



VHD Flyware

Suspension & Rigging

User Guide



- Introduction
- Safety Warning
- Parts & Components
- Weights & Strengths
- Configurations

The Future of Sound. Made Perfectly Clear.

At KV2 Audio our vision is to constantly develop technologies that eliminate distortion and loss of information providing a true dynamic representation of the source.

Our aim is to create audio products that absorb you, place you within the performance and deliver a listening experience beyond expectations.

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Introduction

This manual is presented by KV2 Audio, to enable the clear and precise instructions for the safe practice and execution, suspension and general rigging of the VHD Loudspeaker products, using the **VHD FLYBAR** system.

It is vitally important that operators and users familiarize themselves with all of the components, parts, products and safety instructions, as described and indicated within this document, before attempting any over-head suspension, flying and rigging.

The VHD Loudspeaker enclosures are designed with integral suspension points to facilitate secure flying and rigging, providing that no modifications or external parts are substituted, and that all instructions are adhered to at all times.

KV2 Audio s.r.o operates a continuing process policy of attaining and improving standards.

This means that instructions and methods may be subject to change without notification, and it is the sole responsibility of the operator/user to check for any updated information regarding safe flying procedures whether locally or internationally.

Warning - Safety Rigging

There are accepted '**General Rigging Practices**' appropriate to the entertainment industry and this Document aims to encapsulate them specifically to the safe suspension of the KV2 VHD Loudspeaker systems described here.

It is extremely vital and important that only personnel whom have the qualifications and certificates, prior knowledge and experience of rigging techniques, attempt the execution of any overhead suspension of KV2 products.

All advice and instructions expressed and stated within this document, are based upon the highest engineering data available at the time of publication, from within the Country of manufacture, with regards to materials and general practice techniques.

Specifications are subject to change, due to constant testing, product updates and renements and R&D.

'**General Rigging Practices**' means that Regulations and requirements are possibly subject to alterations in different countries and may be superseded locally.

KV2 Audio, as such is not responsible for the safety of any suspension, flying over-head of all specific KV2 Audio Loudspeaker products, or Rigging configurations as executed in practice by users.

It is expressly the sole responsibility of the user to ensure that at all times any KV2 Audio product or system is suspended and rigged in accordance with current International and local regulations.

All non KV2 Audio products such as hoists, clamps, wires, truss, supports used ,or required to suspend KV2 Audio Loudspeaker systems are the sole responsibility of the user.

Warranty

Your VHD Flyware is covered against defects in material and workmanship.

Refer to your supplier for more details.

Service

In the unlikely event that your VHD Flyware develops a problem, it must be returned to an authorised distributor, service centre or shipped directly to our factory. Because of the complexity of the design and the risk of electrical shock, all repairs must be attempted only by qualified technical personnel.

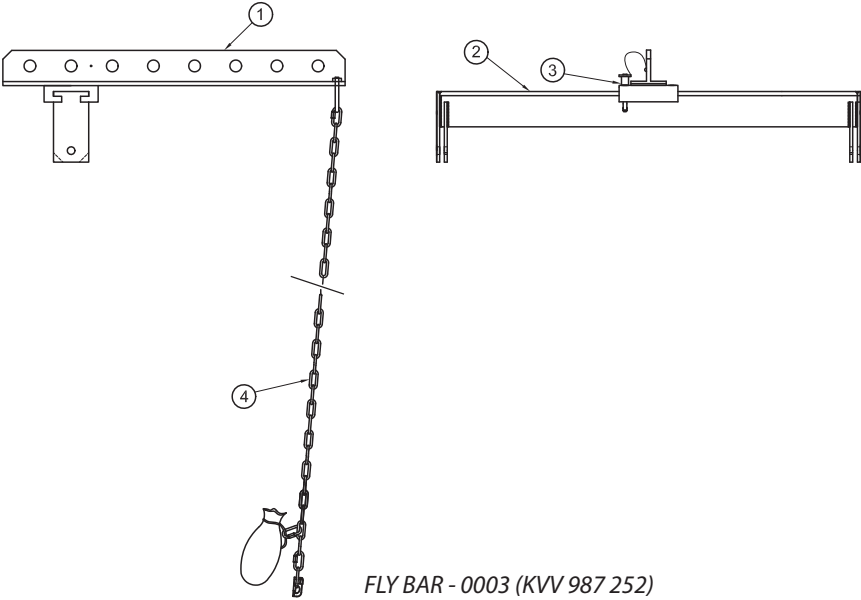
If the unit needs to be shipped back to the factory, it must be sent in its original carton. If improperly packed, the unit may be damaged.

