Z SERIES

User Manual

Systems:

Z 320	Z 320A
Z 350	Z 350A
Z 355	Z 355A
Z 318	Z 318A

Contents

Contents 2
Panel A. Dimensions 4
1. Safety instructions 7
2. Regulatory information 8
3. Z series 9
  3.1. Introduction 9
  3.2. Z series speaker models 9
4. Specifications 10
5. System operation 12
  5.1. Rigging 12
  5.2. Flying via M10 mounting points 12
  5.3. Eye-bolt orientation 12
  5.4. Pole mounting 12
  5.5. Flying via flying adapter 13
  5.6. Mounting via rotating bracket 13
  5.7. Wall or ceiling mounting using the horizontal bracket 13
  5.8. Passive speakers 14
    5.8.1. Passive connections 14
  5.9. Powered speakers 15
    5.9.1. Mains connection 16
    5.9.2. Signal connections 16
    5.9.3. Amplifier controls 16
  5.10. Remote connection 17
    5.10.1. Bluetooth connection - Windows 7 17
    5.10.2. Bluetooth connection - Windows 10. 20
6. Z Control 23
  6.1. Overview 23
  6.2. Discovering speakers 23
  6.3. MAIN window 24
  6.4. EQ window 25
  6.5. Speaker grouping 27
  6.6. UPDATE window 28
7. Standard contents 29
8. Accessories 30
9. Warranty and assistance 31
  9.1. Product warranty 31
  9.2. Assistance 31

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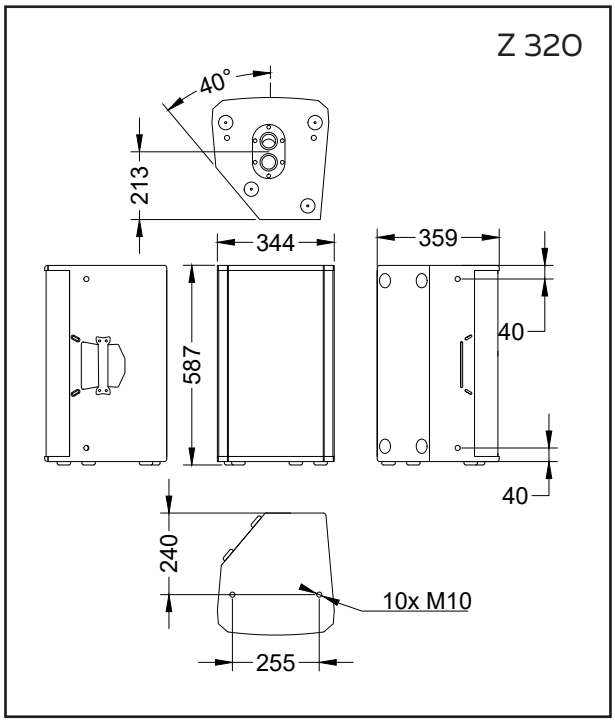
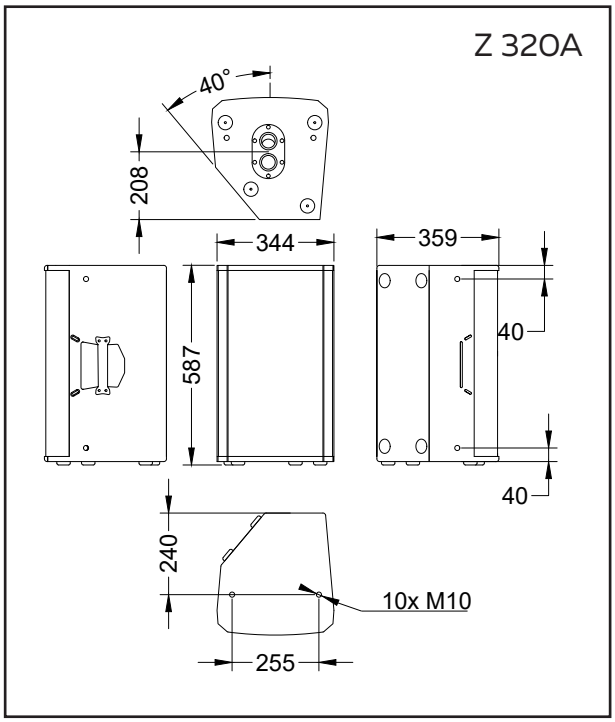
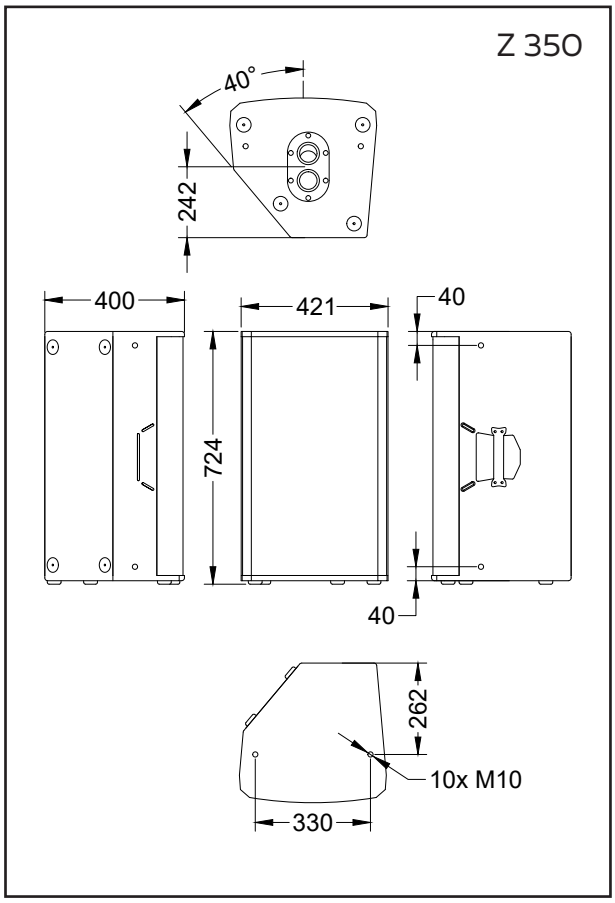
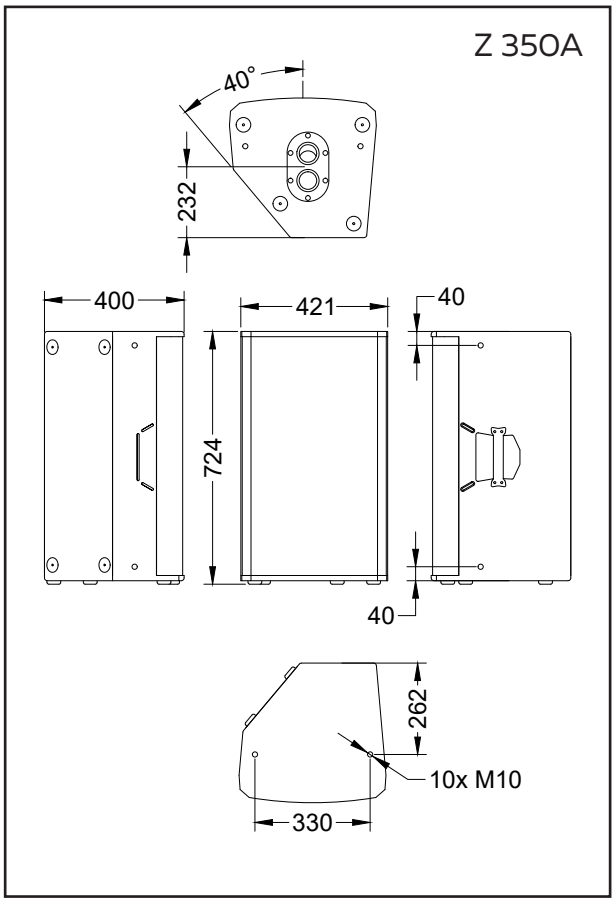
Panel A. Dimensions









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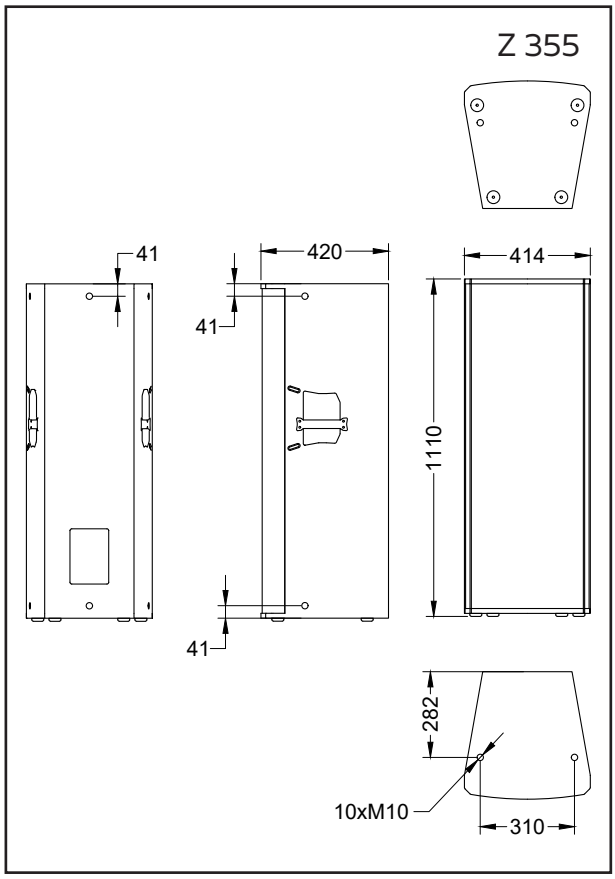

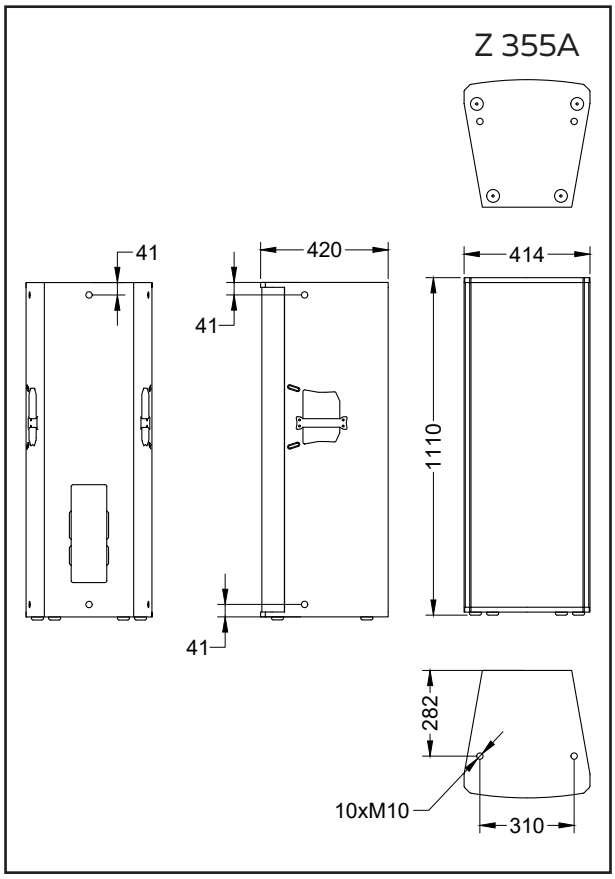

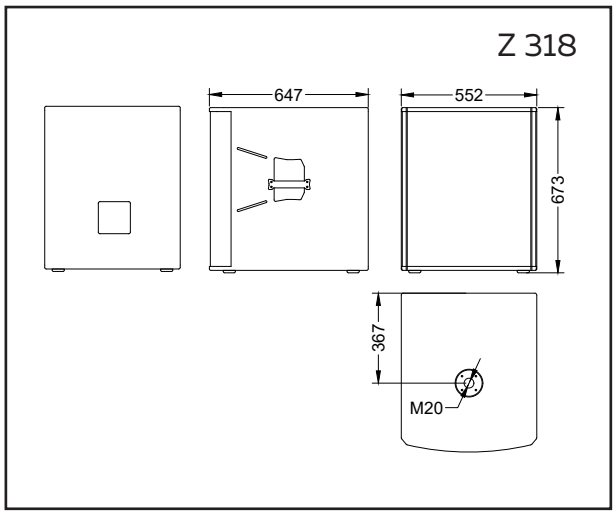

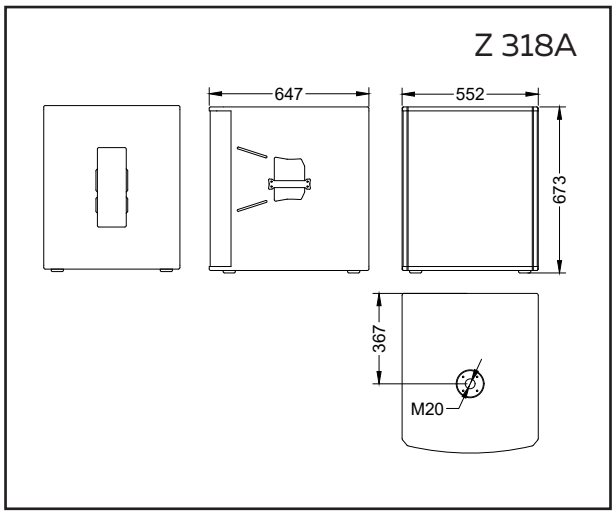

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1. Safety instructions

EXPLANATIONS OF GRAPHICAL SYMBOLS

The triangle with the lightning bolt is used to alert the user to the risk of electric shock.

