







Introduction	The DUAL outdoor speaker series is designed as a multi- purpose speaker and will deliver accurate high fidelity sound in exterior or interior environments. Weather-resistant design and construction provide optimum durability for permanent or temporary outdoor use. Both models are available in black or white.
	For simplicity, we will call your AV receiver or amplifier the "receiver."
Important	The grilles are not designed or intended to be removed. Do not remove the grilles from your speakers. There are no user- serviceable parts behind the grille and removal will damage the speaker.
Warranty Coverage	You must have proof of purchase to receive warranty service. Please keep your original sales receipt and be prepared to provide this receipt in the event you require service, as your original receipt is considered the best proof of purchase and indicates the date you purchased your Dual product.
For Your Records	Model Dealer Name Dealer Phone Purchase Date Note: You may want to keep your original sales receipt or a photo copy with this installation/owner's manual.



# Speaker Placement

Mounting Placement	If mounting is desired, mounting both speakers on a common solid surface facing the listening area will provide the best audio results. Do NOT mount speakers on wall surfaces that have hazards concealed behind them, such as electrical wires or plumbing. Always mount speaker on surfaces that are sturdy enough to support the speakers' weight, and make sure they cannot fall or cause injury.
Speaker Placement	Your speakers can be placed in many convenient locations in your home or patio area - as stereo pairs on either side of your receiver - as surround speakers in home theater surround sound systems - in your computer room to enhance the multimedia experience - or as remote speakers.
Wall and Ceiling Placement	For wall and ceiling applications, DUAL mounting brackets are included. In addition, the LU43 has a rear inset keyhole for surface hanging, and the larger LU53 has two 1/4-20 brass inserts incorporated into the rear of the enclosure if aftermarket mounting systems will be used.
Experiment for Better Sound	You should experiment with various placements. Room acoustics can produce large apparent differences in the sound when small changes in the placement are employed. For example, although the speaker may be located at any height above the floor, directing the tweeter toward ear level (32" – 36") or angling the entire speaker toward the listening position often provides the most realistic imaging experience. The amount of bass perceived increases as you move a speaker closer to solid intersecting room surfaces (walls, ceiling, floor).



(6'10")

Recommended minimum distance between speakers



LU43P-LU53P INSTALLATION

### **Placement & Mounting Speakers**

#### **Outdoor Placement**





Mounting Your Speakers



The DUAL LU43 and LU53 have been tested for environmental usage and are weather resistant, but not waterproof. Occasional moisture will not affect performance. The speakers should be allowed to ventilate and dry after water exposure.

The speakers can be placed permanently outdoors for yearround enjoyment. To maximize speaker life, position in areas protected from the elements, such as the underside of eaves and overhangs. Popular locations include decks, gazebos, porches, atriums, garages, and covered spa areas.

For temporary placement, remove the speaker from the mounting brackets and replace the thumb screws to maintain stability if placing the speakers on end.

Both the LU43 and LU53 speakers have a DUAL logo that can be rotated. The logo is located on the face of the grille in the event a vertical installation is needed. The logo is spring loaded. Use gentle force when adjusting the logo to a new orientation. To rotate the logo, elevate two ends of the logo equally by placing your nail under and lifting lightly. While the logo is elevated, turn the logo to the desired orientation and release.

For ease of installation, the DUAL LU43 and LU53 include an easily removable mounting bracket. Once mounted, the bracket allows the speaker to be pivoted to its ideal location. The included thumb screws knobs will hold the selected speaker position when properly tightened. Avoid over tightening the knob. Before attempting the installation, carefully evaluate the mounting surface, making sure that its composition and construction are strong enough to support the load safely. If you are unsure about the type of mounting hardware for your installation, consult a professional contractor or a knowledgeable hardware store. The anchors and screws to attach the speakers are not included and must be purchased separately. The hardened steel brackets are suitable only for attaching the speaker to walls or ceilings constructed of solid wood, brickwork, concrete, hollow buildings block or wood studs.

Do not mount the bracket to non-reinforced plaster sheetrock (gypsum board). Once the bracket is secure, reattach the speaker using the thumb screws included.

