INSTALLATION INSTRUCTIONS
Digital Pro Shift Gauge

IMPORTANT
WEAR SAFETY GLASSES

QUESTIONS:
If after completely reading these instructions you have questions regarding the operation or installation of your instrument(s),
please contact AutoMeter Technical Service at **866-248-6357.**
You may also email us at **service@autometer.com.**
Additional information can also be found at **http://www.autometer.com/tech_faq.aspx**

INTRODUCTION

Thank you for your purchase of the Digital Pro Shift from AutoMeter Products, Inc.
The following basic features are included on this product:

• Single precise user-programmable set point
• Quick-reacting, intensely-bright LED shift light
• Multiple shift point settings
• User selectable shift light coloration

• Digital RPM display
• User selectable dimming function
• Color change progressive shift light capability
• Full engine RPM playback capability with 80 secs. of record time.

• RPM display blanking

Please read and follow the instructions below regarding the installation and operation of your DPS to receive maximum benefit and accuracy from this product.
Failure to follow the information below will void the product warranty and may result in damage to your vehicle, this product, and/or personal injury.

NOTE: This product features INTENSELY-BRIGHT LEDS! This feature is intended for maximum driver visibility during daytime operation and high glare situations. Usage of this product at full brightness during nighttime or extremely dark settings may adversely affect driver's vision. AutoMeter strongly recommends that you familiarize yourself with the dimming function of this product and that you do not operate the product at full brightness during dim or dark lighting conditions.

INSTALLATION

1. Disconnect the negative (-) battery cable.
2. Gauge can be mounted in a 2 $\frac{1}{16}$" dia. hole with the bracket supplied. Gauge can also be mounted in an AutoMeter Mounting Cup, Panel, or AutoMeter Gauge Works Pod.
3. Wire gauge as indicated. See schematic on following page for more info:

Red Wire: Connect to a fused and switched 12V positive source that is turned on and off with the ignition switch.
Black Wire: Connect to a good engine, chassis, or battery ground.
Green Wire: Connect to the negative terminal of a standard ignition coil, or to the "Tach Output" terminal on the Electronic Ignition Module. (See diagram)
Blue Wire: (Optional) Connect to positive terminal of Trans-Brake or Line Lock Solenoid. Alternatively, connect to the Brake Light Switch, Clutch Switch, or a dedicated Remote Start Switch (normally open, momentary closed).
Violet Wire **(Active only during playback):** Connect this wire to the input (green wire) of a standard AutoMeter tachometer.

QUICK SET OPTIONS:

Day/Night Dimming control: This product is extremely bright at the maximum setting for best visibility for drivers during high glare situations. AutoMeter does not recommend operating this product at full brightness during extremely dark or night time driving conditions. To adjust this product from the daytime or "High" brightness setting to the nighttime or "Low" brightness setting do the following:
• Press and hold the **MENU (+)** button for 2 seconds. The shift light will display the new brightness level and the display will indicate what mode you are changing into with "Hi" or "Lo".

Launch RPM Quick Set – If you need to change your Launch Light Setting quickly, do so when the vehicle engine is running and the Digital Pro Shift is in "Tach Mode" by raising the engine RPM until you have reached the desired set point. Press the ENTER button to confirm your new Launch Light Setting. You should see the Decimal indicator flash quickly to confirm.

Remove RPM Display – Sometimes fewer distractions are better for a driver. If you want to be able to focus on just the shift light when you're making a performance run and don't want to be distracted by the digital RPM display, you can disable the display function. To turn on/off the display function, from "Tach Mode," press and hold the **ENTER** button for 2 seconds. The display will indicate "on" or "off" to indicate which mode you will be changing to.
NOTE: This function takes affect in all modes. The Shift-Lite LEDS and the "Preset/Record" indicator LED will be the only active elements on the display.