The triangle with the exclamation point is used to alert the user to important operating or maintenance instructions.

The CE-mark indicates the compliance with the low voltage and electromagnetic compatibility.

Symbol for earth/ground connection.

Symbol indicating that the equipment is for indoor use only.

Symbol for conformity with Directive 2002/96/EC and Directive 2003/108/EC of the European Parliament on waste electrical and electronic equipment (WEEE).

WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT ATTEMPT TO OPEN ANY PART OF THE UNIT. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

TO COMPLETELY DISCONNECT THIS APPARATUS FROM THE AC MAINS, DISCONNECT THE POWER SUPPLY CORD PLUG FROM THE AC RECEPTACLE.

THE MAINS PLUG OF THE POWER SUPPLY CORD MUST REMAIN READILY ACCESSIBLE.

DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE, DRIPPING OR SPLASHING LIQUIDS. OBJECTS FILLED WITH LIQUIDES, SUCH AS VASES, SHOULD NOT BE PLACED ON THIS APPARATUS.

CONNECTIONS TO THE MAINS SHALL BE DONE ONLY BY AN ELECTROTECHNICALLY SKILLED PERSON ACCORDING TO THE NATIONAL REQUIREMENTS OF THE COUNTRIES WHERE THE UNIT IS SOLD.

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions carefully.

2. Keep these instructions.

3. Heed all warnings.

4. Follow all instructions.

5. Do not use this equipment near water.

6. Clean only with dry cloth.

7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8. Do not use near heat sources such as stoves, heat registers, radiatiors or other equipment (including amplifiers) that produces heat.

9. Do not use the unit near open fire sources.

10. Connect the unit only to the electric network with grounding. Use only electic plugs that provide grounding.

11. Protect the power cord from being walked on, pinched, or otherwise damaged.

12. Use only accessories specified by the manufacturer.

13. Unplug this unit during lightning storms or when unused for long periods of time.

14. 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.

15. WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS SYSTEM UNIT TO RAIN OR MOISTURE.

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

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

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2. Regulatory information

FCC COMPLIANCE NOTICE

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

EC DECLARATION OF CONFORMITY

Manufacturer:

MAG Audio LLC
Merezhna 2
Bila Tserkva, Kyiv region
09112 Ukraine

We declare that under our sole responsibility the products:

Model Names: Z 320-4, Z 320A, Z 350-4, Z 350A, Z 355-4, Z 355A, Z 318-4, Z 318A

Intended use: Professional Speaker System

Are in conformity with the provisions of the following EC Directives, including all amendments, and with national legislation implementing these directives:

- 2006/95/EC Low Voltage Directive

- 2004/108/EC Electromagnetic Compatibility Directive

- 2002/95/CE RoHs Directive

The following harmonized standards are applied:

EN 55103-1:2009 /A1:2012
EN 55014-1:2006 /A1:2009 /A2:2011
EN 55022:2010 /AC:2011
EN 61000-3-2:2006 /A1:2009 /A2: 2009
EN 61000-3-3:2013
EN 61000-3-11:2000
EN 61000-3-12:2011
EN 55103-2:2009 /IS:2012
EN 61000-4-2:2009
EN 61000-4-3:2006 /A1:2008 /IS1:2009 /A2:2010
EN 61000-4-4:2012
EN 61000-4-5:2006
EN 61000-4-6:2014
EN 61000-4-11:2004
EN 60065:2002 /A1:2006 /A11:2008 /A2:2010 /A12:2011

Bila Tserkva,
22 January 2019

Alexey Asanov
CEO

For comliance questions: info@mag-audio.com

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3. Z series

3.1. Introduction

Z series is designed for budget small- and medium-sized indoor spaces. Versatile and reliable loudspeakers with professional sound quality and modern looks, passive and powered Z series speakers are suitable for wide variety of applications. Full-range cabinets' specialized design allows using them for stage monitoring, thusly greatly improving versatility and possible application ranges of Z series.

Featuring low-wear cabinet coating, high-quality components and thoroughly worked out sonic performance, Z series systems compete with speakers way beyond their price range.

To achieve such combination of high performance, optimal sound quality and strict budget constraints, Z series systems were carefully optimized, with only high-quality and reliability sensitive components left: birch plywood cabinets, reliable Neutrik speakON connectors, MAG Audio transducers and high-frequency drivers known for long-term reliability.

Both passive and powered version are available for all models. Powered cabinets feature bi-amp amplifiers, built-in DSP providing crossover, limiting, equalization, and wireless controls capability for ease of installation and setup.

3.2. Z series speaker models

Z series includes following speaker models:

Z 320-4 part number 00-0004509
Z 320A part number 00-0003945

Z 350-4 part number 00-0004510
Z 350A part number 00-0003944

Z 355-4 part number 00-0004033
Z 355A part number 00-0003946

Z 318-4 part number 00-0004508
Z 318A part number 00-0003947

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4. Specifications

System	Z 320	Z 350	Z 355	Z 318
Type	Passive full-range speaker	Passive full-range speaker	Passive full-range speaker	Passive subwoofer
Frequency Response (-10dB)	50 - 20000 Hz	45 - 20000 Hz	40 - 20000 Hz	33 - 300 Hz
Max SPL [1]	130 dB	132 dB	138 dB	132 dB
Sensitivity (1W/1m)	96 dB	98 dB	101 dB	97 dB
LF Driver	12", 2,5" VC	15", 2,5" VC	2x15", 2,5" VC	18", 3"
HF Driver	1", 1,75" VC	1", 1,75" VC	1", 1,75" VC	
Nominal Coverage Angle (Horizontal × Vertical)	100° x 50°	100° x 50°	100° x 50°	
Impedance	4 Ohm	4 Ohm	4 Ohm	4 Ohm
Nominal power [2]	350 W	350 W	650 W	450 W
Connectors	2x NeutrikSpeakon	2x NeutrikSpeakon	2x NeutrikSpeakon	2x NeutrikSpeakon
Dimensions (W×H×D), mm	359x582x344 mm	421x719x400 mm	423x1105x420 mm	552x668x647 mm
Net weight, kg	16,6 kg	21,2 kg	39 kg	41,1 kg
Shipping weight, kg	19,1 kg	23,7 kg	42 kg	44,1 kg
Mounting	10x M10 mounting points, 35mm adjustable pole socket	10x M10 mounting points, 35mm adjustable pole socket	10x M10 mounting points	M20 distance pole adapter
Enclosure material	Plywood; wear-resistant paint	Plywood; wear-resistant paint	Plywood; wear-resistant paint	Plywood; wear-resistant paint
Grill	Steel grill, polymer protective net	Steel grill, polymer protective net	Steel grill, polymer protective net	Steel grill, polymer protective net

[1] - peak value, calculated according to AES 2 - 2012
[2] - based on transducer power measured according to AES 2 - 2012

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System	Z 320A	Z 350A	Z 355A	Z 318A
Type	Powered full-range speaker	Powered full-range speaker	Powered full-range speaker	Powered subwoofer
Frequency Response (-10dB)	50 - 20000 Hz	45 - 20000 Hz	40 - 20000 Hz	33 - 170 Hz
Max SPL (calculated)	131 dB	133 dB	137 dB	130 dB
LF Driver	12", 2,5" VC	15", 2,5" VC	2x15", 2,5" VC	18", 3" VC
HF Driver	1", 1,75" VC	1", 1,75" VC	1", 1,75" VC	
Nominal Coverage Angle (Horizontal × Vertical)	100° x 50°	100° x 50°	100° x 50°	
Amplifier power	500+150 W	500+150 W	800+400 W	650 W
Amplifier	Class D, fan cooling, DSP with phase-linear FIR	Class D, fan cooling, DSP with phase-linear FIR	Class D, fan cooling, DSP with phase-linear FIR	Class D, fan cooling, DSP
Input sensivity	0 dBV (1 V RMS)	0 dBV (1 V RMS)	0 dBV (1 V RMS)	0 dBV (1 V RMS)
Connectors	XLR input, XLR output, Powercon mains	XLR input, XLR output, Powercon mains	XLR input, XLR output, Powercon mains	XLR input, XLR output, Powercon mains
Dimensions (W×H×D)	359x582x344 mm	421x719x400 mm	423x1105x420 mm	552x668x647 mm
Net weight	17,8 kg	22,4 kg	43 kg	42,3 kg
Shipping weight	20,3 kg	24,9 kg	46 kg	45,3 kg
Mounting	10x M10 mounting points, 35mm adjustable pole socket	10x M10 mounting points, 35mm adjustable pole socket	10x M10 mounting points	M20 distance pole adapter
Enclosure material	Plywood; wear-resistant paint	Plywood; wear-resistant paint	Plywood; wear-resistant paint	Plywood; wear-resistant paint
Grill	Steel grill, polymer protective net	Steel grill, polymer protective net	Steel grill, polymer protective net	Steel grill, polymer protective net

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5. System operation

5.1. Rigging

Z series systems are equipped with M10 mounting point adapters and pole mount adapters systems for versatile applications.

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

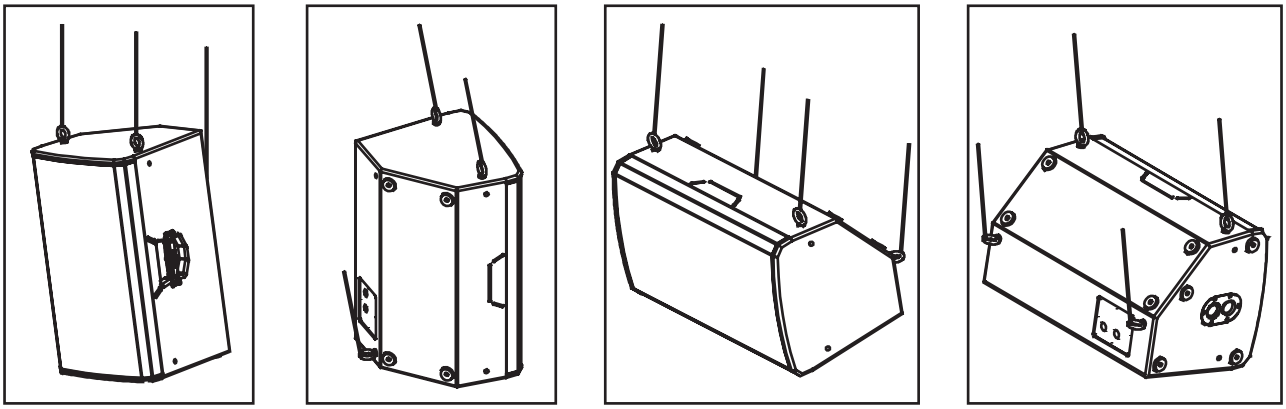
MAXIMUM WEIGHT RESTRICTIONS MUST BE FOLLOWED AT ALL TIMES!

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

5.2. Flying via M10 mounting points

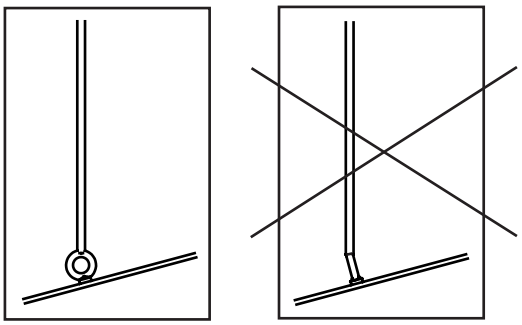
Required accessories:
VA-0016 (part No. 00-00003695)

Different options are available while flying Z series full-range speakers using integrated M10 flying points.



5.3. Eye-bolt orientation

While flying, applied force must be in the plane of the VA-0016 eyebolt's ring. It is prohibited to arrange the rig in the way that force is at the angle from the eyebolt's ring plane.



