

 LIGHTNING AUDIO

# STRAKE<sup>®</sup>

## COMPONENT SPEAKERS

S4.525C

S4.65C

Installation & Operation  
Installation et fonctionnement  
Instalación y operación  
Einbau und Betrieb  
Installazione e funzionamento



# STRIKE COMPONENT SPEAKERS

## SPECIFICATIONS

System Model Number	S4.525C	S4.65C
Nominal Diameter (in.)	5.25	6.5
Nominal Impedance (Ohms)	4	4
Frequency Response	60Hz–20kHz	55Hz–20kHz
Fs (Hz)	60	55
Sensitivity (SPL@1w/1m)	85dB	85dB
RMS Power Handling* (Watts) (Continuous)	50	50
RMS Power Handling* (Watts) (Maximum)	100	100
Mounting Diameter (in.)	4-5/8	5-5/8
Mounting Diameter (mm)	117.5	143.0
Mounting Depth (in.)	2-3/8	2-1/2
Mounting Depth (mm)	60.3	63.5

\* Rated Power Handling for the overall system

Specifications subject to change without notice

## Mounting Location

- Place the speakers where they have a direct path to the listening area.
- Whenever possible, place the tweeter directly above or below the midrange as this maximizes the imaging (point source) capability of the speakers.

### Installation — English

1. Cut the proper size hole for the midrange speaker;
  - For the 5-1/4" speaker, cut a 117.5mm (4-5/8") diameter hole.
  - For the 6-1/2" speaker, cut a 143.0mm (5-5/8") diameter hole.
2. Place the speaker frame over the mounting hole and mark the location of the screw mounting holes.
3. Remove the frame. Drill the holes for the screws using a 1/8" drill bit.

### Mounting Tweeter

- Decide which mounting method to use for the tweeter.

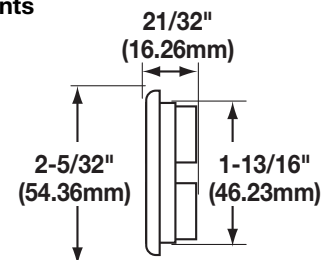
### Flush Mounting

- Cut a 47mm (1-13/16") diameter hole.
- Route wires and mount tweeter into housing.
- Use clips to mount tweeter and housing into place

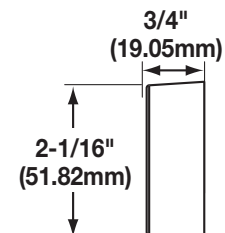
Model	Tweeter
Nominal Diameter (in.)	1.0
Nominal Impedance ( $\Omega$ )	4
Frequency Response	2.5kHz–20kHz
Fs (kHz)	2.5
Sensitivity (SPL@1w/1m)	90dB
RMS Power Handling	50 Watts*
Mounting Diameter (in.)	See Drawings
Mounting Depth (in.)	See Drawings
* Power Rating is established with recommended filter network	

Model	Crossover
Crossover Type	2-Way
Crossover Frequency	4kHz @ 4ohms
Crossover Slope	12dB/octave High-Pass 12dB/octave Low-Pass
Filter Q	0.707 (Butterworth)
Tweeter Protection	Optical Compression
Dimensions in Inches (Width x Depth x Height)	4-5/8 x 4-1/8 x 1-1/2

### Tweeter Mounts



FLUSH



SURFACE

Check our website [www.LightningAudio.com](http://www.LightningAudio.com)  
for updates on your products.

# INSTALLATION REFERENCE SHEET

## Surface Mounting

- Drill hole to route wires for tweeter.
  - Mount housing using sheet-metal screw.
  - Snap Tweeter into mount after wires have been connected.
4. Route the wires from Crossover and through the hole for speaker and/or Tweeter.
  5. Attach the wires and be sure to observe the proper speaker polarity.
  6. Place the speaker frame behind the speaker.
  7. Place the speaker into the hole and screw the speaker into place.
  8. Snap the speaker grille over the speaker onto the speaker frame