To obtain service, contact your nearest KV2 Audio Service Centre, Distributor or Dealer.

Parts & Components

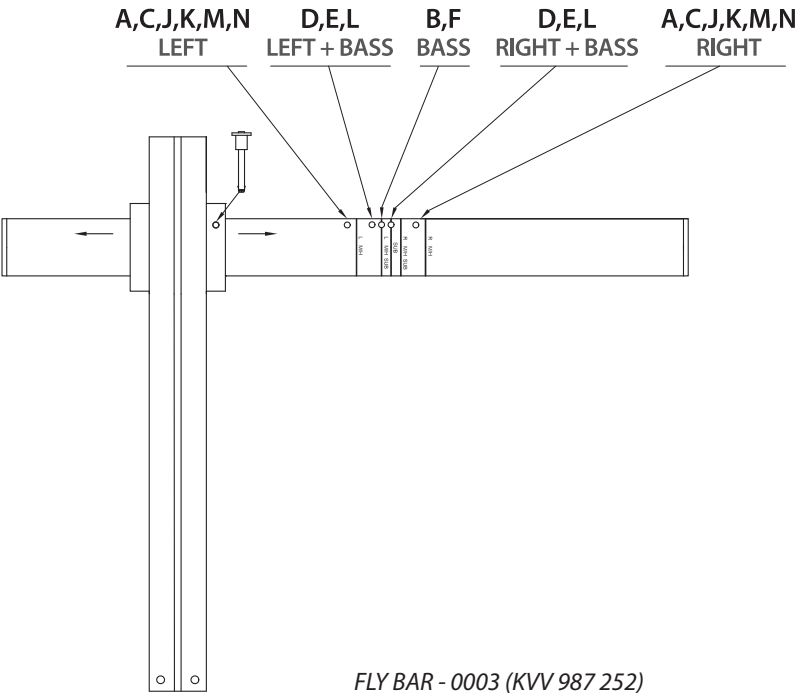
The **VHD FLYBAR** is a complete system to allow the safe suspension of single, double and multiple components of the VHD series.

The system consists of individual parts that form the basis of attaching loudspeaker modules to the **FLYBAR**, these are identifiable and described below as:



FLY BAR - 0003 (KVV 987 252)

Item	QTY	Description
1	1	PICKPOINT Hanging Arm
2	1	CROSS MEMBER Hanging Bracket
3	1	D6 QUICK RELEASE PIN
4	1	STEEL PULL-BACK ARRESTOR



FLY BAR - 0003 (KVV 987 252)

VHD Flyware · Description

Description

FLY BAR - 0003 (KVV 987 252):

The **CROSSMEMBER** hanging bracket is a flat and folded steel bar with returned 90 degree ends.

This bracket attaches to the **PICKPOINT ARM** by simply sliding into two preset grooves, from left to right and secures smoothly and tightly, thus creating a **T- Bar effect**.

Once both bars are attached and joined, it is a simple case of locking and securing the correct position and location, according to which conguration of VHD enclosures are being suspended, either in aLeft/Right unit, by inserting a single D6 QUICK RELEASE PIN, which is attached via a small shrouded steel tie at the return edge of the PICKPOINT ARM. (See diagram).

