AMS-500 V2 Boost Controller

## Overview

The AMS-500 V2 Boost Controller is a time based graph style controller. It has a launch input which is used by transbrake input or clutch input. Both the activation input (which starts time based curve and the launch input can be configured for either 12 volts or a ground.

The kit comes with a 100 psi sensor, solenoids and harness.

IMPORTANT—The AMS-500 controls the pressure on the Waste Gate so the actual boost level obtained is a combination of the Waste Gate Spring pressure and pressure applied by the controller.
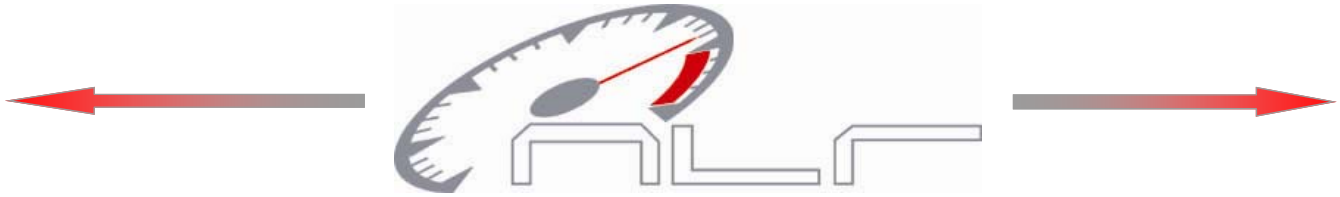
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Notice—It is the responsibility of the purchaser to follow all guidelines and safety procedures supplied with this product and any other manufactures product used with the AMS-500. It is also the responsibility of the purchaser to determine compatibility of the AMS-500 with the vehicle and other components.

NLR, LLC assumes no responsibility for damages resulting from accident, improper installation, misuse, abuse, improper operation, lack of reasonable care, or all previously stated reasons due to incompatibility with other manufacturer's products.

NLR, LLC assumes no responsibility or liability for damages incurred from the use of products manufactured or sold by NLR, LLC on vehicles used for competition racing.

NLR, LLC neither recommends nor approves the use of products manufactured or sold by NLR, LLC on vehicles which may be driven on public highways or roads, and assumes no responsibility for damages incurred from such use.

NLR, LLC does not recommend nor condone the use of its products for illegal street racing.

Installation of NLR, LLC products signifies that you have read this document and agree to the terms stated within.

Important Information:

Follow all recommended safety guidelines from this and other manufactures installation guides. Static suppression ignition wires must be used with this unit! Mount the unit as far away from secondary ignition components (coil, ignition wires, etc.) as physically possible.

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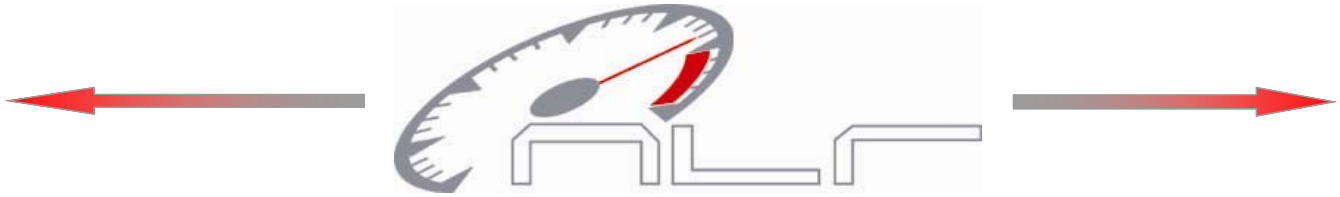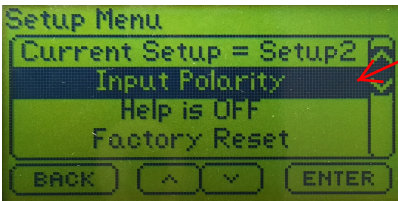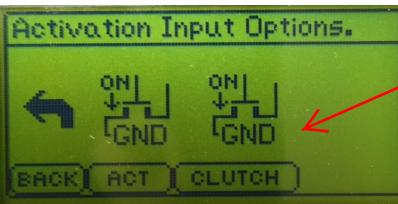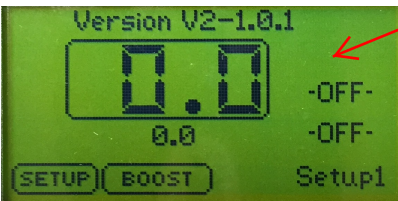
Configure AMS-500 Operating Mode
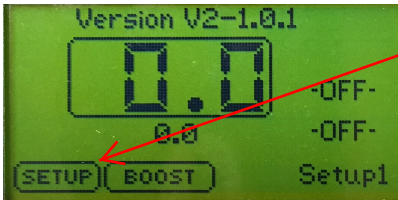
To set up the controller first select setup.

