

## IMAGE DYNAMICS USA LIMITED WARRANTY

IMAGE DYNAMICS USA warrants this product is free from defects in material and workmanship for a period of 1 (one) year from date of original purchase when installed by an authorized retailer or in a retailer approved installation, this must be indicated in writing on the original sales receipt.

Ninety (90) days if not installed by an authorized dealer or in an authorized retailer approved installation.

This warranty is not transferable and applies only to the original retail purchaser of the product from an authorized IMAGE DYNAMICS USA Retailer. Upon inspection by Image Dynamics USA should service be necessary under this warranty for any reason due to manufacturing defects IMAGE DYNAMICS will, at its sole discretion, repair or replace the defective product with new or re-manufactured product at no charge.

This warranty is limited and does not cover claims for damage caused by misuse, abuse, neglect, alteration, or burnt or overheated voice coils, normal wear and tear, and is limited to material failures or defects arising during normal use in a dealer approved installation.

All warranty returns should be sent to IMAGE DYNAMICS USA freight prepaid through an authorized IMAGE DYNAMICS USA retailer and must be accompanied by proof of purchase (a copy of the original sales receipt). Direct returns from consumers or non-authorized retailers will be refused unless specifically authorized by IMAGE DYNAMICS USA customer service with a valid return authorization number. This warranty does not cover the cost of removing or reinstalling the speakers.

**All warranty returns must be packaged in original retail packaging and be accompanied by a copy of the original sales receipt. Products damaged in shipment due to improper packaging will not be covered under this warranty.**

No other warranties are expressed or implied.

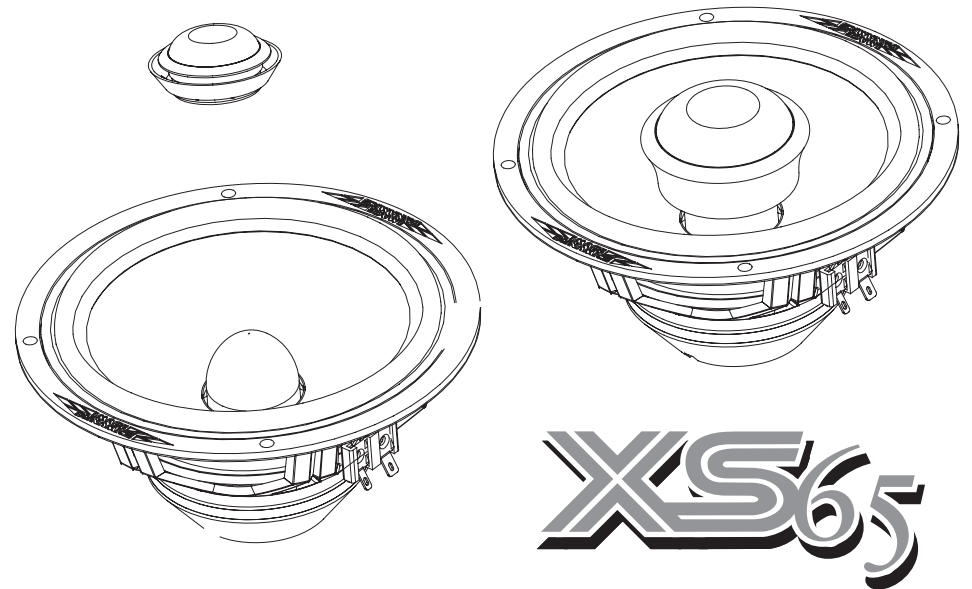
In no event will IMAGE DYNAMICS be liable for incidental, consequential, or other damages resulting from the use of this product, this includes but is not limited to, damage to hearing, property or person, damage based upon inconvenience or on loss of use of the product, and, to the extent permitted by law, damages for personal injury.

This warranty gives you specific legal rights, and you may have other rights, which vary from state to state. This warranty applies to products sold and used in the United States of America. In all other countries, contact your distributor. If you have any questions please contact customer service @951-281-2000.

**CAUTION:  
THESE PRODUCTS ARE CAPABLE OF VERY HIGH SOUND  
PRESSURE LEVELS. PROLONGED EXPOSURE TO SOUND  
PRESSURE LEVELS IN EXCESS OF 100DB CAN CAUSE  
PERMANENT HEARING LOSS. PLEASE LISTEN USING COMMON  
SENSE AND RESTRAINT**

Image Dynamics USA Ph. 951-281-2000 Fax 951-281-2020  
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XS69  
XS65  
XS7  
XS28



**OWNER'S MANUAL**  
Image Dynamics XS Component Speaker System

## GENERAL DESCRIPTION

The XS Interchangeable component speakers are a unique and innovative speaker that allows you to optimize the mounting options to work best with your installation. They offer you the choice of point source separates with the tweeter mounted on the midrange's pole piece or a pair of conventional separates with the tweeter mounted separately. The phase plug is easily removed by un-threading it from the pole piece. The adapter and tweeter are then screwed together and installed in place of the phase plug.

