ISIS-Series Loudspeakers

ISIS W-102M and ISIS 102M 10” two-way, medium dispersion
ISIS W-102W and ISIS 102W 10” two-way, wide dispersion
ISIS W-122M and ISIS 122M 12” two-way, medium dispersion
ISIS W-152M and ISIS 152M 15” two-way, medium dispersion

User Manual
Important Safety precautions & Explanation of symbols

1- Read these instructions.
2- Keep these instructions.
3- Heed all warnings.
4- Follow all instructions.
5- Clean only with a dry cloth.
6- Install in accordance with QSC Audio Product’s instructions and a licensed, professional engineer.
7- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
8- Only use attachments/accessories from QSC Audio Products, Inc.
9- Use only with mounts or brackets specified by QSC Audio Products.
10- Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in this manual.

WARNING! Before placing, installing, rigging, or suspending any speaker product, inspect all hardware, suspension, cabinets, transducers, brackets and associated equipment for damage. Any missing, corroded, deformed or non-load rated component could significantly reduce the strength of the installation, placement, or array. Any such condition severely reduces the safety of the installation and should be immediately corrected. Use only hardware which is rated for the loading conditions of the installation and any possible short-term unexpected overloading. Never exceed the rating of the hardware or equipment. Consult a licensed, professional engineer when any doubt or questions arise regarding a physical equipment installation.

Warranty (USA only; other countries, see your dealer or distributor)

Disclaimer
QSC Audio Products, Inc. is not liable for any damage to amplifiers, or any other equipment that is caused by negligence or improper installation and/or use of this loudspeaker product.

QSC Audio Products 3 Year Limited Warranty
QSC Audio Products, Inc. ("QSC") guarantees its products to be free from defective material and/or workmanship for a period of three (3) years from date of sale, and will replace defective parts and repair malfunctioning products under this warranty when the defect occurs under normal installation and use - provided the unit is returned to our factory or one of our authorized service stations via prepaid transportation with a copy of proof of purchase (i.e., sales receipt). This warranty provides that the examination of the return product must indicate, in our judgment, a manufacturing defect. This warranty does not extend to any product which has been subjected to misuse, neglect, accident, improper installation, or where the date code has been removed or defaced. QSC shall not be liable for incidental and/or consequential damages. This warranty gives you specific legal rights. This limited warranty is freely transferable during the term of the warranty period.

Customer may have additional rights, which vary from state to state.

In the event that this product was manufactured for export and sale outside of the United States or its territories, then this limited warranty shall not apply. Removal of the serial number on this product, or purchase of this product from an unauthorized dealer, will void this limited warranty.
Periodically, this warranty is updated. To obtain the most recent version of QSC’s warranty statement, please visit www.qscaudio.com.

Contact us at 800-854-4079 or visit our website at www.qscaudio.com.

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Introduction

Thank you and congratulations on your purchase of QSC’s ISIS multipurpose loudspeakers. These products represent the state-of-the-art in lightweight SR (sound reinforcement) loudspeaker systems. To get the most from your investment, we encourage you to review this manual carefully.

The ISIS 102M, ISIS 102W, ISIS 122M, and ISIS 152M loudspeaker systems are full range, high output, two-way designs delivering superior sound quality and high SPL in a lightweight, all-weather cored composite enclosure.

The ISIS W-102M, ISIS W-102W, ISIS W-122M, and ISIS W-152M loudspeaker systems are wooden enclosure versions and are essentially identical with the exceptions of weight and weather resistance. These models offer an economical alternative to the cored composite enclosures in high quality 13 to 18 ply baltic birch.

Applications include flown arrays, yoke mounting, foldback stage monitors, and portable event use (pole mount). Hardware options make the ISIS loudspeakers versatile and easy to reconfigure for mobile and touring sound companies. These loudspeakers make an excellent choice for a wide variety of SR applications.

Do not install wooden enclosure models in exterior environments unless fully shield from the weather.

Product Features (ISIS 102M (handle on top) and ISIS W-102M (side recess) shown)

Note: Models featuring cored composite enclosures have a carrying handle on their top, whereas wooden enclosure models have a handling recess on the side of the enclosure. A wooden enclosure is shown at the far right, below. Other views are of a cored composite enclosure.