Next select input polarity. This is where you tell the controller if the activation input will be a ground or 12 volts.
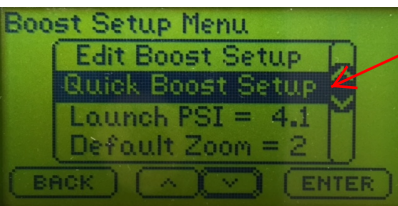
To change just hit the button below the ACT or CLUTCH and it will switch to opposite.

Return to the main screen after you have selected the correct polarity.

To select the pressure you want applied to the gate when the transbrake / clutch input is on highlight the launch psi and select enter.

Next we can use the quick graph function which allows you to select a few criteria and it will build a graph for you. Highlight and then hit enter.
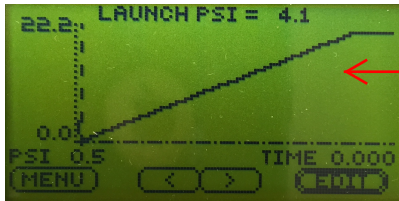
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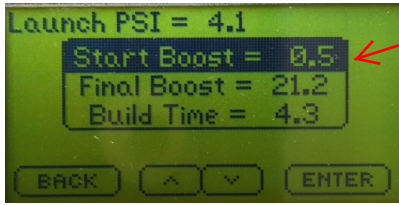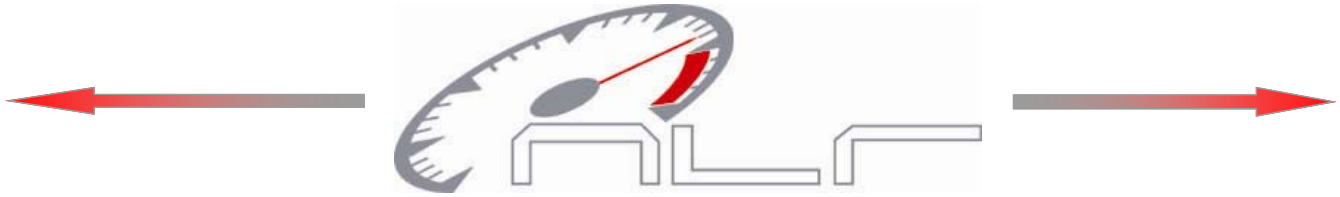
Highlight and then hit enter to select the starting pressure and then repeat for the final pressure and total build time.

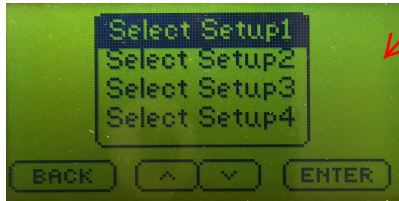Or you can select edit boost set up and build the graph by yourself.

Refer to last page of the manual on how to work the graph.

Make sure you go all the way out to 9.95 seconds in the graph and carry your pressure out!

To save a set up hit set up of the main page. Then select the set up you want to save it to.