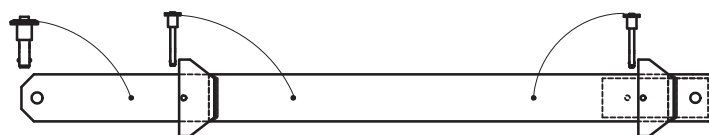
VHD2.0 TOP ARM (KVV 987 309):

The VHD2.0 TOP ARM is a flat steel bar with straight ends, a double groove joint at the lower end and prefixed apertures to accept both **D6** and **D12.6 QUICK RELEASE PINS**.

A single bar is used on each side of an enclosure.

The bar employs a total of two angular wedges that are used to 'lock into' the handles on each side of the VHD2.0 enclosure and are then secured by the insertion of a single **D6 QUICK RELEASE PIN**, (Which are attached to the bars via small shrouded steel ties) into each handle.

Once the **VHD2.0 TOP ARMS** are attached to the VHD2.0, they are then simply attached to the **CROSS MEMBER** hanging bracket by inserting a single D12.6 QUICK RELEASE PIN through the top aperture of both of the **VHD2.0 TOP ARMS** and **CROSSMEMBER** hanging bracket.



VHD2.0 TOP ARM (KVV 987 309)

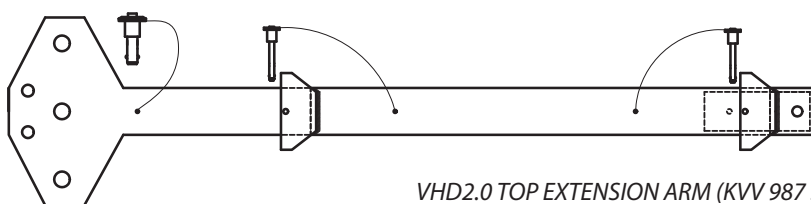
VHD2.0 TOP EXTENSION ARM (KVV 987 306):

The VHD2.0 EXTENSION ARM is of the same design and presentation as the **VHD2.0 TOP ARM**, except it is differentiated by being physically longer and employs a total of two angular wedges to allow locking into an attached secondary VHD2.0 and its enclosure handles.

The same method of inserting a single **D6 QUICK RELEASE PIN** into each handle is employed.

The arm has a poly-hex head at the top end of the bar, with prefixed apertures for the insertion of the **D12.6 QUICK RELEASE PINS**, to allow desired splay angles of the secondary VHD2.0 and is attached by the insertion of a single **D12.6 QUICK RELEASE PIN**.

To add extra enclosures to the hang, this method of attachment is repeated.



VHD2.0 TOP EXTENSION ARM (KVV 987 306)

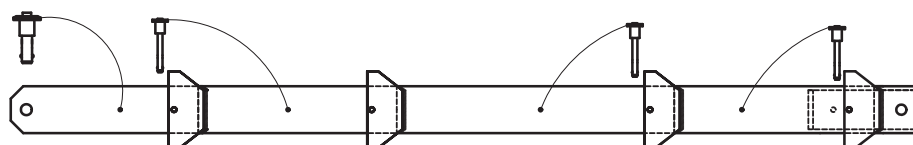
Description

VHD BASS ARM (KVV 987 307):

The **VHD BASS ARM** is a steel bar with straight ends, a double groove joint at the lower end and prefixed apertures to accept both **D6** & **D12.6 QUICK RELEASE PINS**.

This bar is used exclusively to suspend a complement of two VHD Subwoofers and a single bar is used on each side of the two enclosures.

The bar employs a total of four angular wedges that are used to 'lock into' the handles on each side of the VHD Subwoofer enclosure and are secured by the insertion of a single **D6 QUICK RELEASE PIN**, (Which are attached to the bar via small shrouded steel ties) into each handle.



