

# TX-1 4-1/2" Tachometer Instructions



## CAUTION:

1. DO NOT handle coil wires when engine is running. High voltage is sometimes present.
2. DO NOT try to splice directly into a spark plug wire. This will damage tachometer.
3. Wear eye protection.

Note: On some A/C power applications, users opt to install a small gell cell +12v battery pack within the application, to allow the tachometer to playback without the engine running. Hook up the Red +12V to a small battery pack with an inline switch to disconnect power when not in use. The gel cell ground should be connected to chassis ground. Hook up the Red/Black wire to the A/C source to provide power to tachometer while the engine is running. Tachometer will run off A/C power while engine is running to preserve battery life and switch to D/C power from battery pack when engine is off.

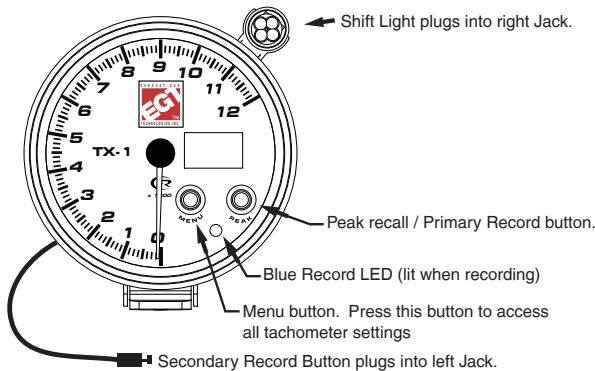
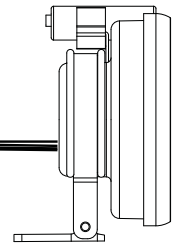
(Red) +12V DC voltage power. For applications with 12v battery power on board. For A/C applications this wire is not needed.  
**D/C PWR**

(Red/black) >9V AC voltage power. If your application does NOT have onboard battery, hook this up to your AC power source. For example dash lighting circuit.  
**A/C PWR**

Ignition coil or tachometer output. For A/C applications tie this wire to the Red/Black wire and connect them to the A/C charging circuit.  
(Yellow/Green)

(Black) Ground Chassis or neg Battery

(White) +12V lighting



The TX-1 recording tach is designed to work on a wide variety of ignition systems with both A/C and D/C power sources. The electronic circuit board inside is voltage spike protected, if you happen to connect it up incorrectly you will not damage the tachometer- the tachometer will simply not work.

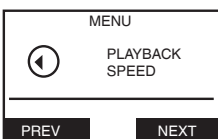
Incoming voltage pulse signals on yellow/green wire can range from .5-300Volts allowing it to sense almost any type of ignition pulse.

When mounting the tachometer, make sure the back of tachometer where the wires exit is not directly exposed to wet conditions. The front of the tachometer is water resistant.

Use a soft cloth to clean the window with warm soapy water or window cleaner.

## Setup Instructions

### Playback Speed

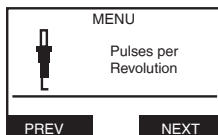


1. Momentary press the menu button to access the menus.
2. Press and hold the Settings Button (right button)
3. Toggle next until playback speed is selected.
4. Press and hold EITHER button to enter menu.
5. Toggle up/down to select either 1:1 or 1:3.
6. At desired playback speed after couple seconds setting is saved

1:1 Is played back in real time  
1:3 is played back in 1/3 speed.

Use this menu to select how fast you would like the tachometer to playback your run.

### Pulse Per Rev Setup. (PPR)



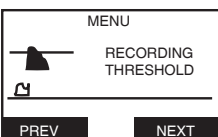
1. Momentary press the menu button to access the menus.
2. Press and hold the Settings Button (right button)
3. Toggle next until Pulse per Revolution menu is selected.
4. Press and hold EITHER button to enter menu.
5. Toggle up/down though available pulses per rev.
6. At desired Pulse Per Rev after couple seconds setting is saved

Note: The PPR is used to calculate how many ignition pulses per revolution of the engine.

This setting can be changed at anytime, so experiment until it is right.