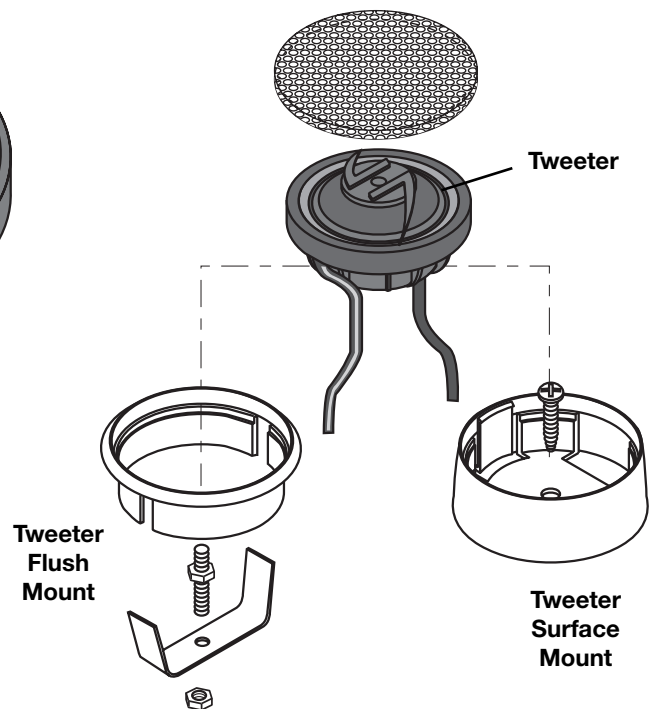
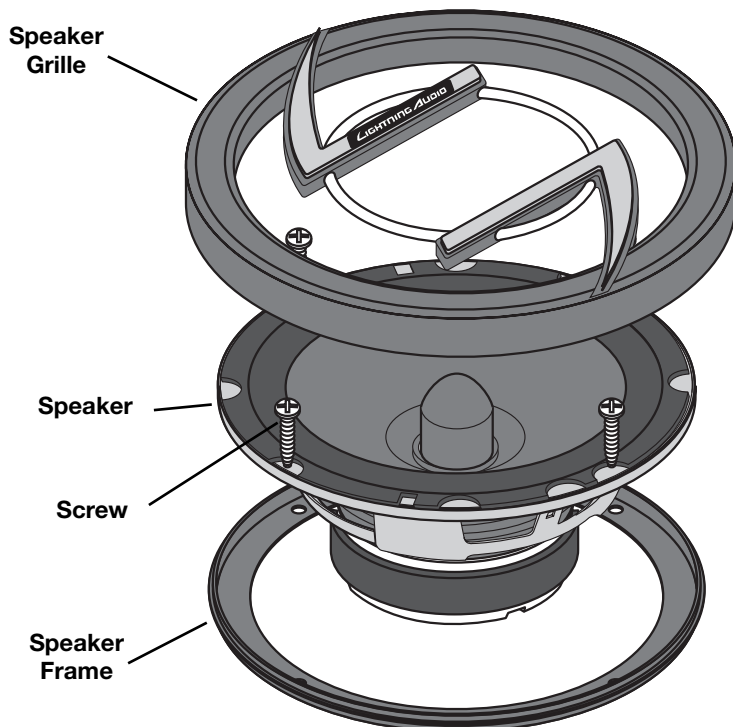
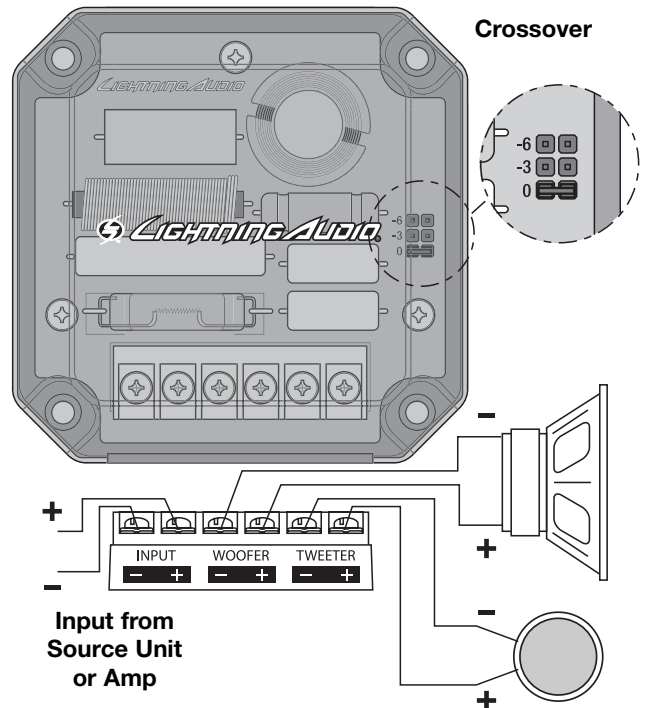
## Crossover Settings

### Tweeter Control

Depending upon the acoustics of the vehicle, the placement of the speakers, and the listening preferences of the listener, it may be desirable to adjust the output of the tweeter in relation to the midbass. There are three (3) different settings for the tweeter. The default shipped setting is 0dB, meaning the tweeter output is equal to that of the midbass, and settings of -6dB and -3dB that allow for different levels of tweeter control.

### To Attenuate Tweeter

1. Remove Plexiglas cover from the top of the crossover.
2. Move the jumper from the 0dB position and place the jumper across two (2) jumper posts at the desired attenuation level. Make sure when moving the jumper to cover both posts.
3. Replace the Plexiglas cover on the top of the crossover.



# Feuille De Référence D'Installation

## Installation — Français

- Découpez un trou de taille appropriée pour le haut-parleur de médium ;
  - Pour le haut-parleur de 5-1/4", découpez un trou de 117,5 mm (4-5/8") de diamètre.
  - Pour le haut-parleur de 6-1/2", découpez un trou de 143,0 mm (5-5/8") de diamètre.
- Placez le cadre du haut-parleur sur le trou de montage et marquez l'emplacement des trous de montage des vis.
- Déposez le cadre. Percez les trous des vis à l'aide d'une mèche de 1/8".

