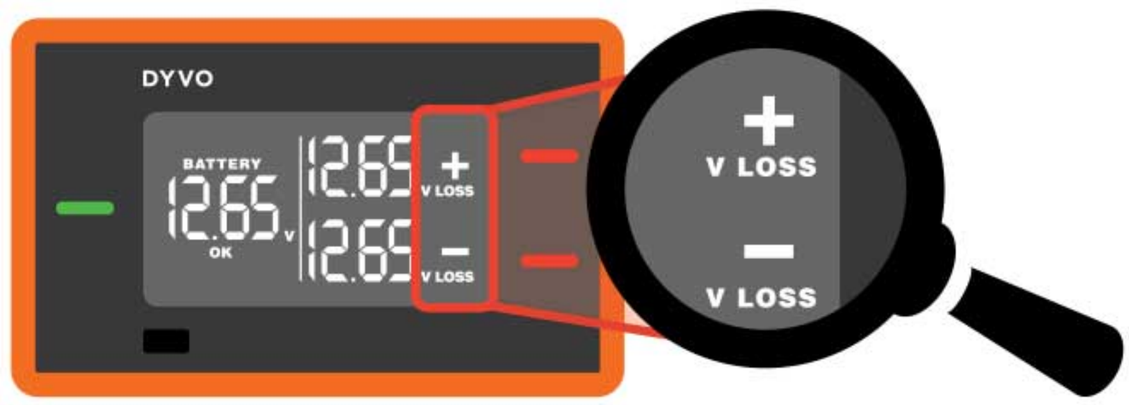


3

LONG PRESS the **MODE** button (3 seconds) to turn **LOAD** mode **ON/OFF**. Default is **ON**. See Step 4 for a description of each mode.



LONG PRESS HOLD FOR 3 SECONDS



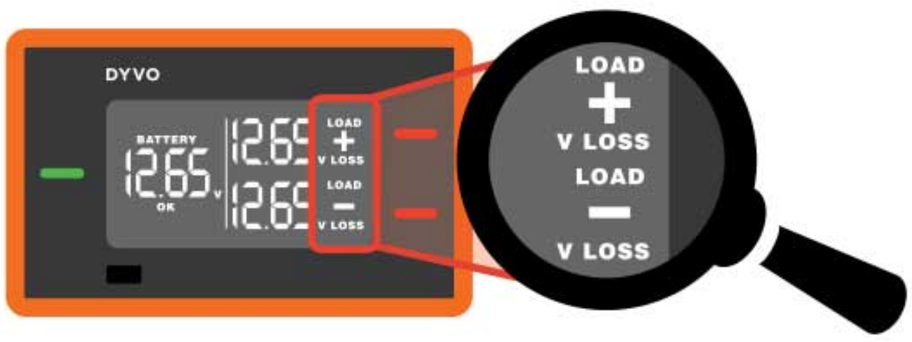
4

COMPONENT NOT WORKING

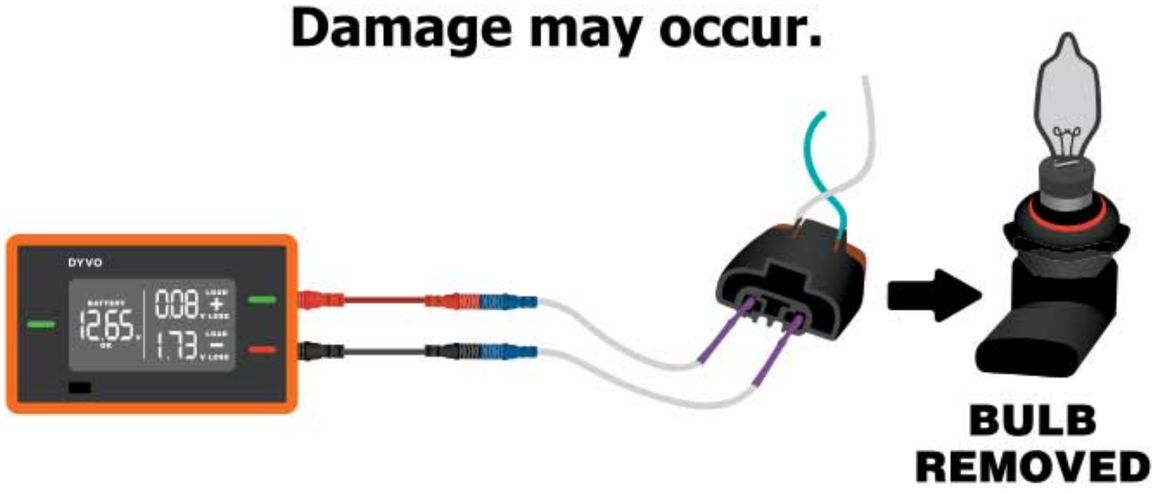
If the component does not work at all (Example: light bulb is completely off, power window does not move, fuel pump makes no sound).

