

TOWER SCREEN SYSTEM

User Manual



Systems:

Tower-B
Tower-T4
Tower-T8



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1. Safety instructions

1. Read these instructions carefully.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this system near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Failure to do so may cause fast overheating and force system to switch itself off.
8. Do not use the system near heat sources such as stoves, radiations or other equipment that produces massive heat.
9. Do not use the system near open fire sources.
10. Connect the system only to the electric network with grounding.
11. Protect the power cord from being walked on, pinched, or otherwise damaged.
12. Use only accessories specified by the manufacturer.
13. Use only the cart, stand, tripod or bracket specified by the manufacturer, or sold with the unit. When a cart is used, use caution when moving the cart with unit to avoid injury from tip-over.
14. Unplug this system during lightning storms or when unused for long periods of time.
15. Refer all servicing to qualified service personnel. Servicing is required when the system has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the unit, the unit has been exposed to rain or moisture, does not operate normally, or has been dropped.
16. To completely disconnect this system from AC mains, disconnect the power supply cord from the AC receptacle.
17. WARNING - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.
18. The main plug of the power supply cord shall remain readily operable.
19. This system is capable of delivering a significant soundpressure levels. To avoid permanent or temporary hearing damage, prolonged exposure to sound pressure levels exceeding 90 dB should be limited

THIS SYSTEM CONTAINS POTENTIALLY LETHAL VOLTAGES. TO PREVENT ELECTRIC SHOCK OR HAZARD, DO NOT REMOVE APLIFIER MODULE OR ITS PARTS. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

MOUNTING AND SUSPENSION OF THIS SYSTEM MUST BE PERFORMED ONLY BY QUALIFIED TRAINED PERSONNEL FOLLOWING APPLICABLE SAFETY RULES. DO NOT ALLOW MOUNTING OR SUSPENSION OF THIS UNIT IF MOUNTING OR SUSPENSION HARDWARE IS BROKEN, BENT, PARTS ARE MISSING OR IS OTHERWISE DAMAGED.

2. System description

TOWER SCREEN SYSTEM is the next generation modular screen system for top-class cinema halls, which establishes new standard of sound clarity, presence, and performance.

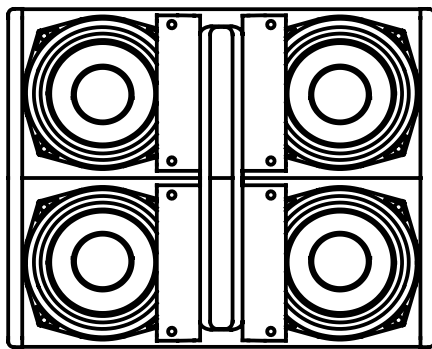
TOWER SCREEN SYSTEM is designed specifically to fit into different cinema hall sizes while delivering uniform performance in each and every installation.

TOWER SCREEN SYSTEM is based on set of easily connectable acoustic cabinets, complete with the rigging and flying hardware.

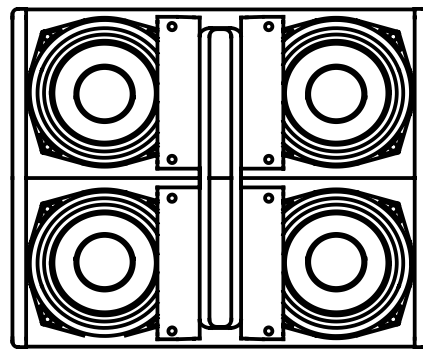
Acoustic cabinets are carefully designed to merge into unified system, regardless of the actual array size. This allows to deliver the signature sound performance into any cinema hall of any size.

Simple and effective rigging system features all-purpose elements allowing to assemble the **TOWER SCREEN SYSTEM** into flown clusters or ground stacks.

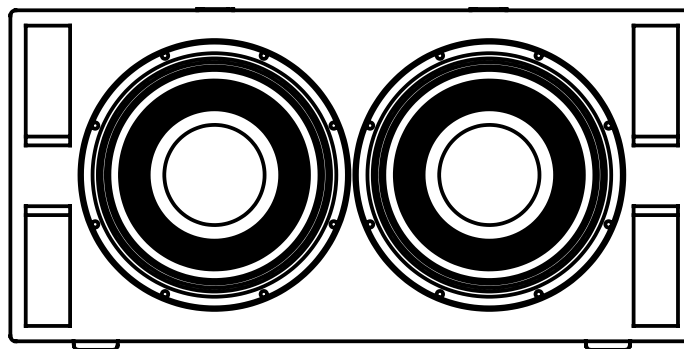
Modular solution not only cuts down the installation time, but also allows for optimal stock with fewer components to worry about while designing the particular system.