It will then ask you if you want to copy the set up that is currently on the ams that your playing with to the set up you just selected. If you want to copy it to that set up then enter yes. If you are trying to load a set up onto the ams then you will select NO otherwise it will copy whats on the ams to this set up.
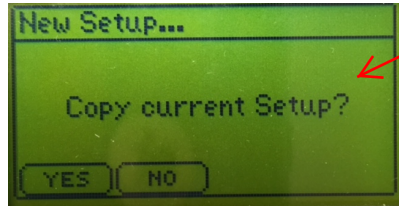
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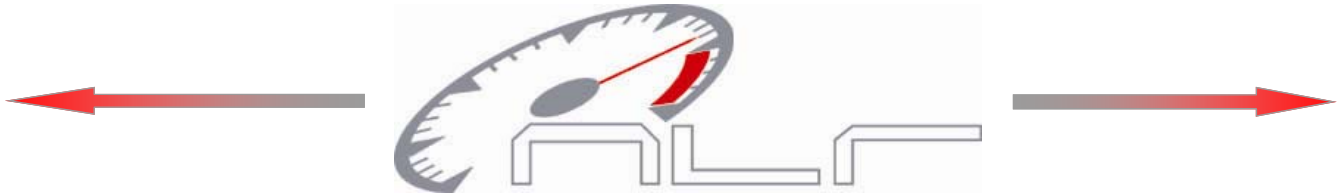
Use the "LEFT", "RIGHT" arrow buttons to move through the Graph. To Edit
and/or change the Ramp move the cursor to the position to Edit and press the "EDIT"
buton.
The editing cursor will appear at the position selected. Using the "UP", "DOWN" arrow
buttons adjust the
new pressure setting. Press the "ENTER" button to accept the new setting. Use the
"LEFT", "RIGHT" arrow
buttons to move to the next set point. Each cursor position represents 1/10 of a PSI.
Press
the "EDIT" button and adjust the target pressure as outlined above. Press "ENTER" to
accept the new setting.
NOTE—When the two set points are more than .025 sec apart the Progressive Ramp
will be automatically
filled in between the set points.
Press the "MENU" button to Exit and/or Save the new setting(s). From the Menu select
Exit and press
"ENTER". You will then be prompted to Save the new settings or Exit without saving.
NOTE—There are several selections available when you pres the "MENU" button.
Please see below
for an explanation of each.
Exit—This selection exits the Graph Editor.
Clear Edit Points—This selection will clear any Edit Points that are set in the Graph
Screen. This
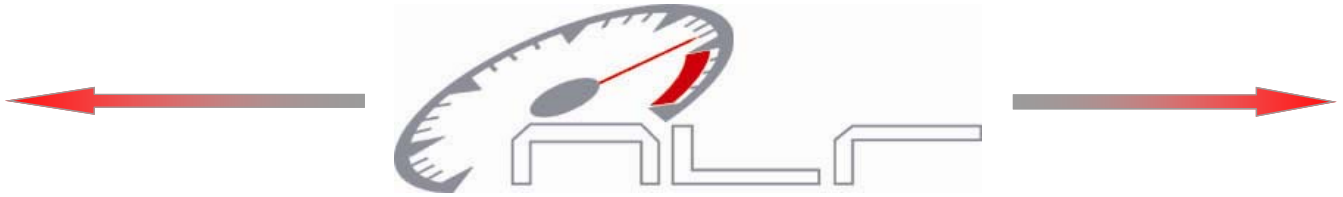does NOT change any Percentage setting, only the Cursor is removed.
View Old Data—This selection will display the Graph that is stored in memory.
Restore Old Data—This selection will restore the Graph settings if any Editing has been
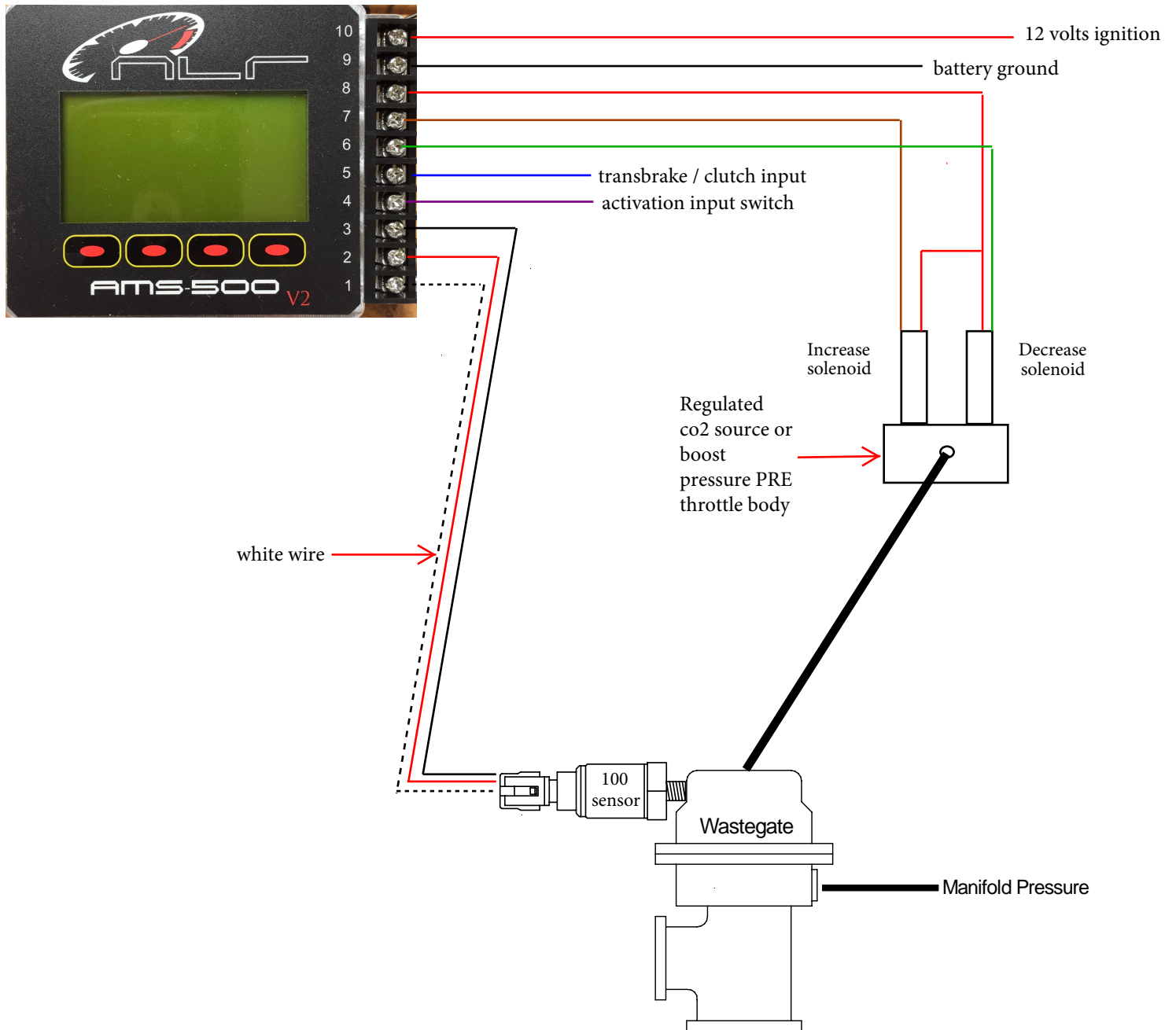done and NOT Saved.
Zoom In—This selection will Zoom the X-Axis in.
Zoom Out—This selection will Zoom the X-Axis out.

