AUTO TIMER
NA & TURBO

SAFETY WARNING
Failure to obey this warning may cause serious injury or damage.

Please read carefully, and pay attention to the following symbols:

WARNING  CAUTION  • CHECK & CONFIRM

WARNING
Failure to obey may result in death or serious injury.

• Be sure to shut off the engine when sleeping inside the vehicle, this may lead to exhaust poisoning.

• Do not leave the engine running in closed environments, this may lead to exhaust poisoning.

• Never leave the vehicle while the engine is running, this could lead to accidents.

• Before installation, make sure the vehicle is stationary and engine turned off.

• This product should only be installed by professional installers.

• Remove ignition key and disconnect negative battery terminal.

• Do not begin installation until the vehicle engine and any contact components are cool.

• This product should be installed in a place where they can not fall or move and damage the vehicle or affect driving.

CAUTION
Indicates risks of personal injury or damage to product.

• Always connect the hand brake wire.

• This product is designed ONLY for DC 12V vehicles. Do NOT use the product on 24V vehicles.

• Insulate any unused wires and reattach any lose connection that maybe caused from installation.

• Use only the wire harness provided, if additional wires are required, be sure to use the same gauge and quality wires.

• Be sure to mount this unit away from any area that may affect driving.

• Excessive force on the terminals may result in damage to product. Please hold on the connector securely when disconnecting.

• CHECK & CONFIRM

This symbol indicates the need to confirm a particular tasks has been properly completed.

SPECIAL NOTES:
Remote Door Locks or Adjustable Steering Columns may not function properly after installation of this unit.
Be sure to test unit operation and parking brake safety wire after installation.

PARTS LIST:

- Control Unit x 1
- Relay Unit x 1
- Fastener x 2
- Electro Tap x 1
- Double Side Tape x 4
- Instruction Manual x 1

*AFR Display mode requires optional Innovate Motorsports P/N: 3769

WIRING DIAGRAM

1. Disconnect the negative battery terminal before wiring.
2. Locate the key switch harness, and refer to the wiring diagram (below) for hardware.
3. Connect the Timer harness connector to relay.
4. Connecting the O2 sensor signal wire to *optional wideband controller and sensor (Innovate Motorsports P/N: 3769). - refer to Special Notes (below)
5. Connecting the ground wire to wideband controller ground. - refer to Special Notes (below)
6. Connecting the parking brake switch - refer to Special Notes (below).

Special Notes:

• AFR Display & Auto Mode only function when using *optional wideband controller and sensor (Innovate Motorsports P/N: 3769). Range 7.4 to 22.4 AFR, 0-5v linear.

• Vehicles NOT using the AFR Display, ground the (Black) wire to chassis.

• Parking Brake Switch - with the IG Key ON, please be sure to check that the parking brake switch reads 12V when brake is down, and reads 0V when brake is up.

(Be sure to mount the timer in a location that does not interfere with driving.)

Gray Wire: Parking Brake Switch
White Wire: O2 Sensor Signal to (Brown) wire from *optional Innovate LC-1 wideband controller.
Black Wire: Ground to *Innovate LC-1 wideband (Blue & White) ground wires.
Green Wire: Ground to chassis, if not using O2.

Relay Unit

Red Wire: 12V+ Constant
Blue Wire: IG2 (IG ON) Output
Green Wire: IG1 (ACC) Output

• CHECK & CONFIRM

Safety Switch Check (Parking Brake Safety Switch)
1. Pull the parking brake up, start the engine, and make sure the IG key is ON.
2. Set the timer to any desired setting above 20 seconds.
3. Turn the IG Key OFF to activate the timer countdown.
4. Release the parking brake down during the timer countdown.
5. Be sure the engine shuts off completely.

www.tuneyourengine.com
OPERATION

DISPLAY
Tuning ignition key ON will activate the display mode. (Power must be turned ON)
TIME - COUNT DOWN TIME
AFR - AIR FUEL RATIO
VOLT - BATTERY VOLTAGE

7 Segment LED
LED
4 Way Knob

PART NAMES & FUNCTIONS

SETTING (MINIMUM BATTERY VOLTAGE WARNING)
1. During Voltage Display, hold the knob to the right. This will activate Voltage Warning Setting.
2. Tilt the knob up or down to select warning point. Chose between 10.1 ~ 15.0V in 0.1V increments.
3. After selection, hold the knob to the left for save and exit.

TO TURN OFF the Auto Timer
During display mode: hold the knob to the left.
Display read Off
During countdown: hold the knob to the left or right.

TURN ON the Auto Timer
When timer is OFF: hold the knob to the left or right to turn ON.

CHANGING THE IDLING TIME DURING COUNTDOWN
During timer countdown: tilt knob up to increase time, and down to decrease time.

AFR
This function requires an optional Innovate Motorsports wideband controller and O2 sensor (P/N: 3759). The voltage input configuration is 0v at 7.4 AFR, and 5v at 22.38 AFR.

AUTO TIMER

SETTING AFTER IDLING TIME (COUNTDOWN TIME)
1. During Time Display, hold the knob to the right. This will activate Countdown Time Setting.
2. To choose between MANUAL or AUTO mode setting, hold the knob to the right.
3. After selection, hold the knob to the left for save and exit.

MANUAL
Selection
Range: 0 sec ~ 10 min.
50 seconds
1 minute
10 minutes

AUTO
Selection
MAX. TIME VALUE
This sets the max. amount of countdown time. Value: Minute
Chose: 1 ~ 8 Minutes
RESPONSE RATE
This sets the auto calculation response rate. Value: H, n, L
Chose: "H" - High
"n" - Normal
"L" - Low
MIN. TIME VALUE
This sets the min. amount of countdown time. Value: Seconds
Chose: 0 ~ 60 Seconds

INNOVATE
MOTORSPORTS

www.tuneyourengine.com