WIRING

Green   **OR**   See "Warning" below

(-) (+)
COIL

Tach output on
Electronic Ignition

Fuse   Red
(See Caution Below)   Ignition
Switch

Black

Remote Start or
Manual Arm Switch

Good
Engine
Ground

12V BATTERY

Blue

OR   Blue

OR

Brake or
Clutch
Switch

12V Battery

Blue   (+)   (-)

Violet
(Optional)

Good
Engine
Ground

Trans Brake
or
Line lock
Solenoid

Green

PRO-COMP
ULTRA-LITE

3 4 5 6
7
2   8
1   9
0 RPM 10
THOUSANDS
Auto Meter

Tach

SETUP and OPERATION MODES

A.) MENU MODE – To Select Menu Mode, press the **MODE (+)** button. To exit setup mode and return to Real Time display, press **EXIT (–)**.

B.) RECORD MODE – The DPS must be in "Preset" mode before the Record mode can be started. This is accomplished by applying +12v to the Blue wire. This can be done with a remote start switch, trans brake or line lock solenoid, brake switch or clutch switch (refer to the Wiring diagram). The right most decimal point should now be blinking indicating that you have entered "Preset" mode.

While in Preset mode, the Launch Lite function will become active. In this mode, the Shift-Lite will perform as follows:

When the RPM is below the Launch RPM Set Point: the Shift-Lite will be off.
When the RPM is at the Launch RPM set point +/-100 RPM: the Shift-Lite will be on.
When the RPM is above the Launch RPM set point: the Shift-Lite will flash. Once the unit enters Record mode, the Launch Lite function will no longer be active.

To start a recording from Preset mode, remove the +12 volts to the blue wire (refer to the Wiring diagram). The right-most decimal indicator will change to a constant lit state indicating recording is in progress.

NOTE: Whenever a Record Mode is started, any previously recorded run information will be over-written.

The device will continue to record for the specified maximum time period (80 seconds), or until EXIT (–) is pressed, or +12 volts is re-applied to the Blue wire, whichever comes first. The decimal indicator will turn off at the end of the recording.

NOTE: During the Record Mode:

- 450 RPM "Short Shift Protection" is provided. This will advance the shift-lite setting from one shift point to the next when the engine drops 450 RPM or more. For example, if shift point #1 is set at 6,000 RPM and you short shift at 5,000 RPM the tach will automatically advance to shift point #2 even though you never reached 6,000 RPM and the light never turned on.
- During a run, after the last shift point, the Shift-Lite always come on at RPM Setting of the last shift point.

If the unit is powered down during a recording, the tach will return to "Tach" mode when power is applied and the engine is running. The recording will be available for playback up to the point that power was removed.

C.) PLAYBACK MODE Press and release the **MODE (+)** . The display will indicate "PLaY." Press **ENTER** to confirm your choice and begin "playing back" the run stored in the memory on the display at ⅓ real time. To "Rewind" the current run being played back, press and hold the **EXIT (–)** button. The display will play the run backward from its current position in real time, for as long as Rewind/Pause is pressed. Once Rewind/Pause is released, playback will be "Paused". To resume playback at ⅓ real time, press and release the **MODE (+)** button. Pressing and holding the **MODE (+)** will play the run forward in real time. When the **MODE (+)** is released, playback will resume at ⅓ real time. During Playback, the Tach Output on the violet wire will be active.

D.) SHIFT POINT SET – Once "SptS" is shown on your display, press **ENTER** to confirm that you would like to set your shiftpoint or points. "SP1" will now be displayed. To set your shift point, press **ENTER** to confirm the shiftpoint you would like to set. The display will now show you the current shift point setting. Use the **MODE (+)** and **EXIT (–)** buttons to raise and lower this number. A single press results in a 10 RPM increment change. Push and hold each button to scroll more quickly through the RPM scale. Once you have dialed in the desired set point, press **ENTER** to confirm your choice. Navigate to additional shift point settings by pressing the **MODE (+)** button. Set these additional points using the process described above.

NOTE: It is recommended that you set the shift point to 3000 RPM (or a similarly mid to low point in your engine's rev range) to confirm proper installation. With the DPS on and in Tach mode, bring the revs of the vehicle to 3000 RPM and verify that the light activates as specified. Once this test is completed dial up your shift point to your desired, or engine builder specified RPM setting.

NOTE: If a set point has been changed, all higher Shift-Lite set points will also be changed to the same value. All lower Shift-Lite set points will be left unchanged. For example, if Shift-Lite set point #2 is changed to 6,000 RPM, set points #3 and #4 will also be changed to 6,000 RPM. Set point #1 will not be changed. Set point #5 is the Launch RPM and will not change when set points #1-4 are changed.

