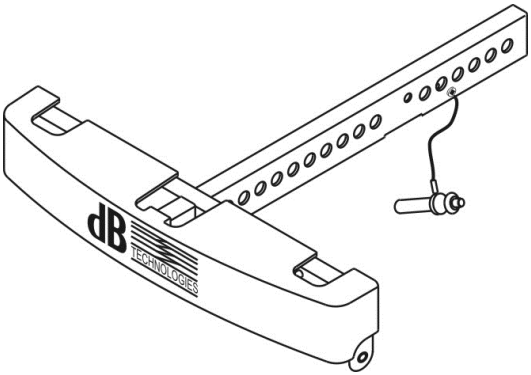
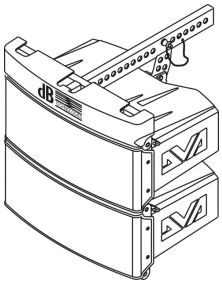
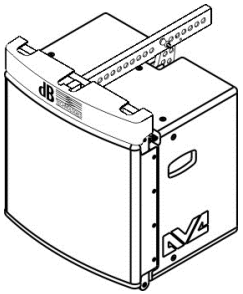
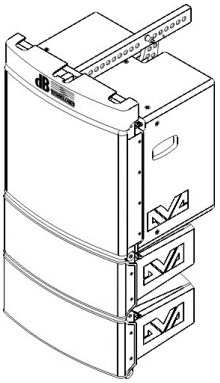
Digital Vertical Array



DRK-M5







MANUALE D'USO
USER MANUAL
BEDIENUNGSANLEITUNG
CARACTERISTIQUES TECHNIQUES

CE

dB TECHNOLOGIES

ISTRUZIONI DI SICUREZZA PER ACCESSORI

SAFETY INSTRUCTIONS FOR ACCESSORIES

ZUBEHÖR SICHERHEITSHINWEISE

INSTRUCTIONS DE SÉCURITÉ POUR LES ACCESSOIRES

Per un corretto utilizzo in sicurezza del sistema DVA MINI e al fine di evitare pericoli di ribaltamento e danni a persone, animali e cose, prima di procedere all'installazione del sistema, verificare sul sito dBTechnologies le configurazioni ammissibili e seguire le indicazioni previste e le relative prescrizioni di sicurezza contenute nel presente manuale. Utilizzare esclusivamente accessori realizzati da dBTechnologies.
Si declina ogni responsabilità da un utilizzo inappropriato degli accessori o di dispositivi aggiuntivi non idonei allo scopo.
Conservare ed archiviare tutti i documenti del sistema DVA MINI in un posto sicuro per successive consultazioni.
Installare il diffusore in modo stabile e sicuro, così da evitare qualsiasi condizione di pericolo per l'incolumità di persone e strutture.

For proper and safe use of the system DVA MINI and in order to avoid any risk of overturning and injuries to persons, animals and property, before to proceed to the system installation, check the dBTechnologies allowable configurations and follow the instructions provided and the safety requirements contained in this manual.
Use only dB Technologies original parts.
dB Technologies will not accept any responsibility when inappropriate accessories or not suitable additional devices are used.
Compile and store all DVA MINI system documents in a safe place for future reference.
Make sure that the loudspeaker is securely installed in a stable position to avoid any injuries or damages to persons or property.

Für die ordnungsgemäße und sichere Nutzung des Systems DVA MINI und um jegliche Kippgefahr und Verletzungen von Personen, Tieren und Sachen, zu vermeiden, bevor auf das System mit der Installation fortfahren, überprüfen der dBTechnologies zulässigen Konfigurationen, folgen Sie den Anweisungen und die in diesem Handbuch enthaltenen Sicherheitsanforderungen.
Nur Original-Teile von dBTechnologies verwenden.
Falls unpassendes Zubehör verwendet wird, wird jegliche Haftung ausgeschlossen.
Alle Unterlagen des Systems DVA MINI müssen an einem sicheren Ort aufbewahrt waschen für die Zukunft.
Den Lautsprecher auf eine stabile und sichere Art und Weise installieren, um jede Gefahr für Personen oder Sachschäden zu vermeiden.

Pour une utilisation correcte et sûre du système DVA MINI et afin d'éviter tout risque de renversement et les blessures aux personnes, aux animaux et des biens, avant de procéder à l'installation du système, vérifiez les dBTechnologies configurations admissibles, suivez les instructions fournies et les exigences de sécurité contenues dans ce manuel.
N'utiliser que les pièces originales fournies par dBTechnologies.
N'accepterons pas toutes les responsabilités lorsque des accessoires inappropriés ou ne conviennentpas à des dispositifs supplémentaires sont utilisés.
Conserver et mettre aux archives en un lieu sûr tous les documents du système DVA MINI pour référence future!

AVVERTENZA – WARNING – ACHTUNG - ATTENTION

Prima si sospendere il diffusore controllare tutti i componenti da utilizzare (non devono presentare danni, deformazioni, parti mancanti o danneggiate che possono ridurre la sicurezza dell'installazione).

Before hanging the loudspeaker check all the components for damages, deformations, missing or damaged parts that may compromise safety during installation.

Bevor man den Lautsprecher aufhängt, alle Teile kontrollieren, sie sollen keine Schäden oder Verformungen, keine fehlenden oder beschädigten Teile haben, die eine sichere Installation beeinträchtigen könnten.

Avant de suspendre le diffuseur, contrôler tous les composants à utiliser, qui ne doivent présenter aucun dommage, aucune déformation ou partie manquante ou abimée qui seraient susceptibles de réduire la sécurité de l'installation.

AVVERTENZA – WARNING – ACHTUNG - ATTENTION

Tutte le indicazioni fornite e contenute nel presente manuale devono essere seguite al fine del corretto e sicuro utilizzo del sistema DVA MINI.

All information contained in this manual have to be followed in order for correct and safe use of the DVA MINI system.

Alle Informationen in diesem Handbuch enthalten sind, und es müssen, um für die korrekte und sichere Verwendung des DVA MINI System verfolgt werden.