1- High-frequency driver/waveguide assembly (102W waveguide differs)
2- Low-frequency driver
3- Removable metal/foam grill
4- Fly track (top and bottom of cabinet)
5- Carrying handle
6- Rear pick-point
7- Connection panel with two Speakon® connectors wired in parallel and crossover mode selector switch
8- Pole cup (bottom of cabinet)

Note- Standard model shown. Custom product options may include hardware and connector variations.
Coverage Angles

102M/122M/152M- These models are equipped with 60° conical waveguides. HF coverage remains constant regardless of cabinet orientation.

102W- Before mounting the loudspeaker, determine the mounting orientation and desired coverage angles. As supplied from the factory, the loudspeaker’s coverage angles are 150° (horizontal) x 50° (vertical) with the cabinet oriented vertically. The waveguide can be rotated to interchange the coverage angles.

Rotating the Waveguide to Alter HF Coverage Pattern (102W only)

1- Remove the grill. It is held in place by eight cap head screws.

2- Remove the four waveguide retaining screws. A #2-size Phillips screwdriver is recommended.

3- Reach into the waveguide’s port and pull gently to remove the waveguide. Be careful not to damage the connections, wiring, or the gasket between the waveguide and the cabinet. The aluminum spacer ring must remain in place.

4- Rotate the waveguide 90° clockwise or counterclockwise and set it back in place. Make certain the wiring is not stressed or pulled loose from its connections when rotating the assembly.

5- Before reinstalling the waveguide mounting screws, lift the assembly a small distance and make sure that the gasket and spacer ring are properly in place. Reposition, if required. Set the waveguide in place and install the screws. We recommend the use of removable thread sealant to prevent the screws from loosening. Do not overtighten.

6- Replace the grill. We recommend the use of removable threadlocker to prevent the screws from loosening. Do not overtighten.
Select the Desired Crossover Mode

All models are equipped with a Crossover Mode switch. Before using, set the Crossover Mode switch to the desired position using a flat-tip screwdriver. The switch has a slotted shaft; insert the screwdriver tip into the slot and turn the shaft so the slot points to the desired mode. Do not change switch positions with power applied.

**FULL RANGE:** This setting uses the internal crossover network. Connect the full-range input signal to Speakon pins 1+ and 1-.

**BI-AMP:** This setting bypasses the internal crossover network and connects Speakon pins 1+ and 1- to the low-frequency (LF) driver and pins 2+ and 2- to the high-frequency (HF) driver. Signal processing ahead of the amplifier is required; the HF driver can easily be damaged if full range program is applied! Use a four-wire cable and an amplifier configured to operate in bi-amp mode.

**BIAMP OPERATION** - Signal processing ahead of the amplifier is required; the HF driver can easily be damaged if full range program is applied!

Make the Required Connections

All models are equipped with two Neutrik NL4-series air-tight Speakon connectors. The two connectors are wired in parallel, allowing for multiple cabinets to be connected in parallel by plugging one cabinet into another with a suitable cable.

Connector pinout is determined by the Crossover Mode switch setting. Full Range selection uses Speakon pins 1+ and 1-. Bi-amp selection uses pins 1+ and 1- for the LF driver, 2+ and 2- for the HF driver. There are pinout charts printed on the connector plate.

**Maintain proper speaker and amplifier connection polarity throughout the entire system.** All positive-marked loudspeaker terminals should be connected to positive-marked amplifier output terminals. This will provide the best possible low-frequency output from your system.

**Speakon plug pinouts** - The Speakon plugs that are connected to the loudspeaker cabinets should conform to the pin outs shown at right. The connectors are shown from the wire-insertion end and show the inside of the disassembled Speakon plug.
Recommended Fastener Torque

- Fly track to cabinet: 4.52 Nm (40 in-lb)
- Pole cup to cabinet: 1.92 Nm (17 in-lb)
- Waveguide to cabinet: 1.92 Nm (17 in-lb)
- LF driver to cabinet: 1.92 Nm (17 in-lb)
- Grill to cabinet: 1.01 Nm (9 in-lb)
- Connector plate to cabinet: 1.01 Nm (9 in-lb)

All fasteners should be checked for tightness before loudspeaker use. If any fastener is loose or is removed for any reason, ensure it is installed using a torque-limiting tool to avoid cabinet damage. Fly track hardware is safety-critical and should be carefully checked before suspending or rigging the cabinet.
**ISIS 102M Dimensions (ISIS 102W similar)**

Do not scale drawing!