LU43P-LU53P CONNECTION

### **Connecting Speakers**

#### Connecting Your Speakers



LU53P



LU43P

**Speaker Wire** -Typical speaker wire has a pair of separate speaker wires with insulating jackets that are molded together. Dual recommends the use of two conductor 18gauge speaker wire to connect your speakers to your receiver. Measure enough wire to reach from your receiver to each speaker plus additional length to allow moving the speakers or receiver without having to disconnect the wires. When connecting the speakers in a stereo configuration, the wire length should be similar. One length should not be dramatically longer or shorter then the other. Maintaining similar wire lengths will provide superior sound quality.

**Polarity** - Speaker wires are marked for polarity consistency so that you can determine the positive and negative identity of the individual wires within the molded pair insulation. Polarity is shown by either a color stripe on the insulation, by ridges molded into one side of the insulation, the color of the insulation case around the wire, or by the colortype or colors of the wires/wire itself (copper or silver).

**Important** - Always connect speaker wire using the positive (+) terminal on the receiver to the positive (+) terminal, and the negative (-) terminal on the receiver to the negative (-) terminal. All speakers in a system must be connected with the same respective polarity. The speaker inputs are located on the rear-mounted terminal cup on the back of the speaker.

**Terminal Type** - The LU43 utilizes a push-pin design. Gently depress the colored lever and insert the stiped end of the wire directly into the opening located in the center of the input housing. - The LU53 uses a screw type input post. To loosen, turn the gold terminal counter clockwise, insert the wire end and re-tighten. The gold terminal have Red (POS) and Black (NEG) polarity indicators.



## **Connecting Speakers**

Your Speakers	The speaker wire must be securely connected and tightened properly to the speaker inputs. Do not over-tighten. Do not allow the positive and negative speaker wire from the receiver to make contact, as this will cause a short.
	Banana style connectors may also be used on the LU53. The connection is made by connecting the speaker wire to the banana plugs, and then inserting the banana plug into the top portion of the binding posts.
	It is recommended that the wire insulation be stripped back approximately 3/8", allowing the wire conductor to make a proper connection. Make sure that the wire insulation is stripped back far enough so that the bare speaker wire will make a proper connection to the metal clip inside the terminal and be securely held in place. This can be confirmed visually.
Distortion/Knocking	<b>Troubleshooting</b> If you hear obvious distortion from the speakers, immediately lower the volume level of your receiver. Those sounds often indicate that either the receiver or the speaker is being overdriven, and damage can result in playing your source material (music-CDs-DVD-MP3) at high volume levels for prolonged periods of time. You should also avoid turning the bass or treble controls fully up and using your "Loudness button" when the volume level is at or above normal listening levels. Note: The Loudness button on most receivers is designed to add depth when your system is being used for background music or at very low volume.
	Distorted or unnatural sound can indicate poor connections, defective electronics, damaged source material or speaker failure. If only one of your speakers has poor sound quality, check the speaker wire and audio connections. If that doesn't fix the problem, try putting each speaker in place of one another (swapping). If the sound remains poor on the suspect speaker after swapping location and the distortion moves with the speaker to the new location, the speaker may be the problem. If the distortion remains in the original location then the problem is eleswhere in your audio/video system.

# **Specifications**

Specifications	Model LU43P Frequency Response 100 Hz-20kHz Woofer 4" (100mm) Polyelite PVA Surround Midrange 40mm polypropylene Tweeter 20mm Piezo Dome Sensitivity 85.5 dB (2.83v @ 1 meter) Nominal Impedance 4-6 ohms Power Handling* 50 watts RMS - 100 watts (IPP) Dimensions (Inches H x W x D) 8.25 x 5.25 x 5.25 Weight 2.8 lbs. Finish Black or White
	Model LU53P
	Frequency Response 70 Hz-20kHz
	Woofer 5 1/4" (130mm) Rubber Surround
	Midrange 25mm polypropylene
	Tweeter 20mm Piezo Dome
	Sensitivity 87dB (2.83v @ 1 meter)
	Nominal Impedance 6-8 ohms
	Power Handling* 60 watts RMS - 125 watts (IPP) Dimensions (Inches H x W x D) 10.13 x 7.25 x 7.25
	Weight 4.4 lbs.
	Finish Black or White
	* Power handling is based on amplifier volume never being set above the point of audible distortion.

All Rights Reserved. All specifications subject to change without notice.

## 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.
- 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.
- Please describe your problem in writing and include your name, a USA return 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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