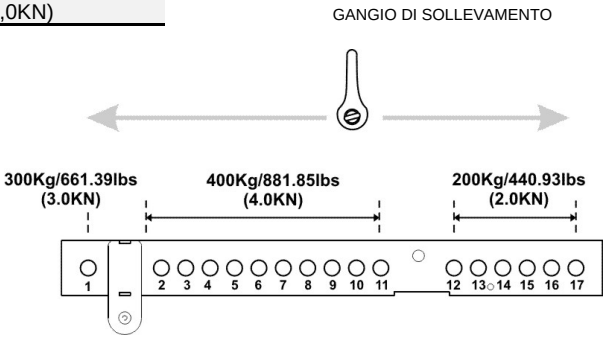
Toutes les informations contenues dans ce manuel est-il doit être suivi dans l'ordre pour une utilisation correcte et sûre du système DVA MINI.

Il dispositivo flybar DRK-M5 e i relativi sistemi di appendibilità previsti per i diffusori DVA M2M, DVA M2S e DVA MS12 sono stati progettati e verificati mediante prove tecniche di rottura in accordo ai documenti, Decreto Ministeriale Italiano D.M. del 14.01.2008 “Nuove norme tecniche per le costruzioni” ed “Eurocodice 1” e Eurocodice 3” per quanto concerne le strutture in acciaio.
Il sistema è stato verificato tecnicamente e attestato conforme ai valori di massima portata dichiarati mediante Attestato di Conformità emesso da **CERMET**.

PERICOLO! Rispettare attentamente il carico ammesso il funzione del punto di fissaggio del gancio di sollevamento. Il non rispetto di tutte le avvertenze può provocare pericolo di caduta della struttura e del suo contenuto con potenziali danni a persone, animali e cose.

I calcoli strutturali attestano che il peso massimo applicabile al flybar DRK-M5 è in funzione del punto di attacco del gancio di sollevamento.

Posizione gancio di sollevamento	Carico massimo appendibile
1	300Kg/661.39lbs (3,0KN)
2 – 11	400Kg /881.85lbs (4,0KN)
12 – 17	200Kg/440,93lbs (2,0KN)



Configurazione
La modularità del sistema DVA MINI permette configurazioni sospese miste tra diffusori DVA M2M/DVA M2S e DVA MS12. Per questo motivo è necessario calcolare il carico totale.
Esempio:

	Quantità	Peso per qtà	Peso configurazione
DVA M2M/DVA M2S	2 + 2	(7,1x2)+(7,7x2)=29,6Kg	**29,6Kg/65.26lbs** [0,29KN]

	Quantità	Peso per qtà	Peso configurazione
DVA M2M/DVA M2S	4 + 4	(7,1x4)+(7,7x4)=59,2Kg	**164,4Kg/362.44lbs** [1,61KN]

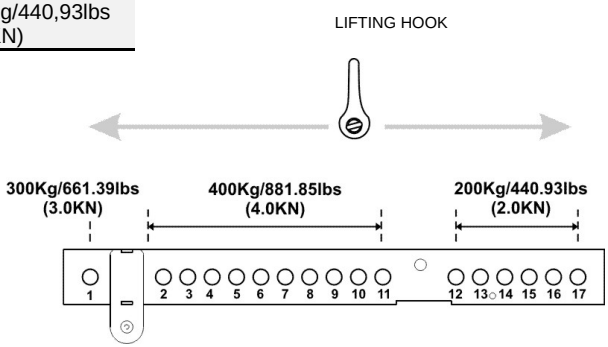
	Quantità	Peso per qtà	Peso configurazione
DVA M2M/DVA M2S	2 + 2	(7,1x2)+(7,7x2)=29,6Kg	**82Kg/180.78lbs** [0,80KN]
DVA MS12	2	(26,2x2)=52,4Kg	

The flybar device DRK-M5 and the related hanging systems provided for the speakers DVA M2M, DVA M2S and DVA MS12 have been designed and verified by technical load tests according to the documents: Italian Ministerial Decree of 14 January 2008 "New technical standards for construction" and "Eurocode 1" and Eurocode 3" as regards the steel structures.
The system underwent technical tests and has been certificated in accordance with the values of maximum load capacity declared by the Certificate of Conformity issued by **CERMET**.

DANGER! Carefully observe the allowable load according to the point of attachment of the lifting hook. The non-respect of all the warnings may cause danger of falling of the structure and its contents with potential damage to people, animals and property.

Structural calculations show that the maximum weight which can be applied to the flybar DRK-M5 depends on the point of attachment of the lifting hook.

Lifting hook position	Maximun load
1	300Kg/661.39lbs (3,0KN)
2 – 11	400Kg /881.85lbs (4,0KN)
12 – 17	200Kg/440,93lbs (2,0KN)



Configuration
The modularity of the system DVA MINI allows mixed suspended configurations between speakers DVA M2M/DVA M2S and DVA MS12. For this reason, it is necessary to calculate the total load.
Example:

	Quantity	Weight x qty	Configuration weight
DVA M2M/DVA M2S	2 + 2	(7,1x2)+(7,7x2)=29,6Kg	**29,6Kg/65.26lbs** [0,29KN]

	Quantity	Weight x qty	Configuration weight
DVA M2M/DVA M2S	4 + 4	(7,1x4)+(7,7x4)=59,2Kg	**164,4Kg/362.44lbs** [1,61KN]

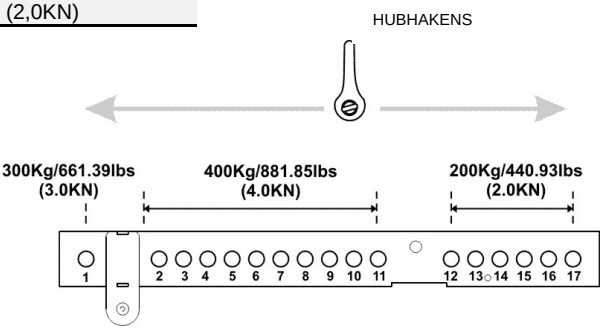
	Quantity	Weight x qty	Configuration weight
DVA M2M/DVA M2S	2 + 2	(7,1x2)+(7,7x2)=29,6Kg	**82Kg/180.78lbs** [0,80KN]
DVA MS12	2	(26,2x2)=52,4Kg	

Die Vorrichtung flybar DRK-M5 und die entsprechenden Flugrahmensysteme für die Lautsprecher DVA M2M, DVA M2S und DVA MS12, wurden entwickelt und mit technischen Bruchtests geprüft, entsprechend der Vorgaben des Italienischen Ministerialdekrets D.M. vom 14.01.2008 “Neue technische Richtlinien für den Bau” und, in Bezug auf die Stahlstrukturen, entsprechend “Eurocode 1” und "Eurocode 3”.
Das System wurde technisch geprüft und entsprechend der Werte der maximalen Tragkraft, die in der Konformitätserklärung, die von **CERMET** ausgestellt wurde.

