

QUICK REFERENCE

MODEL 9160

With 10 Minute Recording Memory For Oval Track or Road Race use

For reference only, for complete instructions see inside.



BEFORE THE RACE

- 1. Press RECORD.
- 2. Press •START.
- 3. Press •STOP when run is over.

AFTER THE RACE

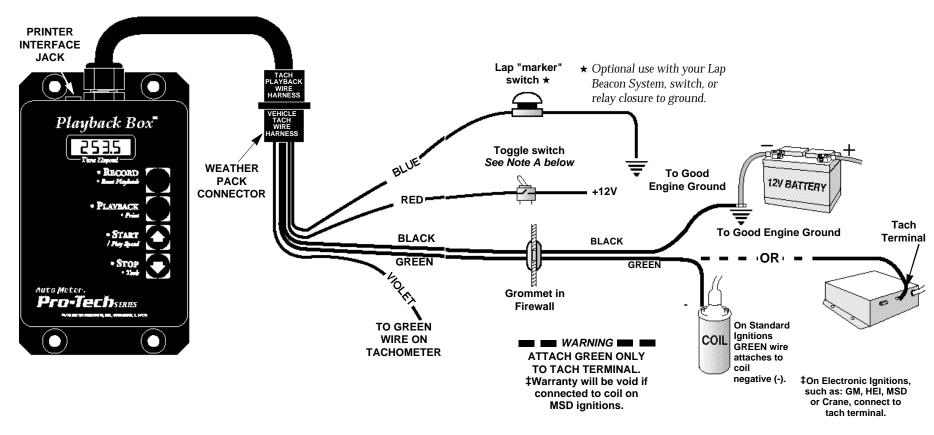
- 1. Press PLAYBACK.
- 2. Press •START.
- 3. Press •STOP when run is over.

OPERATION MANUAL

WIRING INSTALLATION

See page 4 for calibrating for 4 or 6 cylinder engines.





Note: To use the Playback Box with the tachometer, plug the Playback Box wire harness into the vehicle tach wire harness connector. To use the tachometer without the Playback Box, disconnect the Playback Box and plug the bypass connector into the vehicle tach wire harness connector (Weather Pack connector).

Note: This playback recorder operates on standard, factory electronic and high performance electronic racing ignitions, such as Crane and MSD. (This tach is NOT recommended for use on Accel BEI or Laser I & II ignitions. These ignitions require model 5215 adapter.)

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Note A: To allow proper data collection "Shut-Down", it is best to maintain 12V power to the Playback Box for 5 to 10 seconds after recording is stopped. To do this, the red wire can be connected thru a separate toggle switch directly to +12V instead of to the ignition switch.

Note B: No 12V or Dry Cell Battery power is needed to maintain Memory. Data in Memory will remain accurate over any amount of time until it is recorded over.

DEFINITIONS TO KNOW

On the Control Module:

• = A single push of the button. e.g. •START
/ = Button is held until digital display changes to desired function.
e.g. /PLAY SPEED

Time out = The playback recorder will automatically return from function or setup to **TACH** mode in 15 to 20 seconds if you do nothing. Record and playback are the only functions this will not work in.

PLAYBACK RECORDER SETUP

IMPORTANT

After installation, the recorder should be checked for the proper cylinder setting. It is adjustable for 4, 6 and 8 cylinder engines. For other applications, contact Auto Meter for information. The recorder is factory preset for 8 cylinders. To check or change the cylinder selection:

- 1. First, make sure the display is showing **TACH**. If not, wait 15 20 seconds for the recorder to time out and show **TACH**, or turn the power off and then back on.
- 2. Press and hold the •START button until the display reads "1=1" or "1=2". Release the •START button.
- 3. Press and hold the •RECORD button until display reads xCYL, where x indicates the number of cylinders selected. For example: 8CYL
- 4. Press the **UP** or **DOWN** arrow button to select the proper number of cylinders. Select 4, 6 or 8.
- 5. When the proper cylinder setting is displayed, press the •RECORD button to select this setting. If •RECORD is not pressed, the recorder will time out and automatically select the displayed setting.



