

New Directions for Live Sound

Magnificent architecture adds excitement and allure to any live event. But it can also create acoustical problems. IC Live arrays use advanced digital beam steering technology to deliver impeccable sound while staying in the background visually.

IC Live arrays provide a powerful solution to long standing acoustical problems with slim enclosures that blend into any environment. Individual driver control maximizes the acoustical advantages of this design. The result is unsurpassed vertical pattern control – essential for delivering intelligible speech in reverberant spaces. IC Live beams can be steered up or down while the array remains vertical – and nearly invisible.

IC Live arrays are also powerful. Their 6.5 inch neodymium low frequency transducers and 1 inch throat titanium nitride coated high frequency drivers produce surprisingly high sound levels for their size. They are equally at home delivering a quiet sermon in a reverberant cathedral, cutting through the crowd noise in a gym during a close basketball game or shaking the walls with rock music in a club.

Powerful Transparent Solutions

- Houses of Worship: traditional & modern.
- Transport Terminals: train stations, airports, etc.
- Stadiums & Arenas: lobbies & forecourts.
- Convention Centers, warehouses, gymnasiums, etc.
- Museums: lobbies, galleries, etc.
- Performing Arts Centers: vocal/orchestral “lift,” lobbies, etc.
- Any highly reverberant environment where powerful, enjoyable music and/or intelligible speech are as important as the architectural design.

POWERFUL • MUSICAL • INTELLIGIBLE

Adaptable, Articulate, Invisible

Digital beam steering puts IC Live output where it belongs: on the audience, not walls or ceilings. Computer software lets you define the opening angles for as many as four sonic beams from each IC Live array module (up to 8 beams when stacked) and aim them up or down. Meanwhile, the slim enclosure stays vertical and inconspicuous. Two ICL-F modules can be stacked for even tighter control and higher output.

Powerful, Accurate, Musical

Iconyx transparent technology controls sound with DSP intelligence, not cumbersome brute-force techniques. Multi-channel class D digital amplifiers with Integral DSP engines control every single array element with programmable precision. High-current audiophile output stages power each light, efficient transducer in the Iconyx array individually. Even at 100 feet, SPL is an impressive 105 dB (108 dB when stacked). Output is flat from 80 Hz to 20 kHz. Low frequency energy can be extended to 40 Hz or below with matching subwoofers.

Fault Monitoring

Iconyx ICL-F and ICL-F-DUAL arrays include active fault monitoring, a feature that monitors all the arrays in the system and checks on the operating status and temperature of their amplifiers at regular intervals reporting any failures.

Easy To Install

IC Live installation models are equipped with attachment points making them easy to suspend from the ceiling. Hinged mounting hardware is available for wall mounting. It allows the cabinet to be turned away from the wall for easy signal and power connections and then locked into place against the wall after installation.

Intuitive Software

Iconyx BeamWare software and built in DSP control makes it easy to shape the array’s coverage to the audience area and equalize the sound to the room.

IC Live Digitally Steerable Line Arrays



ICL-F & ICL-F-DUAL

(For Permanent Installations)



ICL-F Array

ICL-F-DUAL Array

MUSICAL & NATURAL

Natural Speech, Enjoyable Music - Anywhere

Communication is about more than consonants – meaning is conveyed by the tone of voice as well as the text. We also believe that beautiful spaces deserve beautiful music. That's why IC Live uses an audiophile-quality multi-channel amplifier to drive high performance transducers. They reproduce the full frequency spectrum with accuracy and balance, so instruments and voices sound as they should.

"Up close and personal" communication happens when sound arriving directly from the source, whether it's a live person or a loudspeaker, is much louder than sound that's reflected off the walls, windows, floor and ceiling. As you move farther away, the direct sound loses volume twice as fast as the reflected sound. In very reverberant spaces, it can be hard to understand someone speaking in a normal tone of voice more than a couple of arm's lengths away.

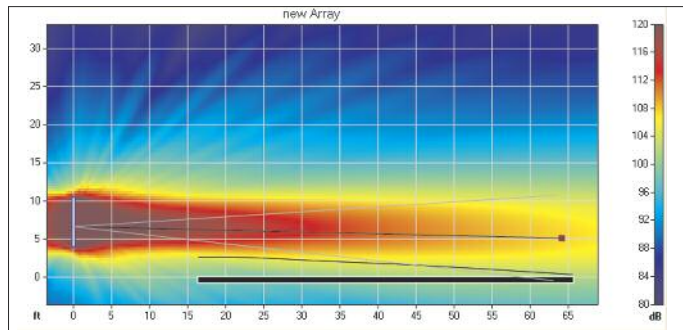
Iconyx arrays produce tightly focused, precisely aimed beams of acoustic energy that retain their intensity over long distances. Because most of the highly directional sound from an Iconyx array is focused on the listeners, very little is left to bounce around the room and confuse the ears. That's how Iconyx arrays let you sit hundreds of feet away from the speaker or musicians and still hear words and music as if they were right "in your face."