GEFAHR! Die zulässige Last in Bezug auf den Anschlusspunkt des Hubhakens muss genau beachtet werden. Werden diese Warnhinweise nicht beachtet, kann die Struktur und ihr Inhalt herunterfallen, was Schäden an Personen, Tieren und Gegenständen verursachen kann.

Die strukturellen Berechnungen bescheinigen, dass das maximal anwendbare Gewicht am flybar DRK-M5 vom Anschlusspunkt des Hubhakens abhängt.

Position des Anschlusspunktes des Hubhakens	**Zulässigeload Tragkraft**
1	300Kg/661.39lbs (3,0KN)
2 – 11	400Kg /881.85lbs (4,0KN)
12 – 17	200Kg/440,93lbs (2,0KN)



Konfiguration
Die Modularität des Systems DVA MINI erlaubt gemischte Hänge-Konfigurationen zwischen DVA M2M/DVA M2S und DVA MS12. Daher muss immer die Gesamtlast berechnet werden.
Beispiel:

	Anzahl	**Gewicht x Anzahl**	**Konfigurationen Gewicht**
DVA M2M/DVA M2S	2 + 2	(7,1x2)+(7,7x2)=29,6Kg	**29,6Kg/65.26lbs** [0,29KN]

	Anzahl	**Gewicht x Anzahl**	**Konfigurationen Gewicht**
DVA M2M/DVA M2S	4 + 4	(7,1x4)+(7,7x4)=59,2Kg	**164,4Kg/362.44lbs** [1,61KN]

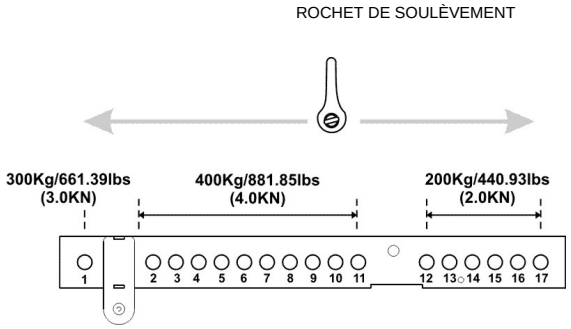
	Anzahl	**Gewicht x Anzahl**	**Konfigurationen Gewicht**
DVA M2M/DVA M2S	2 + 2	(7,1x2)+(7,7x2)=29,6Kg	**82Kg/180.78lbs** [0,80KN]
DVA MS12	2	(26,2x2)=52,4Kg	

Le dispositif flybar DRK-M5 et les systèmes de suspension correspondants pour les haut-parleurs DVA M2M, DVA M2S et DVA MS12 ont été conçus et vérifiés par le biais d'essais techniques de rupture, conformément aux documents : Décret Ministériel Italien D.M du 14.01.2008 “Nouvelles normes techniques pour les constructions” et “Eurocode 1” et “Eurocode 3” en ce qui concerne les structures en acier.
Le système a été techniquement vérifié et certifié comme étant conforme aux valeurs de portée maximum déclarées par le biais de l'Attestation de Conformité émise par **CERMET**.

DANGER ! Respecter scrupuleusement la charge admise en fonction du point de fixation du crochet de soulèvement. L'absence de respect de toutes les instructions peut provoquer un danger de chute de la structure et de son contenu, ce qui pourrait occasionner des dommages à des personnes, des animaux et des choses.

Les calculs structuraux montrent que le poids maximum applicable au flybar DRK-M5 est fonction du point de fixation du crochet de soulèvement.

Point de fixation du crochet de soulèvement	Capacité de charge admise
1	300Kg/661.39lbs (3,0KN)
2 – 11	400Kg /881.85lbs (4,0KN)
12 – 17	200Kg/440,93lbs (2,0KN)



Configuration
La modularité du système DVA MINI permet des configurations suspendues mixtes entre diffuseurs DVA M2M/DVA M2S e DVA MS12. C'est pourquoi il faut calculer la charge totale.
Exemple:

	Quantité	Poids par quantité	Poids configuration
DVA M2M/DVA M2S	2 + 2	(7,1x2)+(7,7x2)=29,6Kg	**29,6Kg/65.26lbs** [0,29KN]

	Quantité	Poids par quantité	Poids configuration
DVA M2M/DVA M2S	4 + 4	(7,1x4)+(7,7x4)=59,2Kg	**164,4Kg/362.44lbs** [1,61KN]

	Quantité	Poids par quantité	Poids configuration
DVA M2M/DVA M2S	2 + 2	(7,1x2)+(7,7x2)=29,6Kg	**82Kg/180.78lbs** [0,80KN]
DVA MS12	2	(26,2x2)=52,4Kg	

DVA Composer - Simulazione acustica di sistemi serie DVA
DVA Composer è un software di puntamento e simulazione acustica per tutti i modelli Line Array della serie DVA e relativi Subwoofers.
Tale software permette di gestire un sistema stereo composto da line array e subwoofer, simulandone separatamente la risposta acustica di entrambi
Vengono inoltre fornite all'utente una serie di informazioni quali: allineamento in fase tra i sistemi sospesi e i relativi subwoofer a terra; vengono suggeriti gli angoli ottimali tra i moduli che compongono i line array e i relativi preset di equalizzazione da assegnare, al fine di consentire anche ad utenti non esperti di ottimizzare le performance del sistema.