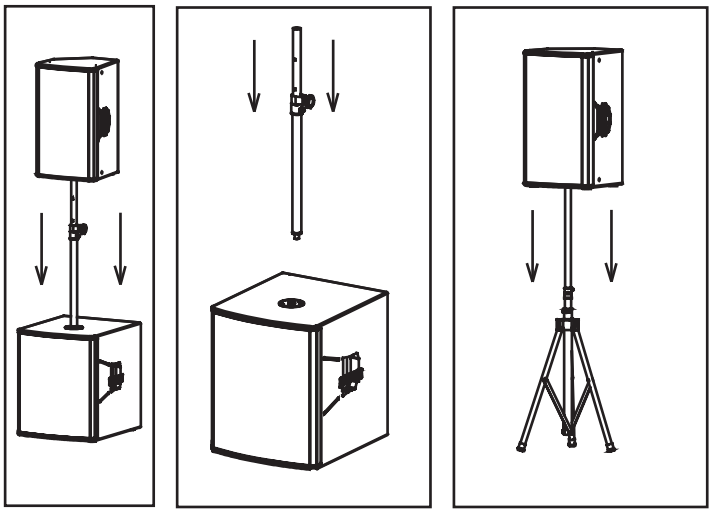
Right Wrong

5.4. Pole mounting

Accessories:
N-BOX-4 (part No. 00-00003474)
SAT-3T (part No. 00-00003644)

Z series full range speakers are equipped with pole mount adapter, allowing them to be installed onto standard speaker stands.

Z series subwoofers are equipped with distance pole adapters, allowing installation of full-range systems onto subwoofers using standard pole stands.



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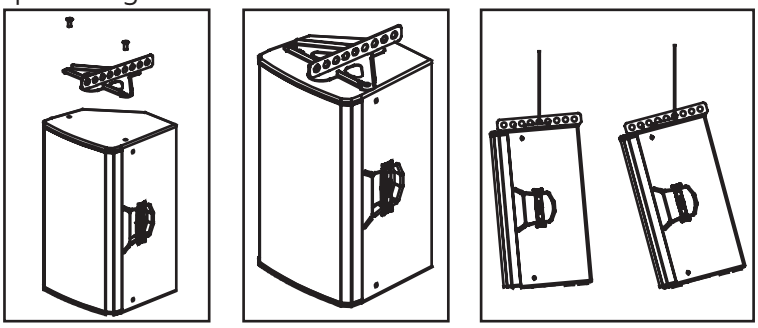
5.5. Flying via flying adapter

Required accessories:
AZ320 (part No. 00-0005427)
AZ350 (part No. 00-0005428)
VA-0012 (part No. 00-00003593)
Fast and neat flying of the single Z series' full-range cabinet using flying adapter.

- Secure Z series' cabinet onto the flying adapter using M10 bolts.

- Mount the assembly using the standard 5/8 inch shackle (VA-0012).

- Use different mounting points of flying adapter to choose different tilt angles.



5.6. Mounting via rotating bracket

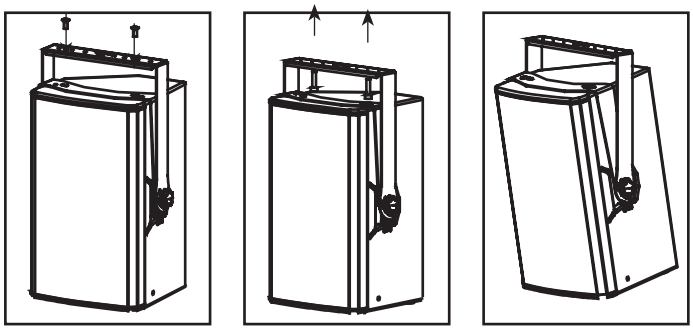
Required accessories:
LZ320 (part No. 00-0005430)
LZ350 (part No. 00-0005429)

- Secure a Z series' cabinet onto the inner half-bracket using M10 bolts.

- Use M10 bolts or threaded rods with nut to secure the outer half-bracket to the support structure.

- Release the wing-nuts and adjust the tilt angle of the speaker.

- Tighten up the wing-nuts firmly.



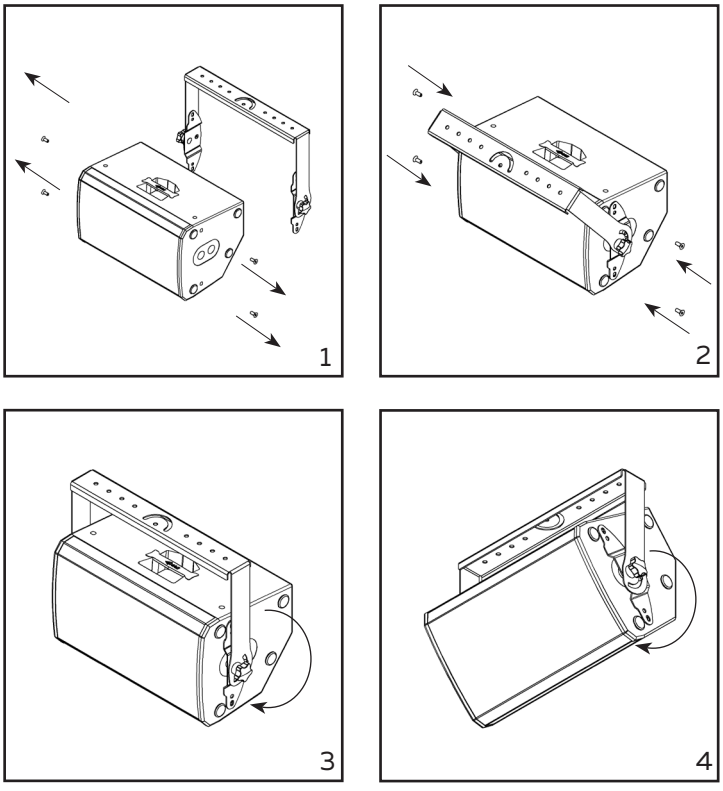
5.7. Wall or ceiling mounting using the horizontal bracket

Accessories:
HZ320 (part No. 00-0005432)
HZ350 (part No. 00-0005431)

1. Remove four M10 bolts from mounting points and position HZ320 (Z 320 and Z 320A) or HZ350 (Z 350, Z 350A) (Pic. 1.)

2. Use two M10 bolts to secure HZ320 or HZ350 horizontal bracket in place (Pic. 2)

3. Use winches on each side of the cabinet to adjust vertical tilt. (Pic. 3, 4.) Z series speaker with HZ320 or HZ350 may be mounted to wall or ceiling using mounting holes of the horizontal bracket.



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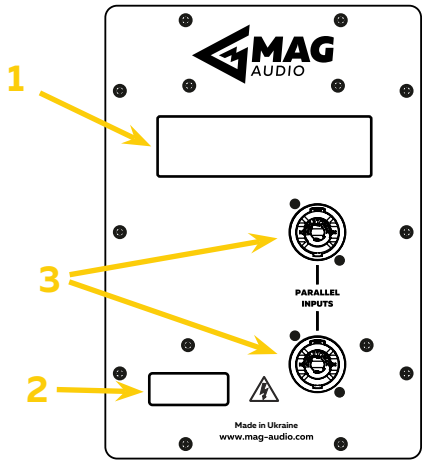
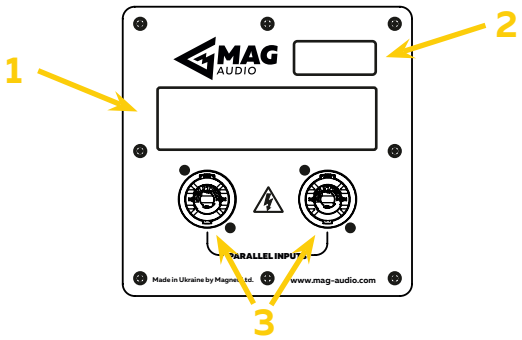
5.8. Passive speakers

Z series passive full-range speaker's connection plate



Z series passive subwoofer's connection plate



1. LABEL FIELD: name of the system, along with its basic parameters is noted here.

2. SERIAL NUMBER FIELD: sticker with the system's serial number is located here. NEVER REMOVE THE SERIAL FROM THE SYSTEM, AS IT IS IMMEDIATE WARRANTY VOID.

3. PARALLEL INPUTS: the pair of parallel Neutrik® Speakon connectors. Use these connectors to connect power amplifier and to feed the signal to the parallel system (optional).

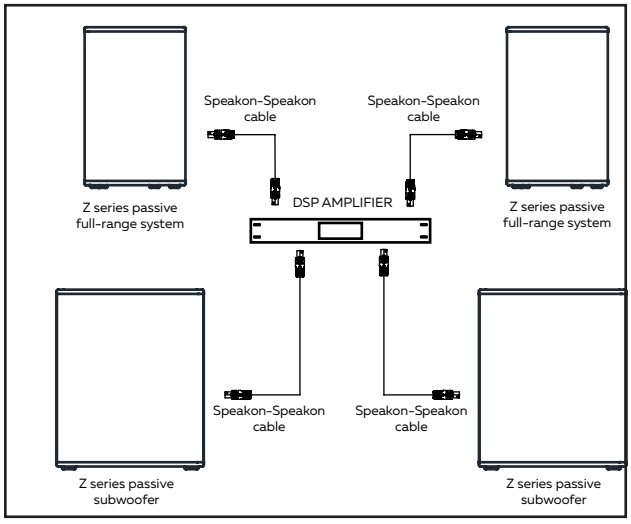
5.8.1. Passive connections

Suggested accessories:
CN-0031 (part No. 00-00004271)
CN-0032 (part No. 00-00004272)

Use power amplifier with DSP or power amplifiers with external speaker processor with Z series passive systems.

MAKE SURE TO USE HIGH PASS FILTER FOR ALL Z SERIES SYSTEMS TO PREVENT EXCESSIVE CONE MOVEMENT, RESULTING IN TRANSDUCER DAMAGE OR FAST DETERIORATION.

Recommended HPF settings, suggested power amplifier ratings, and connection pins are found in the table below:



Z series passive connection diagram

System	Amplifier power	Amplifier impedance	Connection pins	Recommended HPF
Z 320-4	350 - 700 W	4 Ohm	+1 -1	55 Hz or higher, 18 dB/oct min
Z 350-4	350 - 700 W	4 Ohm	+1 -1	50 Hz or higher, 18 dB/oct min
Z 355-4	650 - 1300 W	4 Ohm	+1 -1	47 Hz or higher, 18 dB/oct min
Z 318-4	450 - 900 W	4 Ohm	+1 -1	38 Hz or higher, 18 dB/oct min

