



ELECTROPLATE™ EP-3000

Installation Instructions

TABLE OF CONTENTS

Before Installation	2
Safety Checks	3
Mounting License Plate Frame	4
Programmable Computer Module	6
Remote Programming Switches	7
Dash Console Message Selector	8
Wiring Color Code	9
Power Connections	10
Brake Light Function	11
Alarm Interface	12

BEFORE INSTALLATION

Before installing the ELECTROPLATE™, you should be aware that regulations about lighted or regular signs, bumper stickers and advertising vary from region to region. Be sure to determine what your local regulations permit.

Before beginning the installation, it is important to carefully read this manual at least once. By planning ahead, you can select an approach to the vehicle which eliminates any potential snags before they arise. Make the following checks before starting:

- 1) Check to be sure the vehicle is a 12 volt negative ground system.
- 2) Check layout and construction of vehicle to determine where space is available for placement of components and routing of wires.
- 3) Locate all connection points in vehicle using meter or probe.
- 4) Never drill a hole without checking other side of the panel being drilled for wiring looms or other obstructions.
- 5) Verify that no moving parts of vehicle (any hinges, brake pedal, heater controls, etc.) will interfere with wires being routed for the system.
- 6) Try to avoid routing wires near sharp edges which may cause fraying of the insulation and potential shorts. If a wire MUST be routed past a sharp edge, USE A GROMMET.
- 7) Allow at least an inch or two of slack at all connection points, to reduce the chance of a connection broken by heat, vibration, or impact.

MOUNTING SAFETY CHECKS

Before mounting the ELECTROPLATE™ license plate frame to vehicle, you must make the following safety checks:

- 1) Lights for license plate are not blocked by frame assembly.
- 2) Frame display doesn't extend below vehicle to prevent damage from road debris.
- 3) Adequate frame clearance for:
 - A) Opening tailgate of truck or station wagon
 - B) Trailer hitch hookup ON/OFF
 - C) Moving license plate for gas tank or trunk access
- 4) Moving rear window, hinge on tailgate or hatch clears cable harness from frame display.
- 5) ELECTROPLATE™ frame doesn't cover state registration tags.

MOUNTING LICENSE PLATE FRAME

To install ELECTROPLATE™ frame on vehicle requires original license plate and frame to be removed from vehicle. The ELECTROPLATE™ frame is approximately 1/2" taller than a standard frame and will require shifting up or down to fit. A special 14 gauge steel mounting plate is included to center and secure frame to vehicle. Before installing mounting plate, review all safety checks and determine whether display will be placed on the top or bottom of frame.

- 1) Remove any rear panels or obstructions behind license plate to gain access for securing new mounting plate and routing cable harness to inside of vehicle.
- 2) Drill up to four holes for mounting plate if necessary. Use 1/4" drill bit for 1/4-20 bolts or 5/32" drill bit for #10 sheet metal screws.
- 3) A 1/2" hole must be drilled into vehicle and a rubber grommet installed for display cable harness. The hole should be located directly behind display cable area if possible to allow easy routing into rear of vehicle.
- 4) Route cable harness of frame through rubber grommet into vehicle before tightening mounting plate if applicable.

NOTE: If ELECTROPLATE™ frame is mounted to a hinged door for access to gas tank or trunk, cable harness must be secured with wire ties to factory backing plate to prevent cable wires from moving coming directly out of back of display. Cable harness must have adequate slack at hinged point to allow full movement.

4

PROGRAMMABLE COMPUTER MODULE

The ELECTROPLATE™ display is controlled by a programmable computer module with over 8000 bytes read only memory and 2000 bytes random access memory. The high output driver circuitry is capable of operating all 420 display LEDs simultaneously.

There are 3 programming switches located under access door of module that must be accessible if remote switches are not installed near rear license plate display. The mounting location of the computer module must be inside the vehicle because it isn't weatherproof like the license plate display frame.

Placement must be within reach of display harness and inside rear luggage compartment on cars and under seat in trucks. Check for leaking rubber seals or missing plugs that could allow water to contact computer module. (Water damage is not covered under warranty.

If final placement is in an inaccessible area (behind panel or under seat), remote programming switches must be installed within reach of license plate display.

- 5) Fit license plate into hook of mounting plate and frame. Align mounting holes of frame with license plate and mounting plate. Use one way slot screws provided to secure license plate frame assembly.

ElectroPlate Led Block Color Code

6A	J2	WHITE
	J3	YELLOW
	J4	GREEN
	J5	BLACK

5

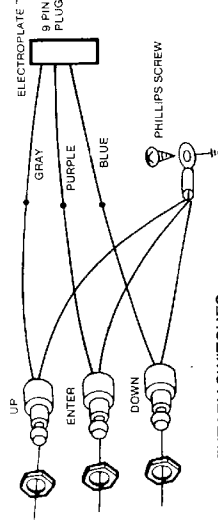
REMOTE PROGRAMMING SWITCHES

The ELECTROPLATE™ has a provision for remotely programming new messages at the rear license plate display if computer module is located in an inaccessible area. There are three auxiliary programming wires (blue, gray and purple) that can be routed to rear license plate display. Touching these wires to ground of vehicle through a standard momentary pushbutton switch will function the same as the programming switches in computer module.

