



# TRITON

## EL SERIES SUBWOOFERS

EL10S4 & EL12S4

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Congratulations and thank you for purchasing Triton mobile subwoofer. With a focus on quality, innovation, and value, Triton loudspeakers feature a no-compromise design built for today's music. Our focus is to provide you an accurate, powerful listening experience by combining premium components into an elegant-but-accurate design that will deliver a listening experience you would expect from a quality product.

To make sure your new subwoofer perform their best, we strongly recommend you have your new Triton loudspeakers professionally installed.

Please use your new Triton subwoofer responsibly. Listening to very loud music for extended periods of time can cause permanent hearing loss.

#### **Triton SQ Series Subwoofers Features:**

- **Black Polypropylene Cone Acoustic Inverted Dust Cap Assembly Design** – improves bass note dispersion while maximizing excursion and improving harmonics
- **Butyl Rubber Surround** – has superior damping and durability characteristics over other materials such as foam or paper
- **2.5 Pound Magnet Assembly** – extraordinary single stacked magnet ensures high power handling and durability
- **2" Voice Coil** – no compromise power handling voice coil properties typically only found in much more expensive subwoofers

#### **I. Package Contents**

- 1 EL Series Subwoofer
- Warranty Card

## II. Specifications

| <b>Model</b>       | <b>EL10S4</b> | <b>EL12S4</b> |
|--------------------|---------------|---------------|
| Size (Inches)      | 10"           | 12"           |
| Impedance          | 4 $\Omega$    | 4 $\Omega$    |
| Frequency Response | 30Hz-450Hz    | 24Hz-350Hz    |
| Voice Coil         | 2"/ 50.5mm    | 2"/ 50.5mm    |
| Magnet             | 40oz          | 40oz          |
| Sensitivity        | 87dB 1W/1M    | 88dB 1W/1M    |
| Fs                 | 32Hz          | 24Hz          |
| Vas                | 40.175m cu    | 109m cu       |
| Qts                | .524          | .510          |
| RMS Power          | 200 Watts     | 250 Watts     |
| Max Power          | 800 Watts     | 1000 Watts    |
| Cone               | IMPP black    | IMPP black    |
| Surround           | Butyl rubber  | Butyl rubber  |
| Frame              | Steel         | Steel         |
| Cutout Size        | 9"            | 11"           |

### III. Installation

Before installation, please follow these guidelines:

1. Be sure to carefully read and understand the instructions before attempting to install this product.
2. For safety, disconnect the negative terminal from the battery prior to beginning the installation.
3. Use the highest quality connectors for a reliable installation and to minimize signal or power loss.
4. Use caution before you drill or cut! Be careful not to cut or drill into gas tanks, fuel lines, brake or hydraulic lines, vacuum lines or electrical wiring when working on any vehicle.
5. Never run speaker wires underneath your vehicle. Running speaker wires inside the vehicle provides the best protection from exhaust heat and environmental elements.
6. Avoid running wires over, near, or through sharp edged surfaces. Use rubber grommets to protect any wires routed through metal.
7. When running the speaker cable from the amplifier, avoid running it near sources of high current (i.e. wiring harnesses, battery cables).

To achieve the best possible sound from this subwoofer enclosure, Dual recommends acquiring the services of a professional car audio installation center.

If you feel confident in your ability to install this product without the assistance of a professional, please read this section thoroughly. We have provided a number of placement recommendations and installation tips to assist you. Keep in mind these are provided as a guideline and you may find that other placements specific to your vehicle may provide better results.

- Make sure all moving parts and factory electrical wires are out of the way and will not interfere after installation.
- Ensure the wire is of sufficient length to avoid pulling or stretching. This is even more important if the wires will be run under or through the factory interior.
- Use electrical tape and wire ties to ensure all wires are properly secured.
- Avoid installing speakers or electronics where they can be subject to moisture.
- Ensure the speaker wires are connected using correct polarity. The positive polarity is marked by a (+) sign. Incorrectly connected subwoofers will result in limited bass output.
- Speaker wire should be isolated from the vehicle's electrical system to avoid noise being picked up by the amplifiers.
- We recommend using 14 gauge or larger sized speaker wire to ensure your subwoofer receives the full power output of your amplifier.

- Remember to listen responsibly and respect your ears. Being exposed to sounds over 125dB for even short periods of time can create permanent hearing loss!

#### IV. Installation - Enclosure Guidelines

To work properly, the walls of your enclosure must be free from flexing during high sound pressure generated by your subwoofer(s).

For best performance, always use MDF (Medium Density Fiberboard) or Baltic Birch Plywood to build your enclosure. We highly recommend that your wood be at least 3/4" in thickness. The enclosure should be sealed internally with silicon or glue and secured with screws every 4".

Assemble the box before cutting the subwoofer hole(s). If the box will be mounted in a vehicle, it should be fastened securely using metal "L" shaped brackets.

To build an enclosure, calculations will need to be made using the information found on the following pages.

#### Remember:

- Use 3/4" MDF or Baltic Birch Plywood
- Use wood glue in joints
- Seal joints with silicon caulking
- Use screws every 2 to 4 inches

#### V. Installation - Sealed Enclosure

| Recommended Sealed Enclosures |                             |         |                             |
|-------------------------------|-----------------------------|---------|-----------------------------|
| EL10S4                        | Recommended Internal Volume | EL12S4  | Recommended Internal Volume |
| Maximum                       | 1.0ft <sup>3</sup>          | Maximum | 1.5ft <sup>3</sup>          |
| Minimum                       | 0.6ft <sup>3</sup>          | Minimum | 1.0ft <sup>3</sup>          |

$$\text{Internal Volume (ft}^3\text{)} = \frac{\text{(in Inches) Internal Width X Depth X Height}}{1728}$$

$$\text{Internal Volume (L)} = \frac{\text{(in Centimeters) Internal Width X Depth X Height}}{1000}$$

VI. Installation - Ported Enclosure

| <b>Recommended Vented Enclosures</b> |                    |
|--------------------------------------|--------------------|
| <b>EL10S4</b>                        |                    |
| <b>Box Volume Maximum</b>            | 1.5ft <sup>3</sup> |
| <b>Box Volume Minimum</b>            | 1.0ft <sup>3</sup> |
| <b>Limited Space</b>                 |                    |
| <b>Box Volume</b>                    | 1.0ft <sup>3</sup> |
| <b>Port Diameter</b>                 | 3" Round           |
| <b>Port Length</b>                   | 8"                 |
| <b>Unlimited Space</b>               |                    |
| <b>Box Volume</b>                    | 1.5ft <sup>3</sup> |
| <b>Port Dimensions</b>               | 10"x1.5" Rectangle |
| <b>Port Length</b>                   | 17.5"              |
| <b>EL12S4</b>                        |                    |
| <b>Box Volume Maximum</b>            | 2.5ft <sup>3</sup> |
| <b>Box Volume Minimum</b>            | 1.5ft <sup>3</sup> |
| <b>Limited Space</b>                 |                    |
| <b>Box Volume</b>                    | 1.5ft <sup>3</sup> |
| <b>Port Diameter</b>                 | 4" Round           |
| <b>Port Length</b>                   | 13.5"              |
| <b>Unlimited Space</b>               |                    |
| <b>Box Volume</b>                    | 2.5ft <sup>3</sup> |
| <b>Port Dimensions</b>               | 12.5"x2" Rectangle |
| <b>Port Length</b>                   | 18"                |