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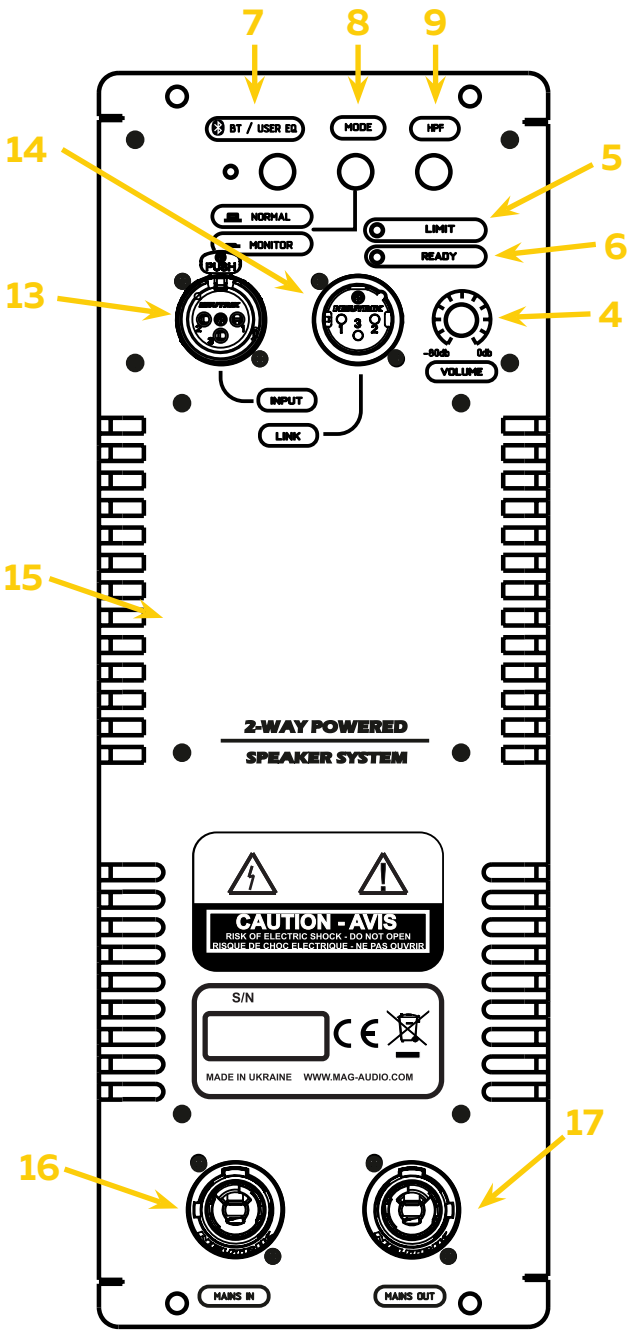
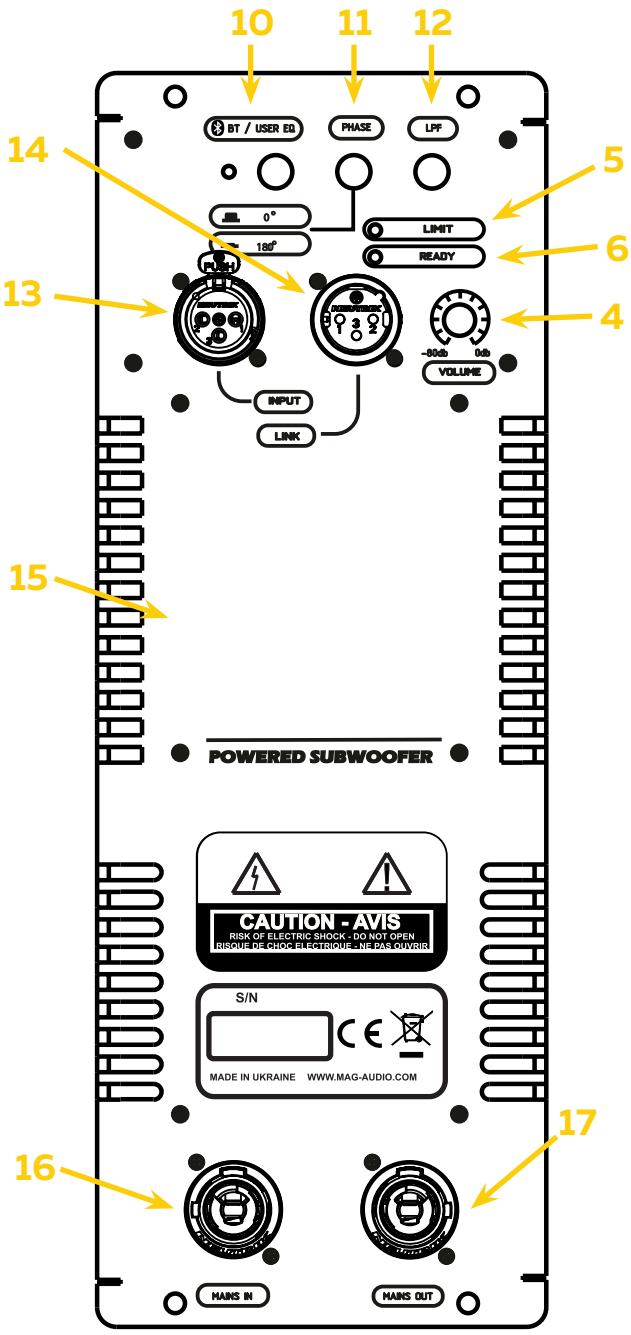
5.9. Powered speakers

Z series powered full-range speaker's amplifier



Z series powered subwoofer's amplifier



4. VOLUME KNOB: used for adjusting the volume of the system. Remember to turn the volume down before connecting/ disconnecting INPUT or LINK connectors.

5. LIMIT LED: is lit when limiter is operational, indicating excessive signal through the system.

6. READY LED: is lit when system is fully operational.

7. BT/USER EQ BUTTON (Full-range systems): engages Bluetooth controls on Bluetooth enabled versions. Engages HF boost filter for farfiled applications for versions without Bluetooth support.

8. MODE BUTTON: engages the feedback suppression contours for stage monitoring appication.

9. HPF: engages the high-pass filter.

10. BT/USER EQ BUTTON (Subwoofer systems): engages Bluetooth controls on Bluetooth enabled versions. Engages custom LF boost for different bass experience for versions without Bluetooth support.

11. PHASE BUTTON: switches the polarity of the subwoofer.

12. LPF BUTTON: engages the low-pass filter.

13. INPUT CONNECTOR: used for connecting the system to the signal source (mixing console etc.).

14. LINK CONNECTOR: used for linking additional compactible system to the same signal source.

15. HEAT SINK: do not close the ventilation openings on the heat sink, as it may cause the system to overheat and switch off by itself.

16. MAINS IN: used for connecting mains supply to the system.

17. MAINS OUT: used for feeding the mains supply to the additional system.

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5.9.1. Mains connection

Z series powered systems are supplied with CN-0010 PowerCon-E/F CEE 7/7 mains cable (part number 00-00005561). Use only original or supplied by manufacturer mains cables!

Z series powered systems are equipped with PowerCon B mains power outlets for mains link to additional Z series powered system.

Z series systems' nominal mains power specifications: AC 220V, 50/60 Hz.

Nominal voltage tolerance: 100 - 250 V.

To power up the system, connect the mains cable to the system, then to the power outlet.

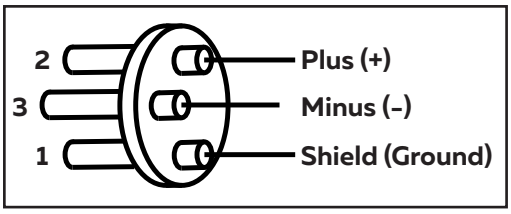
To completely power down the system, disconnect the mains cable from the power outlet.

5.9.2. Signal connections

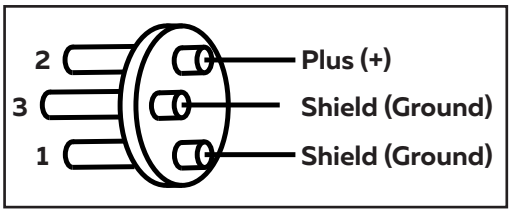
Z series systems are equipped with XLR INPUT an XLR LINK connectors for signal connection.

Use of balanced XLR connector cables is recommended. In case when balanced XLR connections are not available, unbalanced XLR connection is acceptable.

For linking the additional system to the same signal bus LINK connector may be used.



Balanced XLR Plug connections



Unbalanced XLR Plug connections

5.9.3. Amplifier controls

Use several available Z series speaker system's amplifier controls to set up the entire system:

BT/User EQ (full-range system): enables Bluetooth controls for Bluetooth enabled versions. Engages HF boost filter for farfiled applications for versions without BlueTooth support.

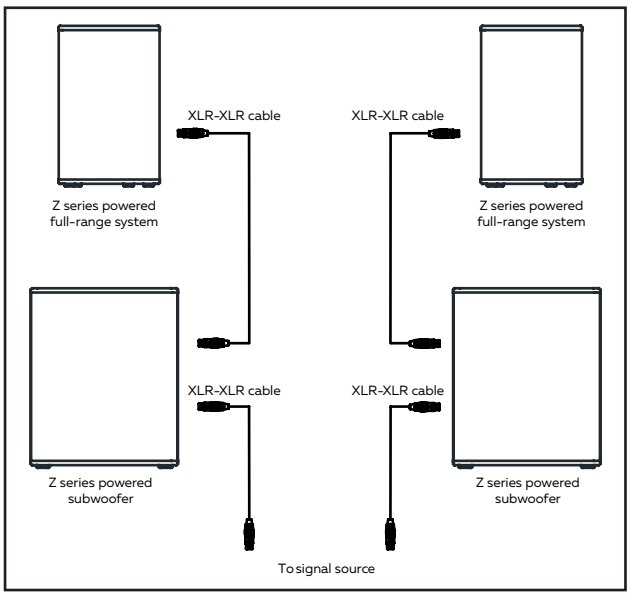
NORMAL/MONITOR MODE (full-range system): provides additional microphone feedback suppression for more performance comfort while using as stage monitor.

HPF (full-range system): provides high-pass filter to seamlessly couple the full-range system with powered subwoofer.

BT/User EQ (subwoofers): engages Bluetooth controls on Bluetooth enabled versions. Engages custom LF boost to add more "kick" to the system performance.

PHASE (subwoofers): switches the polarity of the subwoofer for better coupling with the full-range systems for different applications.

LPF (subwoofers): provides low-pass filter to seamlessly couple the subwoofer with powered full-range system.



Z series powered connection diagram

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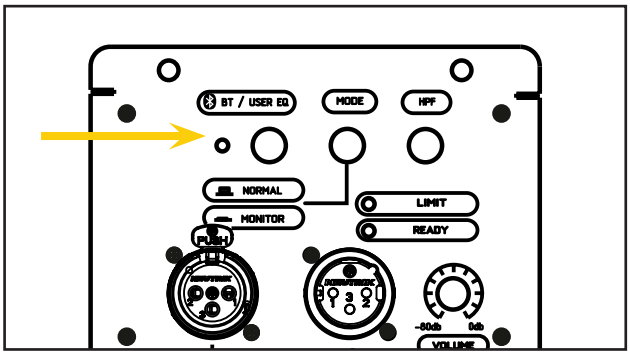
5.10. Remote connection

Z series powered speakers are capable to establish a Bluetooth connection with PC for remote control and status monitoring. Bluetooth enabled Windows PC with Z Control software suite is required for remote connection to Z series.

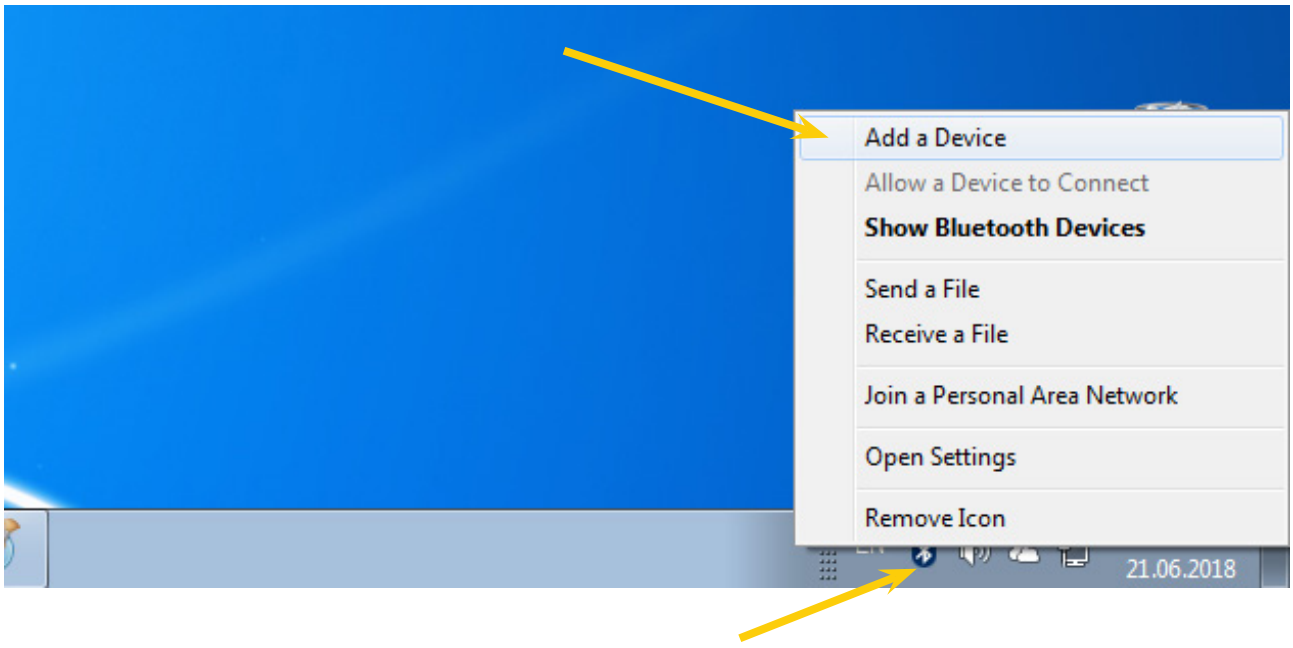
5.10.1. Bluetooth connection - Windows 7

This procedure describes discovery and connection to Z series powered speakers with PC running Windows 7 operating system.

- Start by enabling Bluetooth mode on your Z series speaker (speakers) by pressing down the BT / USER EQ button. The Bluetooth status LED will start to blink to indicate the speaker is ready for connection.



- Right-click on the Bluetooth icon in the statusbar and select "Add a Device".