## Montage du tweeter

- Décidez quelle méthode de montage utiliser pour le tweeter.

## Montage affleurant

- Découpez un trou de 47 mm (1-13/16 po) de diamètre.
- Faites passer les fils et installez le tweeter dans le boîtier.
- Utilisez des clips pour fixer le tweeter et le boîtier en place.
- Enfoncez d'un déclic la grille par-dessus le tweeter.

## Montage en surface

- Percez un trou pour faire passer les fils du tweeter.
- Installez le boîtier à l'aide d'une vis à tête.
- Enfoncez d'un déclic le tweeter dans le support après avoir connecté les fils.
- Enfoncez d'un déclic la grille par-dessus le tweeter.

- Acheminez les fils du filtre passif à travers le trou du haut-parleur ou du tweeter.
- Fixez les fils en respectant la polarité des haut-parleurs.
- Placez le cadre par dessus de haut-parleur derrière le haut-parleur.
- Placez le haut-parleur dans le trou et vissez-le. Veillez à ne pas tordre le cadre du haut-parleur durant cette étape.
- Cassez le gril de haut-parleur au-dessus du haut-parleur sur cadre de haut-parleur.

## Paramètres du filtre

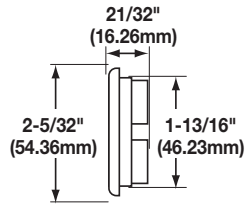
### Commande de tweeter

Selon l'acoustique du véhicule, l'emplacement des haut-parleurs et les préférences d'écoute de l'auditeur, il peut être souhaitable d'ajuster le rendement du tweeter par rapport à celle du midbass. Le tweeter possède trois (3) réglages différents. Le réglage par défaut est de 0 dB, ce qui signifie que le volume du tweeter est égal à celui du midbass; les deux autres réglages, -6 dB et -3 dB, permettent d'obtenir différents niveaux d'atténuation du tweeter.

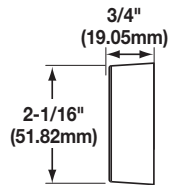
### Pour atténuer le tweeter

- Retirez le couvercle en plexiglas de la partie supérieure du filtre.
- Déplacez le cavalier de la position 0 dB et mettez-le sur deux (2) bornes correspondant au niveau d'atténuation voulu. Prenez soin de couvrir les deux bornes lorsque vous déplacez le cavalier.
- Remettez le couvercle en plexiglas sur la partie supérieure du filtre.