RECORD & PLAYBACK OPERATION

Record & Playback Features

The Playback Box recorder allows you to record and playback race performance by recalling actual tachometer readings along with elapsed recording time. One recording of up to 10 minutes can be made in the Playback Box Recorder's Memory. The recording is saved, even when the power is turned off, until overwritten by a new one. The Playback Box LED display will not show elapsed time during recording; this is only displayed during half-speed or full-speed playback. Time is shown in [Seconds]. [Tenths of a second]. For example: 253.5 is equal to 253 and 5 tenths seconds or 4 minutes and 13.5 seconds.

For less than 100 seconds the time is shown in [Seconds]. [Hundreths of a second]. For example: 36.19 seconds.

Recording

- 1. First make sure the display is showing "TACH". If not, wait for the Playback Box to time out or turn the power off and then back on.
- 2. To select record mode press the •RECORD button. The display will show "REC".
- 3. To start the recording press and release the START button. The display will show "RECD", indicating recording is in progress.
- 4. To mark laps, press the normally open momentary switch at the end of each lap.
- ★Note: Other lap detection systems such as trackside infrared with contact closure to ground or relay may be used instead of momentary switch.
- 5. To stop the recording, press the •STOP button, or allow the Playback Box to record until the Memory is full (about 10 to 12 minutes). At the end of recording, the Playback Box automatically stops recording and returns to TACH mode.

Warning: Do not turn the power off while the Playback Box is recording because this may corrupt the recording. When recording, be sure to press the •STOP button before turning the power off.

Playback

- 1. First, make sure the display is showing TACH. If not, wait for the recorder to time out.
- 2. Select playback speed by pressing and holding / PLAY SPEED button until the display changes to 1=1 or 1=2. Use the UP or DOWN arrow button to change the display between full speed (1=1) and half-speed (1=2).

Note: The playback speed setting is retained until the power is removed.

- Press the •PLAYBACK button to enter playback mode. The display will show PLAY.
- 4. Press the •START button to start the playback.
 - A. During playback, press the •STOP button once to pause playback.
 - B. When paused, press the •START button to continue playback, or press the •STOP•TACH button to quit playback and go back to TACH mode.
 - C. When the playback comes to a lap marker, playback will pause, the display will show LAP1 for a second, then the display will show the elapsed time at the lap marker. Press the •START button to continue with playback. The second lap will display as LAP2 and elapsed time, then LAP3 and elapsed time, etc. The tenth lap will display as LAP0, and then the lap counter will go back to LAP1.
- D. When paused, you can also reset to the beginning of the recording by pressing the RESET PLAYBACK button. Press START to begin the playback again.
- 5. When playback reaches the end of the run, the recorder will stop. The display will show the total elapsed time, and the tach pointer will indicate the engine RPM at that point. At the end of the run, the •START button has no effect. Press the •STOP•TACH button to return to TACH mode.

NOTES

SERVICE

For service send your product to Auto Meter in a well packed shipping carton. Please include a note explaining the problem along with your phone number. Please specify when you need the product back. If you need it back immediately, mark the outside of the box "RUSH REPAIR," and Auto Meter will service the product within two days after receiving it. (\$10.00 charge will be added to the cost of "RUSH REPAIR.") 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.

12 MONTH LIMITED WARRANTY

Auto Meter Products, Inc. warrants to the consumer that all Auto Meter High Performance products will be free from defects in material and workmanship for a period of twelve (12) months from date of the original purchase. Products that fail within this 12 month warranty period will be repaired or replaced at Auto Meter's option to the consumer, when it is determined by Auto Meter Products, Inc. that the product failed due to defects in material or workmanship. This warranty is limited to the repair or replacement of parts in the Auto Meter instruments. In no event shall this warranty exceed the original purchase price of the Auto Meter instruments nor shall Auto Meter Products, Inc. be responsible for special, incidental or consequential damages or costs incurred due to the failure of this product. Warranty claims to Auto Meter must be transportation prepaid and accompanied with dated proof of purchase. This warranty applies only to the original purchaser of product and is non-transferable. All implied warranties shall be limited in duration to the said 12 month warranty period. Breaking the instrument seal, improper use or installation, accident, water damage, abuse, unauthorized repairs or alterations voids this warranty. Auto Meter Products, Inc. disclaims any liability for consequential damages due to breach of any written or implied warranty on all products manufactured by Auto Meter.

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