Make sure **LOAD** mode is **ON** (default mode).

LOAD ON



Disconnect the component. Use **DYVO** Forward-Probes to connect to the front of the connector. Activate the circuit. **DYVO** displays the results. **Do not connect to a circuit longer than 5 minutes in this mode. Damage may occur.**



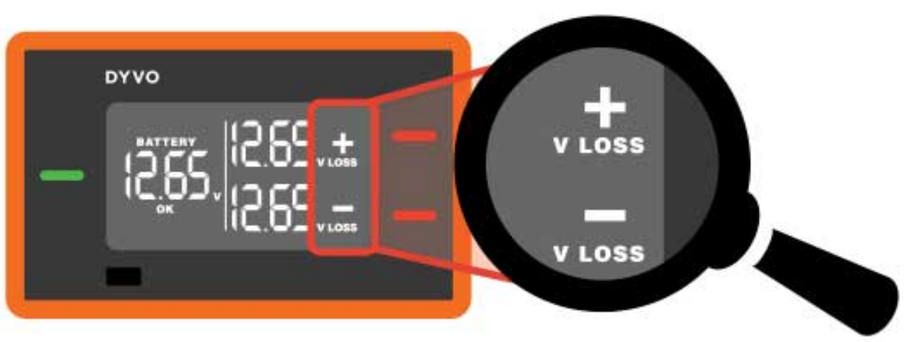
If both **CIRCUIT+** and **CIRCUIT-** show **RED**, the probes may be connected to the opposite circuits. Swap the Circuit test leads to see if either/both turn green.

COMPONENT PARTIALLY WORKING

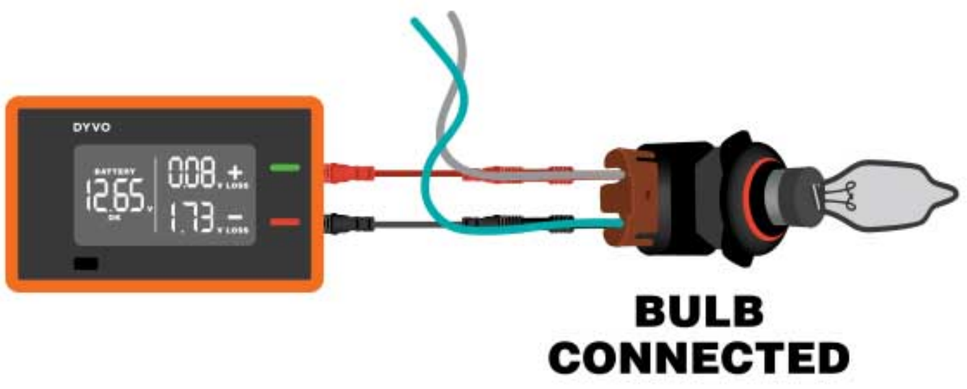
If the component works, even partially (Example: light bulb is dim, power window moves slowly, fuel pump whines)

Make sure **LOAD** mode is **OFF**.

LOAD OFF



Keep the component plugged into the connector. Use **DYVO** Back-Probes to access the circuits through the back of the connector. Make sure the component is on. **DYVO** displays the results.



