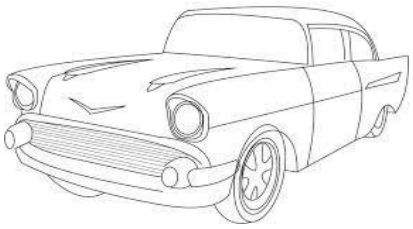
Made in America **Lifetime Guarantee**



Thank you for purchasing this instrument from Intellitronix. We value our customers!

INSTALLATION GUIDE

Chevrolet Bel Air Dash Panel
Part Number: DP1101
Year Series: 1955-56

*** Always disconnect the battery *before* attempting any electrical work on your vehicle.***
Power up the unit before installing to ensure everything is working properly

KIT COMPONENTS

One (1) Digital Circuit Board (with Speedo-Tach Combo, Voltmeter, Water Temp, Oil Pressure and Fuel Gauges)

One (1) Smoked Acrylic Lens

Peel off protective covering from both sides

Two (2) Sending Units: *(1-S8013 OR S8023 - water temp. & 1-S8868 oil pressure)*

1/8" *NPT,* 1/2" *NPT Bushing*

One (1) GM Universal Speedometer Sensor *(S9013)*

7/8" NPT Industry Standard threads

One (1) Mounting Kit:

(6) #4 - 1" recessed Phillips head screws and nylon nuts
(6) ½" nylon spacers.

DASHBOARD REMOVAL AND INSTALLATION

Disassembly

1. Remove the existing dash cluster from the vehicle. Separate the front bezel from the back housing and gauges. (You will not need to re-use the back housing.)
2. Remove the bezel from the old assembly.
3. Attach the acrylic lens to the front of the panel, using provided mounting kit.
4. Attach the new panel to the rear of the bezel, re-using the original screws and other hardware.
5. Wire the gauges and sending units to the panel as indicated by the instructions below.

WIRING INSTRUCTIONS

(If doing an LS engine swap, pick up the tach signal wire from the ECM/ECU and then set the tach switch to 4-cylinders. You may also need to order the Intellitronix LS Engine Swap Adapter Kit – for Series 1, 2 and 3 engines. The part number is 8014LS. If you are getting the tach signal from the ECU, the resistor in the adapter kit will help pull a stronger signal for the tachometer. If your engine is a 4 cylinder, please call Tech Support at Intellitronix, as you may need to send the gauge back to us to be reconfigured. There is no charge for this additional service.)

Note: Automotive circuit connectors are the preferred method of connecting wires. However, you may solder if you prefer.

Ground **- Black** This is the main ground for the display system. A wire should be run from this board to the vehicle's engine block ground. Use I8 AWG or larger wire to ensure sufficient grounding. Proper vehicle grounding is extremely important for any gauges (or electronics) to operate correctly. The engine block should have heavy ground cables to the battery, frame, and firewall. Failure to properly ground the engine block, senders, or digital dash panels can cause incorrect or erratic operation.

Power **- Red** Connect the power terminal to accessory + 12V power from the fuse panel or vehicle wiring harness. This terminal should have power when the key is on or in accessory position. Use I8 AWG wire to ensure the system receives a sufficient power feed.

Dimmer **- Purple** Connect to the parking lights to dim the LEDs 50% when the headlights are on. However, **do not** connect to the headlight rheostat control wire, or the dimming feature will not work properly.

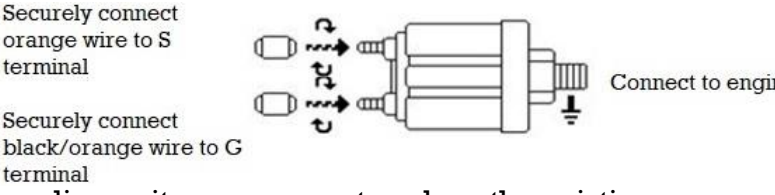
Turn Signals **- Grey** Two I8-gauge wires, one for each signal. Each wire is labeled on the printed circuit board as 'LEFT" or 'RIGHT". Connect each wire to its corresponding indicator circuit.

High-Beam **- Brown** Connect the brown wire on the speedometer panel to your high beam headlight.

Brake **- Tan** Connect to the brake indicator.

Oil Pressure – **Orange -** Replace the existing oil pressure sending unit with the unit included with your gauge. The Orange wire will be wired to the S terminal on the sending unit. This gauge is incompatible with other sending units.