Si raccomanda di scaricare gratuitamente il software DVA_Composer direttamente dal sito dB Technologies (www.dbtechnologies.com) nella sezione dedicata «Software & Controller»

DVA Composer Acoustical Simulation and aiming for DVA Systems
DVA Composer is a software for aiming and simulating acoustical response of all line arrays and Subwoofers from DVA Series.
The software allows you to set up a stereo system composed by tops and subs, and simulates separately the acoustical response of both
DVA Composer also gives to the user all the information about phase alignment between flown systems and ground stacked subwoofers, as well as it suggests an optimized aiming of the line arrays modules and their suggested EQ presets, in order to guarantee maximum performances even for non-expert customers.



It is recommended to download DVA_Composer free software directly from dB Technologies (www.dbtechnologies.com) in the special section «Software & Controller»

DVA Composer Simulation acoustique de systèmes de séries DVA
DVA Composer est un logiciel de direction et simulation acoustique pour tous les modèles de lignes de source de la série DVA et les caissons de basse relatifs.
Ce logiciel permet de gérer un système stéréo composé de ligne source et de caissons de basse, simulant séparément la réponse acoustique de chacun des deux
De plus, de nombreuses informations sont fournies à l'utilisateur, comme l'alignement en phase entre les systèmes suspendus et les relatifs caissons de basse à terre, ou la syggestion d'angles optimisés entre les modules de ligne de source et les préréglages d'égaliseur relatifs. Cela permet d'optimiser les performances du système, même pour des utilisateurs non experts.



On conseille de télécharger gratuitement le logiciel DVA_Composer directement à partir du site dB Technologies (www.dbtechnologies.com) dans la section dédiée « Software & Controller »

DVA Composer Akustiksimulation für Systeme der Serie DVA
DVA Composer ist eine Software zur Beschallungsplanung und simulation für alle Line Array-Modelle der Serie DVA und den zugehörigen Subwoofern.
Sie ermöglicht die Verwaltung eines Stereosystems, das aus Line Arrays und Subwoofern besteht, wobei das akustische Ansprechprofil jeweils separat simuliert wird.
Dem Nutzer werden eine Reihe von Daten geliefert, z.B. die Phasenanpassung zwischen den Hängesystemen und den entsprechenden Subwoofern am Boden. Außerdem werden die optimalen Winkel zwischen den Line Array-Modulen und den entsprechenden Equalizer-Presets angegeben, so dass auch weniger erfahrene Benutzer die Leistungen des Systems optimieren können.

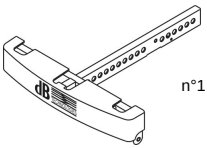


Wir empfehlen, die Software DVA_Composer direkt von der Webseite dB Technologies (www.dbtechnologies.com) im Abschnitt «software & Controller» herunterzuladen

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Kit completo
Complete kit

a



n°1 Telaio flybar
Flybar frame

b



n°2 Grillo con perno a vite
Screw pin anchor

c



n°1 Pin di bloccaggio
Fixing pin

d



n°1 Vite M5x30mm
Screw M5x30mm

e

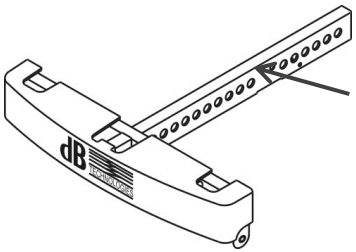


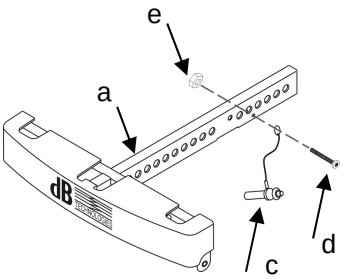
n°1 Dado flangiato M5
Flange nut M5

Fissaggio pin di bloccaggio al flybar
Fixing pin blocks to flybar

1

Identificare il foro di D5,5mm sulla staffa
Identify D5,5mm hole on the stirrup



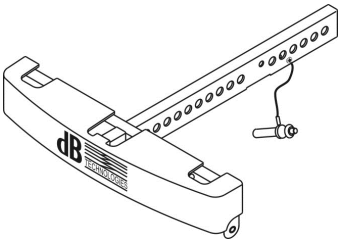


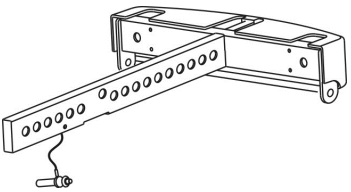
2

Posizionare l'occhiello, posto alla fine del laccetto del pin di bloccaggio, in corrispondenza del foro dedicato.
Fissare alla staffa l'occhiello tramite la vite M5x30mm e il dado in dotazione.
Place the eyelet at the end of the fixing pin to dedicate hole.
Fix to stirrup the pin with M5x30mm and nut supplied.

3

Montaggio completato
Complete assembly



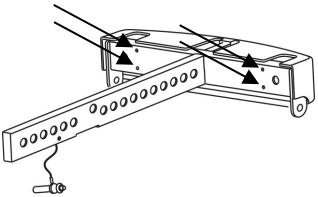


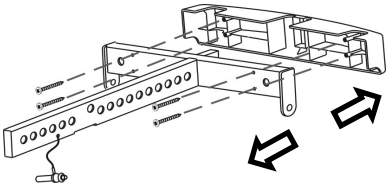
INSTALLAZIONE CON ANGOLO DI COPERTURA POSITIVO
INSTALLATION WITH POSITIVE COVER ANGLE

Se si desidera ottenere un angolo di copertura positivo per particolari installazione, è necessario utilizzate il foro di ancoraggio presente sulla parte anteriore della barra, in corrispondenza della protezione in plastica frontale
A tale scopo è necessario rimuovere momentaneamente la protezione in plastica per il corretto fissaggio dell'ancoraggio. A seguito sono riportate le istruzioni nel dettaglio.
If you would like to get a positive cover angle for particular installations, you have to use the anchor hole on front part of the bar, near to frontal plastic protection
For this purpose, it is necessary to temporarily remove the plastic protection for the correct fitting of the pin anchor. You can find some instructions in detail on follow.