Tower-T4
Part No. 0023003510



Tower-T8
Part No. 0023003610



Tower-B
Part No. 0023003410

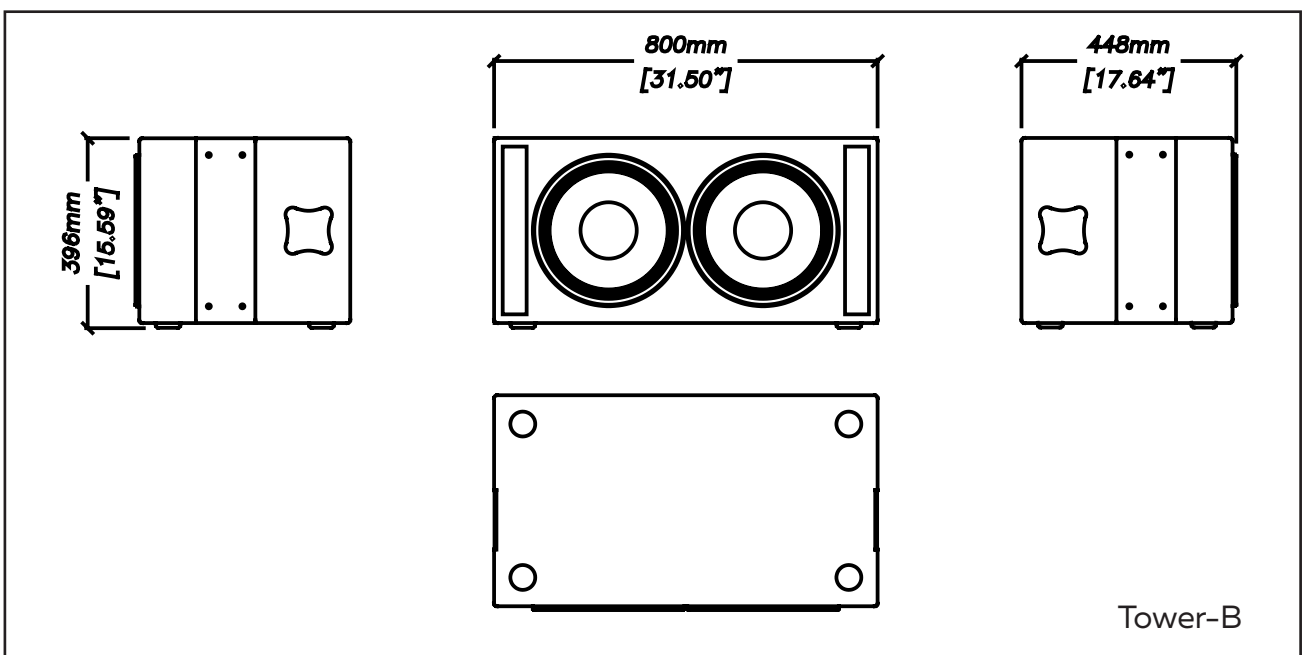
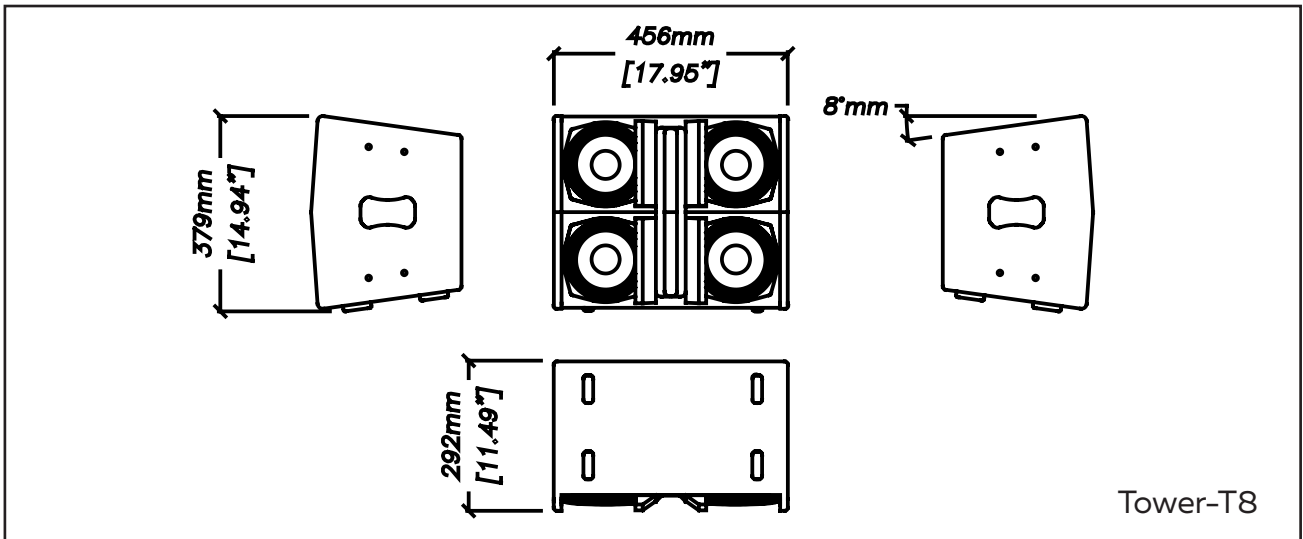
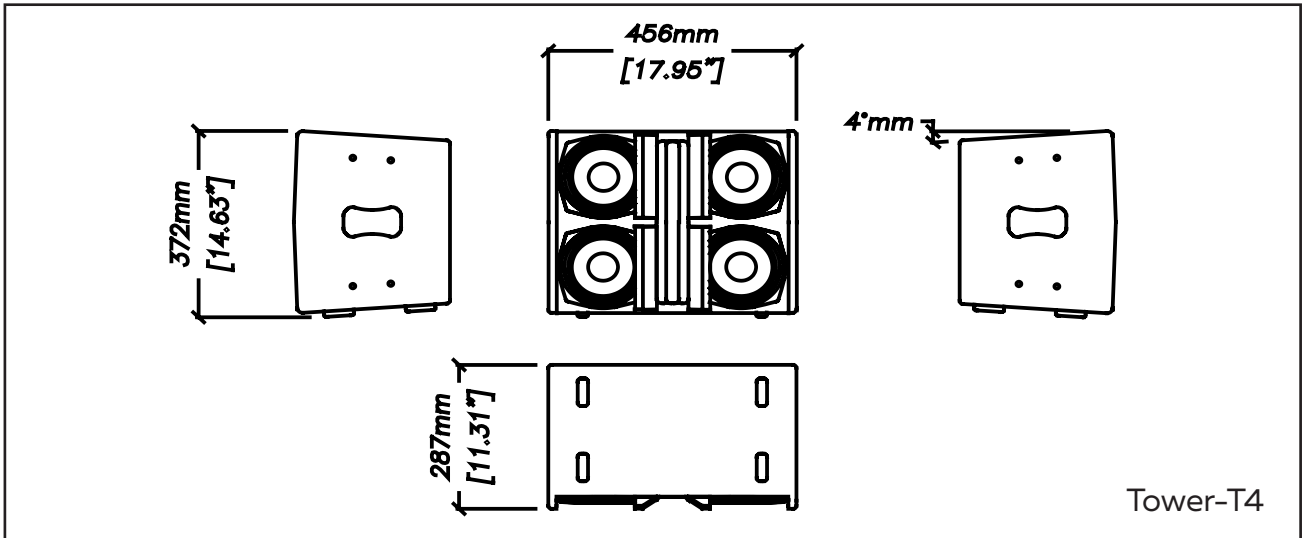


3.1. Specifications - Technical data

System	Tower-T4		Tower-T8
Type	Tower Screen System Mid-Hi module		
Frequency response (± 3)	100-22000 Hz		
Max SPL (peak)	131 dB (calculated)		
Sensitivity (1W/1m)	98 dB Mid / 113 dB Hi		
LF Transducer	4x6"		
HF Transducer	2x1"		
Horizontal coverage	90 deg		
Vertical splay angle	4 deg		8 deg
Impedance	8 Ohm Mid / 16 Ohm Hi		
Nominal power (1)	520 W Mid / 100 W Hi		
Program power	1040 W Mid / 200 W Hi		
Peak power	2080 W Mid / 400 W Hi		
Connectors	Barrier strip terminal		
Mounting options	Integrated rigging hardware		
Dimensions (WxHxD)	456x368x287 mm		456x376x292 mm
Net weight	21,6 kg		
Shipping weight	24,0 kg		

System	Tower-B	
Type	Tower Screen System subwoofer	
Frequency response (± 3)	42-200 Hz	
Max SPL (peak)	135 dB (calculated)	
Sensitivity (1W/1m)	98 dB	
LF Transducer	2x12"	
Impedance	4 Ohm	
Nominal power (1)	1200 W	
Program power	2400 W	
Peak power	4800 W	
Connectors	Barrier strip terminal	
Mounting options	Integrated rigging hardware	
Dimensions (WxHxD)	800x368x447 mm	
Net weight	38,2 kg	
Shipping weight	41,4 kg	

3.2. Specifications - Dimensions





4.1. System operation - Rigging

Tower Screen System modules are equipped with integrated rigging system for versatile applications.

Rigging must be performed only by trained personnel following the established safety rules.

MAXIMUM WEIGHT RESTRICTIONS MUST BE FOLLOWED AT ALL TIMES!

MAKE SURE THE SUPPORT STRUCTURE IS CAPABLE OF HOLDING THE APPLIED WEIGHT WHILE SUSPENDING THE SYSTEM!

Connecting two Tower-T4/T8 modules.