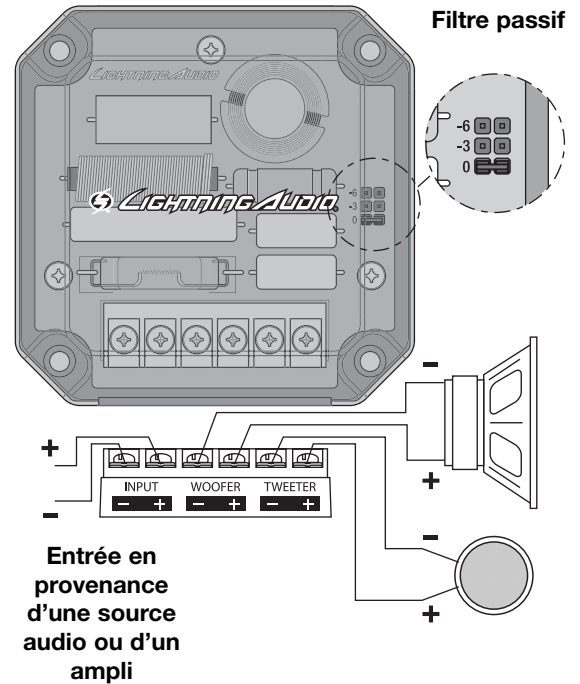
## Supports de tweeter



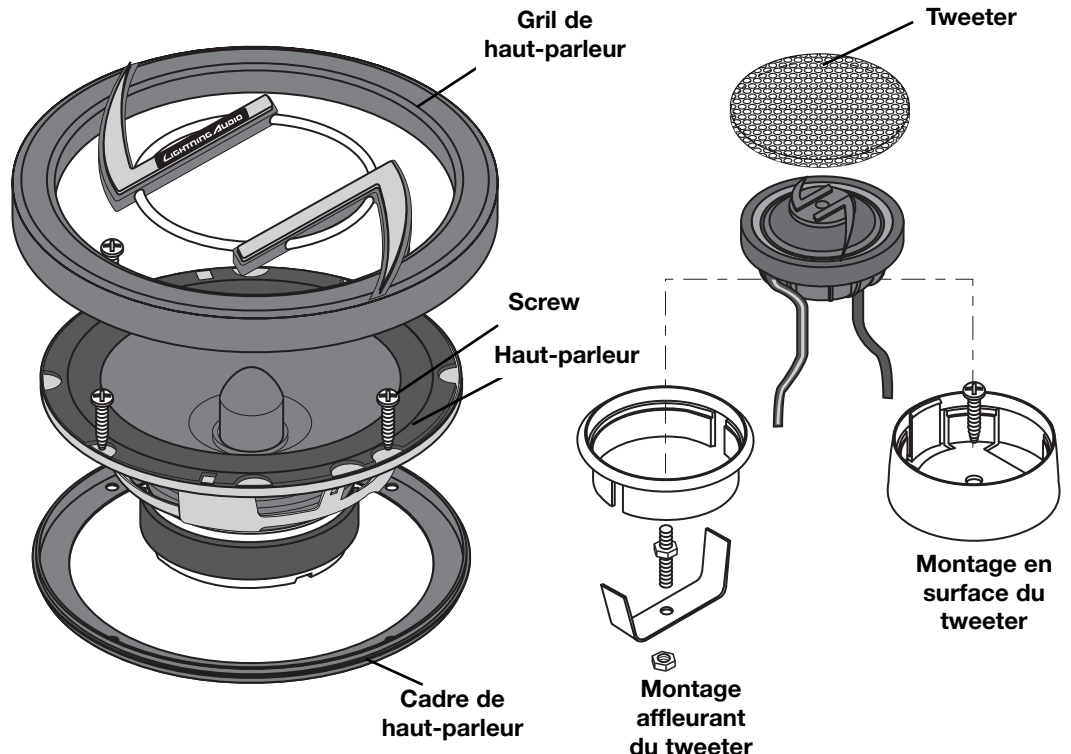
## Montage affleurant



## Montage en surface



Entrée en provenance d'une source audio ou d'un ampli



# Referencia De la Instalación

## Instalación – Español

- Corte el orificio para el altavoz de medios.
  - Para el altavoz de 5-1/4", corte un orificio de 117.5 mm (4-5/8") de diámetro.
  - Para el altavoz de 6-1/2", corte un orificio de 143.0 mm (5-5/8") de diámetro.
- Sitúe el cerquillo del altavoz sobre el orificio y marque la posición de los agujeros para los tornillos de fijación.
- Retire el cerquillo. Perfore los agujeros para los tornillos con una broca de 1/8".

### Montaje del tweeter

- Decida qué método de montaje usar para el tweeter.

### Montaje empotrado

- Corte un orificio de 47 mm (1-13/16") de diámetro.
- Pase los cables y monte el tweeter en el alojamiento.
- Use clips para montar el tweeter y el alojamiento en su sitio.

### Montaje en superficie

- Perfore un agujero para pasar los cables para el tweeter.
- Monte el alojamiento usando tornillos autorroscantes.
- Inserte a presión el tweeter en su soporte después de que se hayan conectado los cables.

- Pase los cables para el tweeter y/o altavoz desde el filtro a través del orificio.
- Conecte los cables observando la polaridad.
- Ponga el cerquillo del altavoz detrás del altavoz.
- Sitúe el altavoz en el orificio y atorníllelo en su posición. Sea cuidadoso y no fuerce el altavoz durante esta operación.
- Encaje a presión la parrilla del altavoz sobre el altavoz sobre el cerquillo del altavoz.

## Ajustes del crossover

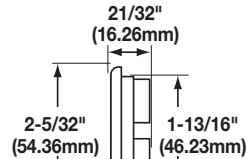
### Control del tweeter

Dependiendo de la acústica del vehículo, la ubicación de los altavoces, y las preferencias del oyente, es posible que se quiera ajustar la salida del tweeter con relación al midbass. Hay tres (3) ajustes distintos para el tweeter. El ajuste por omisión enviado es de 0dB, lo que quiere decir que la salida del tweeter es igual a la del midbass, y ajustes de -6dB y -3dB que permiten distintos niveles de control del tweeter.

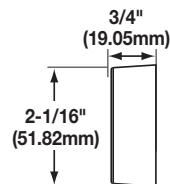
### Atenuación de tweeter

- Extraiga la cubierta de plexiglás de la parte superior del crossover.
- Mueva el puente de la posición de 0dB y coloque el puente a través de dos (2) contactos para puente en el nivel de atenuación deseado. Asegúrese de que cubra ambos contactos al mover el puente.
- Vuelva a instalar la cubierta de plexiglás arriba del crossover.

