



illuminITE[™] TS10

INSTALLATION/OWNER'S MANUAL

1" Soft Dome Tweeter

DUAL AUDIO
LOUD & CLEAR





Getting Started

Thank you for purchasing the TS10 1" tweeter. Although Dual has attempted to make sure all of the information contained within this manual is accurate, please be aware that any part of it is subject to change without notice.

Safety



CAUTION To prevent injury and damage to the unit, please read and follow the instructions in this manual.



CAUTION If you feel unsure about installing this system yourself, have it installed by a qualified audio technician.



CAUTION Before installation, disconnect the battery negative (-) terminal to prevent damage to the unit, fire and/or possible injury.



CAUTION Do not connect Amplifier or any audio source to illumination inputs. Inputs are designed for 12 volt power source only.

Placement

The TS10 must be combined with other component speakers to develop a complete speaker system. A 2-way system is comprised of a midrange and tweeter, while a 3-way system includes a midrange, tweeter and woofer/subwoofer.

Midranges, like tweeters, are directional and require a similar "line of sight" location. In addition, a tweeter should be located as close as possible to its corresponding midrange driver to assure good sound cohesion. Woofer and subwoofer drivers are generally considered non-directional due to the nature of the low frequencies they produce; therefore, their placement is less critical. Carefully consider the layout of your entire system before installing any speaker components.

The TS10 is a high performance tweeter which reproduces the upper portion of the audible frequency range. As such, it should be mounted in locations which provide a direct line of sight path to the listener's ear. Ideal locations include dashboard and upper areas of door and side panels.

The included mounting adapters provided with this kit allow surface, flush or angled mounting. Experiment with tweeter placement to determine best location before permanently mounting tweeters in vehicle.

illuminate™ Connection

The illuminate lighting elements of your TS series products provide you with a unique custom touch to your vehicle. Dual's patent pending illuminate bulb system and control circuitry provides an extraordinary lighted-Hue illumination which allows great creative opportunities for the beginner and seasoned custom installer alike. The interior of your vehicle will never sound or look ordinary again. Let your imagination take you there.

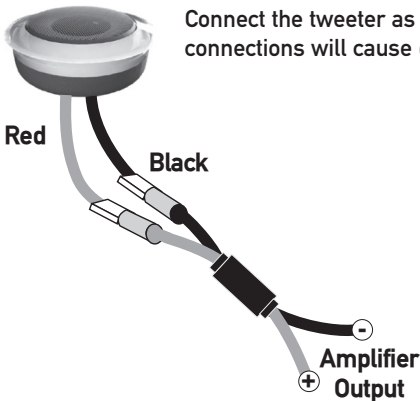
The lighting features of all illuminate products require a 12 volt DC power source to operate. The speaker has two distinct sets of input terminals. The first is labeled audio input terminals and the second is labeled illuminate lighting inputs. The inputs are clearly marked with a label positioned directly above the terminal housing. The polarity (+ and -) indicators for each set of inputs also appear on these labels.

1. Do not connect Amplifier or any audio source to illuminate lighting inputs. Inputs are designed for switched 12 volt DC power source only.
2. See fig. 1a, (illustrates wiring diagram) be sure to maintain polarity. Be sure to connect to a constant switched 12 volt DC source. Correct connection would be the positive (+) 12 volt wire to the Positive (+) illuminate Lighting input terminal and connect the Negative (-) illuminate lighting input terminal to a good chassis ground.

Notice: The Illuminate™ series LED illumination elements are not removable. There are no serviceable parts inside or attached to the speaker assembly. The Illuminate™ series products are sensitive electronic devices. Removal or tampering with any part or portion of the speaker and/or its assemblies will damage the product and void the limited warranty.

Wiring

Connect the tweeter as shown in the wiring diagram. Improper connections will cause damage not covered by the product warranty.



Mounting

Tweeters have been designed for flush, surface or 30 degree mounting. Flush mounting, which provides a custom appearance, requires 1" of clearance behind mounting surface. If sufficient clearance is not available, the included mounting kit allows tweeter to be mounted to the surface of the vehicle's interior. Tweeters can be mounted straight or at an angle depending on the adapter selected.

Specifications

Peak Power Handling.....	100 Watts
RMS Power Handling.....	25 Watts
Frequency Response.....	3kHz - 20kHz
Sensitivity (1 Watt @ 1 Meter).....	90dB
Impedance.....	4 ohms

Includes 12dB Inline Crossover

Limited One-Year Warranty

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

Dual Electronics Corp. warrants this product to the original purchaser to be free from defects in material and workmanship for a period of one year from the date of the original purchase.

Dual Electronics Corp. agrees, at our option, during the warranty period, to repair any defect in material or workmanship or to furnish an equal new, renewed or comparable product (whichever is deemed necessary) in exchange without charges, subject to verification of the defect or malfunction and proof of the date of purchase. Subsequent replacement products are warranted for the balance of the original warranty period.

Who is covered? This warranty is extended to the original retail purchaser for products purchased and used in the U.S.A.

What is covered? This warranty covers all defects in material and workmanship in this product. The following are not covered: installation/removal costs, damage resulting from accident, misuse, abuse, neglect, product modification, improper installation, incorrect line voltage, unauthorized repair or failure to follow instructions supplied with the product, or damage occurring during return shipment of the product.

What to do?

1. Before you call for service, check the troubleshooting guide in your owner's manual. A slight adjustment of any custom controls or connections discussed in your instruction booklet may save you a service call.
2. If you require service during the warranty period, you must carefully pack the product (preferably in the original package) and ship it by prepaid transportation with a copy of the original receipt from the retailer to an authorized service center.
3. Please describe your problem in writing and include your name, a return UPS shipping address (P.O. Box not acceptable), and a daytime phone number with your shipment.
4. For more information and for the location of the nearest authorized service center please contact us by one of the following methods:

Call us toll-free at 1-866-382-5476
E-mail us at cs@dualav.com

Exclusion of Certain Damages: This warranty is exclusive and in lieu of any and all other warranties, expressed or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose and any obligation, liability, right, claim or remedy in contract or tort, whether or not arising from the company's negligence, actual or imputed. No person or representative is authorized to assume for the company any other liability in connection with the sale of this product. In no event shall the company be liable for indirect, incidental or consequential damages.



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