Oil Pressure **– Ground Wire-** From the G terminal on sender will be wired to ground on the engine block using 18 Ga wire to ensure proper ground



Water – **Blue -** This gauge is incompatible with other sending units, so you must replace the existing water temperature sending unit with the included sender. **Do not** use Teflon tape or other sealer on the new sending unit's threads to avoid inaccurate readings. Connect the blue wire to the sending unit. For best results we suggest running a new wire.

NOTE: THE FOLLOWING INSTRUCTION ONLY PERTAINS TO THE TWO TERMINAL SENDER AND CIRCUIT BOARDS THAT ARE WIRED FOR THIS SENDER. NOT ALL KITS WILL CONTAIN A TWO TERMINAL SENDER.

***Water* –Black/ Blue -** This is a ground wire for the two terminal water temp sender. If your dash kit came with the single terminal sender this wire will go to the engine block ground. If using the two terminal sender this will go to the black/blue wire on the sender's harness. If your kit contains a two wire sender and your dash circuit board does not have the Black/Blue wire installed then run this wire coming off the senders harness to the same ground that the dash board is grounded too.

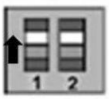
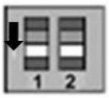
***Trip/Cal Recall Button* – Grey** There are two long grey wires connected to a push-button on the speedometer board. Mount the button in a convenient location such as under the steering column so that you may easily reset your trip odometer or other speedometer functions. Alternatively, your speedometer may have a small pushbutton which will accomplish these same settings.

***Fuel* – Yellow** The fuel gauge sending unit is not normally supplied because the display system can use the existing fuel level sending unit in the tank in most cases. If your wiring harness already has a single wire routed through the vehicle for the fuel sender then it may be used. If using a wire from an external harness, make sure that the wire does not have power. Fuel senders reference their ground from the sender mounting plate. Connect the yellow wire to the factory sending unit. Be sure the toggle settings on the switch match those displayed on the panel, as illustrated.

For early GM/Chevrolet, only, (prior to 1960 ±) both toggle switches should be in the **up** position. OHM range is 0-30.

For **ANY** other application, toggles may be in any position, and the OHM range is 0-90 OHM.

Fuel Selector Switch Position

Manufacturer	Switch Positions	Ohm Range
GMC/Chevrolet Prior to 1960 ± Both toggles UP		(Empty to full) 0-30 OHM
Any other Positions are 0-90 OHM.		(Empty to full) 0-90 OHM.
		
		

Intellitronix Digital Performance Speedo/Tach Combo

***Speedometer* – White** If your vehicle has a mechanical speedometer cable from the transmission, disconnect it and thread the new electronic sensor onto the transmission. This unit comes with a 3wire sensor. If you are using this sensor, the **white** wire is the speed signal; connect this to the speed signal wire on your gauge. The **red** and **black** wires in the cable are switched power (12VDC) and ground, respectively. Twisting the ground and signal wires around each other will provide an additional level of interference protection. The speed signal wire should not be routed alongside the tachometer, ignition, or any other high-current or high-voltage wires. For vehicles which have a vehicle speed signal from a transmission -- one wire goes to the speedometer, and the other to the ground -- or ECM. Tap into the VSS wire (consult a vehicle service manual or wiring diagram to determine the correct wire color) and connect it to the white speed sending wire on the digital dash.

--OR --

***Speedometer* – White** If your vehicle has an electronic vehicle speed signal from a transmission -- one wire goes to the speedometer, and the other to the ground -- or ECM. Tap into the VSS wire (consult a vehicle service manual or wiring diagram to determine the correct wire color) and connect it to the white speed sending wire on the digital dash. The speed signal wire should not be routed alongside the tachometer, ignition, or any other high-current or high-voltage wires. Twisting

the ground and signal wires around each other will provide an additional level of interference protection

***Tachometer (memory capable)* – Green**

If your vehicle has a **separate ignition coil**, connect the green wire to the **negative** (-) side of the coil – the wire that goes to the points or electronic ignition module.

If your vehicle has a **GM HEI ignition**, connect to the terminal marked 'TACH', or, on some systems, a single white wire with a spade terminal.

If your vehicle has an **after-market ignition** – some systems will connect to the TACH output terminal.

If your vehicle has a **computer controlled ignition** system, consult the service manual for the wire color and location.

If your vehicle has a **magneto** system, connect the tach signal wire to the negative side of the coil. **Do not** connect the tach terminal to the positive (+ *or* high voltage) side of the ignition coil.

This tachometer is initially calibrated for use with 8 cylinder engines. If you are using it with a 4 or 6 cylinder engine, you must recalibrate the tach for your specific application by pushing the recall button in accordance with the programming modes shown below.

Modes

By pushing the recall button in accordance with the chart below you can set the S/T combo for various modes and programming functions.