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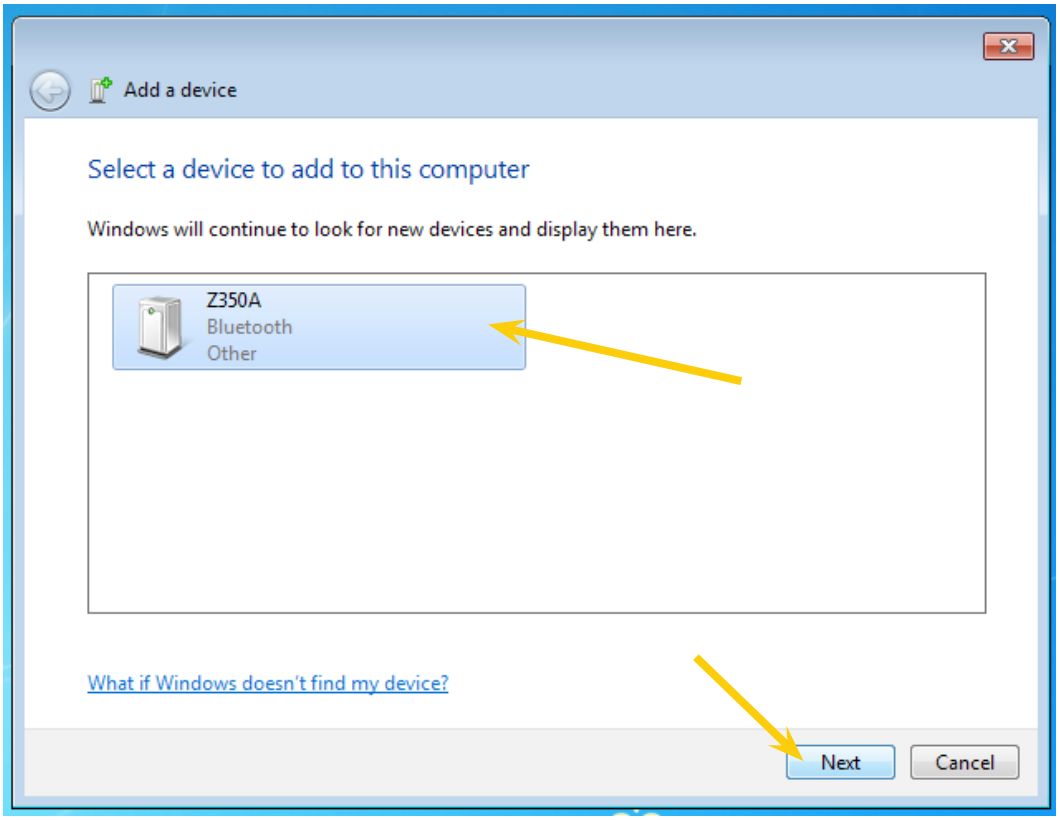
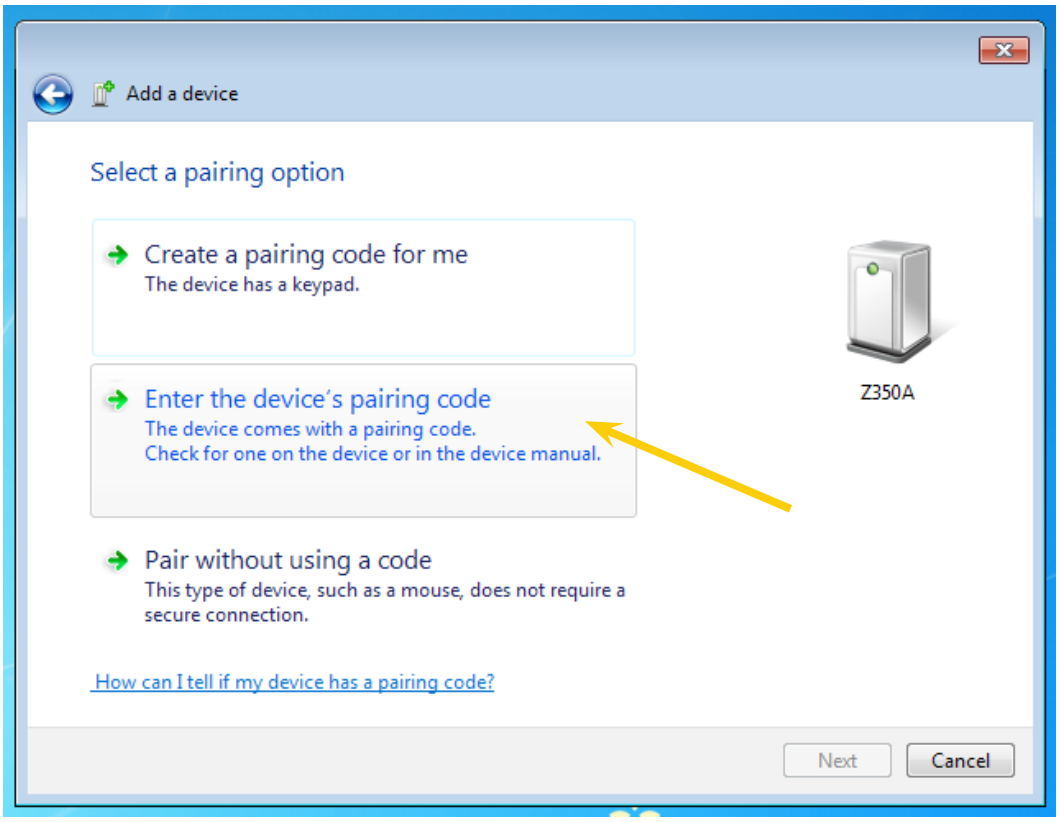
- In the appeared window, choose a Z series speaker to add and press “Next”. Each Z series speaker will be shown as different device.



- In the next window, choose “Enter the device’s pairing code”



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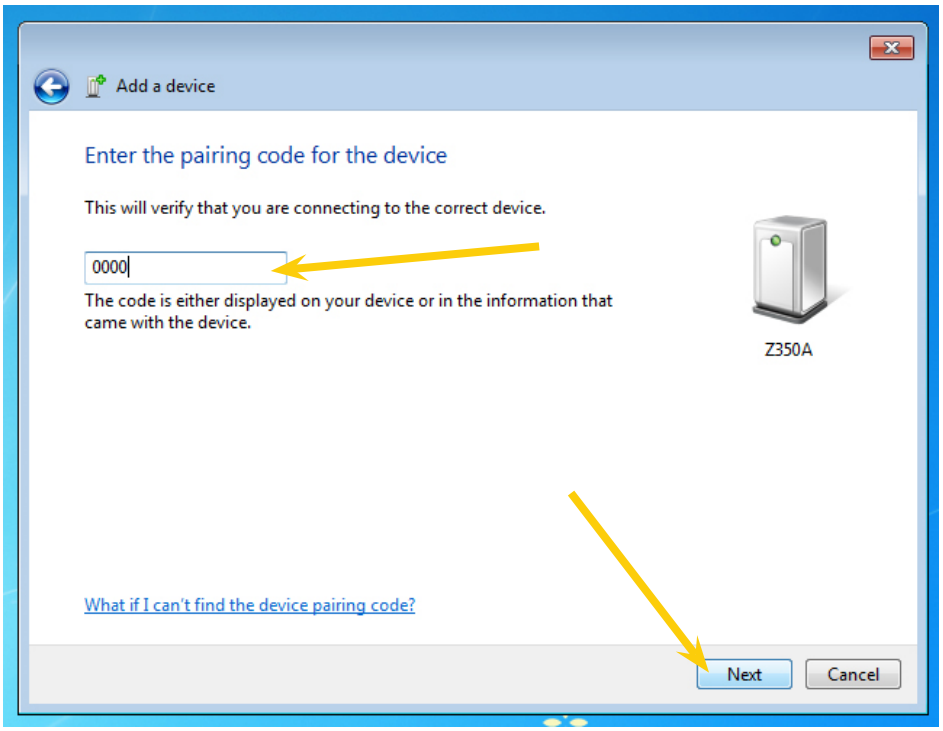
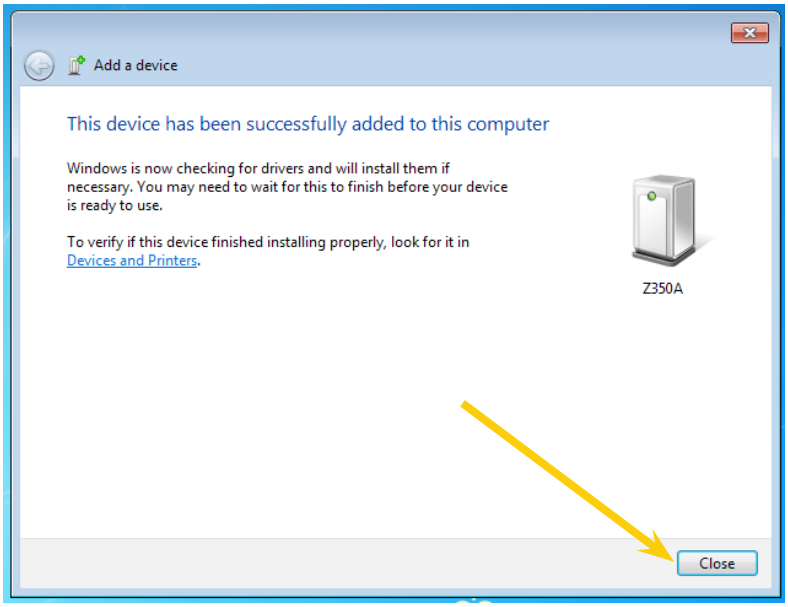
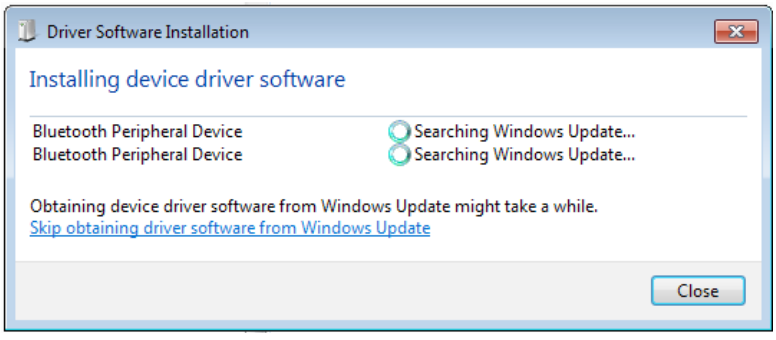
- Enter the default "0000" (four zeros) pairing code in the text field and press next.



- In the next window verify your device is properly installed and click "close". Pair additional devices if needed.



- Upon pairing with your first ever Z series device, system will automaticaly search and install drivers for your new devices. Allow this process to finish before starting Z Control software suite.



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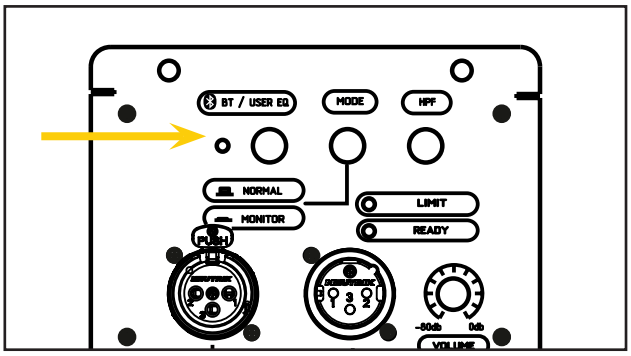
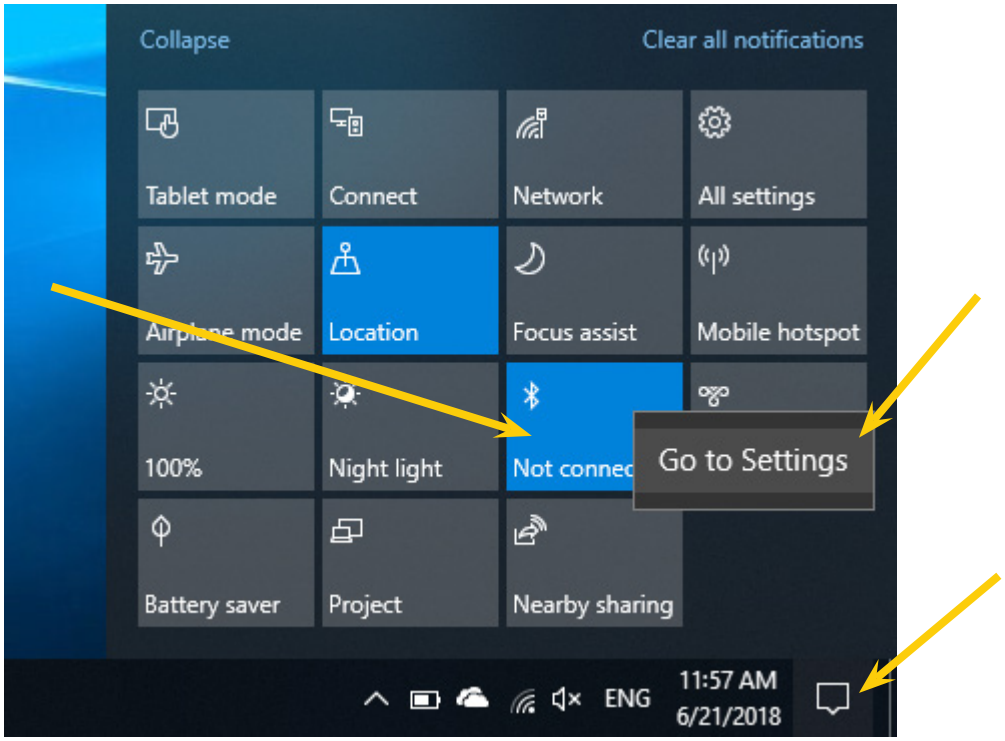
5.10.2. Bluetooth connection - Windows 10.