Fly track 34.5 x 77.5 mm (1.36 x 3.06")

33 mm (1.3") dia. foam covered carrying handle

87°

42°

177 mm square x 79 mm deep handle recess (4.6" square x 3.1" deep)

328 mm (12.9")

259 mm (10.2")

615 mm (24.2")

305 mm (12.0")

Pole cup, 38 mm ID x 57 mm deep (1.5" ID x 2.25 deep)

20% glass-filled polycarbonate

165 mm (6.5")

107 mm (4.2")

25 mm (1.0")

**Connector Plate Detail:**
- Model/serial number
- Connector pin-out charts
- Bi-amp/full range switch
- Neutrik® NL4-series
  - Speakon®, 2 places, wired in parallel.

**Fastener Information:**
All fasteners are SAE American thread, black stainless steel. All fasteners secured with Locite #242 threadlocker.

- LF driver-to-cabinet: 1/4-20 x 1.00" allen screws
- Connector plate-to-cabinet: #8-32 x 0.325" pan head screws
- Grill-to-cabinet: #8-32 x 1.00" allen screws
- Pole cup-to-cabinet: #10-32 x 0.325" flat head screws
- Rear pick-point: #5/16-18 threaded insert
- Fly track-to-cabinet: 1/4-20 x 1.00" flat head allen screws
- HF waveguide-to-cabinet: #10-32 x 1.00" flat head phillips screws

**Fly Track Information:**
- Material: Aluminum, high tensile aircraft alloy

1/2-13 threaded hole, front tracks only

Insert fastener <13 turns or cabinet can be damaged.

Specifications are subject to change without notice.
ISIS W-102M Dimensions (ISIS W-102W similar)

Specifications are subject to change without notice.

Connector Plate Detail:
- Model/serial number
- Connector pin-out charts
- Bi-amp/full range switch
- Neutrik® NL4-series Speakon®, 2 places, wired in parallel

Fastener Information:
All fasteners are SAE American thread, black stainless steel. All fasteners secured with Loctite #242 threadlocker.
- LF driver-to-cabinet: 1/4-20 x 1.00” allen screws
- Connector plate-to-cabinet: #8-32 x 0.325” pan head screws
- Grill-to-cabinet: #8-32 x 1.00” allen screws
- Pole cup-to-cabinet: #10-32 x 0.325” flat head screws
- Rear pick-point: 5/16-18 threaded insert
- Fly track-to-cabinet: 1/4-20 x 1.00” flat head allen screws
- HF waveguide-to-cabinet: #10-32 x 1.00” flat head phillips screws

Fly Track Information:
- Material: Aluminum, high tensile aircraft alloy

1/2-13 threaded hole, front tracks only.
Insert fastener <13 turns or cabinet can be damaged.
ISIS 122M Dimensions

Specifications are subject to change without notice.
ISIS W-122M Dimensions

Fly track 34.5 x 77.5 mm (1.36 x 3.06")

Do not scale drawing!

Fly track: 34.5 x 278.4 mm (1.36 x 10.96"

739 mm (29.1")

396 mm (15.6")

310 mm (12.2")

Shown with protective grill removed.

Pole cup, 38 mm ID x 57 mm deep (1.5" ID x 2.25 deep)
20% glass-filled polycarbonate

196.8 mm (7.75")

142 mm (5.6")

27.9 mm (1.1")

Connector Plate Detail:
- Model/serial number
- Connector pin-out charts
- Bi-amp/full range switch
- Neutrik® NL4-series Speakon®, 2 places, wired in parallel.