1a

Svitare le 4 viti di fissaggio posteriori
Unscrew the 4 screws on the rear part



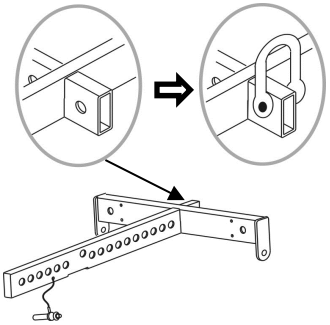


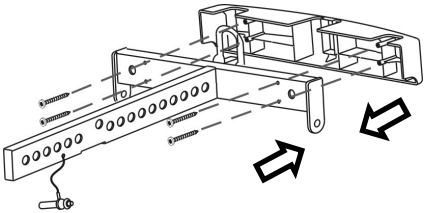
2a

Togliere le viti e sfilare il frontale in plastica
Remove the screw and unstring the plastic frontal

3a

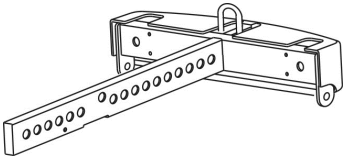
Inserire e fissare il grillo con il perno a vite nel foro sulla parte frontale
Insert and fixing the screw pin anchor on the hole on the frontal part





4a

Riposizionare il frontale in plastica sul frontale del telaio e avvitare le viti precedentemente tolte.
Replace the front plastic on the front of the chassis and tighten the screws previously removed.



5a

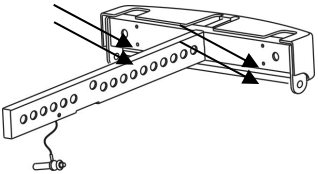
Montaggio completato
Complete assembly

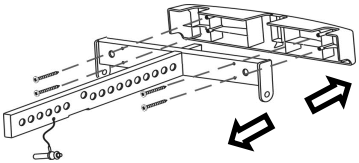
INSTALLAZIONE CON TRE PUNTI DI ANCORAGGIO
INSTALLATION WITH THREE FIXING POINTS

Se si desidera appendere il sistema con tre punti, è necessario utilizzate i fori di ancoraggio presenti sulla parte anteriore della barra, in corrispondenza della protezione in plastica frontale
A tale scopo è necessario rimuovere momentaneamente la protezione in plastica per il corretto fissaggio dell'ancoraggio.
If you would like to fix the system on three points, you have to use the anchor holes on front part of the bar, near to frontal plastic protection. For this purpose, it is necessary to temporarily remove the plastic protection for the correct fitting of the pins anchor.

1a

Svitare le 4 viti di fissaggio posteriori
Unscrew the 4 screws on the rear part



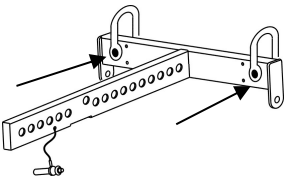


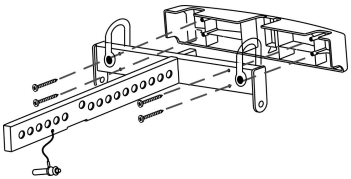
2a

Togliere le viti e sfilare il frontale in plastica
Remove the screw and unstring the plastic frontal

3a

Inserire e fissare il grillo con il perno a vite nel foro sulla parte frontale
Insert and fixing the screw pin anchor on the hole on the frontal part



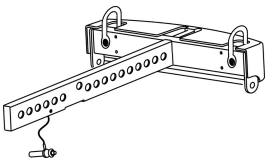


4a

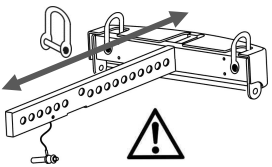
Riposizionare il frontale in plastica sul frontale del telaio e avvitare le viti precedentemente tolte.
Replace the front plastic on the front of the chassis and tighten the screws previously removed.