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Wiring Diagram

12 volts ignition

battery ground

transbrake / clutch input

activation input switch

Increase solenoid

Decrease solenoid

Regulated co2 source or boost pressure PRE throttle body

white wire

100 sensor

Wastegate

Manifold Pressure

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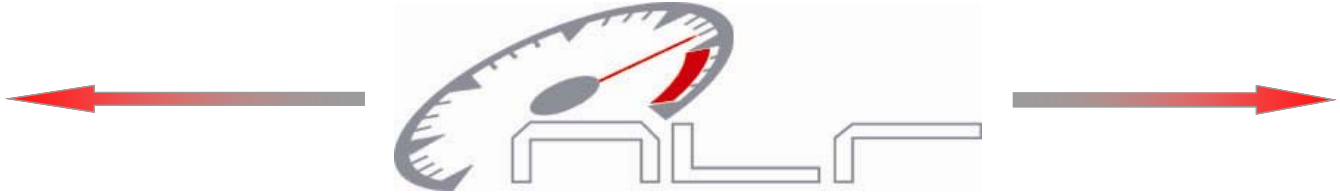
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Warranty Information

NLR warrants to the original purchaser that the AMS-500 V2 Controller Shall be free from defects in parts and workmanship under normal use for 6 months from the date of purchase.

NLR obligation under this warranty is limited to the repair or replacement of any component found to be defective when returned postpaid to NLR.

The Controller must be returned with evidence of place and date of purchase or warranty will be void. The warranty will not apply if the AMS-500 Controller has been installed incorrectly, repaired, damaged, or tampered with by misuse, negligence or accident.

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