Fastener Information:
All fasteners are SAE American thread, black stainless steel. All fasteners secured with Loctite #242 threadlocker.
- LF driver-to-cabinet: 1/4-20 x 1.00" allen screws
- Connector plate-to-cabinet: #8-32 x 0.325" pan head screws
- Grill-to-cabinet: #8-32 x 1.00" allen screws
- Pole cup-to-cabinet: #10-32 x 0.325" flat head screws
- Rear pick-point: 5/16-18 threaded insert
- Fly track-to-cabinet: 1/4-20 x 1.00" flat head allen screws
- HF waveguide-to-cabinet: #10-32 x 1.00" flat head phillips screws

Fly Track Information:
- Material: Aluminum, high tensile aircraft alloy
- 2/8.4 mm (10.96") OR 77.5 mm (3.06")
- 10.80 mm (0.425")
- 13.36 mm (0.526")
- 1/2-13 threaded hole, front tracks only. Insert fastener <13 turns or cabinet can be damaged.
- 19.56 mm (0.773") diameter, 11 or 3 places
- 25.4 mm (1.00") spacing, 10 or 2 places

Specifications are subject to change without notice.
ISIS 152M Dimensions

Specifications are subject to change without notice.

Connector Plate Detail:
- Model/serial number
- Connector pin-out charts
- B-amp/full range switch
- Neutrik® NL4-series Speakon®, 2 places, wired in parallel.

Fastener Information:
All fasteners are SAE American thread, black stainless steel. All fasteners secured with Loctite #242 threadlocker.
- LF driver-to-cabinet: 1/4-20 x 1.00" allen screws
- Connector plate-to-cabinet: #8-32 x 0.375" pan head screws
- Grill-to-cabinet: #8-32 x 1.00" allen screws
- Pole cup-to-cabinet: #10-32 x 0.375" flat head screws
- Rear pick-point: 5/16-18 threaded insert
- Fly track-to-cabinet: 1/4-20 x 1.00" flat head allen screws
- HF waveguide-to-cabinet: #10-32 x 1.00" flat head phillips screws

Fly Track Information:
- Material: Aluminum, high tensile aircraft alloy
- 1/2-13 threaded hole, front tracks only. Insert fastener <13 turns or cabinet can be damaged.
- 19.56 mm (0.773") diameter, 15 or 3 places
- 25.4 mm (1.00") spacing, 14 or 2 places
ISIS W-152M Dimensions

Do not scale drawing!

Fly track: 34.5 x 380.0 mm (1.36 x 14.96")

Fly track 34.5 x 77.5 mm (1.36 x 3.06")

475 mm (18.7")

351 mm (13.8")

815 mm (22.1")

408 mm (16.0")

Pick-point

Pole cup, 38 mm ID x 57 mm deep (1.5" ID x 2.25" deep)
20% glass-filled polycarbonate

234.7 mm (9.24")

193 mm (7.6")

27.2 mm (1.07")

Radius: 72.5 mm (2.86")

Connecter Plate Detail:
- Model/serial number
- Connector pin-out charts
- Bi-amp/full range switch
- Neutrik® NL4-series Speakon®, 2 places, wired in parallel.

Fastener Information:
All fasteners are SAE American thread, black stainless steel. All fasteners secured with Loctite #242 threadlocker.

- LF driver-to-cabinet: 1/4-20 x 1.00" allen screws
- Connector plate-to-cabinet: #8-32 x 0.325" pan head screws
- Grill-to-cabinet: #8-32 x 1.00" allen screws
- Pole cup-to-cabinet: #10-32 x 0.325" flat head screws
- Rear pick-point: 5/16-18 threaded insert
- Fly track-to-cabinet: 1/4-20 x 1.00" flat head allen screws
- HF waveguide-to-cabinet: #10-32 x 1.00" flat head phillips screws

Fly Track Information:
- Material: Aluminum, high tensile aircraft alloy

34.5 mm (1.36")

380.0 mm (14.96")

77.5 mm (3.06")

10.30 mm (0.425")

13.36 mm (0.526")

1/2-13 threaded hole, front tracks only.
Insert fastener <12 turns or cabinet can be damaged.

