

NEXO

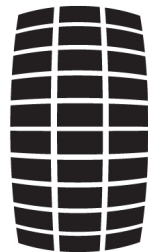
STM



Scale
Through
Modularity

NEXO

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ON-SITE RIGGING GUIDE



SAFETY FIRST

Read User Manual before deployment.

Before use of enclosed speaker system, please ensure that anyone involved in system deployment understands the rigging safety rules as described in the speaker system User Manual. Failure to do this exposes people to potential injury or death.

NS-1 is a dedicated calculation software that will give you vital information on your coverage, but also your load limitations, rigging, and mechanics.

DO NOT PROCEED if you have not run NS-1 prior to implementing STM.

Mounting precautions

- Choose mounting hardware and an installation location that can support the weight of the speaker system.
- Do not use speaker handles or any other rigging methods than those specified by Nexo for suspended installation.
- Do not expose speaker system to excessive dust or vibration, or extreme cold or heat to prevent possibility of component damage.
- Do not place the speaker system in an unstable position from which it might fall accidentally.

Health and Safety

- Please ensure you follow all your local Health and Safety regulations when using Nexo STM and any other Nexo products.
- Make sure all people on-site are approved and wearing the required PPE .
- Respect Legislation on heavy lifting limitations. One STM M46 or B112 module weighs 59Kg (2 person lift!)
- Nexo supplies a list of approved accessories. Please do not use any other accessories, for your own and other's safety.
- STM is capable of delivering extremely high sound pressure levels. Please ensure that you are complying to local legislation and that personnel are not exposed to dangerous levels and are wearing the necessary ear protection.
- When implementing STM, please take into account the effect of wind on the load. In case of wind exceeding Beaufort 8, clusters must be lowered at ground level.



STM RIGGING PARTS

<p>STT-XBOW Single Column top rigging</p> 	<p>STT-XCOUP2 2 column top coupling bar</p> 	<p>STT-XCOUP3 3 column top coupling bar</p> 
<p>STT-MBEAM 2 & 3 column flying beam</p> 	<p>STT-KBEAM Kelping Beam</p> 	<p>STT-PTILT Front/Rear Motor Rig point</p> 
<p>STT-MLINK Center Motor rig point</p> 	<p>STT-BTBUMPER Single column bottom rigging</p> 	<p>STT-BCOUP2 2 column bottom coupling bar</p> 
<p>STT-BCOUP3 3 column bottom coupling bar</p> 	<p>SST-DPLATE Delta Plate for horizontal aiming</p> 	<p>VXT-BRIDLE23 Bridle for Single Motor point rig</p> 
<p>VXT-LEVA750 VXT-LEVA1500 Leva-Lift Ratchet Chain ½ & 1.5 ton</p> 	<p>VXT-BCCH1500 VXT-BCCH3000 Compression Chains 1.5 ton & 3 ton</p> 	<p>VXT-LIKM Laser inclinometer</p> 



FLYING MODES

There are 6 flying modes that can apply depending on design and motor variables:

- 2 modes in single motor
- 4 modes in double motor.

Below table describes these modes and lists parts required. Additional parts according to cluster configuration are listed next page