VHD BASS ARM (KVV 987 307)

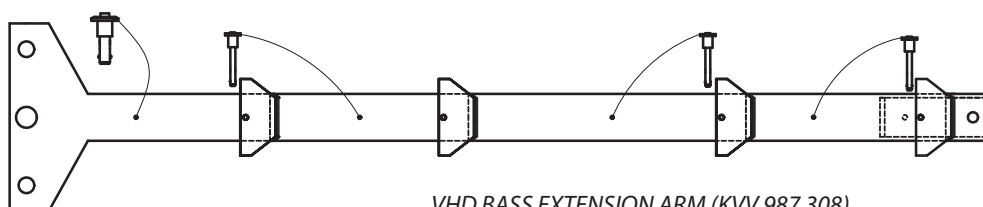
VHD BASS EXTENSION ARM (KVV 987 308):

The **VHD SUBWOOFER EXTENSION ARM** is of the same design and presentation as the **VHD SUBWOOFER ARM**, except it is differentiated by being physically longer and employs a total of four angular wedges to allow locking into an attached-secondary double hang of VHD Subwoofers and its enclosure handles.

The same method of inserting a single **D6 QUICK RELEASE PIN** into each handle is employed.

The arm has a poly-hex shape head at the top of the bar, with pre-fixed apertures for the insertion of the **D12.6 QUICK RELEASE PINS**, and is attached to the lower end of the VHD SUBWOOFER ARM by sliding into the groove and then being secured by the insertion of a single **D12.6 QUICK RELEASE PIN**.

To add extra enclosures to the hang, this method of attachment is repeated.



VHD BASS EXTENSION ARM (KVV 987 308)

STEEL PULL-BACK ARRESTOR:

A steel chain is used as a pull-back to assist with obtaining desired angles of hang.

Using the pre-set identification coloured links in conjunction with the example diagrams allows quick and easy set-ups.

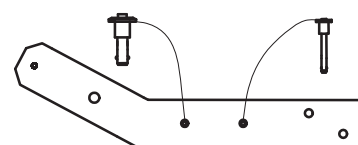
A small overhang chain collector bag is provided to protect and store the chain.

VHD 1.0 DOWNFILL ARM (KVV 987 310):

The **VHD1.0 DOWNFILL ARM** is a short, at pre-angled steel bar that has two pre-fixed apertures at the lower end of the bar to allow different angles of suspension from the enclosure above.

The arm is attached to the VHD1.0 down-fill enclosure by means of two apertures that receive the insertion of two **D6 QUICK RELEASE PINS**.

The top of the bar is attached to the bottom of either the **VHD2.0 TOP ARM** or **BASS/VHD2.0 ARM** by sliding into the groove and inserting a single **D12.6 QUICK RELEASE PIN**.



VHD1.0 DOWNFILL ARM (KVV 987 310)