19.56 mm (0.773") diameter, 15 or 3 places
25.4 mm (1.0") spacing, 14 or 2 places

Specifications are subject to change without notice.
ISIS 102M and ISIS W-102M Specifications

102M Full Range Specifications (Crossover Mode switch set to Full Range, Passive)

Frequency Range (free field)  
Frequency Response (-6 dB) 60-19 kHz  
Usable Frequency Range (-10 dB) 50-20 kHz

Maximum Output
- Calculated Continuous rms Output 118 dB SPL  
- Calculated Maximum Peak Output 124 dB SPL  
- Continuous Noise Exposure Level 116 dBA SPL

Impedance
- Nominal 8 ohms  
- Minimum 6.7 ohms @ 3 kHz  
- Maximum 50 ohms @ 35 Hz

Power Rating
- rms Power Handling 300 Watts, 100hrs, IEC 268-5, 50-20kHz, 6 dB crest factor  
- Recommended Amplifier Power 600 Watts

Sensitivity
- 1 W, 1 m free field 93 dB SPL

Nominal Coverage, -6 dB
- Conical 60°

Directivity Index & Q

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>DI (dB)</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>3.6</td>
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<td>9.8</td>
<td>9.6</td>
</tr>
<tr>
<td>16000</td>
<td>9.3</td>
<td>8.5</td>
</tr>
</tbody>
</table>

102M Bi-Amp Specifications (Crossover Mode switch set to Bi-Amp, LF= low frequency transducer, HF= high frequency transducer)

Frequency Range (free field)  
LF
- Frequency Response (-6 dB) 70-6.5 kHz  
- Usable (-10 dB) 50-7 kHz  
HF
- Frequency Response (-6 dB) 640-17 kHz  
- Usable (-10 dB) 520-19.3 kHz

Maximum Output
- Calculated Continuous rms Output 119 dB SPL  
- Calculated Maximum Peak Output 125 dB SPL  
- Continuous Noise Exposure Level 117 dBA SPL

Impedance
- Nominal 8 ohms 8 ohms  
- Minimum 7.9 ohms @ 280 Hz 9.2 ohms @ 3.1 kHz  
- Maximum 53 ohms @ 35 Hz 67 ohms @ 460 Hz

Power Rating
- rms Power Handling (2 hrs., 6 dB crest factor, within usable freq. range) 300 W 80 W  
- Recommended Amplifier Power 600 W 160 W

Sensitivity
- 1 W, 1 m, free field, within usable freq. range 94 dB 108 dB

102M Bi-Amp with recommended DSP Parameters (QSC DSP configurations are available at the QSC website www.qscaudio.com)

Frequency Range (free field)  
- Frequency Response (-6 dB) 55-19 kHz  
- Usable (-10 dB) 50-20 kHz

Nominal Coverage, -6 dB
- Conical 60°

Directivity Index & Q (free field)

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>DI (dB)</th>
<th>Q</th>
</tr>
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<tbody>
<tr>
<td>500</td>
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<td>1000</td>
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</tr>
<tr>
<td>6000</td>
<td>9.5</td>
<td>8.9</td>
</tr>
</tbody>
</table>

Physical

Weight
- Cored Composite: 16.8 kg net, 19.1 kg gross (37 lbs. net, 42 lbs. gross)  
- Wood: 21.3 kg net, 23.6 kg gross (47 lbs. net, 52 lbs. gross)

Specifications are subject to change without notice.
**ISIS 102W and ISIS W-102W Specifications**

### Full Range Specifications (Crossover Mode switch set to Full Range, Passive)

<table>
<thead>
<tr>
<th>Frequency Range (free field)</th>
<th>Frequency Response (-6 dB)</th>
<th>60-20k Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable Frequency Range (-10 dB)</td>
<td>50-21k Hz</td>
<td></td>
</tr>
</tbody>
</table>

#### Maximum Output
- Calculated Continuous rms Output: 117.5 dB SPL
- Calculated Maximum Peak Output: 123.5 dB SPL
- Continuous Noise Exposure Level: 116 dB SPL

#### Impedance
- Nominal: 8 ohms
- Minimum: 7.8 ohms @ 180 Hz
- Maximum: 50 ohms @ 35 Hz

#### Power Rating
- rms Power Handling: 300 Watts, 100hrs, IEC 268-5, 50-20kHz, 6 dB crest factor
- Recommended Amplifier Power: 600 Watts