This procedure describes discovery and connection to Z series powered speakers with PC running Windows 10 operating system.

- Start by enabling Bluetooth mode on your Z series speaker (speakers) by pressing down the BT / USER EQ button. The Bluetooth status LED will start to blink to indicate the speaker is ready for connection.



- Open Notification panel in your taskbar, right-click "Bluetooth" and then "Go to Settings".



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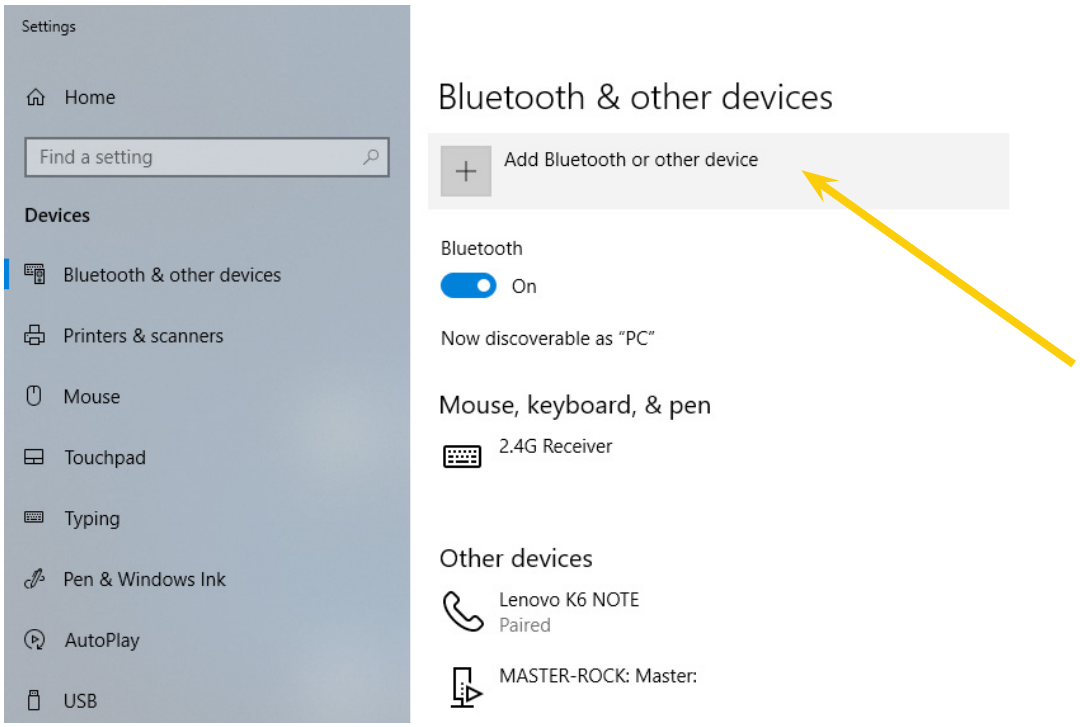
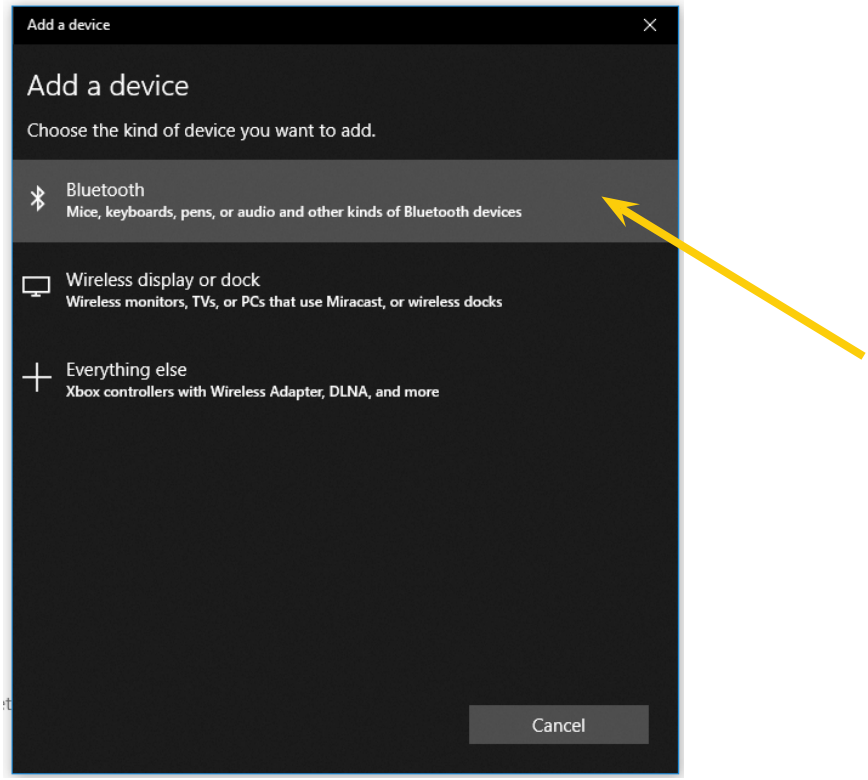
- In opened “Bluetooth & other devices” window click “Add Bluetooth or other device”.



- In next window choose “Bluetooth - Mice, keyboards, pens, or audio and other kinds of Bluetooth devices”.



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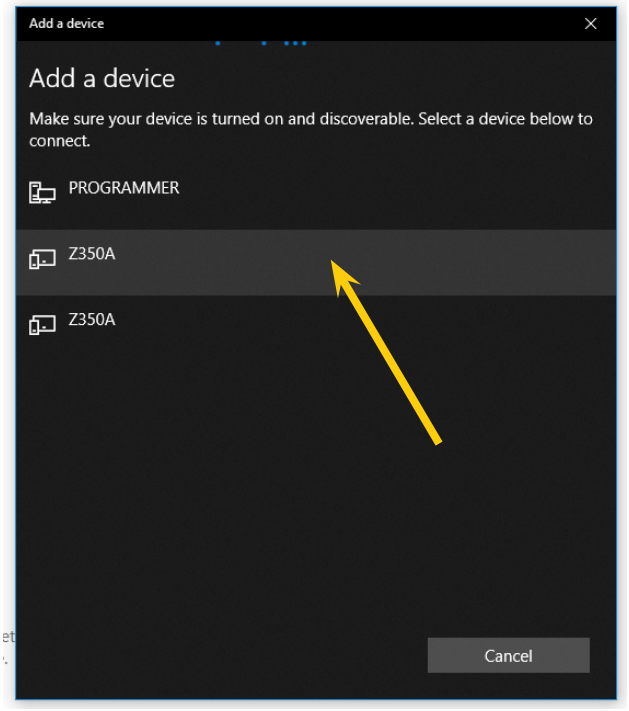
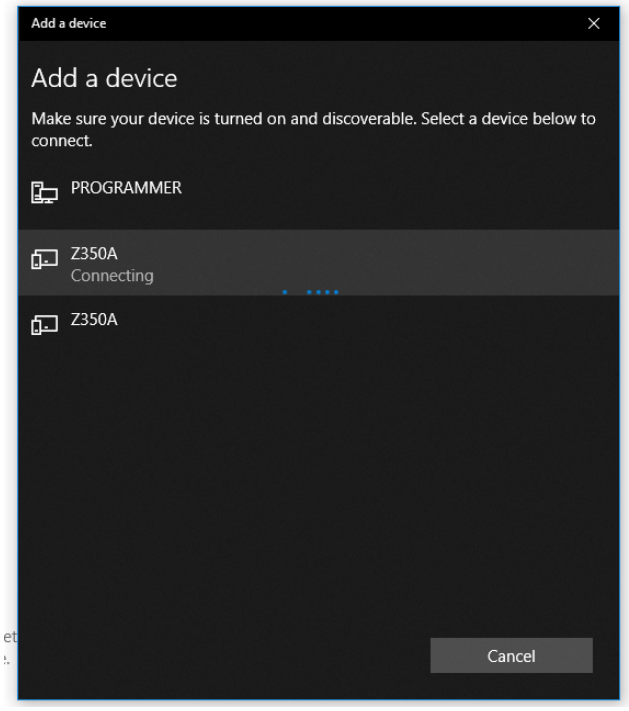
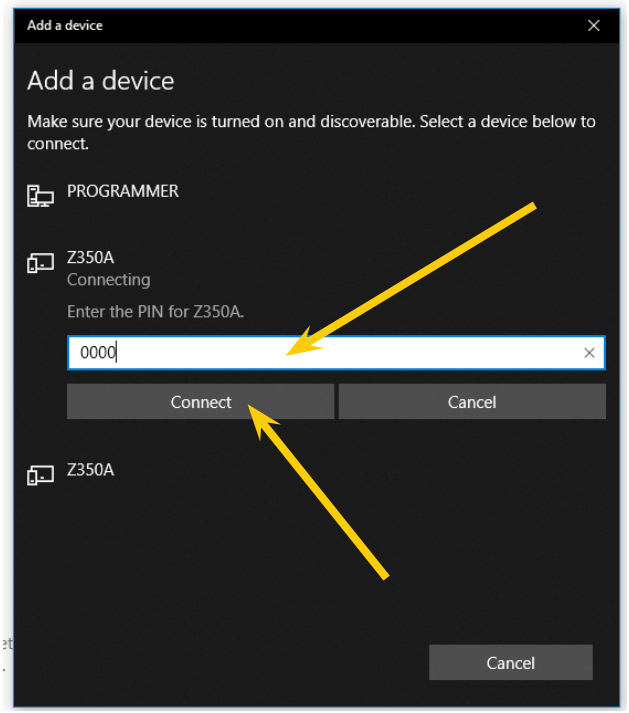
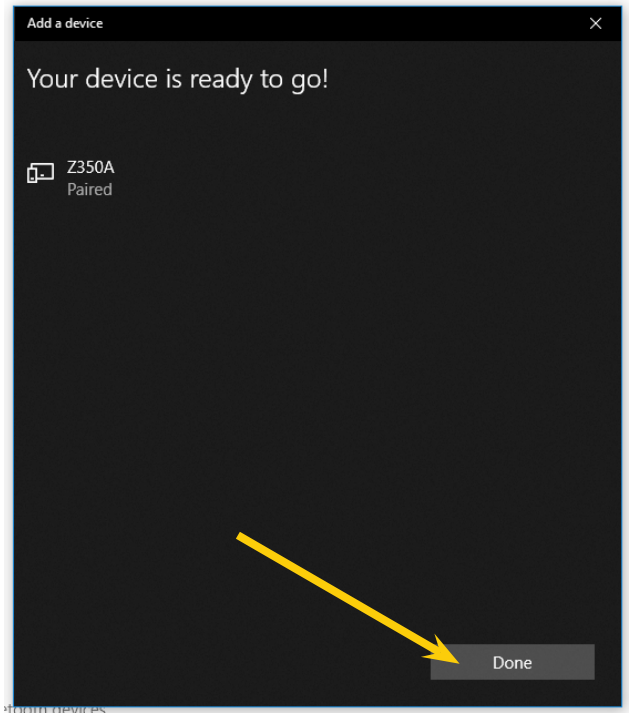
- In next window, choose the device to pair with from the list of available. Wait for pairing to initialize.





- Enter the default "0000" (four zeros) pairing code in the text field and press Connect. Wait for confirmation of successful pairing and press "Done". Pair additional devices if needed.