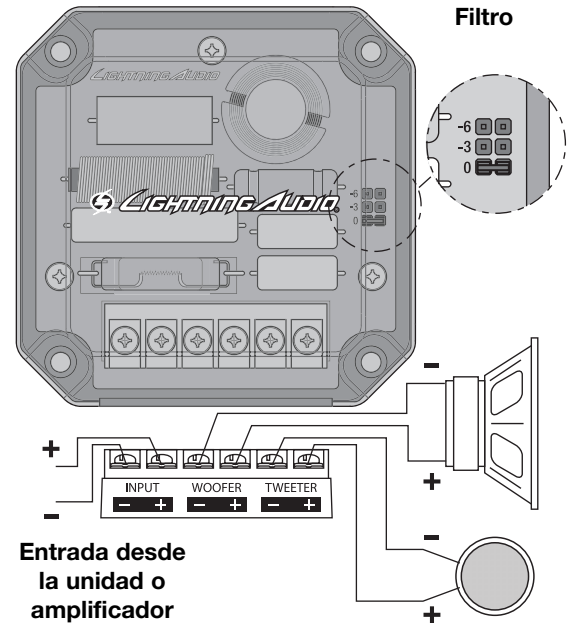
### Soportes de tweeter



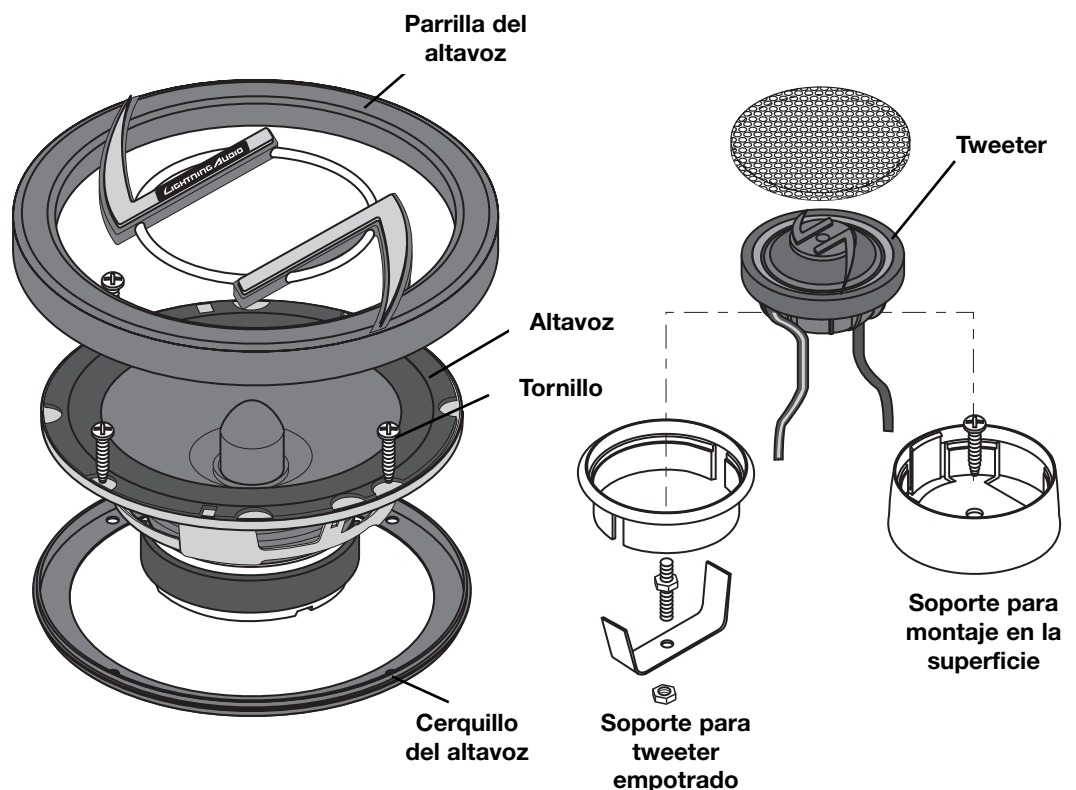
Montaje empotrado



Montaje en superficie



Entrada desde la unidad o amplificador



## Installation — Deutsch

- Schneiden Sie ein Loch fuer den Mitteltöner aus.
  - Fuer den 5-1/4" Lautsprecher, schneiden Sie ein Loch mit 117,5 mm Durchmesser aus.
  - Fuer den 6-1/2" Lautsprecher, schneiden Sie ein Loch mit 142,9 mm Durchmesser aus.
- Plazieren Sie den Lautsprecherrahmen ueber dem Befestigungsloch, und markieren Sie die Loecher fuer die Schrauben.
- Entfernen Sie den Rahmen. Bohren Sie die Loecher fuer die Schrauben mit einen 4 mm Bohrer.

### Befestigung des Hochtöners

- Befestigungsmethode fuer den Hochtöner festlegen.

### Bündige Befestigung

- Ein Loch von 47 mm Durchmesser schneiden.
- Die Kabel verlegen und den Hochtöner im Gehäuse befestigen.
- Klemmen zur Befestigung von Hochtöner und Gehäuse benutzen.

### Oberflächenbefestigung

- Ein Loch zur Verlegung der Kabel zum Hochtöner bohren.
- Das Gehäuse mit einer Blechschraube befestigen.
- Nach Anschließen der Kabel den Hochtöner in der Befestigung einschnappen lassen.

- Verlegen Sie die Kabel, von der Frequenzweiche zu den Lautsprechereinbauplaetzen.
- Verbinden Sie die Kabel, und ueberpruefen Sie ob die Lautsprecherpolaritaet korrekt ist.
- Setzen Sie den Lautsprecherrahmen hinter den Lautsprecher.
- Setzen Sie den Lautsprecher in das Loch, und schrauben Sie den Lautsprecher fest. Geben Sie acht, dass Sie nicht den Lautsprecherrahmen waehrend des Vorgangs verbiegen.
- Reißen Sie den Lautsprechergrill ueber dem Lautsprecher auf den Lautsprecherrahmen.