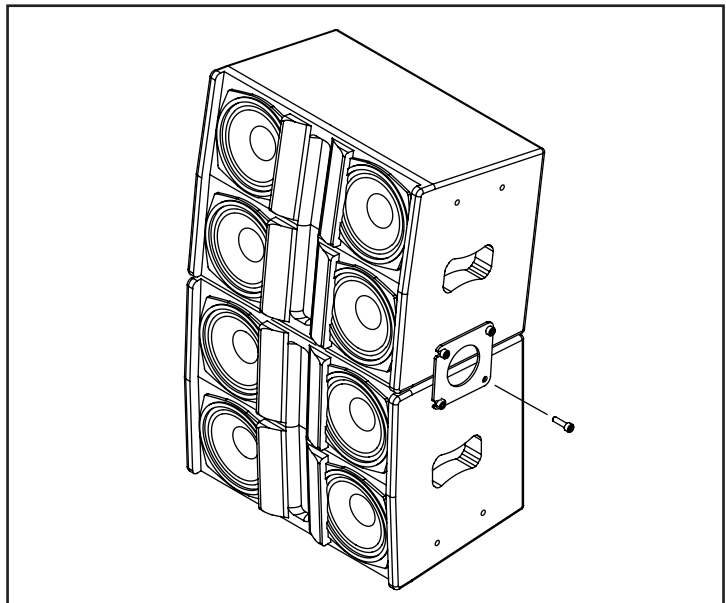
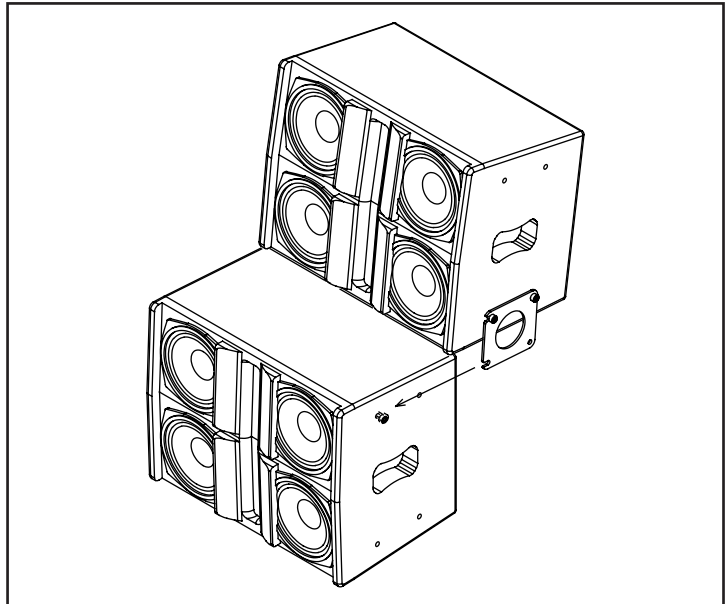
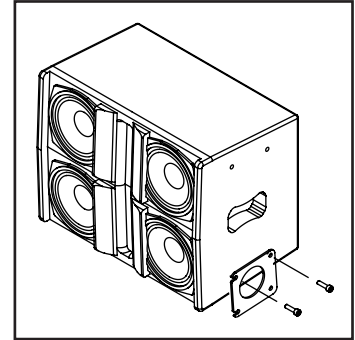
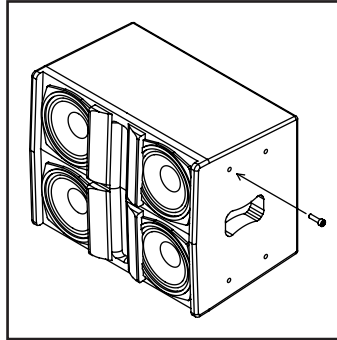
Required accessories:

Tower Connector (part No. 0200100003)

- 2 pcs

DIN 912 M8x30 - 8 pcs

- Insert two M8x30 bolts into upper frontal sockets of one of the Tower-T4/T8. Leave 6-7mm gap between bolt's head and side panel.
- Use four M8x30 bolts to attach two Tower Connectors onto the other Tower-T4/T8. Secure connection firmly.
- Attach two Tower-T4/T8 cabinets until the Tower Connectors of the upper cabinets find their rest on M8x30 bolts of the lower cabinet.
- Insert two M8x30 bolts in sockets of the lower Tower-T4/T8. Secure all the bolts firmly.



4.1. System operation - Rigging

Connecting two Tower-B modules.

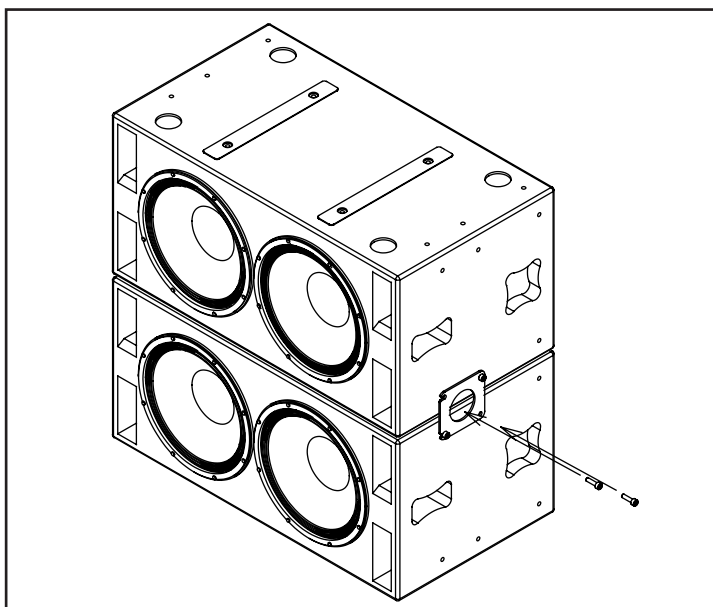
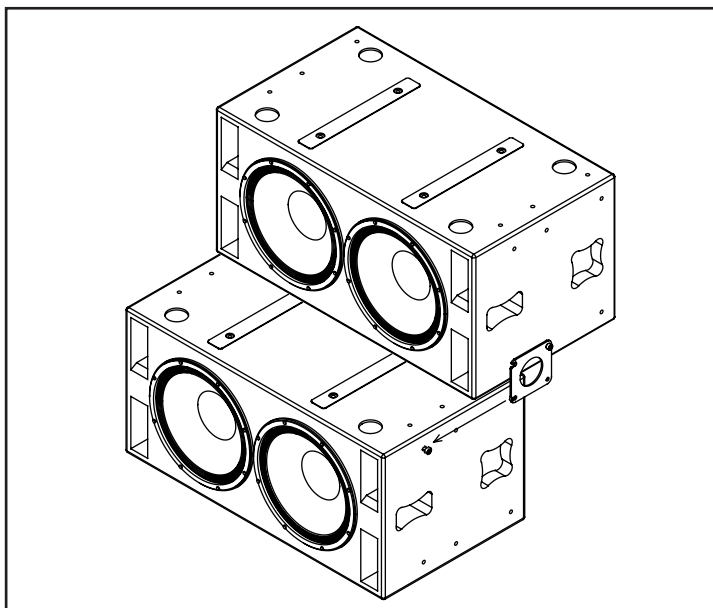
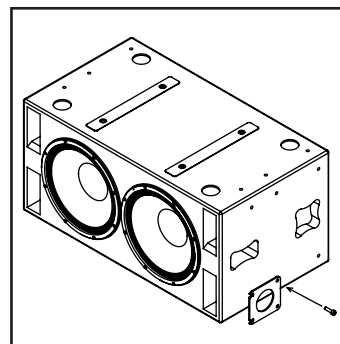
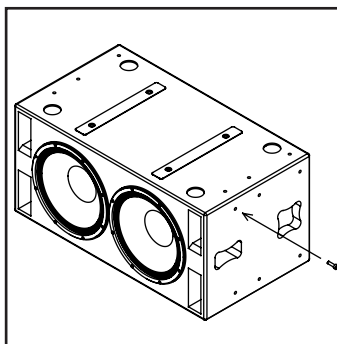
Required accessories:

Tower Connector (part No. 0200100003)

- 2 pcs

DIN 912 M8x30 - 8 pcs

- Insert two M8x30 bolts into upper frontal sockets of one of the Tower-B. Leave 6-7mm gap between bolt's head and side panel.
- Use two M8x30 bolts to attach two Tower Connectors onto the other Tower-B.
- Attach two Tower-B cabinets until the Tower Connectors of the upper cabinets find their rest on M8x30 bolts of the lower cabinet.
- Insert four M8x30 bolts in sockets of both Tower-B cabinets. Secure all the bolts firmly.





4.1. System operation - Rigging

Ground stack - attaching support frame to Tower-B module

Required accessories:

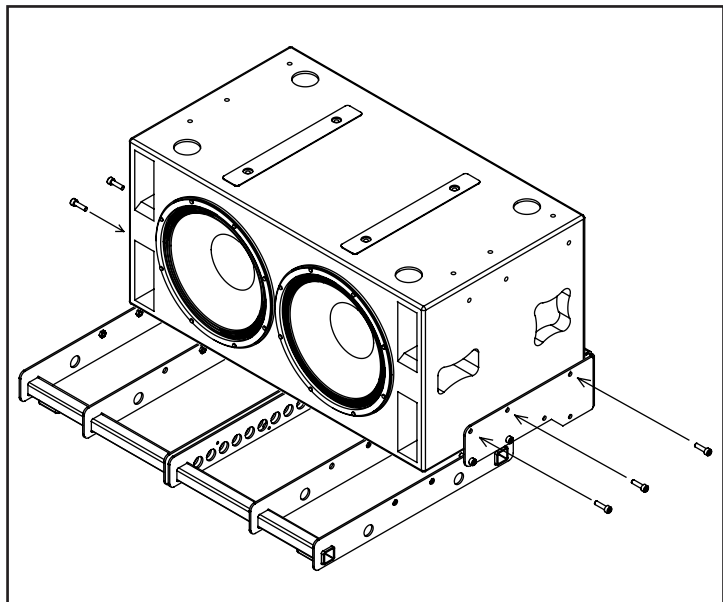
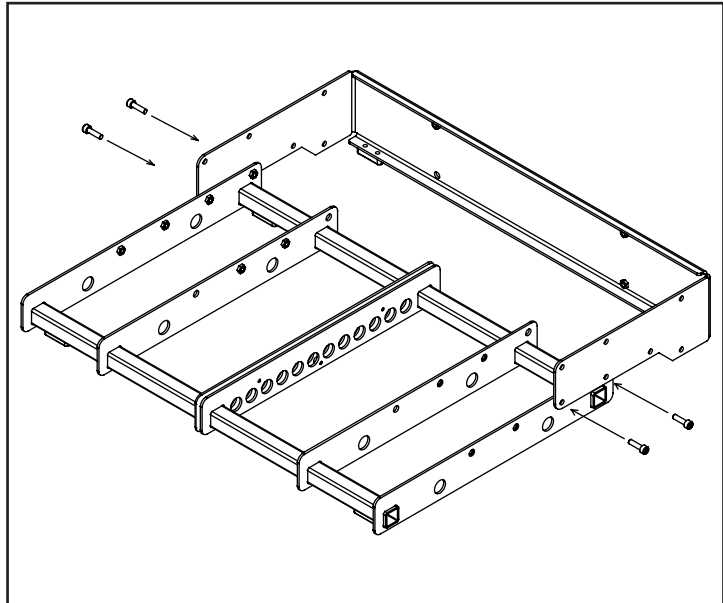
Tower C-Bracket (part No. 0200100005)

- 1 pcs.

Tower Frame (part No. 0200100004) - 1 pcs.

DIN 912 M8x30 - 10 pcs

- Connect Tower Frame to Tower C-Bracket using four M8x30 bolts.
- Attach Tower-B cabinet to Tower Frame - Tower C-Bracket assembly and secure with six M8x30 bolts.
- Secure all bolts firmly.



4.1. System operation - Rigging

Ground stack - attaching Tower-T4/T8 module to Tower-B module

Required accessories:

Tower P-Bracket (part No. 0200100007)

- 1 pcs

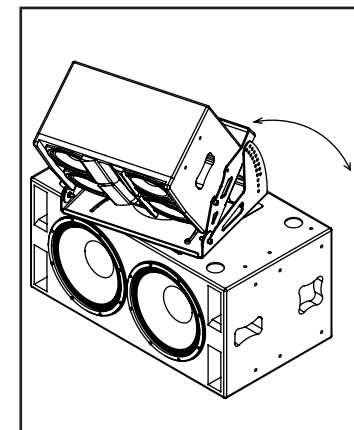
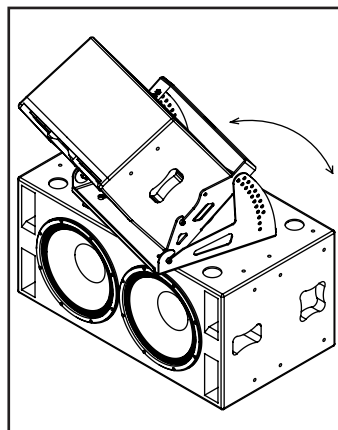
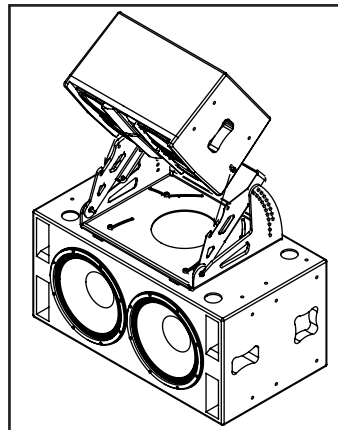
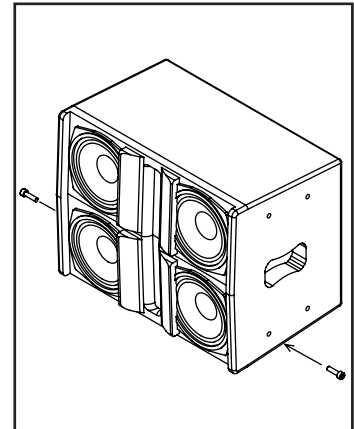
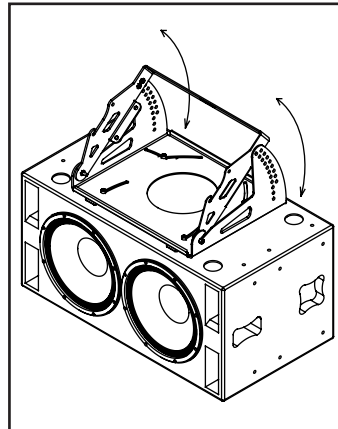
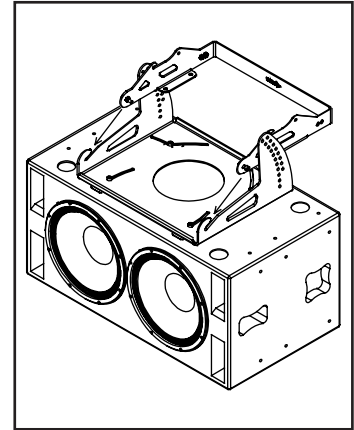
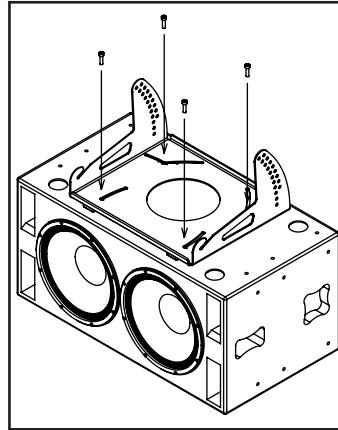
Tower F-Bracket (part No. 0200100006)