If both **CIRCUIT+** and **CIRCUIT-** show **RED**, the probes may be connected to the opposite circuits. Swap the Circuit test leads to see if either/both turn green.

INTERPRETING RESULTS AND TROUBLESHOOTING

	Indicators	Description
LCD/ LEDs	**All OFF**	DYVO does not power on, LCD & LEDs are off. Ensure vehicle's battery is 12.0V – 14.90V. Check the 22' Test Lead for: a good connection to the vehicle's battery, fuse in lead is not blown, lead is connected to 'BATTERY' side of DYVO (left side), correct polarity of lead, lead is not damaged or open. If problem persists, contact DYVO customer support.
Battery	**Green, OK**	Battery voltage is between 12.0 – 14.9V. 'OK' is displayed
	RED, LOW	Battery voltage is below 12.0V. It is not recommended to test circuits below 12.0V as the circuits may not operate correctly and test results may be invalid. Charge the battery before testing.
	RED, HIGH	Battery voltage is above 14.90V. Remove battery from charger to prevent overcharging.
Ckt+	**GREEN**	Voltage drop is 0.00 – 0.19V. This is a good voltage drop and indicates the wiring and circuits to the component are most likely good.
	YELLOW	Voltage drop is 0.20 – 0.99V. It is normal for some circuits to have voltage drops in this range, while it may indicate a problem for other circuits. Refer to the manufacture's specifications or compare to a known good.
	RED	Voltage drop is 1V or greater. This indicates a higher than normal voltage drop for most circuits and could be causing the component to not operate as intended. Make sure test lead is connected to the correct circuit, the probe is touching the terminal and the circuit is activated.
	LED colors flicker	Four conditions may cause this: (1) Probe is not making good contact with the circuit. (2) The signal is Pulse Width Modulated (PWM), in which case this is normal operation. (3) The circuit has an intermittent issue, either in the wiring or where the signal is coming from. (4) The battery is on a charger and causing the signal to pulse. Change to 'V LOSS' mode and the LED flickering should stop.
	'Err'	DYVO has detected an error on Ckt+ during startup. Disconnect both test leads connected to Ckt+ and Ckt-. 'Err' should clear. If it does not clear, disconnect battery jacks to DYVO and reconnect. If 'Err' continues to display, contact DYVO customer support.
	Blank	If all indicators for Ckt+ are blank, ensure battery voltage is less than 14.90V and Battery indicators are GREEN and 'OK'. If Ckt+ indicators continue to remain off, disconnect battery jacks to DYVO and reconnect. If the problem persists, contact DYVO customer support.
Ckt-	**GREEN**	Voltage drop is 0.00 – 0.10V. This is a good voltage drop and indicates the wiring and circuits to the component are most likely good.
	YELLOW	Voltage drop is 0.11 – 0.79V. It is normal for some circuits to have voltage drops in this range, while it may indicate a problem for other circuits. Refer to the manufacture's specifications or compare to a known good.
	RED	Voltage drop is 0.80V or greater. This indicates a higher than normal voltage drop for most circuits and could be causing the component to not operate as intended. Make sure test leads are connected to the correct circuit, the probe is touching the terminal and the circuit is activated.
	LED colors flicker	Three conditions may cause this: (1) Probe is not making good contact with the circuit. (2) The signal is Pulse Width Modulated (PWM), in which case this is normal operation. (3) The circuit has an intermittent issue, either in the wiring or where the signal is coming from.
	'Err'	DYVO has detected an error on Ckt- during startup. Disconnect both test leads connected to Ckt+ and Ckt-. 'Err' should clear. If it does not clear, disconnect battery jacks to DYVO and reconnect. If 'Err' continues to display, contact DYVO customer support.
	Blank	If all indicators for Ckt- are blank, ensure battery voltage is less than 14.90V and Battery indicators are GREEN and 'OK'. If Ckt- indicators continue to remain off, disconnect battery jacks to DYVO and reconnect. If the problem persists, contact DYVO customer support.