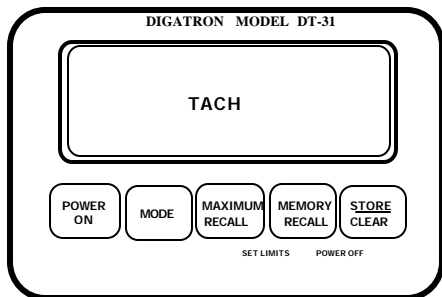


# INSTALLATION & OPERATING INSTRUCTIONS MODEL DT-31SNL

## KEYBOARD CONFIGURATION



## POWER ON

Your DT-31SNL gets its power from your lighting coil. The instrument will not operate unless your engine is on. When turned on, your instrument will begin a 10 second display test. At the end of the test, your instrument's serial number will be displayed

## POWER HARNESS NOTES

The power harness cable should always be routed as far away as possible from the ignition system components (plug wires, spark plugs, ignition coils, distributor or magneto). If this sensor cable is too close to these components it may pick up radiated electrical interference and cause erratic instrument readings and operation. A distance of at least 6" from these components is desirable in all installations.

When routing sensor cables through any panels, be sure to use a rubber grommet to keep the cables from being cut by a sharp edge. If your cable is too long to route back to your instrument fully extended, we recommend sending it back to Digatron to be cut to the appropriate length for your needs or coiling it away from the engine.

If you experience erratic readings after installing your instrument, it is usually helpful to separate individual sensor cables as much as possible.

## POWER HARNESS

**SN-LCHBN:** Your instrument receives its power from the lighting coil. Install the harness in the following manner.

Splice the red lead of the lighting coil harness directly into the lighting coil wire before the regulator using one of the "set screw" wire connectors provided. Connect the other lead of the lighting coil harness directly to the engine block. Route the connector end of the harness to the instrument and plug it into the pigtail with the **black boot**. Twist the connector ¼ turn to lock it in place.

**NOTE:** Do not use the large white pigtail with the gray boot, it is an EGT input.

## TACHOMETER CALIBRATION

Your instrument comes from the factory with the tachometer calibration number set at 2. This is the correct setting for most 2

cycle, 2 cylinder applications. If your tachometer readings are not correct, you can change the tachometer calibration number.

With your motor running, turn your instrument on. Press and hold the **MAXIMUM RECALL** and **MEMORY RECALL** buttons simultaneously until the display flashes. This will put the instrument into the Set Limits mode of operation, which is indicated by the display flashing. To increase the calibration number, press the **MAXIMUM RECALL** button. To decrease the calibration number, press the **MEMORY RECALL** button.

The tach calibration number enables the instrument to display the correct RPM for different engine types. The instrument divides the tach input signal by the tach calibration number. This number can be between .5 and 31. Find the correct tach calibration number for your sled by determining how many poles your lighting coil has and divide this number by two.

The most frequently used numbers are:

- 2 cylinders - set at 2 or 4
- 3 cylinders - set at 3 or 6
- 4 cylinders - set at 4 or 6

If you are unsure of the exact tach calibration number for your engine, experiment. If your calibration number is currently set at 2 and the RPM displayed is double what it should be, set the calibration number to 4. Alternately, if the RPM displayed is half of the correct value, decrease the calibration number to half of the current number.

To save the current limits and exit the Set Limits mode, press the **STORE** button or switch.

## TACHOMETER

The tach displays RPM in thousands of RPM. If your display shows 9.50, your RPM is actually 9500 RPM.

## STORING DATA

The **STORE** switch or the optional **REMOTE STORE** switch can be pressed up to three different times to store the current tach value. The display and the optional **WARNING INDICATOR LIGHT** will flash to indicate a successful store of information. After three numbers are stored, additional attempts to store information will be ignored.

In addition, the instrument automatically stores a maximum tach value during the current recording period.

## MEMORY RECALL

The **MEMORY RECALL** button is used to recall the numbers stored in memory. To recall the first stored number, press and release the **MEMORY RECALL** button. The contents of the first memory will be displayed and the left decimal point will flash. Press **MEMORY RECALL** again to display the second number. The middle decimal point will flash. A third press of **MEMORY RECALL** will bring up the last number and cause the right decimal point to flash. Press **MEMORY RECALL** once more to return to normal display mode.

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## MAXIMUM RECALL

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The **MAXIMUM RECALL** button is used to display the maximum tach value recorded during the current recording period. Recording of this value takes place automatically and requires no input from the user. To display the maximum, hold down the **MAXIMUM RECALL** button. This value will be displayed until the button is released.

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## DISPLAY OF OVER RANGE

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When conditions exceed the range of the instrument, the display will show three bars at the top of the display where the over range condition occurs. This condition can also be caused by a bad or disconnected sensor.

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## ELECTRICAL INTERFERENCE

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If the instrument encounters excessive electrical interference it will display three vertical decimal points in the display. This indicates that the stored data could be invalid. It can also indicate an incorrect instrument or sensor installation.

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## OPTIONS

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There are four optional features that can be added to your DT-31SNL. To have any of these options added to your instrument, send it to the address at the end of these instructions.

### MEMORY LIMITS

When this feature is added to your instrument, you can set a limit for each function displayed. The instrument then gives you a visual warning if any of the inputs exceed their limit, which helps you to avoid engine damage.

### BACKLIGHT

The **BACKLIGHT** lights the displays for use at night. To turn it on or off, press and hold the **MODE** and **MAXIMUM RECALL** buttons simultaneously. The **BACKLIGHT** is an optional feature; it will only work if installed.

### WARNING INDICATOR LIGHT

The optional **WARNING INDICATOR LIGHT** will flash once when the **STORE** button or switch is pressed. Memory is full if the switch is pressed and the **WARNING INDICATOR LIGHT** does not flash. If you add **MEMORY LIMITS** to your instrument, the **WARNING INDICATOR LIGHT** will flash constantly when any of the set limits are exceeded. It will stop flashing when the conditions fall below the set limits.

### REMOTE STORE

When mounted to your steering wheel, the **REMOTE STORE** switch allows you to store three sets of numbers while keeping your hands on your wheel.

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## POWER OFF

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Your instrument will shut off automatically when you turn your motor off. You may also turn the instrument off manually by pressing the **MEMORY RECALL** and the **STORE** buttons at the same time.

Any stored data will be lost when the power is turned off. View all stored information before turning the instrument off.

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## REPAIRS

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If you have any questions about the operation of your instrument, please call. One of our technicians will be happy to help you.

Your instrument is warranted to be free from factory defects and electronic failure for one year from the date of purchase. Physical damage during normal usage is not covered under the warranty. Be sure to fill out and return your warranty card for our records. If we do not have a card on file for your instrument, you will be charged for repairs unless you can provide us with proof of purchase date.

When returning an instrument for repair, enclose a note indicating your return address, phone number and a detailed description of the problem. Send your instrument and sensors so that we can check the complete system.

Send repairs to:

**Digatron**

**8102 N. Freya St.**

**Spokane, WA 99217**

**Phone: (509) 467-3128 Fax: (509) 467-2952**

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