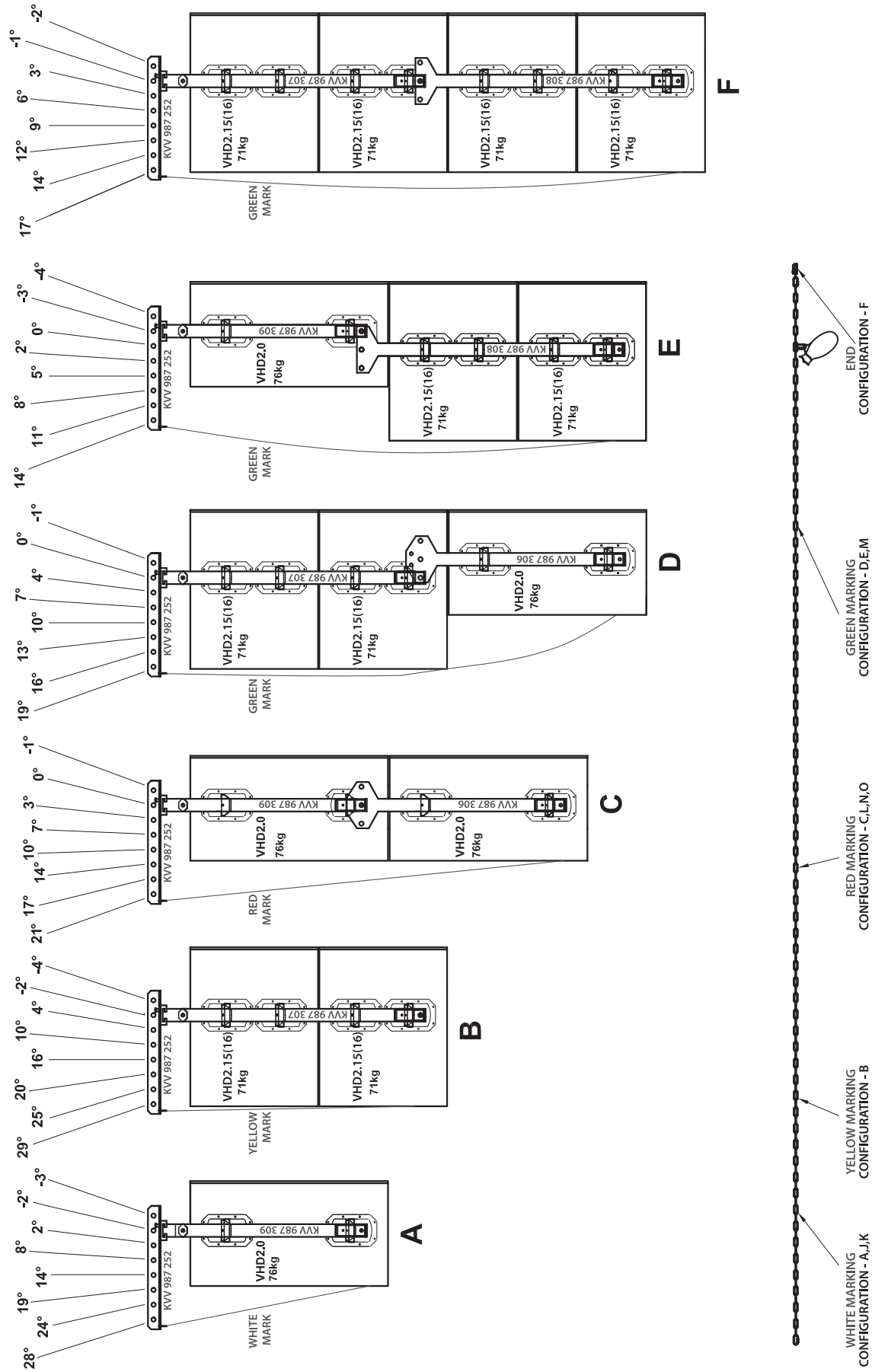
Weights & Stregths

The ES Flybar System presents several configurations of system design product combinations for suspension and rigging. Each component has to be factored into the total weight being suspended.

Part	Weight per unit
CROSSMEMBER - Hanging Bracket (part of KVV 987 309)	5,5 kg (12.13lbs)
PICKPOINT - Hanging Arm with Fixation Chain	6 kg (13.23lbs)
VHD2.0 TOP ARM (pair), (KVV 987 309)	6,5 kg (14.33lbs)
VHD2.0 TOP EXTENSION ARM (pair), (KVV 987 306)	7,5 kg (16.53lbs)
VHD BASS ARM (pair), (KVV 987 307)	8,5 kg (18.74lbs)
VHD BASS EXTENSION ARM (pair), (KVV 987 308)	9,5 kg (20.95lbs)
VHD1.0 DOWNFILL ARM (pair), (KVV 987 310)	3 kg (6.62lbs)
TOTAL WEIGHT OF ONE COMPLETE SYSTEM WITH TWO TOP ARMS	18 kg (39.69lbs)
TOTAL WEIGHT OF ONE COMPLETE SYSTEM WITH FOUR TOP ARMS	25,5 kg (56.22lbs)
TOTAL WEIGHT OF ONE COMPLETE SYSTEM WITH TWO TOP ARMS AND TWO SUBWOOFER ARMS	27,5 kg (60.63lbs)
MAXIMUM SWL OF ONE COMPLETE SYSTEM	400 kg (881.84lbs)