## Einstellungen des Crossovers

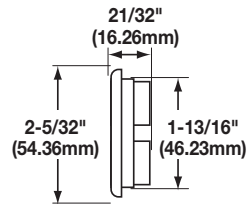
### Hochtöners-Steuerung

Je nach der Akustik im Fahrzeug, der Platzierung der Lautsprecher und den Hörvorlieben des Hörers ist es u. U. wünschenswert, die Leistung des Hochtöners im Vergleich zum Mitteltieföner zu reduzieren. Drei verschiedene Hochtönereinstellungen stehen zur Verfügung: Die werkseitige Einstellung 0 dB – d.h. Hochtöner und Mitteltieföner erbringen die gleiche Leistung –, sowie die Einstellungen -6 dB und -3 dB, die verschiedene Dämpfungspegel am Hochtöner-Steuerung.

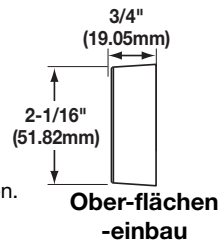
### Dämpfen des Hochtöners

- Die Plexiglas-Abdeckung von der Oberseite des Crossovers entfernen.
- Den Jumper von der 0 dB Position entfernen und entsprechend dem gewünschten Dämpfungspegel über zwei Jumperstützen platzieren. Dabei müssen beide Stützen abgedeckt werden.
- Die Plexiglas-Abdeckung wieder auf der Oberseite des Crossovers anbringen.

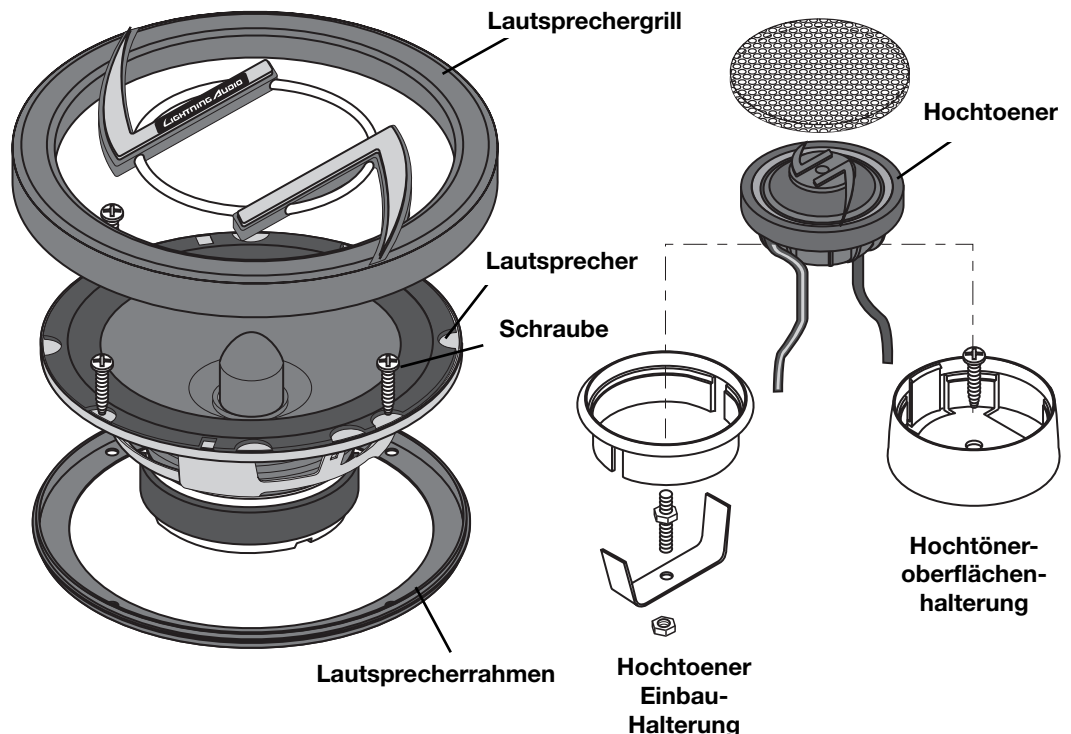
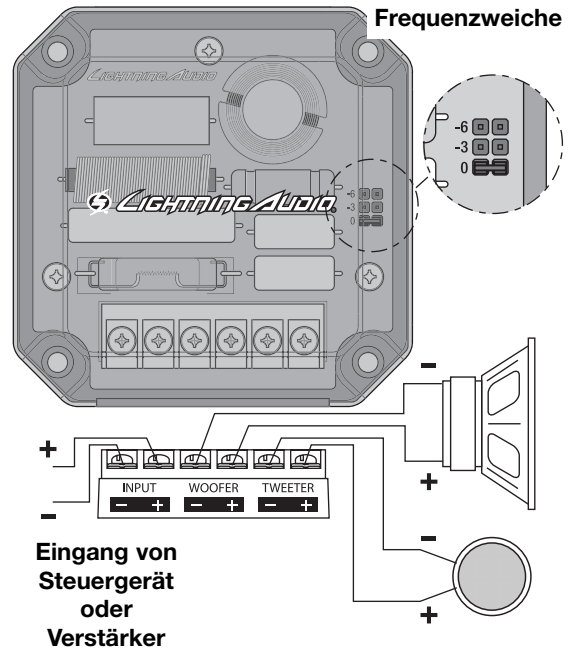
### Hochtoner Einbaumöglichkeiten