5a

Montaggio completato
Complete assembly

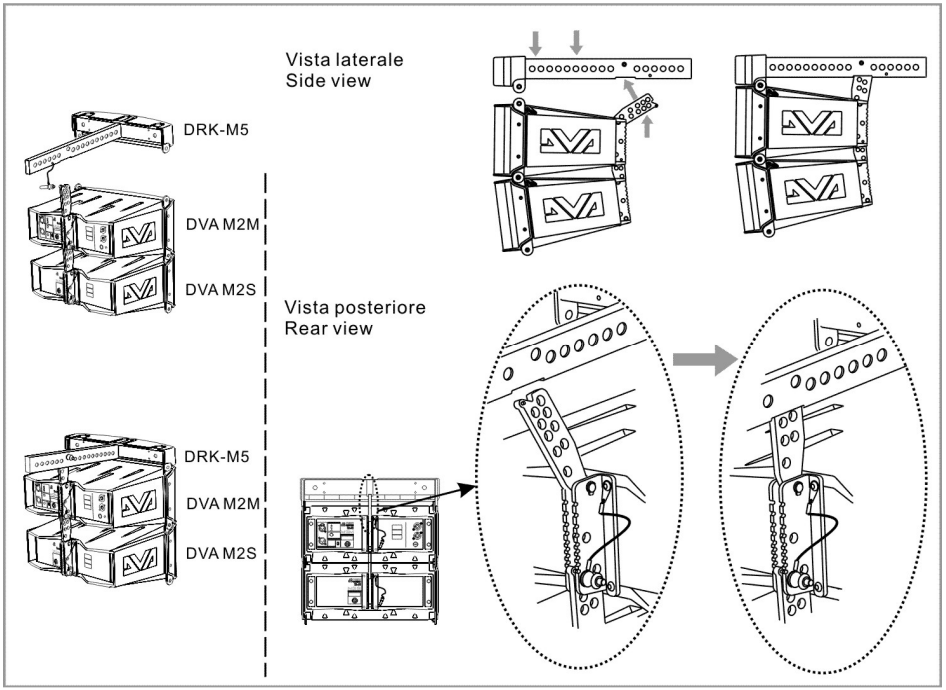


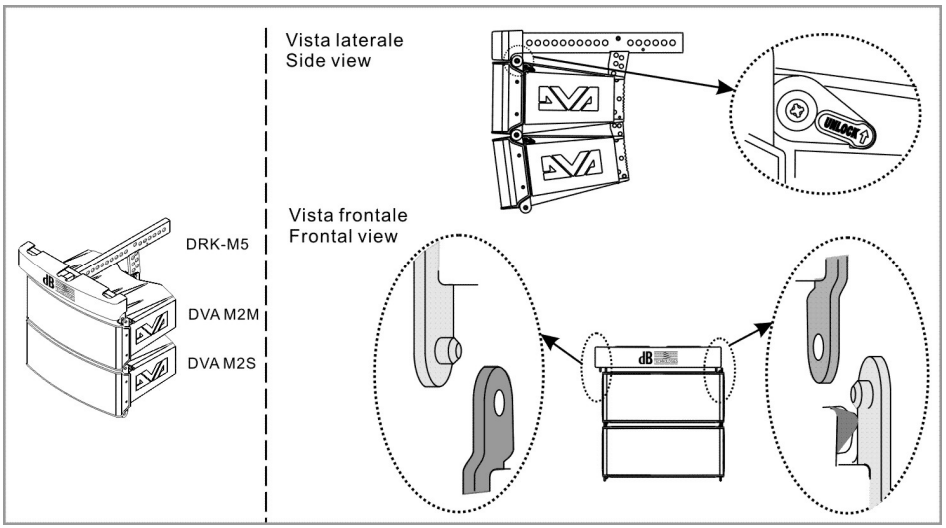
Appendere SEMPRE il flybar utilizzando il perno con grillo a vite in dotazione tramite i fori dedicati lungo la barra.
Hanging ALWAYS the flybar with screw pin anchor enclosed through the dedicate holes on the bar.

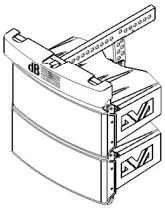


INSTALLAZIONE - INSTALLATION
INSTALLATIONEN - INSTALLATIONS

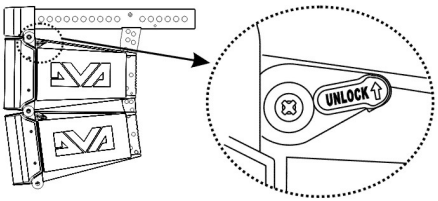
DRK M5 + DVA M2M/DVA M2S



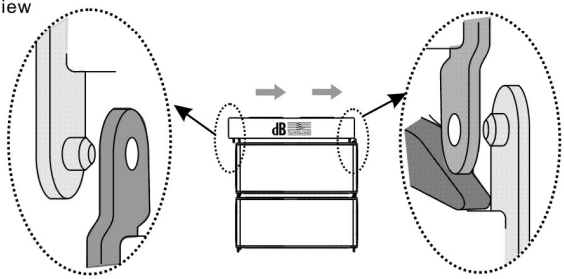




Vista laterale
Side view



Vista frontale
Frontal view

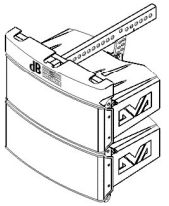


La leva Rossa deve essere posizionata come indicato in figura per garantire il bloccaggio dei diffusori

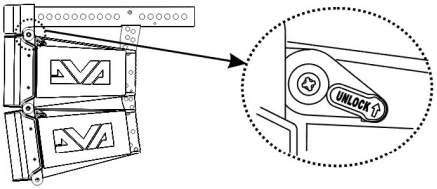
The Red lever must be positioned as shown in the figure to ensure the locking of the speakers

Der rote Hebel muss wie in Abbildung positioniert sein, um die Blockierung der Lautsprecher zu garantieren

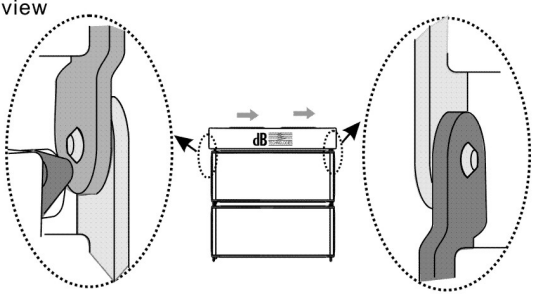
Le levier Rouge doit être positionné comme indiqué sur la figure pour garantir le blocage des diffuseurs