PUSH	MODE
Once	Tach/Speed Combo
Twice	Speed and Trip Odometer
Three	Speed and Odometer

After installing your speedometer according to the wiring instructions, with the ignition on, the speedometer will be in Speedometer only mode. The speedometer leaves our factory with an industry standard pre-set calibration of 8000 pulses per mile. You may recalibrate the gauge for your specific application. To accomplish this, locate a measured mile where you can safely start and stop your vehicle. By running the vehicle over this measured distance, the speedometer will learn the number of pulses outputted by the speedometer sensor during a specific measured distance. It will then use this acquired data to calibrate itself for accurate reading.

Instructions

This electronic speedometer/tachometer displays your speed and rpm reading. It also includes an odometer, trip meter, high speed recall, 0-60 time and Y:4 mile elapsed time (ET). It can also be calibrated with the push of a button to adjust the gauge for different tire sizes, wheel sizes and gear ratios. The odometer and trip odometer can switch back and forth by gently tapping the push button. While in Trip mode, if you press and 'HOLD' the button, the trip meter will reset to zero. In odometer mode, if you press and 'HOLD' the button, the performance data will then be displayed, in addition to 'CAL' mode which will allow you to again 'TAP' to reprogram the pulses per mile stored info.

When in speedometer only mode, press in and hold the recall button until it starts to run through the various functions. The chart below shows what each display mode is and how to utilize that function.

Display	Function
Hi Spd	Displays highest speed reached
0-60	Displays time to go from 0 to 60 MPH
¼	Displays time over ¼ mile distance
8 cylinder	Sets cylinder selection
Odo	Sets odometer display
Cal	Calibrates speedometer

While ‘CAL’ is being displayed, press the recall button briefly one time. This will put the speedometer in Program Mode. It is very important that you drive to the end of the measured mile and tap the button again. **WARNING:** If while in ‘CAL’ mode you do not move at all but press the button again, the microprocessor will NOT have received any data whatsoever and the unit will need to be sent back to the factory for reprogramming. At a minimum, drive some distance and you can always go back and start again if need be.

If you miss stopping the display at ‘CAL’, simply repeat the steps. With ‘CAL’ displayed, the speedometer is now waiting to record the pulse count data accumulated over the measured mile. When you are ready to begin driving, press the recall button once. The odometer will display the incoming pulse count. Drive the vehicle through the measured mile (speed is not important). As you move, the odometer will begin showing the speedometer pulses as they are being counted. At the end of the mile, stop and press the pushbutton again. The odometer will now display the number of speedometer pulses that were registered over the distance.

Trip Distance

A single *tap* of the recall button will activate the trip meter in the odometer display. A decimal point will appear which will indicate that you are in trip meter mode. *Holding* the recall button will clear out the trip distance. To return to the default odometer display, *tap* the recall button again. The decimal point will disappear, indicating that you are back in the default odometer display.

Setting the Odometer

While scrolling through 'CAL' mode you will see 'ODO' appear. This will allow you to enter the vehicle's actual mileage. Press the trip button again at this point and you will enter the odometer set up mode. Press quickly to change the number of the digit on the right. Press and hold to advance to the next digit. Do this for all 5 digits. ***For Example:*** To enter the mileage reading 23456 into the odometer, at the 'ODO' prompt, tap the small black button (quickly) two times, until the number 2 is displayed. Then press and hold the button until the numbers **20** are displayed. Tap the button 3 times until **23** is displayed. Press and hold the button until **230** is displayed, and continue in this manner until **23456** is displayed. The speedometer will advance to the home screen, five seconds after the last number is entered.

Recording and Viewing Performance Data

Follow these steps to record and recall Performance Data (high speed, ¼ mile ET, and 060 time):

1. Before each run, your car must be at a complete stop at the starting position. *Press and hold* the push-button as it cycles through the performance data. At the end, the odometer will reset and all performance data will be cleared. This will not affect your stored calibration value or the odometer reading.
2. Press the push-button until 'HI-SP' is displayed. The gauge will automatically cycle through the performance data.
3. Start the run, pass, session, etc., as mentioned above.
4. When finished, repeat *Step* 2 to view the data gathered from the run. While stopped, you can view this data as often as you wish. However, once it finishes scrolling one time, the memory is ready to record new data and will begin recording again once the vehicle starts to move. The highest speed measured over multiple runs will be retained in memory.

# # #

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Intellitronix
Intelligent Electronics

Technical Support

Monday – Friday
9am to 5 pm EST

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support@intellitronix.com

This product carries a limited Lifetime Warranty.
This warranty is limited to replacement or repair of the unit at the discretion of Intellitronix.