#### Sensitivity
- 1 W, 1 m free field: 93 dB SPL

**Nominal Coverage, -6 dB, waveguide as factory mounted**
- 150° horizontal by 50° vertical

#### Directivity Index & Q

<table>
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<th>Frequency (Hz)</th>
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### Bi-Amp Specifications (Crossover Mode switch set to Bi-Amp, LF= low frequency transducer, HF= high frequency transducer)

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<th>HF</th>
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<tbody>
<tr>
<td>Frequency Response (-6 dB)</td>
<td>70-6.5k Hz</td>
<td>415-20.5k Hz</td>
</tr>
<tr>
<td>Usable (-10 dB)</td>
<td>50-7k Hz</td>
<td>355-20.7k Hz</td>
</tr>
</tbody>
</table>

#### Maximum Output
- Calculated Continuous rms Output: 120 dB SPL
- Calculated Maximum Peak Output: 128 dB SPL
- Continuous Noise Exposure Level: 119 dBA SPL

#### Impedance
- Nominal: 8 ohms
- Minimum: 7.6 ohms @ 330 Hz
- Maximum: 56 ohms @ 35 Hz

#### Power Rating
- rms Power Handling (2 hrs., 6 dB crest factor, within usable freq. range): 300 W
- Recommended Amplifier Power: 600 W
- 1 W, 1 m, free field, within usable freq. range: 94 dB

**Bi-Amp with recommended DSP Parameters (QSC DSP configurations are available at the QSC website www.qscaudio.com)**

<table>
<thead>
<tr>
<th>Frequency Range (free field)</th>
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<tbody>
<tr>
<td>Frequency Response (-6 dB)</td>
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#### Physical

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<td>Cored Composite: 16.8 kg net, 19.1 kg gross (37 lbs. net, 42 lbs. gross)</td>
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<td>Wood: 21.3 kg net, 23.6 kg gross (47 lbs. net, 52 lbs. gross)</td>
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Specifications are subject to change without notice.
ISIS 122M and ISIS W-122M Specifications

Full Range Specifications (Crossover Mode switch set to Full Range, Passive)

Frequency Range (free field)  
Frequency Response (-6 dB) 60-19k Hz  
Usable Frequency Range (-10 dB) 50-20k Hz

Maximum Output
- Calculated Continuous rms Output 120 dB SPL  
- Calculated Maximum Peak Output 126 dB SPL  
- Continuous Noise Exposure Level 119 dBA SPL

Impedance
- Nominal 8 ohms  
- Minimum 6.8 ohms @ 15k Hz  
- Maximum 58 ohms @ 30 Hz

Power Rating
- rms Power Handling 350 Watts, 100hrs, IEC 268-5, 50-20kHz, 6 dB crest factor  
- Recommended Amplifier Power 700 Watts

Sensitivity
- 1 W, 1 m free field 95 dB SPL

Nominal Coverage, -6 dB  
Conical, 60°

Directivity Index & Q (free field)

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<tr>
<td>1000</td>
<td>7.9</td>
<td>6.1</td>
</tr>
<tr>
<td>2000</td>
<td>9.5</td>
<td>8.8</td>
</tr>
<tr>
<td>4000</td>
<td>12.0</td>
<td>15.7</td>
</tr>
<tr>
<td>8000</td>
<td>11.2</td>
<td>13.2</td>
</tr>
<tr>
<td>16000</td>
<td>9.6</td>
<td>9.1</td>
</tr>
</tbody>
</table>

Bi-Amp Specifications (Crossover Mode switch set to Bi-Amp, LF= low frequency transducer, HF= high frequency transducer)

Frequency Range (free field)
- LF  
  Frequency Response (-6 dB) 70-3.9k Hz  
  Usable (-10 dB) 50-4k Hz  
- HF  
  Frequency Response (-6 dB) 600-19k Hz  
  Usable (-10 dB) 500-20k Hz

Maximum Output
- Calculated Continuous rms Output 121 dB SPL  
- Calculated Maximum Peak Output 127 dB SPL  
- Continuous Noise Exposure Level 120 dBA SPL

Impedance
- Nominal 8 ohms  
- Minimum 7.9 ohms @ 305 Hz  
- Maximum 52 ohms @ 32 Hz