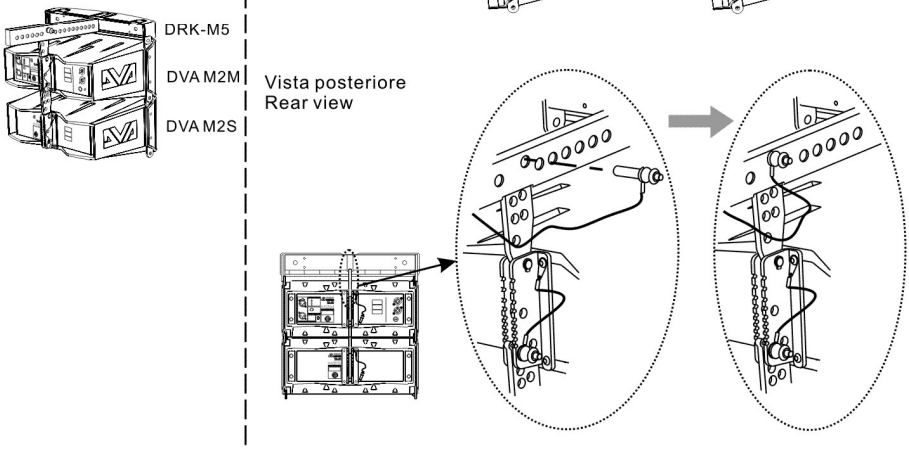
Vista laterale
Side view



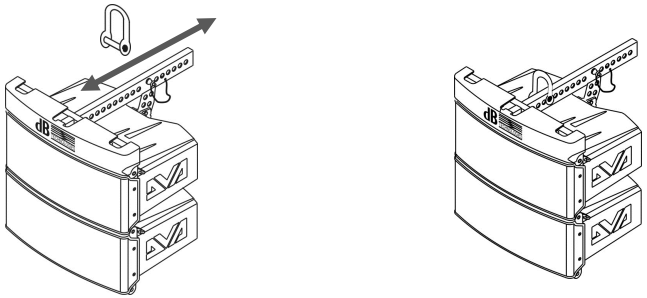
Vista frontale
Frontal view



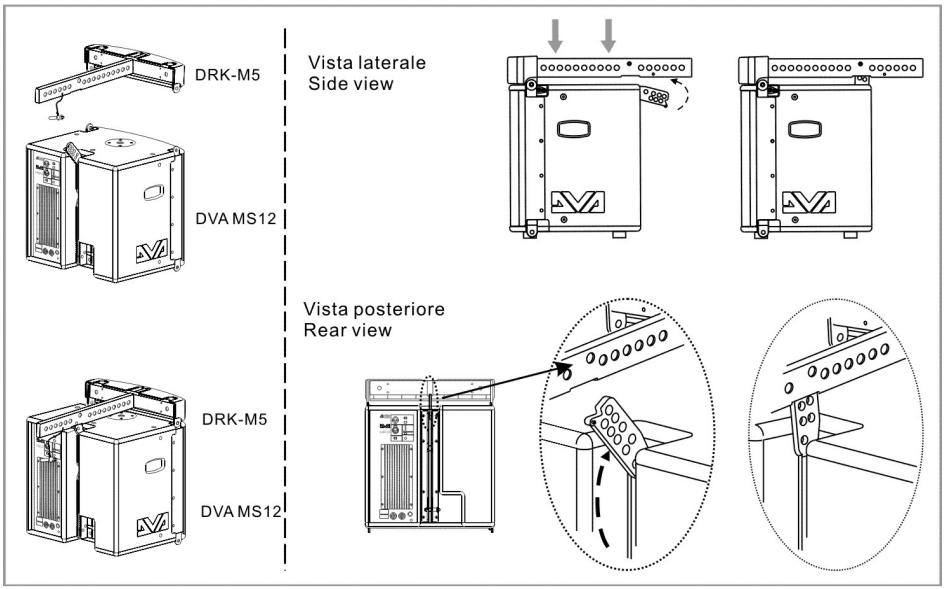
Bloccare la staffa con il pin nel foro indicati in figura
Lock the bracket with the pin in hole indicated in the figure
Verriegeln Sie die Halterung mit dem Stift in Loch in den Figuren angedeutet
Verrouiller le support avec la broche dans le trou indiqué sur la figure

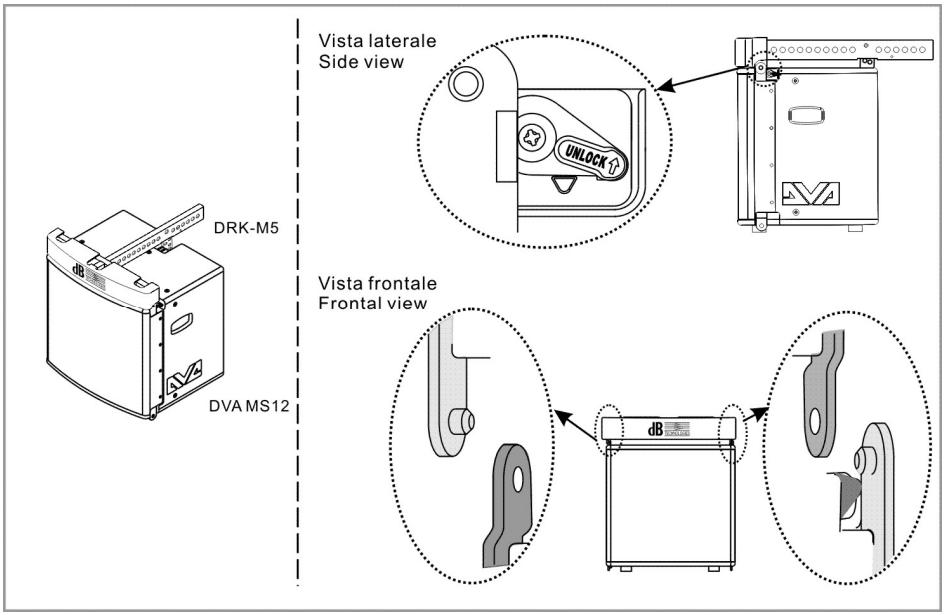


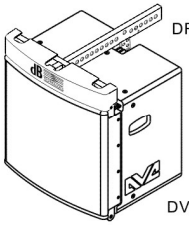
Appendere i diffusori utilizzando il perno con grillo a vite in dotazione, tramite i fori dedicati lungo la barra.
Hanging the speaker boxes with screw pin anchor enclosed, using the dedicate holes on the bar.



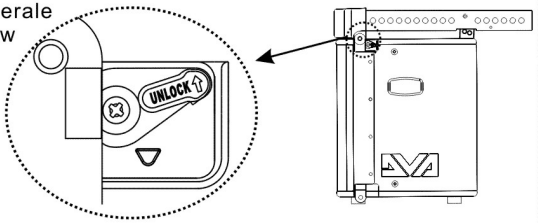
DRK M5 + DVA MS12



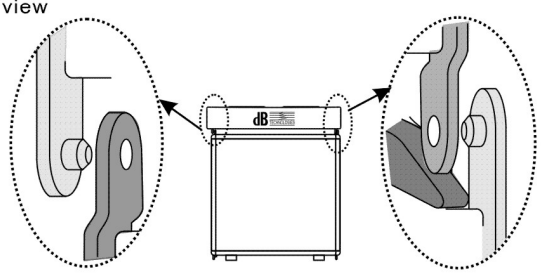




Vista laterale
Side view



Vista frontale
Frontal view

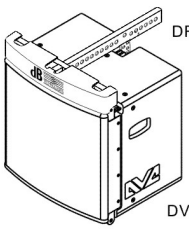


La leva Rossa deve essere posizionata come indicato in figura per garantire il bloccaggio dei diffusori