### Halterung fuer Einbau



### Oberflächen-einbau



# Foglio Di Riferimento Dell'Installazione

## Installazione – Italiano

1. Tagliare un foro delle dimensioni adatte per l'altoparlante a media portata;
  - Per l'altoparlante da 5-1/4 pollici, tagliare un foro avente un diametro di 117,5 mm.
  - Per l'altoparlante da 6-1/2 pollici, tagliare un foro avente un diametro di 143,0 mm.
2. Sistemare il telaio dell'altoparlante sopra il foro di montaggio e segnare l'ubicazione dei fori per le viti di montaggio.
3. Rimuovere il telaio. Trapanare i fori per le viti usando una punta da trapano da 1/8 di pollice.

### Montaggio del tweeter

- Decidere quale metodo di montaggio si vuole utilizzare.

### Montaggio a filo

- Praticare un foro con diametro di 47 mm.
- Disporre i cavi e inserire il tweeter nell'alloggiamento.
- Usare i fermagli per fissare il tweeter e l'alloggiamento.

### Montaggio a superficie

- Praticare il foro attraverso cui si faranno passare i cavi del tweeter.
  - Fissare l'alloggiamento mediante la vite per lamiera.
  - Dopo avere collegato i cavi, inserire il tweeter nell'alloggiamento finché si blocca con uno scatto.
4. Far passare i fili dell'incrocio attraverso il foro per l'altoparlante e/o il tweeter.
  5. Collegare i fili e assicurarsi di aver osservato la polarità corretta per l'altoparlante.
  6. Disponga la telaio dell'altoparlante dietro l'altoparlante.
  7. Sistemare l'altoparlante dentro il foro e avvitarlo. Stare attenti a non piegare il telaio dell'altoparlante durante questa operazione.
  8. Schiocchi la griglia dell'altoparlante sopra l'altoparlante sulla telaio dell'altoparlante.

## Impostazioni del crossover

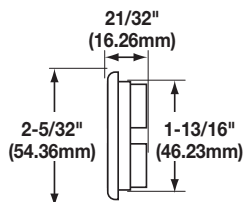
### Controllo del tweeter

A seconda dell'acustica del veicolo, della posizione degli altoparlanti e delle preferenze dell'ascoltatore, può essere desiderabile registrare l'uscita del tweeter rispetto al midbass. Per il tweeter si può scegliere fra tre impostazioni: quella predefinita è 0dB, ossia l'uscita del tweeter è uguale a quella del midbass; le altre due, corrispondenti a -6 dB e a -3dB, permettono livelli diversi di controllo del tweeter.

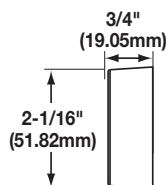
### Attenuazione del tweeter

1. Rimuovere la copertura in plexiglas dalla parte superiore del crossover.
2. Spostare il ponticello dalla posizione corrispondente a 0dB e inserirlo tra i due terminali corrispondenti all'attenuazione desiderata. Quando si sposta il ponticello, assicurarsi che vada a contatto di entrambi i terminali.
3. Riposizionare la copertura in plexiglas.