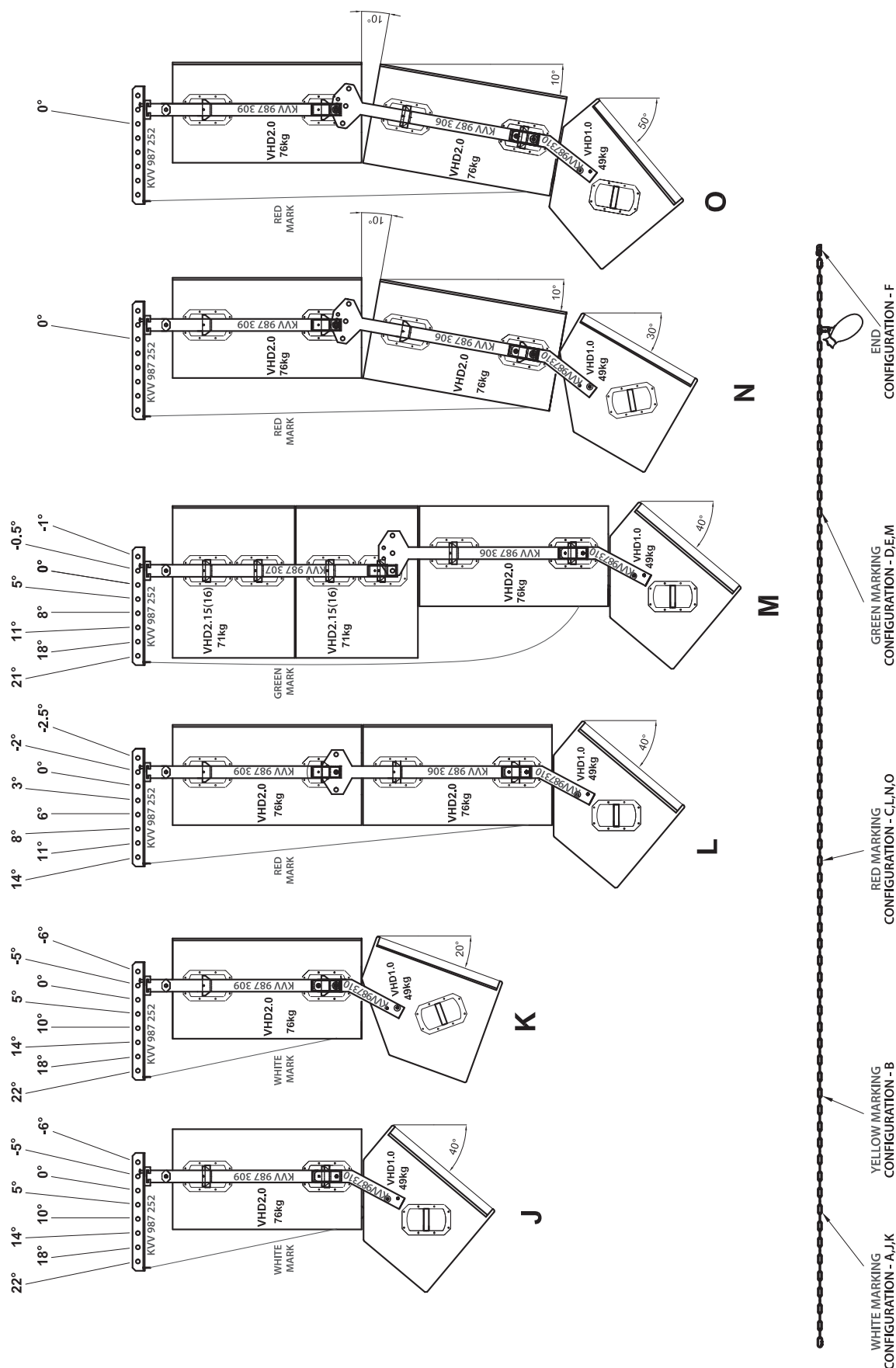
FOR CERTIFICATION OF FLYBAR COMPONENTS AND PINS PLEASE VISIT · www.kv2audio.com

Configurations



VHD Flyware · Configurations with Down Fill

Configurations





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