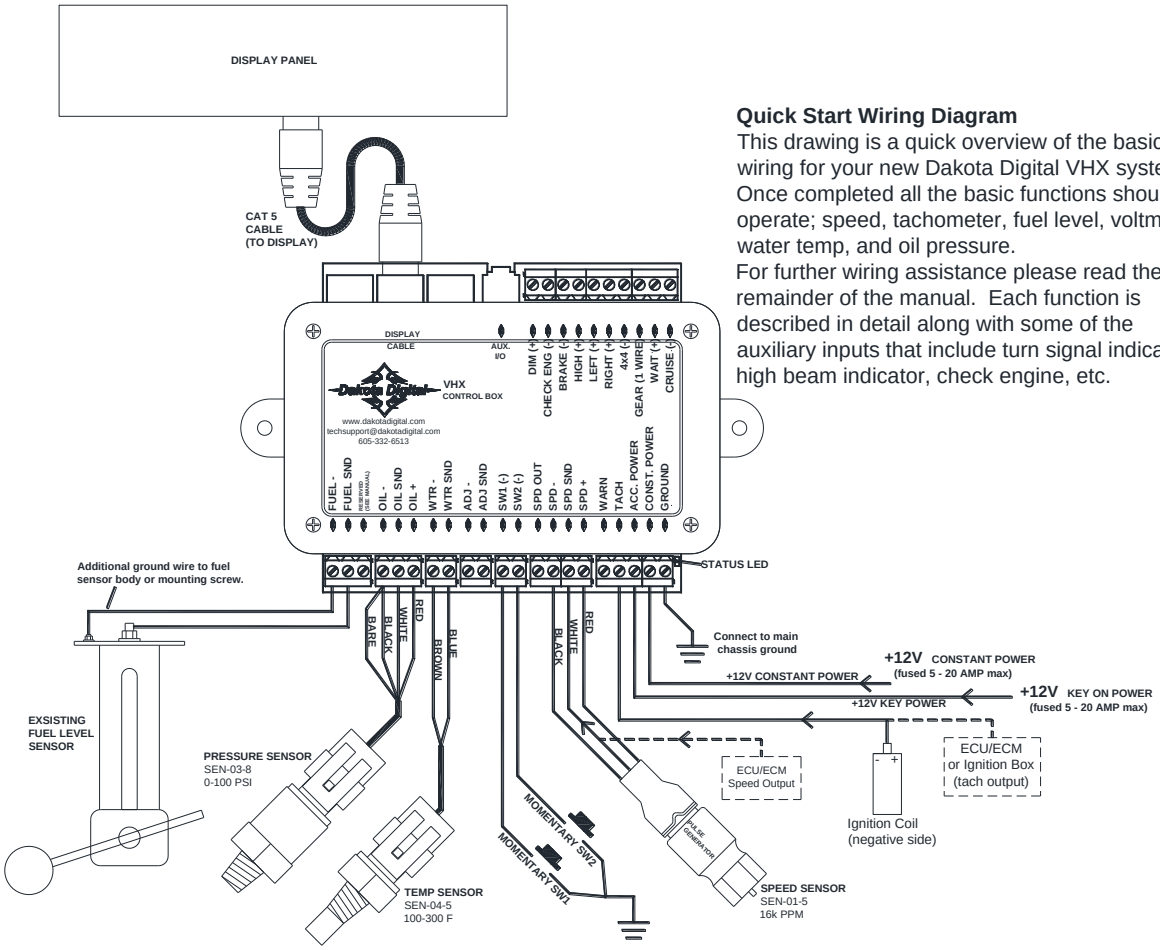
QUICK START GUIDE
DAKOTA DIGITAL VHX GAUGE SYSTEM

This guide is designed to get you up and running quickly with the minimal amount of options installed. It shows a typical and abbreviated wiring diagram as well as how to set up your speedometer, tachometer, and fuel sensor. A detailed description of all the wiring and connections can be found in the full instruction manual.

******* IMPORTANT NOTE! *******

This control box has an odometer preset option that is only available one time within the first 100 miles of operation. See "ODOMETER PRESET MENU" in main instruction manual for details.

- Mount the display panel into your dash. (see mounting instructions or manual)
- Install the supplied senders. (see sensor pack manual)
- Mount and wire the control box. (see diagram on this sheet or see manual for more detailed descriptions)
- Setup the control box by selecting fuel sensor and programming speedometer.



Quick Start Wiring Diagram
This drawing is a quick overview of the basic wiring for your new Dakota Digital VHX system. Once completed all the basic functions should operate; speed, tachometer, fuel level, voltmeter, water temp, and oil pressure.
For further wiring assistance please read the remainder of the manual. Each function is described in detail along with some of the auxiliary inputs that include turn signal indicators, high beam indicator, check engine, etc.