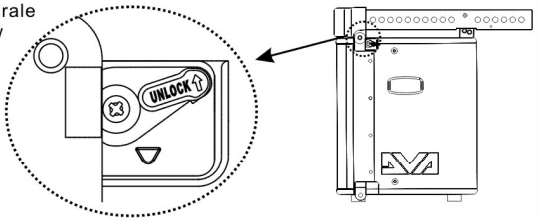
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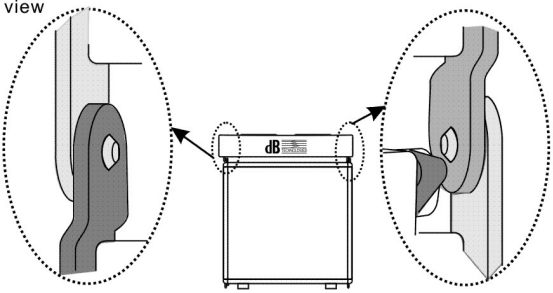
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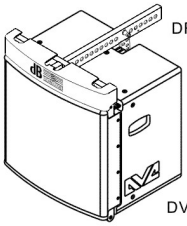
Vista laterale
Side view

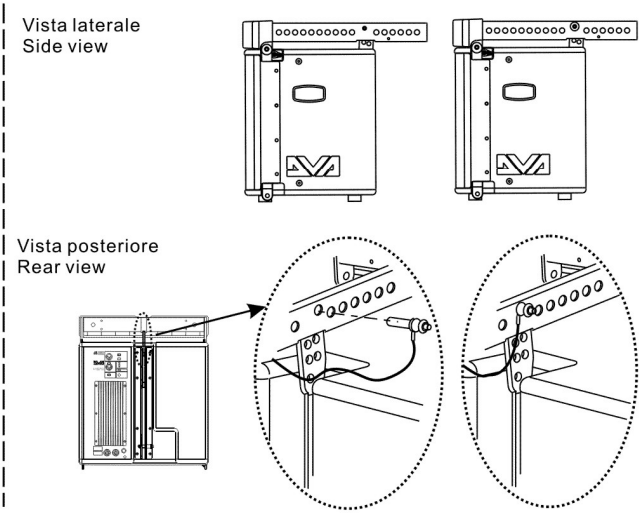


Vista frontale
Frontal view

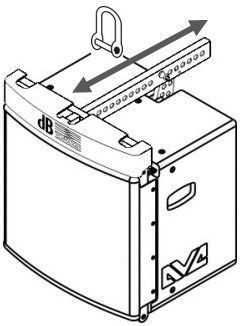


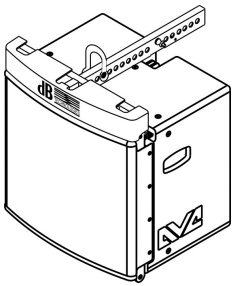
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Verrouiller le support avec la broche dans le trou indiqué sur la figure





Appendere i diffusori utilizzando il perno con grillo a vite in dotazione, tramite i fori dedicati lungo la barra.
Hanging the speaker boxes with screw pin anchor enclosed, using the dedicate holes on the bar.



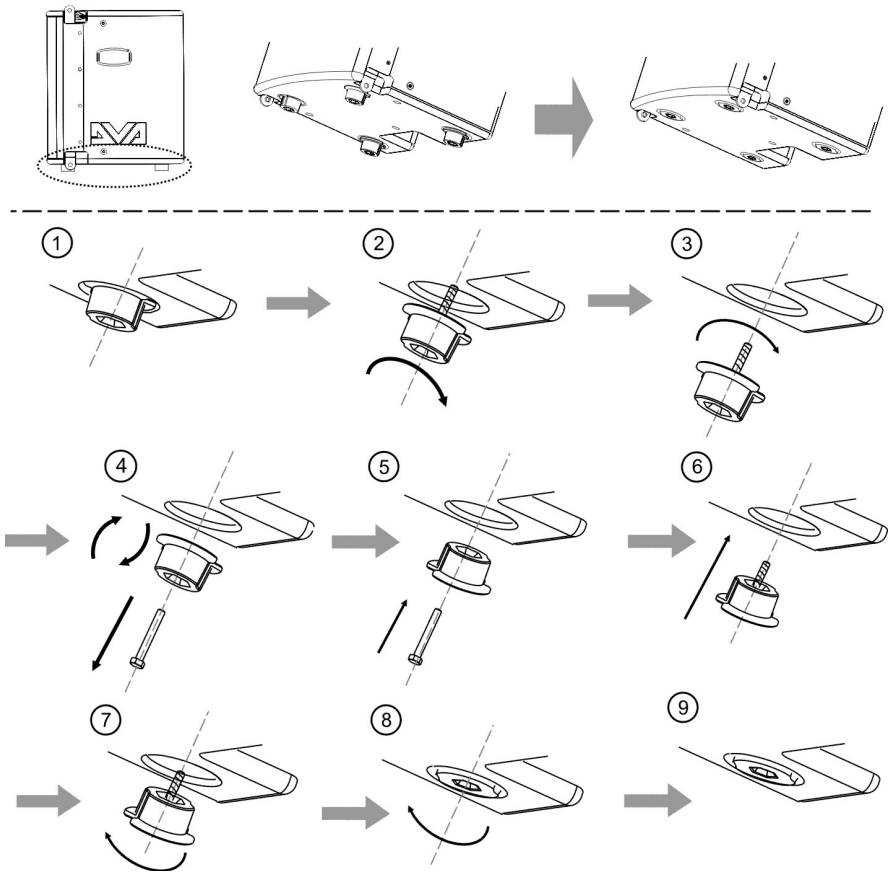


DRK M5 + DVA MS12 - DVA M2M/DVA M2S

Seguire le istruzioni riportate nel manuale d'uso dei diffusori per il corretto aggancio e blocco tra diffusori.
Follow the instruction indicates on user manual of the speakers for the correct handling and fixing between speakers.

Prima di procedere con il fissaggio dei diffusori DVA M2M sotto il subwoofer DVA MS12 è necessario posizionare i piedi in plastica di appoggio del subwoofer all'interno delle sedi predisposte sotto il box.
Seguire le istruzioni a seguito.
Before to proceed with DVA M2M speaker fixing under the DVA MS12 subwoofer, it is necessary to put the support plastic feet of the subwoofer inside the preset slots under the box.
Follow the instruction below.

Ripetere la procedura per tutti e quattro i piedi.
Repeat the procedure for all four feet.





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