Power Rating
- rms Power Handling (2 hrs., 6 dB crest factor, within usable freq. range) 350 W  
- Recommended Amplifier Power 700 W  
- Sensitivity  
  - 1 W, 1 m, free field, within usable freq. range 96 dB  
  - Recommended Amplifier Power 160 W

Sensitivity
- 1 W, 1 m, free field, within usable freq. range 108 dB

Bi-Amp with recommended DSP Parameters (QSC DSP configurations are available at the QSC website www.qscaudio.com)

Frequency Range (free field)
- LF  
  Frequency Response (-6 dB) 55-19k Hz  
- HF  
  Frequency Response (-6 dB) 600-19k Hz  
  Usable (-10 dB) 45-20k Hz

Directivity Index & Q (free field)

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>DI (dB)</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>4.5</td>
<td>2.8</td>
</tr>
<tr>
<td>1000</td>
<td>12.2</td>
<td>16.4</td>
</tr>
<tr>
<td>2000</td>
<td>9.7</td>
<td>9.3</td>
</tr>
<tr>
<td>4000</td>
<td>12.3</td>
<td>17.7</td>
</tr>
<tr>
<td>8000</td>
<td>11.0</td>
<td>12.5</td>
</tr>
<tr>
<td>6000</td>
<td>9.8</td>
<td>9.6</td>
</tr>
</tbody>
</table>

Physical

<table>
<thead>
<tr>
<th>Weight</th>
</tr>
</thead>
</table>
| Cored Composite: 15.4 kg net, 18.6 kg gross (34 lbs. net, 41 lbs. gross)  
| Wood: 23.6 kg net, 26.8 kg gross (52 lbs. net, 59 lbs. gross) |

Specifications are subject to change without notice.
### ISIS 152M and ISIS W-152M Specifications

#### Full Range Specifications (Crossover Mode switch set to Full Range, Passive)

<table>
<thead>
<tr>
<th>Frequency Range (free field)</th>
<th>Frequency Response (-6 dB)</th>
<th>55-20k Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable Frequency Range (-10 dB)</td>
<td>45-20.7 kHz</td>
<td></td>
</tr>
</tbody>
</table>

#### Maximum Output
- Calculated Continuous rms Output: 120.5 dB SPL
- Calculated Maximum Peak Output: 126.5 dB SPL
- Continuous Noise Exposure Level: 120 dBA SPL

#### Impedance
- Nominal: 8 ohms
- Minimum: 6.3 ohms @ 16.4 kHz
- Maximum: 52 ohms @ 23.6 Hz

#### Power Rating
- rms Power Handling: 350 Watts, 100hrs, IEC 268-5, 50-20kHz, 6 dB crest factor
- Recommended Amplifier Power: 700 Watts

#### Sensitivity
- 1 W, 1 m free field: 95.5 dB SPL

#### Nominal Coverage, -6 dB
- Conical, 60°

#### Directivity Index & Q

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>DI (dB)</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>5.7</td>
<td>3.7</td>
</tr>
<tr>
<td>1000</td>
<td>8.9</td>
<td>7.7</td>
</tr>
<tr>
<td>2000</td>
<td>12.2</td>
<td>52.1</td>
</tr>
<tr>
<td>4000</td>
<td>12.3</td>
<td>16.9</td>
</tr>
<tr>
<td>8000</td>
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<td>11.2</td>
</tr>
<tr>
<td>16000</td>
<td>9.3</td>
<td>8.4</td>
</tr>
</tbody>
</table>

#### Bi-Amp Specifications (Crossover Mode switch set to Bi-Amp, LF= low frequency transducer, HF= high frequency transducer)

<table>
<thead>
<tr>
<th>Frequency Range (free field)</th>
<th>Frequency Response (-6 dB)</th>
<th>LF</th>
<th>HF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable (-10 dB)</td>
<td>50-3.7 kHz</td>
<td>60-2.6kHz</td>
<td>450-20.7 kHz</td>
</tr>
</tbody>
</table>

#### Maximum Output
- Calculated Continuous rms Output: 121 dB SPL, 127 dB SPL
- Calculated Maximum Peak Output: 127 dB SPL, 133 dB SPL
- Continuous Noise Exposure Level: 120 dBA SPL