For example  
8 cylinder (single coil) 4 stroke, engine typically is 4 PPR.  
MSD ignitions are usually 1 PPR.  
Most snowmobile stock ignitions are 2,3,4 or 6 PPR.

### Recording Threshold



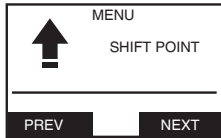
1. Momentary press the menu button to access the menus.
2. Press and hold the Settings Button (right button)
3. Toggle next until recording threshold is selected.
4. Press and hold EITHER button to enter menu.
5. Toggle up/down to move pointer to desired RPM.
6. At desired recording threshold after couple seconds setting is saved

Recording threshold is the RPM the engine must exceed before the tachometer starts to record. So for example if you select an RPM of 4500RPM the tachometer will start to record after the RPM passes this point. Once RPM has exceeded this point, recording will start. This allows the user to press the record button while staging at the starting line and not worry about the loss of recording time while staging.

Setting the RPM threshold at 0 will turn this feature off and start recording as soon as the record button is pressed.

Note: If threshold RPM is setup, pressing the record button will flash the blue LED to indicate that the recording feature has been initiated but NOT recording until threshold RPM is breached. Once this occurs the blue LED will turn solid blue indicating recording has started.

### Shift Point Set / RPM event

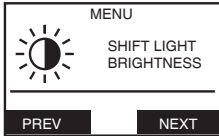


1. Momentary press the menu button to access the menus.
2. Press and hold the Settings Button (right button)
3. Toggle next until Shift Point menu is selected.
4. Press and hold EITHER button to enter menu.
5. Toggle up/down to move pointer to desired shift point.
6. At desired shift point after couple seconds setting is saved

Note: The shift point controls when the external shift light will turn on. The brightness is controlled in another menu.

To trigger an RPM event consult the factory for wiring instructions.

### Shift Light Brightness



1. Momentary press the menu button to access the menus.
2. Press and hold the Settings Button (right button)
3. Toggle next until shift light brightness is selected.
4. Press and hold EITHER button to enter menu.
5. Toggle up/down to select from 0-4 settings
6. At desired shift light brightness after couple seconds setting is saved

0 = Shift light is OFF  
1=Lowest brightness  
4= Highest brightness.

As you toggle through brightness settings you will see shift light change in brightness.

Note: There are two different brightness settings that can be set for day and night. If you set the brightness while the lights are 'off', you are setting the day setting. Setting the brightness while backlighting is 'on' will set the night brightness setting.

### Record LED Brightness



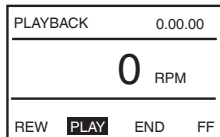
1. Momentary press the menu button to access the menus.
2. Press and hold the Settings Button (right button)
3. Toggle next until record LED brightness is selected.
4. Press and hold EITHER button to enter menu.
5. Toggle up/down to select from 0-4 settings
6. At desired record LED brightness after couple seconds setting is saved

0 = Record LED is OFF  
1=Lowest brightness  
4= Highest brightness.

As you toggle through brightness settings you will see the record LED light change in brightness.

Note: There are two different brightness settings that can be set for day and night. If you set the brightness while the lights are 'off', you are setting the day setting. Setting the brightness while the backlighting is 'on' will set the night brightness setting.

### Playback Menu



1. Momentary press the menu button to access the menus.
2. Press and hold the playback Button (left button)
3. Run will start to play.back at set playback speed (1:3 or 1:1)
4. Use buttons to toggle between menu items.
5. To exit run select END.

REW- press and hold this button to rewind run. Momentary press this button to step back through the run 1/100th of second.

PLAY/ PAUSE - press this button to play or pause the run.

END- exits run. Run is stored until next run is recorded.

FF- press and hold this button to fast forward run. Momentary press this button to step through run 1/100th of second.

### Recording Runs

1 run can be stored up to 60 seconds in length.

To record a run press the Record/peak button on the front of gauge or press the secondary button (included) for 2 seconds. Recording will start and Blue LED will turn c

Note: If threshold RPM is setup. Blue light will flash to indicate that the record is ready to start once RPM passes threshold RPM. Then LED will turn solid blue.

Run will be stored (even if power is turned off) until next run is recorded. New run will then overwrite old data.

For Technical Support

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