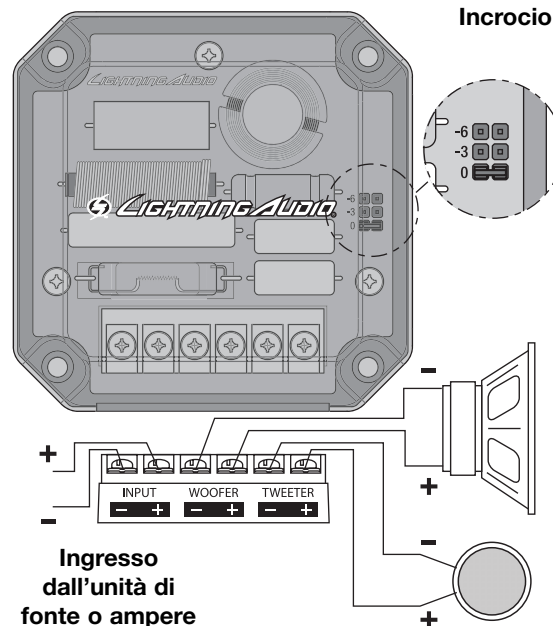
### Attacchi per tweeter



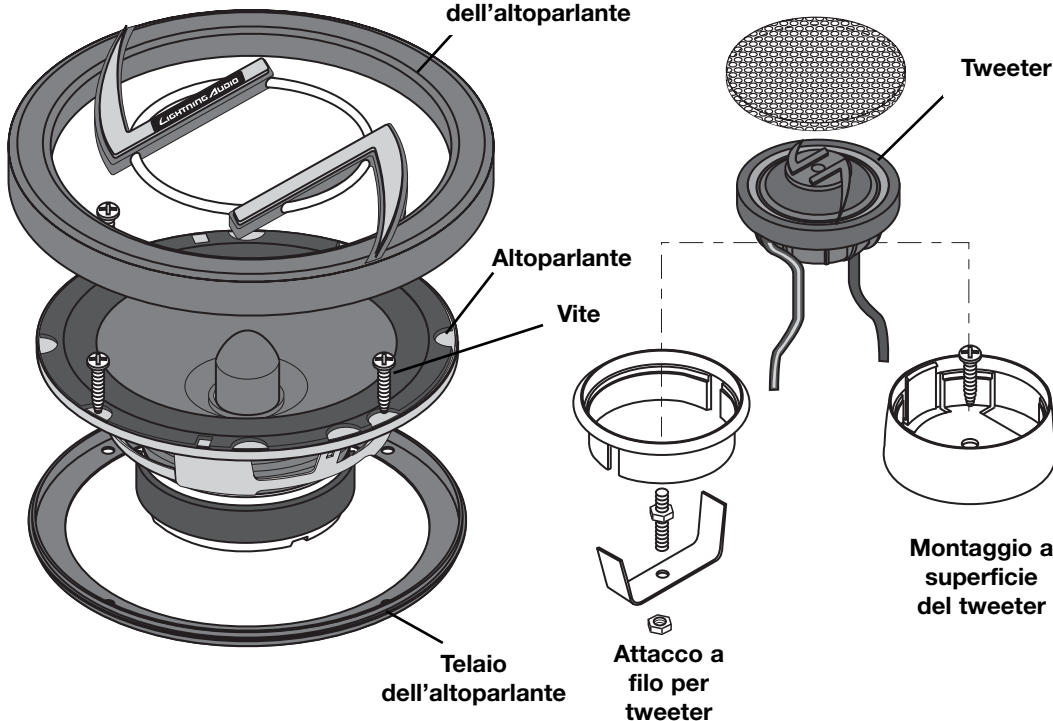
### Attacco a filo



### Montaggio a superficie



### Griglia dell'altoparlante



# LIMITED WARRANTY INFORMATION



Lightning Audio offers a limited warranty on products on the following terms:

- **Length of Warranty**

- **Speakers**

- One year parts and labor warranty. Requires proof of purchase.

- **Amplifiers**

- **Bolt:** One year parts and labor warranty. Requires proof of purchase.

- **Strike and Storm:** One year parts and labor warranty. Requires proof of purchase.

- Or, Two years parts and labor warranty if installed by a Authorized Dealer. Requires proof of purchase.

- **CT1, FM1, PC1 and CS1**

- One year parts and labor warranty. Requires proof of purchase.

- **What is Covered**

This warranty applies only to Lightning Audio products sold to consumers by Authorized Lightning Audio Dealers in the United States of America or its possessions. Product purchased by consumers from an Authorized Lightning Audio Dealer in another country are covered only by that country's Distributor and not by Lightning Audio.

- **Who is Covered**

This warranty covers only the original purchaser of Lightning Audio product purchased from an Authorized Lightning Audio Dealer in the United States. In order to receive service, the purchaser must provide Lightning Audio with a copy of the receipt stating the customer name, dealer name, product purchased and date of purchase.

- **Products found to be defective** during the warranty period will be repaired or replaced (with a product deemed to be equivalent) at Lightning Audio's discretion.

- **What is Not Covered**

1. Damage caused by accident, abuse, improper operations, water, theft
2. Any cost or expense related to the removal or reinstallation of product
3. Service performed by anyone other than Lightning Audio or an Authorized Lightning Audio Service Center
4. Any product which has had the serial number defaced, altered, or removed
5. Subsequent damage to other components
6. Any product purchased outside the U.S.
7. Any product not purchased from an Authorized Lightning Audio Dealer

- **Limit on Implied Warranties**

Any implied warranties including warranties of fitness for use and merchantability are limited in duration to the period of the express warranty set forth above. Some states do not allow limitations on the length of an implied warranty, so this limitation may not apply. No person is authorized to assume for Lightning Audio any other liability in connection with the sale of the product.

- **How to Obtain Service**

Please call 1-888-881-8186 for Lightning Audio Customer Service. You must obtain an RA# (Return Authorization number) to return any product to Lightning Audio. You are responsible for shipment of product to Lightning Audio. Always include Proof of Purchase. Mark RA# on outside of shipping carton.

- **EU Warranty**

This product meets the current EU warranty requirements, see your Authorized dealer for details.

Ship to: **Electronics**  
Lightning Audio  
Warranty Repair Department  
2055 E. 5th Street  
Tempe, AZ 85281  
RA#: \_\_\_\_\_

Ship to: **Speakers**  
Lightning Audio  
Speaker Returns  
3056 Walker Ridge Dr. Suite G.  
Walker, MI 49544  
RA#: \_\_\_\_\_