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6. Z Control

6.1. Overview

Z control is a dedicated software suite designed to unleash the full potential of Z series speakers. Used in conjuction with Bluetooth control interface available in powered speakers, Z control is an easy tool to set up and monitor performance of your Z series installation.

Main screen allows for fast detection of near-by Z series units, remote volume adjustment, preset switching, and level monitoring. Basic information, including processor temperature and actual mains voltage is also available.

Software suite controls built-in user 4-band parametric equalizer to adjust to the properties of the venue, and to add personal touch to the sound picture. Options include peaking, low-shelf and high-shelf filters with adjustable bandwidth and up to ±15 dB of gain, and polarity switch.

Additionaly, Z control incorporates several utilitary functions: Automatic OFF switch to assist in power saving, cooling fan mode switching to reduce background noise when no signal is available, and Noise function to help with locating Z series units.

Z control incorporates the tool with firmware update, helping users to keep their systems current as new functions and improvements are constantly added.

Z control is a free suite available for download from MAG Audio website.

6.2. Discovering speakers

In order to get started with using Z Control with Z series, speakers must be paired with computer as per paragraphs 5.4.1 and 5.4.2. After successfully paired, launch Z Control suite and press "Disc" button to discover Z series speakers in the vicinity.

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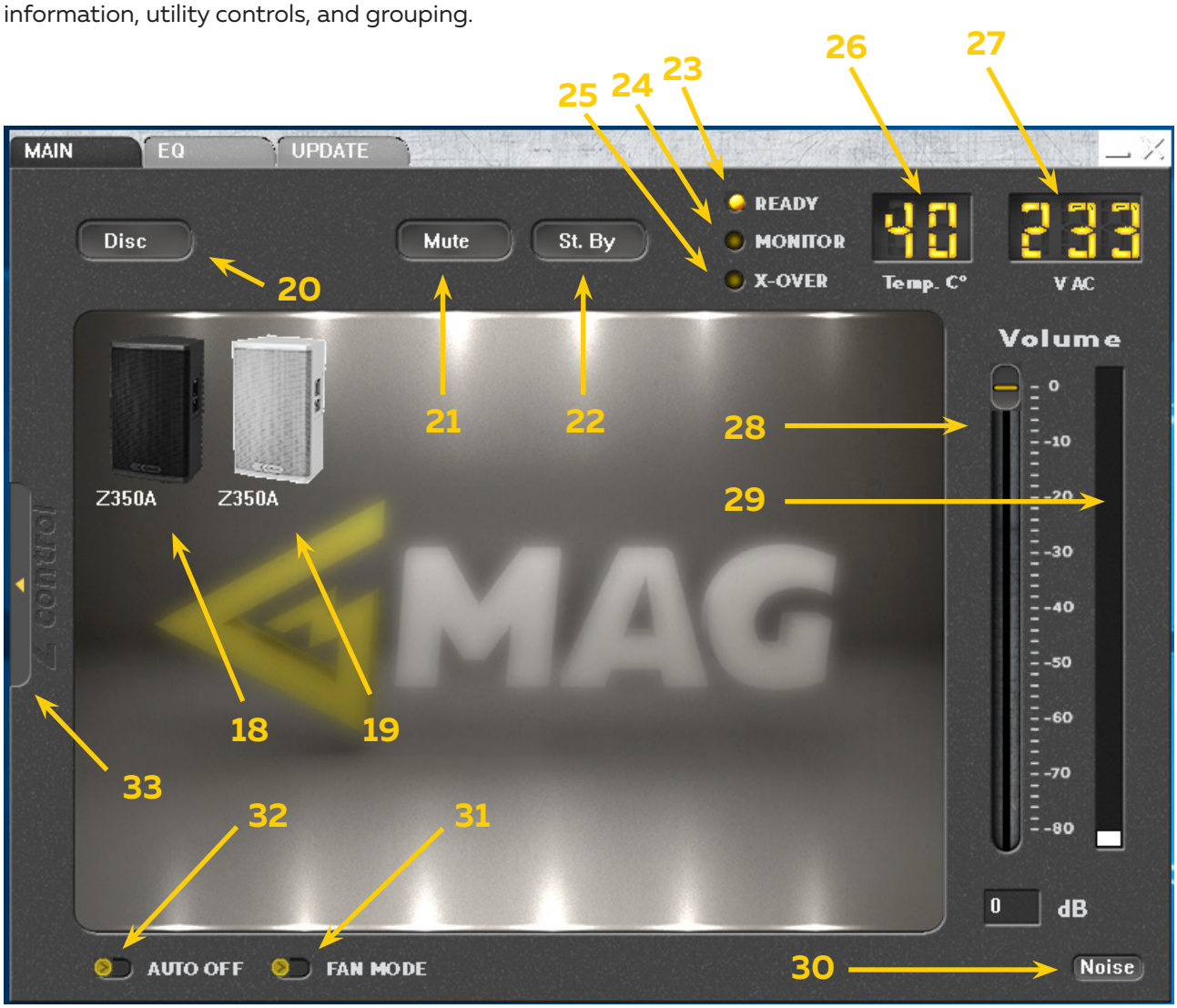
6.3. MAIN window

MAIN window provides overview of the connected Z series speakers, volume adjustment, sensor information, utility controls, and grouping.



18. DISCOVERED SELECTED SPEAKER: shows discovered powered Z series speaker that has been selected for controls.

19. DISCOVERED DESELECTED SPEAKER: shows discovered powered Z series speaker that has not been selected. Its parameters are not being controlled.

20. SPEAKER DISCOVERY BUTTON: click this to discover Z series powered speakers in the vicinity.

21. MUTE BUTTON: click to mute selected speakers.

22. STANDBY BUTTON: click to put selected speakers into energy saving standby mode.

23. READY LED: indicates speaker has been initialized and is working normally.

24. MONITOR LED: indicates selected speaker has MONITOR button pressed down on the back panel.

25. X-OVER LED: indicates selected speaker has X-OVER button pressed down on the back panel.

26. TEMP INDICATOR: shows temperature of the selected speaker's amplifier.

27. V AC INDICATOR: shows input mains voltage of selected speaker.

28. VOLUME FADER.

29. INPUT SIGNAL INDICATOR: show momentary input signal level.

30. NOISE BUTTON: engages pink noise generator for selected speaker.

31. FAN MODE SWITCH: switches between normal and smart temperature controlled fan modes.

32. AUTO OFF SWITCH: engages Auto Off mode, which switches the amplifier off while no input signal is present.

33. GROUP PANEL BUTTON: shows Group side panel.

In order to control speaker parameters, select the speaker first. MAIN window provides functions of muting and standby mode, speaker volume adjustment, engaging pink noise generator, and switching of Auto Off mode, shuting down the amplifier to prevent hum and preserve energy while no input is availalbe, and Fan Mode, engaging smart temperature controlled fan speed management.

Also MAIN window provides information on amplifier temperature, input mains voltage, and speaker preset status.

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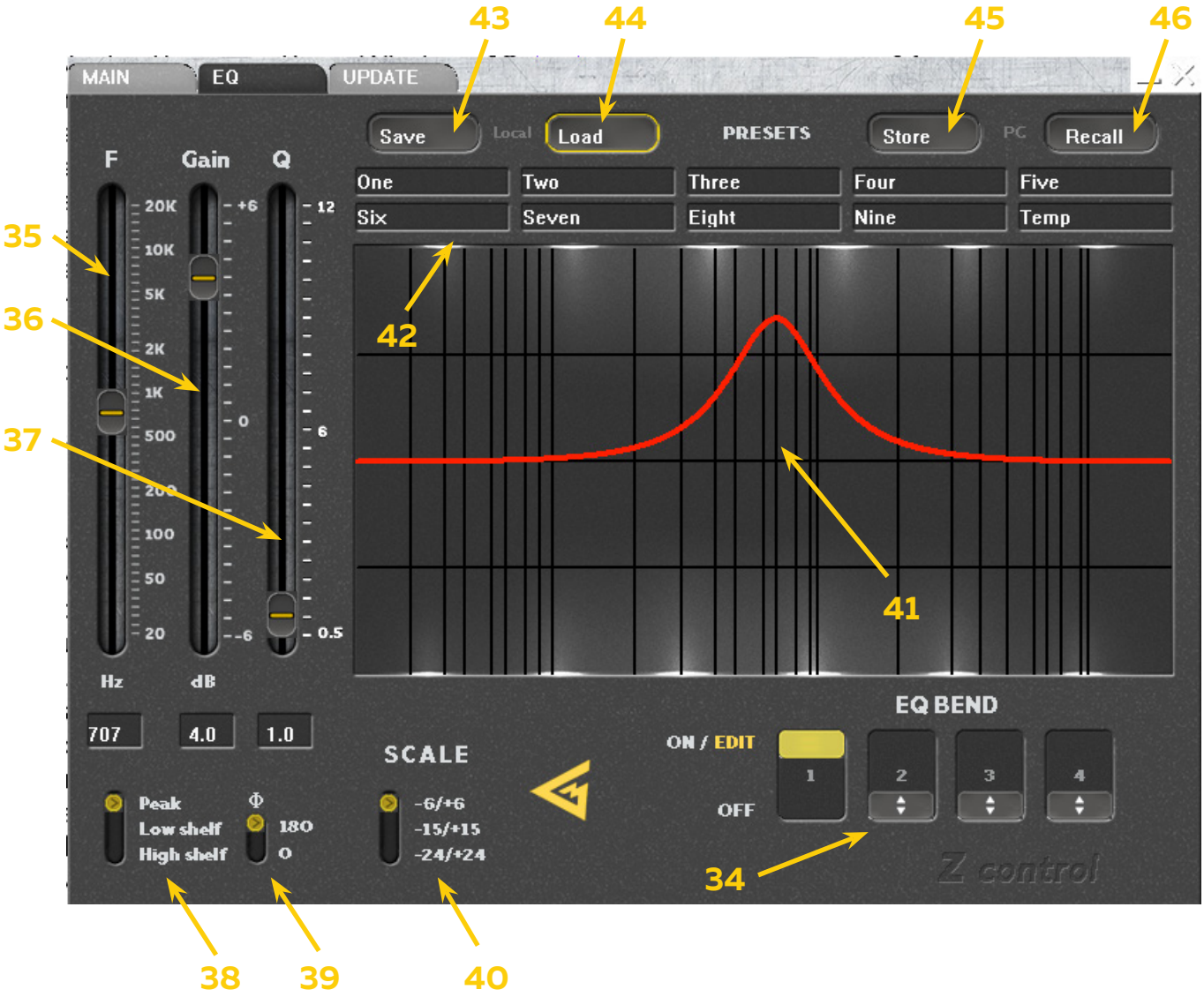
6.4. EQ window

EQ window gives access to 4-band parametric user equalizer, user preset storage, and polarity switching.



34. 1-4 PARAMETRIC BAND: turns on/off four user equalizer parametric bands.

35. FREQUENCY SLIDER: controls central frequency for selected EQ band.

36. GAIN SLIDER: controls gain for selected EQ band.

37. Q SLIDER: controls bandwidth for selected EQ band.

38. FILTER TYPE SWITCH: selects between Peaking, Low-shelf or High-shelf filter.

39. POLARITY SWITCH: flips polarity of the selected speaker.

40. SCALE SWITCH: switches gain scale of equalization curve view.

41. CURVE VIEW: graphical representation of applied user EQ.

42. STORED EQ PRESETS: shows ten slots or stored user equalizer presets.

43. SAVE PRESET BUTTON: allows saving preset into one of the Stored Presets.

44. LOAD PRESET BUTTON: allows to load preset from one of the Stored Presets.

45. PC STORE BUTTON: saves current user EQ state as a file onto PC.

46. PC RECALL BUTTON: load user EQ state from a file from PC.

In order to control speaker user EQ, select the speaker to control from MAIN window first.

Press buttons (34) to enable user EQ bands, than adjust with faders (35), (36) and (37).