- 1 pcs

DIN 912 M8x30 - 8 pcs

Hex socket pan head M8x45 bolt - 4 pcs

- Unscrew four M8x45 bolts from Tower-B cabinet.
- Attach Tower P-Bracket onto the Tower-B cabinet and secure loosely with four M8x45 bolts.
- Insert two M8x30 bolts into frontal sockets of Tower F-Bracket. Leave 6-7mm gap between bolt's head and Tower F-Bracket's plane.
- Insert Tower F-Bracket into Tower P-Bracket, so F-Bracket's frontal M8x30 bolts find their supports on P-Bracket's slots. Choose appropriate tilt angle and secure connection with two rear M8x30 bolts.
- Insert two M8x30 bolts into the frontal sockets of Tower T4/T8 module. Leave 6-7mm gaps between bolt's head and T4/T8 side panel.
- Insert Tower-T4/T8 module into the Tower F-Bracket so T4/T8 module's frontal M8x30 bolts find their support in F-Bracket's slots. Secure connection with two rear M8x30 bolts.
- Optionally assemble entire Tower-T4/T8 stack and pan the Tower-T4/T8 assembly to desired angle using Tower P-Bracket's guides.
- Secure all bolts firmly.





4.1. System operation - Rigging

Suspended stack - attaching suspension frame to Tower-B module

Required accessories:

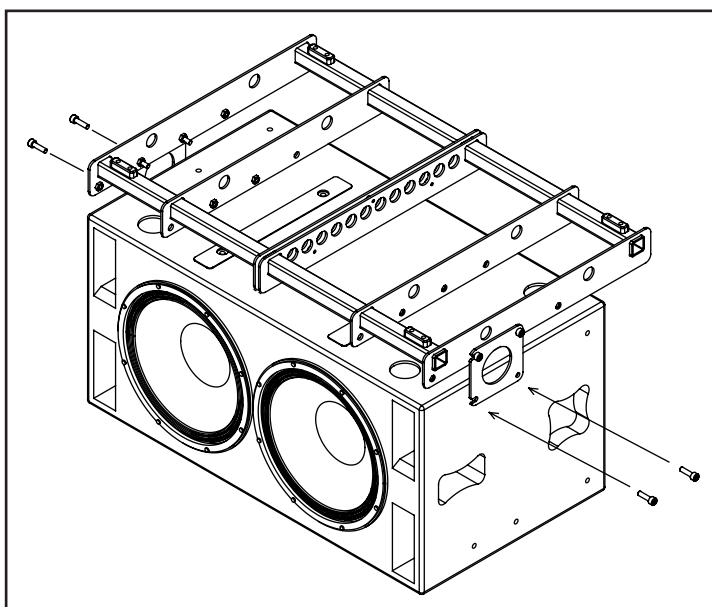
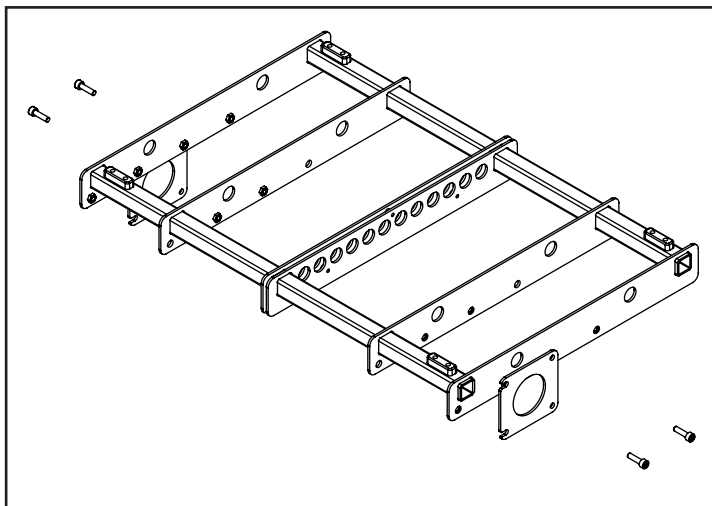
Tower Connector (part No. 0200100003)

- 2 pcs

Tower Frame (part No. 0200100004) - 1 pcs.

DIN 912 M8x30 - 8 pcs

- Attach two Tower Connectors to Tower Frame using four M8x30 bolts.
- Attach Tower Frame - Tower Connectors assembly to Tower-B cabinet using four M8x30 bolts.
- Secure all bolts firmly.



4.1. System operation - Rigging

Suspended stack - attaching Tower-T4/T8 module to Tower-B module

Required accessories:

Tower C-Bracket (part No. 0200100005)