- **Set up the control box to match your vehicle**. The tachometer must be set to match the number of engine cylinders and the fuel gauge must be set to match your fuel sender resistance curve or the instrument system will not display correctly. The control box can read seven common fuel level sender resistance values. If your sender is not listed, the system can be programmed to a custom sender (see full manual for details).

Sender type	Menu	Empty R	Full R
GM 0-30 ohm (mid 60's-earlier)	GM 30	0 ohms	30 ohms
GM 0-90 ohm (mid 60's-late 90's)	GM 90	0 ohms	90 ohms
GM 40-250 ohm (late 90's-later)	GM 250	40 ohms	249 ohms
GM 90-0 ohm (63-67 Corvette)	63 VET	90 ohms	0 ohms
FORD 73-10 ohm (earlier -late 80's)	F 10	73 ohms	10 ohms
FORD 20-150 ohm (late 80's-later)	F 150	20 ohms	150 ohms
VDO 10-180 ohm	V 180	10 ohms	180 ohms
SW/SUN 33-240	SW 33	240 ohms	33 ohms
User programmed	CUSTOM	User settable	User settable

Setup continued

1. Make sure you have switch 1(SW1) connected with one lead to ground and the other to the SW1 terminal on the control box. SW1 is used to enter setup.
2. Start with the ignition key off, hold SW1 while turning the key on.
3. Both message displays should read SETUP, release SW1. The speed/LCD1 display will show SETUP SPEED, this is the start of the setup menus.
4. Press and release SW1 to get to the TACH setup menu. Press and hold the switch until the screen changes to enter the tach setup menus, then release SW1.
5. Now you can press and release the switch to scroll through the tach sub-menus, "ENGINE" "UPDATE" "WARN" "SIGNAL" "DONE".
   When "SETUP ENGINE" is displayed, press and hold SW1 until you see "ENGINE"
   Release SW1 and the current cylinder setting will be displayed.
   Press and release SW1 to increase the value from " 01 " – " 16 " or "BUS".
   When the desired setting is displayed, press and hold SW1 until "DONE" is displayed
   Release the switch to go onto the next tach menu item.
   Press and release the switch to get to "TACH DONE".
   press and hold SW1 until "DONE" is displayed to get back to the main setup menus.
6. Press and release SW1 to scroll through the setup menus until you get to the "SETUP FUEL" menu. Press and hold the switch until "FUEL SENDER" is displayed to enter the fuel setup menus, then release SW1.
7. Now you can press and release the switch to scroll through the fuel sub-menus, "SENDER" "CUSTOM" "TEST" "DONE".
   When "SENDER" is displayed, press and hold SW1 until the message screen changes.
   Release SW1 and the current sensor selection will be displayed as "SENDER XX XX"
   where "xx xx" is the current sensor it is set to.
   Press and release SW1 to scroll through the sensor options "GM 30" "GM 90" "GM 250" "F 10" "F 150" "V 180" "SW 33" "BUS" "63 VET" "CUSTOM"
   When the desired setting is displayed, press and hold SW1 until "DONE" is displayed.
8. To quit and exit, turn the key off. The tach and fuel should now be set.

- **Calibrate the speedometer**. You must also calibrate the speedometer, failing to do so could cause accelerated accumulation of odometer miles. The setup procedure described below is for use with the supplied sensor, see full manual for other options. (auto-cal method listed, see full manual for more)

1. Start with the key off. Press and hold SW1, then turn the key on and start the engine.
2. Once the engine is running, release SW1.
3. SETUP SPEED should be displayed. Press and hold the switch until SPEED SENDER is displayed to go into the speed setup menus, then release SW1.
4. Now you can press and release the switch to scroll through the sub-menus, "SENDER" "AUTO" "ADJUST" "SERVICE" "OUTPUT" "DONE".
   - When "SPEED AUTO" is displayed press and hold SW1 until you get "SPD PULSES 0", release SW1
   - The speed/LCD 1 message display should read "SPD PULSES 0". LCD 2 will read "SETUP" and the other gauges should display the current readings (tach, fuel, volt, water, and oil).
   - Begin driving one measured mile. The "SPD PULSES X" reading should start incrementing as you travel, indicating the pulses received from the speed sensor or VSS.
   - Once you reach the end of the marked mile, or are passing the marker, press and release SW1. The reading will zero, then all readings should move to the correct values and the speedometer should now be displaying your current speed. Auto Cal is now complete and your speedometer should be reading correctly.

Emissions note:
If your vehicle requires emissions testing in your area then the CHECK ENG terminal must be connected to the ECM service engine wire. A BIM-01 or STA-1000 cannot be used to supply the Check Engine or Service Engine indicator.

⚠**WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

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