E.) *LAUNCH LITE SET – The Digital Pro Shift has a Launch Lite setting for drag racing applications and other forms of motorsport that can benefit from a precise launch RPM from a dead stop. When the Launch Lite is active, the shift light will perform as follows:
- When the RPM is below the Launch RPM Set Point: the shift light will be off.
- When the RPM is at the Launch RPM set point +/-100 RPM: the shift light will be on.
- When the RPM is above the Launch RPM set point: the shift light will flash.

Press the **MODE (+)** button until "SptS" is displayed, press **ENTER** to confirm this choice and then press **MODE (+)** until "LnCH" is displayed. Press **ENTER** to confirm your choice to set your launch light RPM. Use the **MODE (+)** and **EXIT (–)** buttons to scroll up and down until your desired RPM set point is displayed. Press **ENTER** to confirm your Launch Lite set point.

***LAUNCH RPM QUICK SET** – If you need to change your Launch Light Setting quickly, you can do so when the vehicle engine is running and the Digital Pro Shift is on by raising the engine RPM in "Tach Mode" until you have reached the desired set point. Press the **ENTER** button to confirm your new Launch Light Setting. You should see the Decimal indicator flash quickly to confirm your new setting.

F.) PULSE PER REVOLUTION SET (CYL. CALIBRATION) – Use this feature to calibrate your Digital Pro Shift to your engine and ignition type. To enter Pulse Per Revolution Set, press the **MODE (+)** button until "PPr" is displayed, then press **ENTER** to confirm your selection. You may now use the **"+"** and **"–"** buttons to cycle up and down through the pulse settings available on this product. Pulse per revolution settings refer to the number of pulses or "plug firings" provided by the ignition to the device per engine crank revolution. For example a single coil ignition on a 4-cylinder engine will typically fire two cylinders per crank revolution. If your ignition matched this type, you would need to set your PPr value to "2" († See below). Below is a list of common ignition pulse settings. If you need further assistance calibrating this unit for your application please visit our Tech Tips and FAQ section on our website **(http://www.autometer.com/tech_faq.aspx)** or contact AutoMeter tech support personnel via the information included with the warranty information shown later on this sheet.

† **The available ignition pulse settings are .5, 1, 1.5, 2, 2.5, 3, 4, 5 & 6.**

ENGINE		Most 2 cyl.		Most 4 cyl.		Most 6 cyl.	Most 8 cyl.		
PPR	0.5	1	1.5	2.0	2.5	3	4	5	6

G.) Launch Lite Enable - The Launch Lite feature can be Enabled or Disabled.
Press and release the MODE (+) button until "L En" is shown on your display, press ENTER to confirm that you would like to
Enable or Disable this feature. The current setting will be displayed, either "LEoF" for Disabled or "Leon" for Enabled. Press the MODE (+) button to
Enable, or the ENTER button to Disable. Press the EXIT (–) button to save the setting.

H.) *SHIFT LIGHT COLOR SET – To adjust the color of the light on your Level 2 or 3 product, press the **MODE (+)** button until "CoLr" is displayed, then press
ENTER to confirm your choice.
- If this is your first time selecting the color, your factory programmed preset is RED. When you enter "CoLr" from the menu, the display should
indicate "1" and the shift lite should illuminate RED. Use the **MODE (+)** and **EXIT (–)** buttons to cycle up and down the color choices. Use the
chart below for your reference.

Display Indicater	Shift Light Color
0	White
1	Red
2	Yellow
3	Green
4	Teal
5	Blue
6	Magenta

- Press **ENTER** to confirm your color choice and return to Menu Mode.
  - **NOTE:** If yellow is chosen as shift light color, progressive early warning light color changes to Magenta, see Progressive Shift Light set for more info.