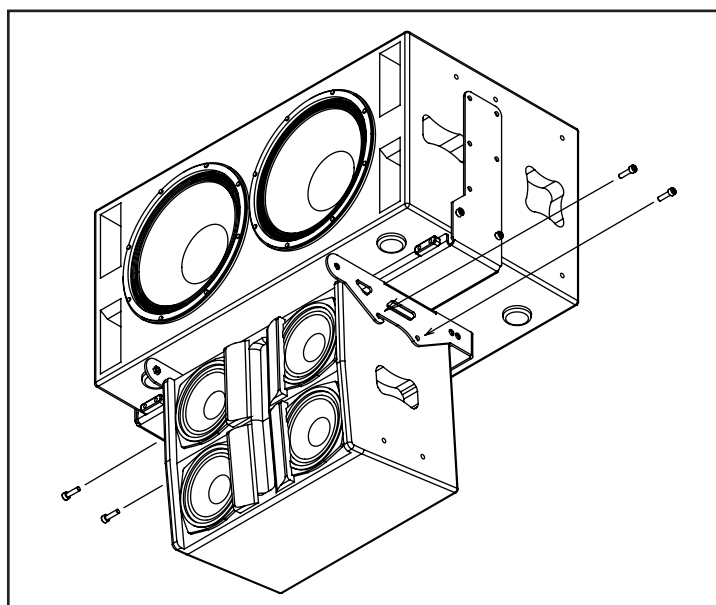
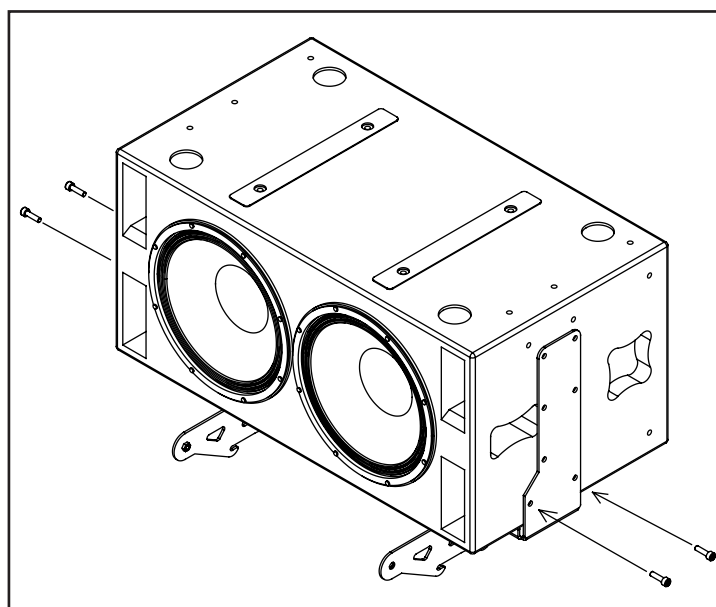
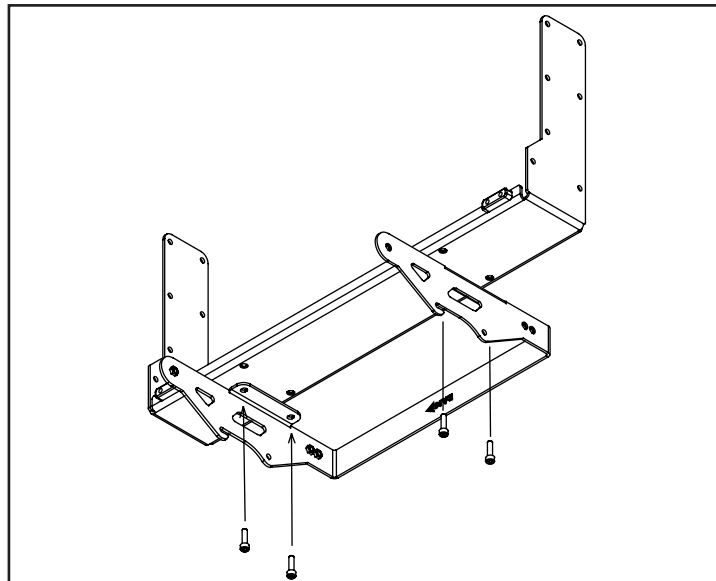
- 1 pcs

Tower F-Bracket (part No. 0200100006)

- 1 pcs

DIN 912 M8x30 - 12 pcs

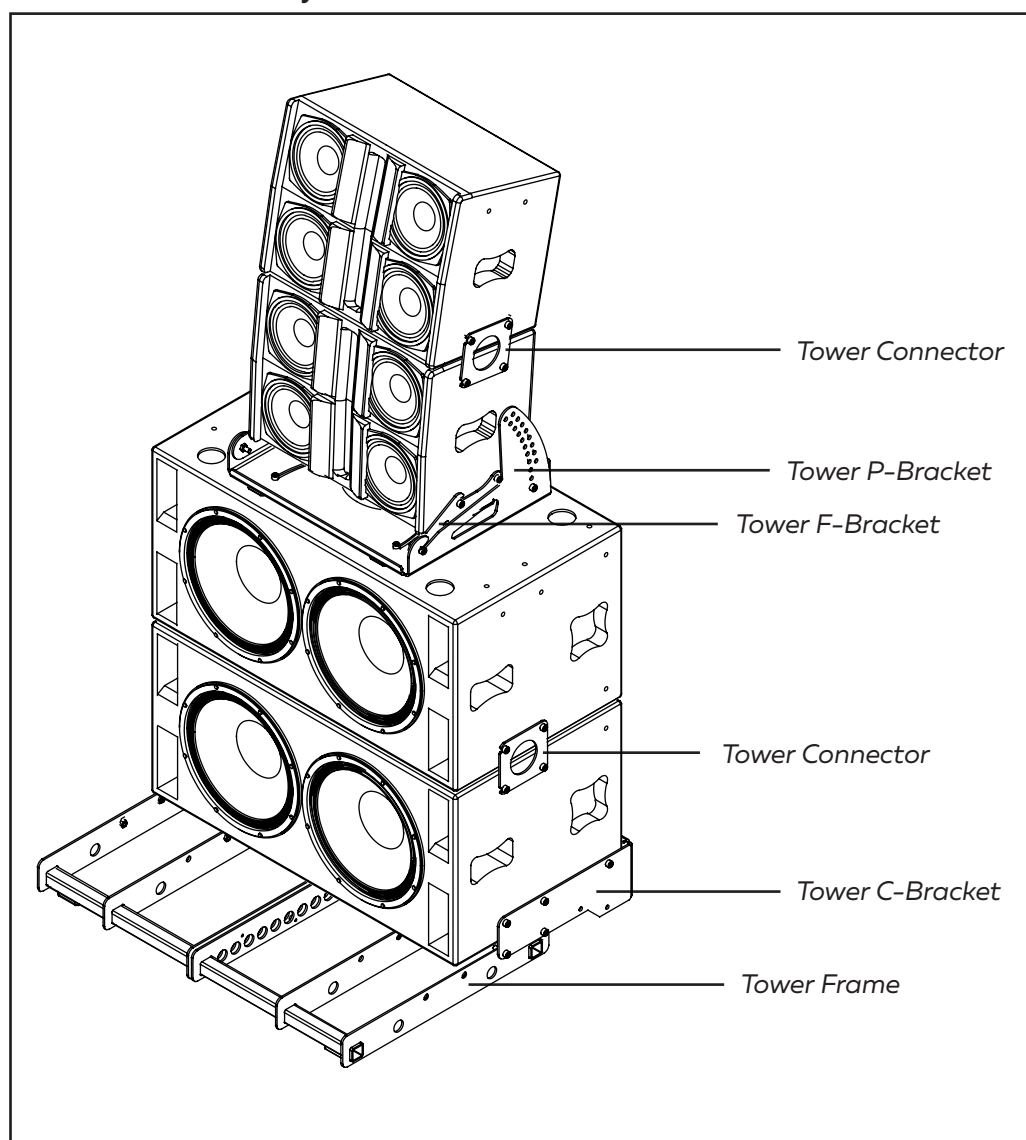
- Attach Tower C-Bracket to Tower F-Bracket using four M8x30 bolts. Secure the connection firmly.
- Attach C-Bracket - F-Bracket assembly to Tower-B cabinet using four M8x30 bolts.
- Attach Tower-T4/T8 cabinet to assembly using four M8x30 bolts.
- Secure all bolts firmly.