	<p><u>GENERIC</u> Double motor points, all angles (≤ 24) 1&2 Front and rear motors 3 Compression chain Components: 1xXBOW + 1xPTILT + 1xKBEAM + 1xBCCH + page 5</p>
	<p><u>NO FRONT CLUSTER CLEARANCE</u> Double motor points, negative angle (≤ 24) 1&2 Front and rear motors 3 Compression chain Components: 1xXBOW + 1xMLINK + 1xKBEAM + 1xBCCH + page 5</p>
	<p><u>NO FRONT AND REAR CLUSTER CLEARANCE</u> Double motor points, Levelift, all angles (≤ 24) 1&2 Front and rear motors 3 Levelift Components: 1xXBOW + 2xPTILT + 1xLEVA + page 5</p>
	<p><u>EXTREME POSITIVE UPTILT</u> Double motor points, Levelift, high positive angles (≤ 16) 1&2 Front and rear motors 3 Levelift Components: 1xXBOW + 1xPTILT + 1xKBEAM + 1xLEVA + page 5</p>
	<p><u>SINGLE MOTOR UPTILT</u> Single motor point, Levelift, positive angles (≤ 12) 1&2 Bridle 3 Levelift Components: 1xXBOW + 2xPTILT + 1xBRIDLE + 1xLEVA + page 5</p>
	<p><u>SINGLE MOTOR DOWNTILT</u> Single motor point, Levelift, negative angles (≤ 12) 1&2 Bridle 3 Levelift Components: 1xXBOW + 2xPTILT + 1xBRIDLE + 1xLEVA + page 5</p>

NB: Points #4 ($\Delta\Delta$) are for safety connection.



CLUSTER CONFIGURATION

STM rigging hardware allows to fly single column clusters, as well as double and triple column clusters. Below table lists parts required according to these configurations

<u>Configuration</u>	<u>FRONT VIEW</u>	<u>LEFT VIEW</u>
<p><u>1 COLUMN WIDE</u></p> <p>Components: Same as in page 4 + 1xBTBUMPER</p>		
<p><u>2 COLUMNS WIDE</u></p> <p>Components: Same as in page 4 + 1xMBEAM + 1xXCOUP2 (pair) + 2xBTBUMPER + 1xBCOUP2</p>		
<p><u>3 COLUMNS WIDE</u></p> <p>Components: Same as in page 4 + 1xMBEAM + 1xXCOUP3 (pair) + 3xBTBUMPER + 1xBCOUP3</p>		



CONNECTING STM CABINETS

Below table describes connection of one STM M46 or B112 to subsequent module.

REAR VIEW	LEFT VIEW	<u>Operation</u>
		<p><u>Step 1</u></p> <ul style="list-style-type: none"> Lower cabinet into position, aligning side locking slots on both sides of the cabinets.
		<p><u>Step 2</u></p> <ul style="list-style-type: none"> Push REDLOCK™ into “LOCK” position. Ensure handle is locked. Check side locking pins are flush to the rigging plates on both sides of the cabinet.
		<p><u>Step 3</u></p> <ul style="list-style-type: none"> Slide piston to lower cabinet, and insert quick release pin. Check quick release pin is locked
		<p><u>Step 4</u></p> <ul style="list-style-type: none"> Lift speaker Connect speaker cable
		<p><u>Step 5</u></p> <ul style="list-style-type: none"> Set speaker angles as specified from NS-1 Software Rotate piston lock handle to “OPERATION” position (vertical). Back to step one for subsequent cabinet.

