

# DIGITAL MAXIMIZER 15963



Read all Instructions before beginning!!!! Caution – EXTREME DANGER – Caution

### Do not use or mix any other manufacturer's products with any Nitrous Express products. Do not use or mix any Nitrous Express products with any other manufacturer's products. THESE INSTRUCTIONS APPLY TO NITROUS EXPRESS PRODUCTS ONLY! FOR SANCTIONED RACE USE ONLY - NOT FOR SALE OR USE IN CALIFORNIA

STEP 1: Wire the Digital Maximizer as shown in the wiring diagram. The shorter the wires between the controller and the solenoids the more efficiently it will work.

The Digital Maxmizer has been pre-programmed from the factory with the following settings,

**Power / Time Menu** (Initial Delay= 0, Build Time = 4.0, Stage 2 Time, Start Power = 40 %, Final Power = 100%, Stage 2 Power, Reset Rise, Retard on )

System Settings (Frequency 14, Reset Option, Stage 2 On/Off, Run Timer), Auto Rerun only when Run Timer is on).

**Default Values** (No Change, Stage 1, Stage 2, Stage 3). Do not use this option if you want to change your Maximizer settings.

Calibrations (Nitrous Solenoid Delay).

Saved Settings (Load or Saved)

#### Button Controls

1= Entering a menu screen, or increasing a value

2= Decrease a Value

- 3= Advance to next screen
- 4= Abort (only on last screen)

STEP 2: Turn the arming switch to the "On" position and you will see the product ID screen. (Show model number, version and date.)

NX MAXI	MIZER V6 (DATE)
RACE	(DATE)

The Maximizer will automatically advance to the "Set-Up" screen.

TO SET UP PRESS1NOW

If the number 1 is not pushed within 3 seconds you will go to the check screen.

STEP 3: When the number 1 is selected the Power / Time Menu screen will appear.

POWER 1 = YES	TIME	MENU
1 = YES	3 = NI	EXT

Select 1 to enter the Power / Time screen.

INITIAL	DELAY	<b>→</b> 3
11	SECS	12

Adjust up to desired Initial Delay if any, i.e. if you want a delay between WOT and system activation thenselect the desired delay



This adjustment allows you to chose at what percentage of nitrous power you want to activate your retard box. I.E. If you want no retard up to 50% of nitrous boost, set the percentage at 50%. At this point the Maximizer will activate a ground output to signal your retard box.

Press 3 to continue.

STEP 4: Select 1 to enter the System Settings screen.

$$\begin{array}{c} FREQUENCY \rightarrow 3 \\ 1 \uparrow 16 \text{ Hz} \downarrow 2 \end{array}$$

The Frequency circuit is adjustable on this unit, however the NX solenoids operate best at 14 to 16 Hz.

Press 3 to continue.

RESET OPTIONS 
$$\rightarrow$$
 31 1 $\downarrow$  2

This selection has 3 different setups. Adjust up or down to the desired function.

- The reset function is used on manual transmission applications when you want the Maximizer to reset every gear change. Whenever the throttle is released the box will reset and begin again. If you do not want this function ther select "Off".
- START. Resets the power level at the initial START power settings. This will happen ever time the throttle switch is cycled on-off.
- 3. EXP. 10%. In this mode ever time you cycle the throttle switch on and off the Digital Maximizer will increase the start power setting by 10%, i.e. Start Power is set at 20% after you reset now your at 30% Start Power, reset again now its at 40% Start Power. This will continue up to 80%.

Press 3 to continue.

RUN TIMER 
$$\rightarrow 3$$
  
1 ↑ OFF / ON  $\downarrow 2$ 

This selection has 2 different settings.

- ON. This will tell the Digital Maximizer when to turn off as a function of time, i.e. if 5 seconds is selected then the system will turn off 5 seconds into the run.
- OFF. This will tell the Digital Maximizer that no timer is needed and this option will not show up under menu 1 settings.

Press 3 to continue.

AUTO RERUN 
$$\rightarrow$$
 3  
1 ↑ ON / OFF  $\downarrow$  2

This screen will only appear if you selected ON in the Run Timer Mode. Auto Rerun will automatically reset the Maximizer after 30seconds. I.E. Bracket racing and hot lapping between rounds.

Press 3 to continue.

STEP 5: Select 1 to enter the Calibrations screen.

Press 3 to continue.



Adjust up to desired run time. This amount will turn the Maximizer off when it expires. (This screen is only seen if the Run Timer was turn on in the System Settings Menu).

Press 3 to continue.

BUILD TIME 
$$\rightarrow 3$$
  
1 ↑ SECS  $\downarrow 2$ 

Adjust up or down to the desired build time your vehicle requires, i.e. the shorter the build time the more aggressive the nitrous system will be, a longer build time will produce a more docile effect. This is the time it takes to go from START POWER to FULL POWER setting.

Press 3 to continue.

$$\begin{array}{c} \text{STAGE 2 TIME} \rightarrow 3 \\ 1 \uparrow \quad 0.0 \text{ SECS} \quad \downarrow 2 \end{array}$$

Adjust up or down to the desired start time of you Stage 2. This feature allows you to revert to a preprogrammed "second stage". This feature will not control a second set of solenoids, but allows you to move to a secondary, preset, non-progressive horsepower setting. I.E. If you want the Maximizer to progress from 20% to 50% at a very slow rate when launching the car, then switch to full power instantly 2.0 seconds into the run, the "Stage 2 Time" feature will accomplish this.

START POWER 
$$\rightarrow 3$$
  
1 1 %  $\downarrow 2$ 

Adjust up or down. This will be your starting power level, i.e. If you have the nitrous system jetted for 100 horsepower a Start Power setting of 40% will produce 40 horsepower.

Press 3 to continue.

Adjust up or down. This is the Final Power you will achieve. This adjustment should always be at 100%, i.e. if you want 100 total horsepower do not jet the nitrous system for 300 horsepower then set the Final Power at 33%.

Press 3 to continue.

Adjust up or down to the percentage of power change you want when the "Stage 2" timer activates. This feature has no-adjustable ramp and is set by the user.

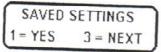
Press 3 to continue.

RESET RISE 
$$\rightarrow 3$$
  
1  $\uparrow$  %  $\downarrow 2$ 

Adjust up to the desired reset percentage. EXP. 10%. In this mode ever time you cycle the throttle switch on and off the Digital Maximizer will increase the start power setting by 10%, i.e. Start Power is set at 20% after you reset new your at 30% Start Power, reset again now its at 40% Start Power. This will continue up to 80%. CLUTCH CAR. (Thi screen will only appear if in the System Setting screen you select the %).

## NITROUS DELAY-3 1 t OFF / mSECS 12

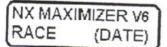
This selection can slow the opening of your nitrous solenoid in milliseconds. Press 3 to continue.



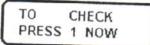
Press 1 will enter the load or save screen.

### SAVED SETTINGS LOAD = 1 SAVE = 2

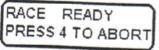
You can save 10 different programs. Once you have completely programmed the unit you can save it from 0-10. This allows you to make changes without loosing any preprogrammed data. To save, press 2 and go up or down to the desired you have loaded one of your programmed files and your ready to race. If you program the box and do not want to save an information into a file do not use this option.



Press 4 to abort and go back to the beginning. Skip pushing 1 to set up. Wait until you see the check screen now push 1, this will show you what you have programmed into the Maximizer.



Pressing 1 will show you how the Maximizer has been programmed.



This screen indicates all necessary programming has been done and the Maximizer is ready to "GO".