4.1. System operation - Rigging

Ground stack - assembly overview



Ground stack - hardware complement reference

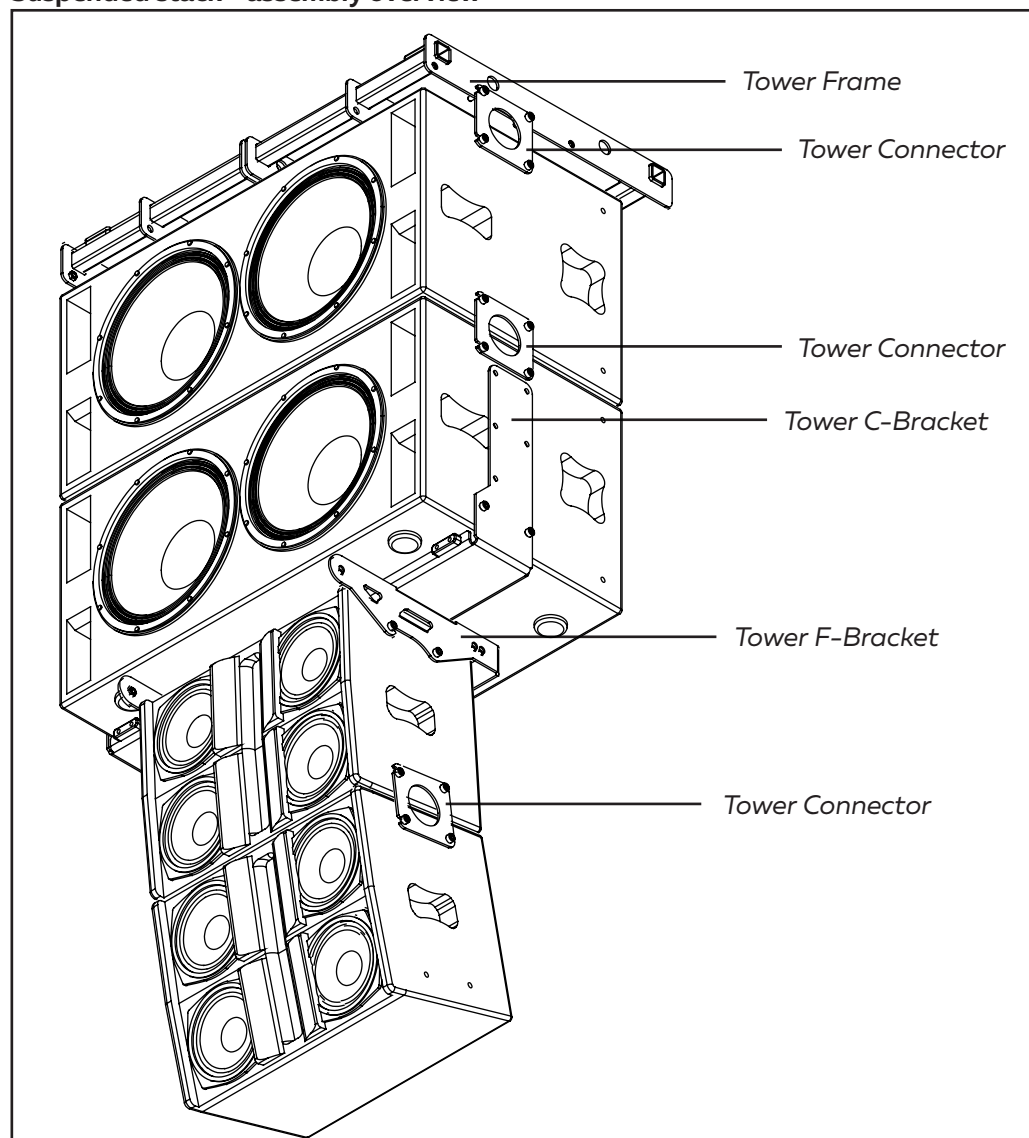
Component	Configuration														
	1-2			2-2			2-3			3-3			3-4		
	1 stack	3 stacks	5 stacks	1 stack	3 stacks	5 stacks	1 stack	3 stacks	5 stacks	1 stack	3 stacks	5 stacks	1 stack	3 stacks	5 stacks
Tower-B	1	3	5	2	6	10	2	6	10	3	9	15	3	9	15
Tower-T4/T8 ¹	2	6	10	2	6	10	3	9	15	3	9	15	4	12	20
Tower Frame	1	3	5	1	3	5	1	3	5	1	3	5	1	3	5
Tower Connector	2	6	10	4	12	20	6	18	30	8	24	40	10	30	50
Tower C-Bracket	1	3	5	1	3	5	1	3	5	1	3	5	1	3	5
Tower F-Bracket	1	3	5	1	3	5	1	3	5	1	3	5	1	3	5
Tower P-Bracket	1	3	5	1	3	5	1	3	5	1	3	5	1	3	5
DIN 912 M8x30 ²	36	108	180	48	144	240	56	168	280	68	204	340	76	228	380
Hex socket pan head M8x45 ²	4	12	20	4	12	20	4	12	20	4	12	20	4	12	20

¹- Total number of Tower-T4 + Tower-T8 cabinets. Exact T4/T8 complement is project based.

²- Total number of fasteners required. Includes Tower-B, Tower-T4 and Tower-T8 fastener complement plus additional fasteners. Please refer to Standard Content page.

4.1. System operation - Rigging

Suspended stack - assembly overview



Suspended stack - hardware complement reference

Component	Configuration														
	1-2			2-2			2-3			3-3			3-4		
	1 stack	3 stacks	5 stacks	1 stack	3 stacks	5 stacks	1 stack	3 stacks	5 stacks	1 stack	3 stacks	5 stacks	1 stack	3 stacks	5 stacks
Tower-B	1	3	5	2	6	10	2	6	10	3	9	15	3	9	15
Tower-T4/T8 ¹	2	6	10	2	6	10	3	9	15	3	9	15	4	12	20
Tower Frame	1	3	5	1	3	5	1	3	5	1	3	5	1	3	5
Tower Connector	4	12	20	6	18	30	8	24	40	10	30	50	12	36	60
Tower C-Bracket	1	3	5	1	3	5	1	3	5	1	3	5	1	3	5
Tower F-Bracket	1	3	5	1	3	5	1	3	5	1	3	5	1	3	5
Tower P-Bracket	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DIN 912 M8x30 ²	36	108	180	48	144	240	56	168	280	68	204	340	76	228	380
Hex socket pan head M8x45 ²	4	12	20	8	24	40	8	24	40	12	36	60	12	36	60

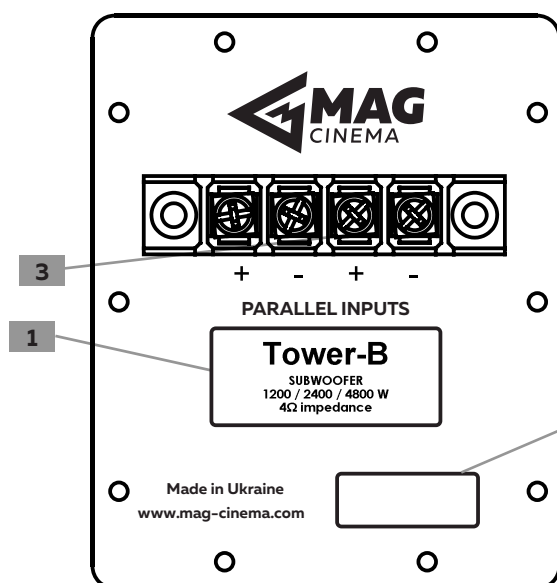
¹- Total number of Tower-T4 + Tower-T8 cabinets. Exact T4/T8 complement is project based.