## INSTALLATION AND MOUNTING INSTRUCTIONS

### MOUNTING LOCATION

Choosing the proper mounting location can have a very dramatic effect on the overall sound quality achieved. There are several factors that will affect your decision on where and how to mount the XS separates, such as installation difficulty or cost, cosmetic integration, and/or effect on sound quality. Part of this decision will be whether to mount the drivers separately or as a point source. In most instances the best results will be attained when using the XS separates as a point source driver or with the tweeter mounted within a few inches of the mid-bass driver. In certain instances where the tweeter will be extremely off axis, the sound quality can be improved by mounting the tweeter separately and aiming it towards the listeners. Always mount the tweeter as close to the midrange driver as possible.

**Warning:** Before settling on any given mounting location check for proper rear clearance and that there are no mechanical structures that prevent proper mounting.

### SOUND STAGING

To achieve the best sound staging and imaging it is necessary to keep the path length difference between the left and right speakers as small as possible, this usually means mounting the drivers as far from the listening position in the front of the vehicle as possible. The most logical is the kick panel as this mounting location yields the least amount of path length difference. The only drawback is it requires custom installation which results in a more expensive or time consuming installation. The second most logical location is low and far forward in the door, this can be done behind factory grills or in a custom fabricated speaker pod. The simplest and most cost effective mounting location is to utilize speaker mounting locations provided by the vehicle manufacturer. The factory locations may not provide a proper sound stage, but can yield very satisfying results in tonal quality.

### ENCLOSURE CONSIDERATIONS

The XS mid-bass drivers are high performance drivers that provide dynamic mid-bass output and detailed midrange response. They are designed and engineered to perform excellently when used infinite baffle or free-air in a door or other location.

## INSTALLATION INSTRUCTIONS

If you are not an experienced installer it is advised that you have your authorized Image Dynamics dealer complete the installation for you. Follow these simple guidelines for best results.

Carefully plan out your installation before beginning. Check for proper clearance and depth before cutting or altering your vehicle in any way.

It is recommended to run new wires into the door location rather than using the factory systems wiring.

Mount speakers only to a flat and rigid baffle. A baffle that vibrates or resonates will severely degrade sound quality.

Ensure that the speakers are protected from water damage. Most parts of the XS speakers are water resistant but prolonged exposure to moisture can damage the spider and motor structure.

## POINT SOURCE TWEETER MOUNTING INSTRUCTIONS

**Step 1-** Remove phase plug by twisting ins counter clockwise direction to un-screw it from the pole piece of the speaker.

**Step 2-** Remove tweeter flush mount trim ring and replace with coaxial mounted trim ring.

**Step 3-** Mount tweeter to tweeter stand. Slide tweeter wire through the center hole in the black tweeter adapter stand and screw threads of the adapter into threads on the rear of the tweeter

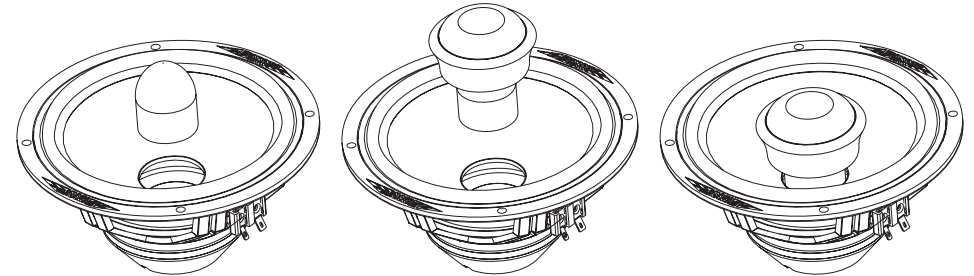
**Step 4-** Remove the rear magnetic label from the mid-bass speaker and save for re-assembly.

**Step 5-** Insert wire through hole in pole piece of the XS mid-bass and screw the tweeter assembly into the threads in the top of the mid-bass driver pole piece. Make sure to tighten snugly to prevent vibrations but do not over tighten.

**Step 6-** Route the tweeter wires in the groove up to the terminal on the side of the basket and connect the copper colored wire to the positive terminal and the silver colored wire to the negative terminal.

**Step -** Replace the rear magnetic label.

**Note:** To remove tweeter from XS mid perform above steps in reverse order.



### CROSSOVER CONNECTIONS AND OPERATION

The connections to the crossover are simple. It is suggested to use a high quality 14 gauge or larger speaker wire for the connection to the amplifier and the mid-bass driver. For the tweeter it is recommended that a high quality 16 gauge or larger speaker wire be used. The actual connections to the crossover can be made two ways, 1- strip the wire back approx .25" and insert into terminal block and tighten, 2- Crimp or solder a terminal to the end of the wire and insert into terminal block and tighten.

### CROSSOVER CONTROLS

The XS crossovers are equipped with multiple adjustments for tailoring the sound output to compensate for different mounting locations and acoustic environments. Adjustments are as follows:

**TWEETER FILTER-** This jumper allows you to adjust the filter slope between second order to first order.

**TWEETER CONTOUR-** These two jumpers allow you to vary the crossover frequency and output level of the tweeter.

**MID-BASS CONTROL-** This jumper allows you to select a low pass filter or to bypass the low pass filter.

### Suggested settings:

Tweeter mounted near or on mid-bass- Tweeter Filter set to 2nd, Tweeter contour set to 6.0uF and +3 dB, Mid-Bass control set to low-pass.

Tweeter mounted up high- Tweeter filter set to 1 st, Tweeter contour set to 4.7 uF and 0 dB, Mid-Bass set to all pass.