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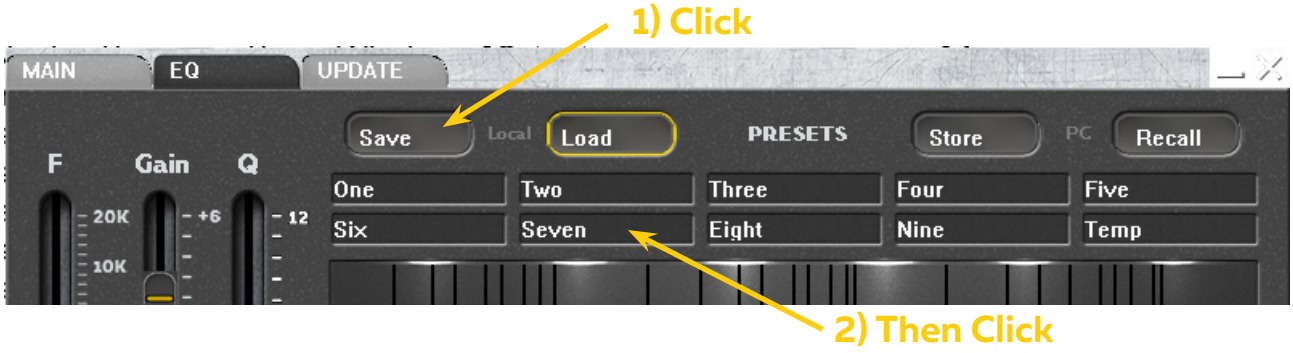
Z Control provides selection (38) between Peaking, Low-Shelf and Hi-Shelf filter for each parametric band:

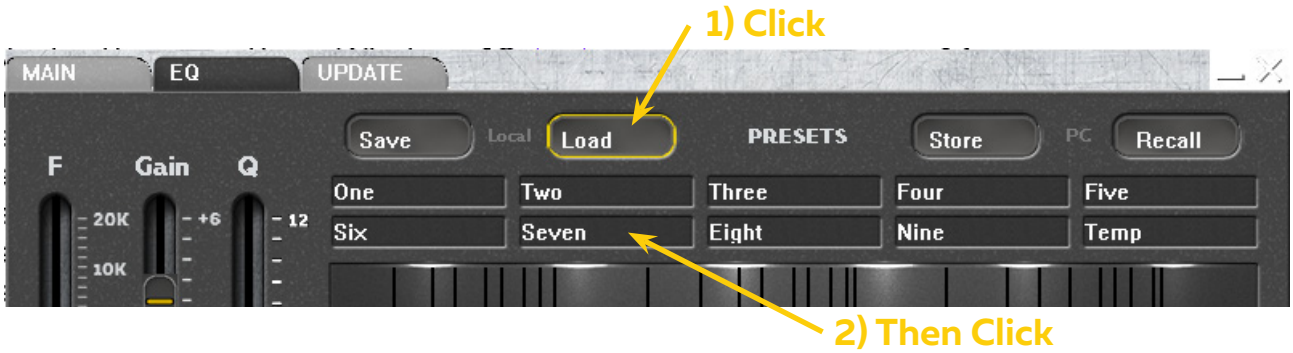
Polarity switch (39) allows flipping polarity of the selected speakers

For visual representation convenience, Curve View may be adjusted (40) to scales of ±6 dB, ±15 dB, and ±24 dB:

In order to save preset into Stored Preset slot (42), first click (43) Save Preset Button, then click desired Preset button:



In order to load preset from Stored Preset slot (42), first click (44) Load Preset Button, then click desired Preset button:



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6.5. Speaker grouping

Clicking (33) Group Panel Button will show Group side panel, which allows grouping speakers for simultaneous control.

To add speaker to a group, first select the speaker, and then click group number button. The speaker will show red group number indicating the group it belongs to.

Clicking any speaker of created group will select all speakers of same group, allowing simultaneous control over their parameters.

To remove the speaker from group, first click "Ungroup" button, and then the speaker to ungroup.

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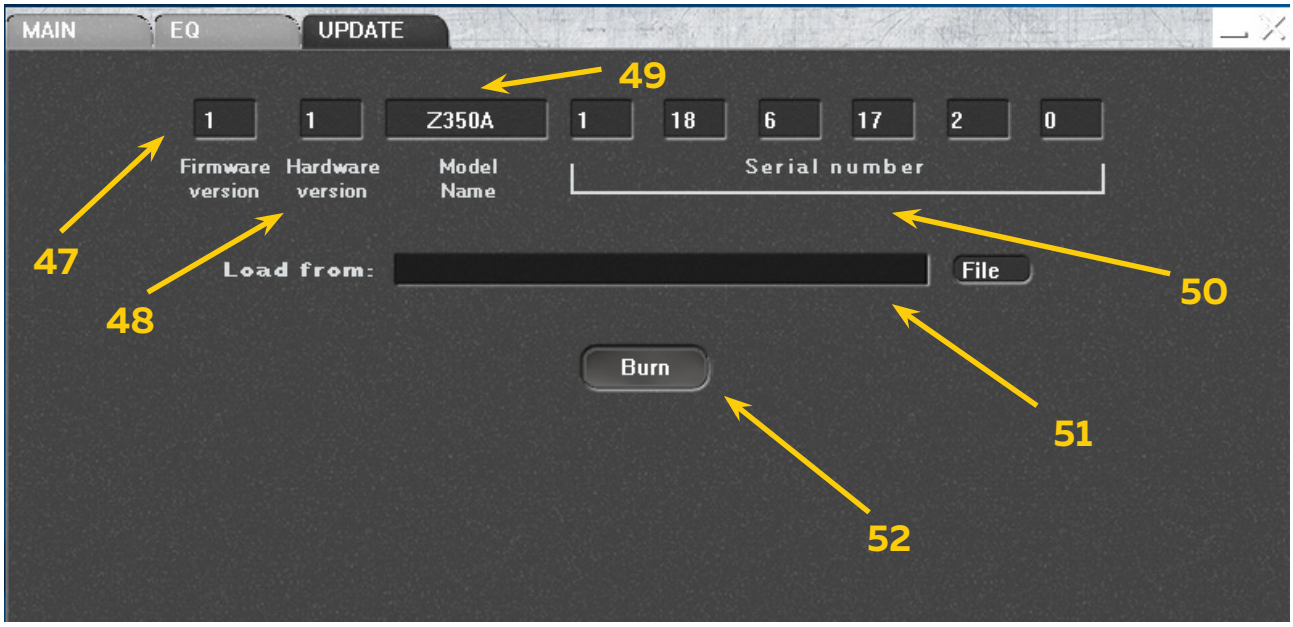
6.6. UPDATE window

UPDATE windows shows information about speaker version, serial number, and allows updating firmware from a file on the PC:



47. FIRMWARE VERSION: shows currently installed firmware version.

48. HARDWARE VERSION: shows implementation version of the speaker design.

49. MODEL NAME: shows name of the speaker.

50. SERIAL NUMBER: shows serial number of selected speaker.

51. LOAD FROM FIELD: allows selecting the firmware update file to be loaded into the selected speaker.

52. BURN BUTTON: loads selected firmware file into the selected speaker.

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7. Standard contents

Please check the complement of your Z series system upon receiving the package.

Standard contents of Z series systems:

System	Supplied Z series system	Z series User Manual	CN-0010 PowerCon mains cable	Polyethylene bag	Carton Box
Z 320-4	Z 320 4 Ohm passive speaker system	+		+	+
Z 320A	Z 320A powered speaker system	+	+	+	+
Z 350-4	Z 350 4 Ohm passive speaker system	+		+	+
Z 350A	Z 350A powered speaker system	+	+	+	+
Z 355-4	Z 355 4 Ohm passive speaker system	+		+	+
Z 355A	Z 355A powered speaker system	+	+	+	+
Z 318-4	Z 318 4 Ohm passive speaker system	+		+	+
Z 318A	Z 318A powered speaker system	+	+	+	+

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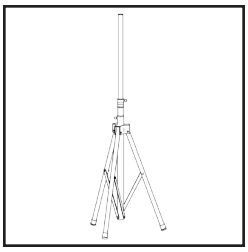
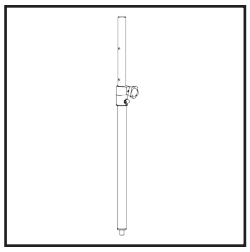
8. Accessories

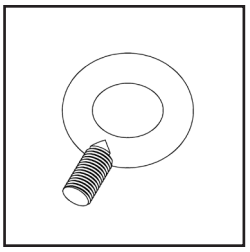
Various accessories are available for Z series systems:



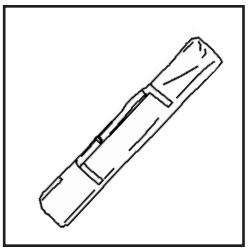
N-BOX-4 speaker stand
Part No. 00-00003474



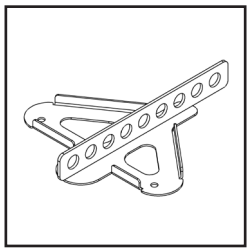
SAT-3T M20 Distance pole
Part No. 00-00003644



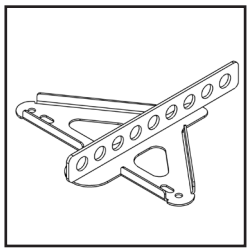
VA-0016 M10 Rigging eyebolt
Part No. 00-00003695



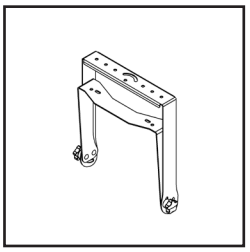
BOX-CB2 Bag for for two speaker stands
Part No. 00-00003553



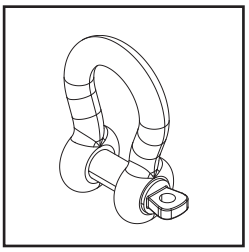
AZ320 flying bracket
Part No. 00-0005427



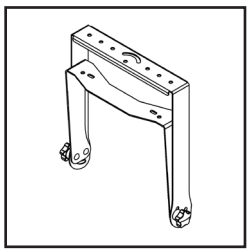
AZ350 flying bracket
Part No. 00-0005428



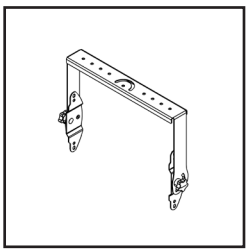
LZ320 rotation bracket
Part No. 00-0005430



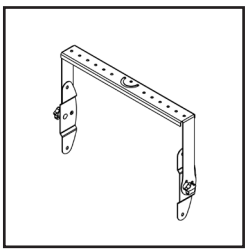
VA-0012 omega-shackle
Part No. 00-00003593



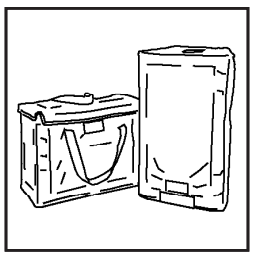
LZ350 flying bracket
Part No. 00-0005429



HZ320 horizontal bracket
Part No. 00-0005432



HZ350 horizontal bracket
Part No. 00-0005431



Z320-TB - Z 320-4 cover Part No. 00-0006626
Z320A-TB - Z 320A cover Part No. 00-0006167
Z350-TB - Z 350-4 cover Part No. 00-0006431
Z350A-TB - Z 350A cover Part No. 00-0006627
Z355-TB - Z 355-4 cover Part No. 00-0006629
Z355A-TB - Z 355A cover Part No. 00-0006628
Z318-TB - Z 318-4 cover Part No. 00-0006432
Z318A-TB - Z 318A cover Part No. 00-0006630

info@mag-audio.com **www.mag-audio.com**
Tel./Fax: +38 044 277-47-89

9. Warranty and assistance

9.1. Product warranty

1. By this warranty MAG Audio grants that all equipment manufactured under the MAG Audio 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 Audio 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 cone transducers, high frequency drivers and crossovers, whether sold separately or as a component of a speaker system, is 60 months from the production date.

4. Warranty period for enclosures, grills, connection plates and accessories, whether sold separately or as a component of a speaker system, is 60 months form the production date.

5. Warranty period for built-in power amplifiers, whether sold separately or as a component of a speaker system, is 36 months form the production date.

6. Warranty repairs or maintenance will be performed only if a) MAG Audio 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.

7. 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.

8. Warranty shall not be applicable to any product with defaced, removed, or modified serial number.

9. If your MAG Audio product needs repairs or maintenance, contact your official MAG Audio distributor / dealer. Please do not ship your MAG Audio product without prior authorization.

9.2. Assistance

There are no user-serviceable parts in your device. Refer servicing to qualified technical personnel. In addition to in-house service department, MAG Audio supports the chain of distributors, authorized in repairs and service. If your device needs repair contact your MAG Audio dealer or distributor.

Occasionally, due to the nature of the failure, it might be necessary to return defective products to MAG Audio for repair. In this case, before shipping, please kindly contact your MAG Audio distributor or dealer, or MAG Audio directly. You will be provided the RMA number code and detailed instructions regarding your particular case. Please do not send products without a prior authorization.

Thank you for your understanding, cooperation and choice of MAG Audio products.

info@mag-audio.com
www.mag-audio.com
Tel./Fax: +38 044 277-47-89

2 Merezhna str., Bila Tserkva,
Kyiv region, 09100, Ukraine
Tel./Fax.: +38 044 2774789
e-mail: info@mag-audio.com
www.mag-audio.com