²- Total number of fasteners required. Includes Tower-B, Tower-T4 and Tower-T8 fastener complement plus additional fasteners. Please refer to Standard Content page.



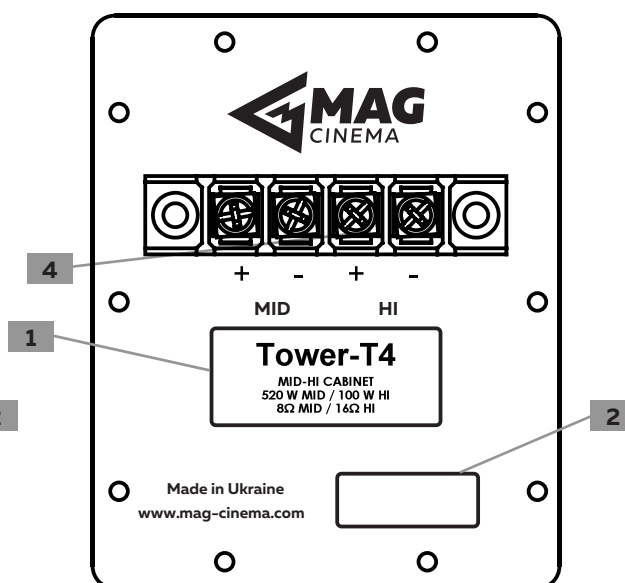
4.2. System operation - Connections and setup

Tower-B's passive connection plate



1. LABEL FIELD. Name of the system, along with its basic parameters is noted here.
2. SERIAL NUMBER FIELD. Sticker with the systems serial number is located here. NEVER REMOVE THE SERIAL FROM THE SYSTEM, AS IT IS IMMEDIATE WARRANTY VOID.
3. TOWER-B's PASSIVE CONNECTION TERMINALS. Two pairs of parallel terminals. Use these connectors to

Tower-T4/T8 bi-amp connection plate



- connect power amplifier and to feed the signal to the parallel system (optional).
4. TOWER-T4/T8 PASSIVE CONNECTION TERMINALS. Pair of MID and pair of HI channel connection. Use these to connect power amplifier to MID and HI transducers respectively.

Tower Screen System connections:

Use power amplifier with DSP or power amplifiers with external speaker processor for Tower Screen System.

MAKE SURE TO USE HIGH PASS FILTER FOR ALL TOWER SCREEN SYSTEM CABINETS SYSTEMS TO PREVENT EXCESSIVE CONE MOVEMENT, RESULTING IN TRANSDUCER DAMAGE OR FAST DETERIORATION.

Recommended HPF settings and suggested power amplifier ratings are found in table below:

System	Amplifier power	Amplifier impedance	Recommended crossover
Tower-B	1200 - 2400 W	4 Ohm	HPF 40 Hz, 24 dB/oct LPF 200 Hz, 24 dB/oct
Tower-T4 MID	520 - 1040 W	8 Ohm	HPF 200 Hz, 24 dB/oct LPF 1200 Hz, 24 dB/oct
Tower-T4 HI	520 - 1040 W	16 Ohm	HPF 1200 Hz, 24 dB/oct
Tower-T8 MID	520 - 1040 W	8 Ohm	HPF 200 Hz, 24 dB/oct LPF 1200 Hz, 24 dB/oct
Tower-T8 HI	520 - 1040 W	16 Ohm	HPF 1200 Hz, 24 dB/oct

5. Standard contents

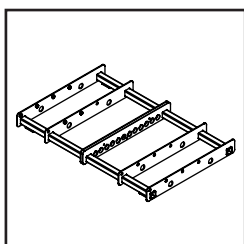
Please check complete complement of your Tower Screen System cabinets upor receiving the package.

Standard contents of Tower Screen System cabinets:

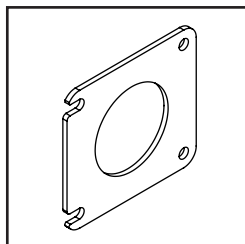
System	Tower-B	Tower-T4	Tower-T8
	1 pcs - Tower-B - Tower Screen System subwoofer 12 pcs - DIN 912 M8x30 bolt 4 pcs - Hex socket pan head M8x45 bolt 1 pcs - Tower Screen System Technical Manual 1 pcs - Polyethylene bag 1 pcs - Carton Box	1 pcs - Tower-T4 - Tower Screen System MID-HI cabinet, 4 deg splay angle 8 pcs - DIN 912 M8x30 bolt 1 pcs - Tower Screen System Technical Manual 1 pcs - Polyethylene bag 1 pcs - Carton Box	1 pcs - Tower-T8 - Tower Screen System MID-HI cabinet, 8 deg splay angle 8 pcs - DIN 912 M8x30 bolt 1 pcs - Tower Screen System Technical Manual 1 pcs - Polyethylene bag 1 pcs - Carton Box

6. Hardware

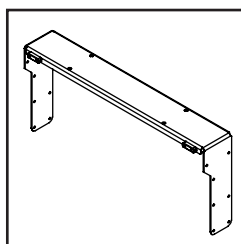
Connection hardware available for Tower Screen System:



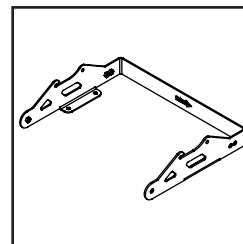
Tower Frame
Part No. 0200100004



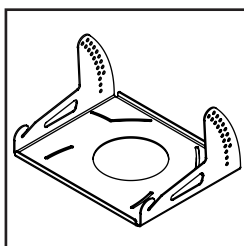
Tower Connector
Part No. 0200100003



Tower C-Bracket
Part No. 0200100005



Tower F-Bracket
Part No. 0200100006



Tower-P Bracket
Part No. 0200100007





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MANUFACTURER'S WARRANTY

1. By this warranty MAG Audio grants that all equipment manufactured under the MAG Cinema trademark is free from defects in material, components and factory workmanship under the normal use and maintenance for the time as specified below.
2. All warranty repairs and maintenance of MAG Cinema products shall be carried out at MAG Audio production sites or by MAG Audio authorized personnel at no cost for the product purchaser.
3. Warranty period for all the MAG Cinema products is 7 years from the date of purchase.
4. Warranty repairs or maintenance will be performed only if a) MAG Cinema product was purchased from an official MAG Audio distributor / dealer and b) warranty card with specified serial number, production date, realization date, vendor's signature and stamp is presented.
5. Warranty shall not cover following: damage caused by accident, misuse or failure to follow exploitation rules stated in technical manual; repairs performed by non-authorized personnel; mechanical damage caused by shipping accidents and normal tear and wear.
6. Warranty shall not be applicable to any product with defaced, removed, or modified serial number.
7. If your MAG Cinema product needs repairs or maintenance, contact your official MAG Audio distributor / dealer. Please do not ship your MAG Cinema product without prior authorization.

MANUFACTURER'S CONTACTS

2 Merezhna street, Bila Tserkva, Kyiv region, 09109, Ukraine
Tel.\Fax: +38 044 277 47 89
e-mail: info@mag-audio.com
www.mag-audio.com

YOUR MAG CINEMA DISTRIBUTOR

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person

Coordinates