I.) SHIFT LIGHT BRIGHTNESS SET – To adjust the high and low brightness settings of your Digital Pro Shift, press the **MODE (+)** until "L LV" (Light LeVel) is
displayed and press **ENTER** to confirm your choice.
- **"Lo"** is displayed. Factory programmed preset is the lowest setting, "1." To adjust, use the **MODE (+)** and **EXIT (–)** buttons. Max brightness setting
for the Low level from the factory is "11."
  NOTE: Low brightness setting cannot be set higher than 4 light levels below the High setting (i.e. if the High brightness setting is changed to "11" the
  new default Low level setting will be "7" and cannot be increased until the High setting is increased).
- Press **ENTER** to confirm your Low (dim) level setting and proceed to your High (bright) level setting.
- **"Hi"** is displayed. Factory programmed preset is the brightest setting, "15." To adjust, use the **MODE (+)** and **EXIT (–)** buttons. Lowest brightness
setting for the High setting from the factory is "5".
  NOTE: High brightness setting cannot be set lower than 4 light levels above the Low setting (i.e. if the Low setting is "7", the High setting cannot be
  set lower than "11" without first lowering the Low setting.).
- Press **ENTER** to confirm your High (bright) level setting and return to menu select option.

J.) PROGRESSIVE SHIFT LIGHT SET – The progressive shift light feature of this product enables a color change and blink feature to alert the driver of the
approaching shift point as well as a potential over-rev situation. To adjust this settings of this feature or turn it on or off, press the **MODE (+)** button until
"PSL" is displayed, then press **ENTER** to confirm your choice.
- "PSL 1" should now be displayed. This is the early warning point and is indicated by a solid yellow light. To adjust this point, press **ENTER**. Use the
MODE (+) and **EXIT (–)** buttons to adjust the percentage of the current shift point set that you would like the progressive early warning color to
activate. The factory programmed preset for this point is 60%. This entry may be set as low as 10% of the current shift point, or as high as 1 below the
PSL 2 setting. Setting this feature to one below PSL 2 disables this feature. Once you have selected the desired value, press **ENTER** to confirm.
- "PSL 2" will be displayed if you press the **MENU** button once after "PSL 1" is displayed. This is the shift point approaching warning indicated by a
blinking yellow light. To adjust this point, press **ENTER**. Use the **MODE (+)** and **EXIT (–)** buttons to adjust the percentage of the current shift point set
that you would like the progressive early warning color to activate. The factory programmed preset for this point is 80%. This entry may be set as
low as 1 above PSL 1, or as high as 100%. Setting this feature to 100% disables the blinking yellow light feature of the progressive shift light function.
Once you have selected the desired value, press **ENTER** to confirm.
- "PSL 3" will be displayed if you press the **MODE (+)** button twice after "PSL1" is displayed. This is the over-rev warning and is indicated by a blinking
red light. To adjust this point, press **ENTER**. Use the **MODE (+)** and **EXIT (–)** buttons to adjust the percentage of the current shift point set that you
would like the progressive over-rev warning color to activate. The factory programmed preset for this point is 110%. This entry may be set as low as
101% or as high as 150% of the current shift point setting. Once you have selected the desired value, press **ENTER** to confirm.
- "on" / "oFF" Press the **MODE (+)** button three times after the display shows "PSL 1" in order to be able to turn on or off the progressive shift light function.
The factory programmed preset for this function is off. Use the ENTER button to toggle this setting on or off, the **MODE (+)** button to confirm or the
EXIT button to cancel.
- ***NOTE:** If you have selected yellow as your chosen shift light color, your early warning progressive light color will change to Magenta.
It will default to yellow for all other color options. The over rev feature remains blinking red even if red is selected as the chosen
shift light color.

K.) PEAK Recall – The DPS features a "peak" recall or memory to recall the highest RPM reached during a particular run. Scroll through the Menu
Mode **[MODE (+)]** until the display reads "PEAC" then press **ENTER**. This will display the highest RPM achieved. To clear the peak press **MODE (+)**.

SERVICE

For service send your product to AutoMeter in a well packed shipping carton. Please include a note explaining what the problem is along with your phone number. If you are sending
product back for warranty adjustment, you must include a copy (or original) of your sales receipt from the place of purchase.

FOR SERVICE SEND TO: **AutoMeter PRODUCTS, INC.** 413 W. Elm St., Sycamore, IL 60178 (866) 248-6357
For Email: Service@autometer.com

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