#### Impedance
- Nominal: 8 ohms, 8 ohms
- Minimum: 7.8 ohms @ 55 Hz, 9.2 ohms @ 5.1 kHz
- Maximum: 40 ohms @ 25 Hz, 77 ohms @ 440 Hz

#### Power Rating
- rms Power Handling (2 hrs., 6 dB crest factor, within usable freq. range): 350 W, 80 W
- Recommended Amplifier Power: 700 W, 160 W

#### Sensitivity
- 1 W, 1 m, free field, within usable freq. range: 96 dB, 108 dB

#### Bi-Amp with recommended DSP Parameters (QSC DSP configurations are available at the QSC website www.qscaudio.com)

<table>
<thead>
<tr>
<th>Frequency Range (free field)</th>
<th>Frequency Response (-6 dB)</th>
<th>50-20k Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable (-10 dB)</td>
<td>45-21k Hz</td>
<td></td>
</tr>
</tbody>
</table>

#### Directivity Index & Q (free field)

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>DI (dB)</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>5.1</td>
<td>3.4</td>
</tr>
<tr>
<td>1000</td>
<td>12.0</td>
<td>16.0</td>
</tr>
<tr>
<td>2000</td>
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<td>11.2</td>
</tr>
<tr>
<td>6000</td>
<td>9.3</td>
<td>8.4</td>
</tr>
</tbody>
</table>

#### Physical
- Weight:
  - Cored Composite: 22.2 kg net, 25.4 kg gross (49 lbs. net, 56 lbs. gross)
  - Wood: 28.1 kg net, 31.3 kg gross (62 lbs. net, 69 lbs. gross)

**Specifications are subject to change without notice.**
This page is intentionally blank so that each model's performance curves appear on facing pages.
ISIS 102M Performance Curves (ISIS W-102M similar)

- **ISIS 102M Bi-Amp Setting, Individual Driver Response and Impedance vs. Frequency**
- **ISIS 102M Bi-Amp Setting, Response vs. Frequency with Recommended Signal Processing**
- **ISIS 102M Bi-Amp Setting, Beamwidth vs. Frequency with Recommended Signal Processing**

(1) QSC DSP configurations with the recommended signal processing are available at http://www.qscaudio.com
ISIS 102W Performance Curves (ISIS W-102W similar)

ISIS 102W Full Range (passive) Setting, Response and Impedance vs. Frequency

ISIS 102W Full Range (passive) Setting, Horizontal and Vertical Beamwidth vs. Frequency
ISIS 102W Performance Curves (ISIS W-102W similar)

ISIS 102W Bi-Amp Setting, Individual Driver Response and Impedance vs. Frequency

ISIS 102W Bi-Amp Setting, Response vs. Frequency with Recommended Signal Processing

(1) QSC DSP configurations with the recommended signal processing are available at http://www.qscaudio.com
ISIS 122M Performance Curves (ISIS W-122M similar)

ISIS 122M Full Range (passive) Setting, Response and Impedance vs. Frequency

ISIS 122M Full Range (passive) Setting, Horizontal and Vertical Beamwidth vs. Frequency
ISIS 122M Performance Curves (ISIS W-122M similar)

ISIS 122M Bi-Amp Setting, Individual Driver Response and Impedance vs. Frequency

ISIS 122M Bi-Amp Setting, Response vs. Frequency with Recommended Signal Processing

ISIS 122M Bi-Amp Setting, Beamwidth vs. Frequency with Recommended Signal Processing

(1) QSC DSP configurations with the recommended signal processing are available at http://www.qscaudio.com
ISIS 152M Performance Curves (ISIS W-152M similar)

ISIS 152M Full Range (passive) Setting, Response and Impedance vs. Frequency

ISIS 152M Full Range (passive) Setting, Horizontal and Vertical Beamwidth vs. Frequency
ISIS 152M Performance Curves (ISIS W-152M similar)

(1) QSC DSP configurations with the recommended signal processing are available at http:\www.qscaudio.com
Notes:
How to Contact QSC Audio Products

Cómo comunicarse con QSC Audio Products

Comment prendre contact avec QSC Audio Products

Kontaktinformationen für QSC Audio Products

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