The remote switches must be located within comfortable reaching distance of the license plate frame display for easy programming. We suggest placing switches in the same configuration as the computer module to standardize programming procedure.

Ground one wire of each switch to vehicle chassis. Connect the other switch wires to computer module plug as follows: the GRAY wire for DOWN, BLUE wire for UP, and PURPLE for ENTER.

REMOTE PROGRAMMING SWITCHES



MOMENTARY SWITCHES

6

7

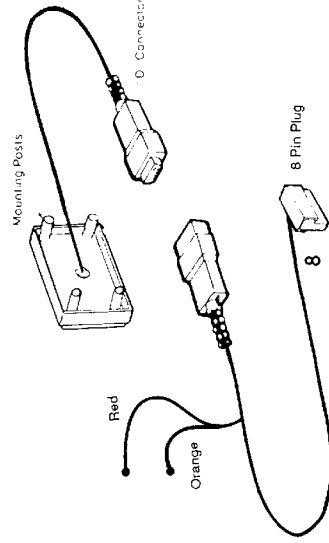
DASH CONSOLE-MESSAGE SELECTOR

The dash console is used to turn "ON" and "SELECT" messages displayed on the rear license plate frame. There are 8 message lights and a selector button located on the dash console. The unit should be located where it is easily accessible and visible to the vehicle driver, but out of direct sunlight.

To install, drill four 1/8" holes for mounting and one center hole for connector plug. Secure unit using epoxy or melting rear mounting post behind dash panel using soldering iron with plastic cutting tip.

Plug in dash console connector to corresponding plug harness. Route harness over to programmable computer module.

There are two wires (RED and ORANGE) 36" long extending out of one end of plug. These wires are used for constant power (RED) and ignition power (ORANGE) when power is not easily accessible at computer module location. The constant and ignition power can be connected to either the dash console plug or the 9 pin computer module plug. It is not necessary to connect power at both locations. Any wires not used must be insulated with electrical tape to prevent shorting.



POWER CONNECTIONS

The ignition and constant 12 volt power source can be connected to either the computer module 9 pin plug or the dash console plug. It is not necessary to connect power at both locations. Any wires not used must be insulated with electrical tape to prevent shorting.

Connect RED wire to a fused constant 12 volts at fuse box, battery or other location in vehicle. Use 5 amp inline fuse at power connection source in vehicle.

Connect ORANGE wire to an ignition or accessory source in vehicle. Locations include: fuse box, radio, cellular phone, etc.

NOTE:
DON'T PLUG CONNECTORS INTO COMPUTER MODULE UNTIL ALL WIRE CONNECTIONS ARE COMPLETE. PLUG 5 AMP FUSE IN LAST.

WIRING COLOR CODE

COMPUTER MODULE

9 POSITION PLUG J6

1	ORANGE	Ignition 12 Volts
2	RED	Constant 12 Volts
3	BLUE	"DOWN" Program Switch
4	YELLOW	Brake 1 Power
5	YELLOW	Brake 2 Power
6	PURPLE	"ENTER" Program Switch
7	GRAY	"UP" Program Switch
8	BLACK	Ground
9	BROWN/WHITE	Alarm Negative Arming Wire

NOTE:

DON'T PLUG FUSE INTO HOLDER UNTIL ALL CONNECTIONS ARE COMPLETE.

9

BRAKE LIGHT FUNCTION

ELECTROPLATE™ turns into a third brake light when slowing, returns to message when stopped. The ELECTROPLATE™ unit uses a signal from the vehicle's brake system to trigger a "STOP" message whenever the brakes are applied. It does this by using a timer circuit that displays the "STOP" message for approximately 10 seconds. Whenever you release the brake pedal, your message will resume its display, or if you continue to hold the brake pedal down for longer than 10 seconds, the message will resume even though your foot is still depressing the brake. The "STOP" message is non-moving and is in reversed lettering (the letters are dark, background is lit) for maximum light output.

NOTE:

THIS FEATURE IS CRITICAL TO ENSURE THE MAXIMUM SAFETY OF THE ELECTROPLATE™ ON THE ROAD, AND CANNOT BE DEFEATED. THE UNIT CHECKS PERIODICALLY FOR THE PRESENCE OF THE BRAKE SIGNAL AND WILL DISPLAY THE MESSAGE "USE BRAKE" IF BRAKE IS DISCONNECTED.

INSTALLATION

The two yellow wires must be connected to brake light or switch for unit to operate. Connecting only one yellow wire will not work, both must be used. The ELECTROPLATE™ will display "USE BRAKE" if only one wire is connected. There are two ways of connecting this function.

- 1) Single brake light source, third brake light or brake pedal switch. Connect both yellow wires together to single brake light source.
- 2) Left and right brake light also used for turn signals. Connect one yellow to left brake light, and the other yellow wire to the right brake light.

NOTE: Check that operating left or right turn signals doesn't cause stop message to flash.

10

11