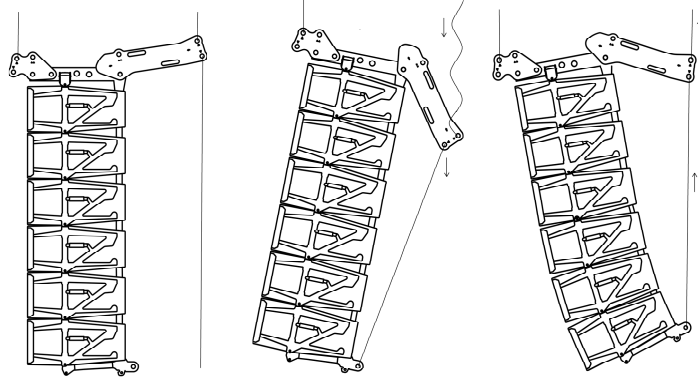


RIGGING PROCEDURE

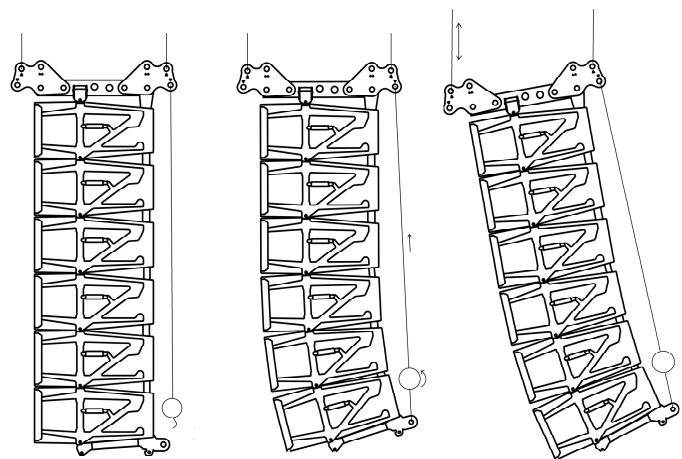
Procedure description

- Install XBOW on to each top module, lock into place with two spring locks and rear steel pin.
- If 2 or 3 columns: join XBOW's together at front and rear with XCOUP2 or XCOUP3 coupling bars, and secure in place with steel pins. Insert MBEAM at the middle of the XCOUP2 or XCOUP3 coupling bars, and secure in place with spring locks.
- Install top rigging components as in page 4, including laser inclinometer and Compression Chain or Chain Lever Hoist.
- Attach motor(s) and lift
- Connect subsequent STM modules (refer page 5)
- Once all modules are connected, install BTBUMPERs underneath bottom modules, align side-pins, and push "REDLOCK" to the "LOCK" Position
Connect BTBUMPERs to bottom module piston and secure in place with locking pin.
- If 2 or 3 columns: join BTBUMPER's together with BCOUP2 or BCOUP3 coupling bar.
- Attach Compression Chain or Chain Lever Hoist to BTBUMPER or BCOUP2 or BCOUP3 center point.
- Before applying compression, ensure all piston locking handle are in "OPERATION" position – ie vertical – and all angles set at correct value.
- If 2 motors: bring the array angles to compression with rear motor or Chain Lever Hoist, ensure compression is fully applied on all cabinets, fly STM to operating height and adjust bumper angle with motors
- If 1 motor: bring the array angles to compression and adjust bumper angle with Chain Lever Hoist, ensure compression is fully applied on all cabinets, fly STM to operating height.

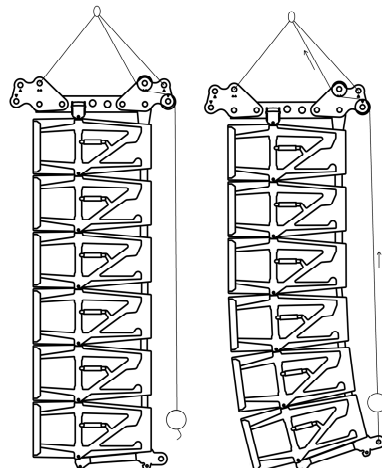
2 motors, Keeping beam and Compression Chain



2 motors and Chain lever Hoist



1 motor and Chain Lever Hoist





DISMANTLING

De-rigging

De-rigging is as simple as following rigging procedures in reverse order:

- Lower the array slowly, until the array is close to the floor.
- Release compression slowly, until the array is hanging vertically.
- Remove the compression chain, BTCOUP2/3 if required, and BTBUMPERs.
- Remove all speaker cables within reach, without climbing the array.
- Set all piston taps to the STORAGE position.
- Position dollies below the bottom module and lock the wheel brakes.
- Lower the array into position on the dollies.
- Push REDLOCK to LOCK position on the bottom cabinets.
- Release the upper array from the stacked cabinets by releasing the REDLOCK and the rear steel pin on the cabinet above the stacked boxes.
- Lift remaining array, release wheel brakes and remove stacked modules.
- Repeat as required.
- Remove rigging components.