Many venues need the energy and excitement of live music as well as clear communication via the spoken word. Iconyx Live excels in both roles, with a unique combination of precise control and abundant acoustical power. Each IC Live ICL-R module has 800 Watts of pure digital amplification. To turn electrical power into accurate, natural, exciting sound, IC Live uses five 6.5-inch cone drivers high-energy neodymium magnets along with three 1-inch exit Titanium HF drivers for superior efficiency and reduced weight.

With its highly efficient amplifiers, advanced transducers and precisely focused output, a full IC Live stack produces an impressive 108 dB peak SPL at 100 feet. IC Live arrays are engineered to project the energy of live performance throughout the entire listening area, with intimate detail and exciting impact.

Iconyx uses complex software and individual DSP control over each array element to focus sound without bulky horns or boxes that block sight lines. Iconyx digitally controlled arrays give you the power, accuracy and flexibility to handle reverberant spaces of all shapes and sizes. Advanced DSP software shapes and aims up to four beams from each module. Up to ten preset configurations speed setup.

The software algorithms that shape and aim the output of an Iconyx array are complex, but the user interface is intuitively simple. Our BeamWare Windows application lets you define the audience area, then adjust the beams until coverage is optimized.



Typical BeamWare display

ICL-R

CLEARLY INTELLIGIBLE

Portable Modular System

IC Live array systems were engineered from the start for portable use in live event productions. Six system configurations are available from just two items, the ICL-R array module and its associated subwoofer which doubles as a solid support base for the array.

The ICL-R array module can be used alone or stacked two high, or combined with either one or two subwoofers.

They are easy to transport and set up quickly and easily. A unique interlocking hardware system with quick release pins joins the modules and/or subwoofers together into a solid and secure assembly in a minute or two.

Preset array configurations adapt the system to anything from a small hotel meeting to a live concert for thousands of people.



ICL-R array with horizontal subwoofer

ICL-R array with vertical subwoofer

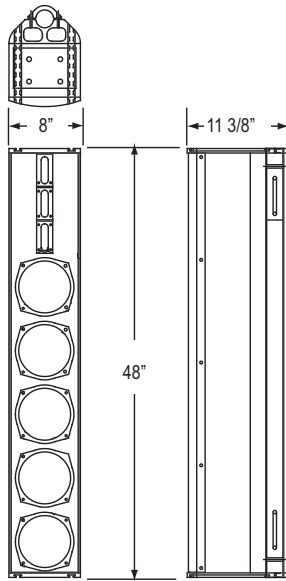
ICL-R array with dual horizontal subwoofers

Stacked ICL-R array with horizontal subwoofers

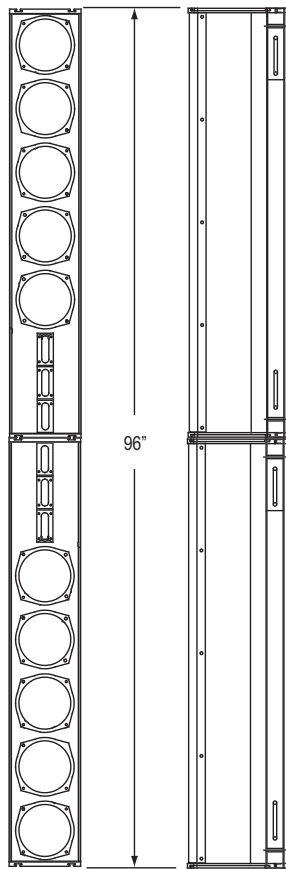


ICL-R

ICL-R Array



ICL-R Stacked Array, showing proper orientation



Sensitivity: 01.0 V (for rated power output)

Freq. Range: 80 Hz to 20 kHz

Max SPL: 102 dB pgm, 105 dB peak @ 100 Ft. (30.5 meters),
105 dB pgm, 108 dB peak when stacked
(3-octave bandwidth centered at 2 kHz)

Horiz. Dispersion: 150° up to 3 kHz; 120° above 3 kHz

Vert. Opening Angles: 20°, 25° and 30° (5°, 10°, 15° and 20° when stacked)

Aiming Angle: Adjustable from -30° to +30°

Typical Throw: 66 Ft. (20 m) 132 Ft. (40 m) when stacked

Beam Control: Effective down to 800 Hz (400 Hz when stacked)

No. Transducers: Five 6.5-inch cone transducers with neodymium magnets
Three 1-inch HF titanium nitride compression drivers

No. Amp. Channels: 8 (per module)

Dimensions: 48" H x 8" W x 11.3" D (121.5 cm x 20. cm x 28.7 cm)

Weight: 61 Lbs (27.7 Kg)

Hanging Method: AeroQuip Fly-Track

Enclosure: Finnish Birch with Aluminum end caps and perforated steel grill; suitable for outdoor use

Inputs: Analog Audio Inputs: Looping XLR (female in, male out) and Phoenix 6-pin (looping 3-in, 3-out)
CobraNet: Dual RJ45 connectors (for CAT 5e copper cable)
AES/EBU: Phoenix connector

Controls (Rear Mounted): Mute button
Up & Down Output Level push buttons
10 dB Input pad (on Analog 1 input), Power On/Off,
Push-To-Reset circuit breaker, Configuration PreSet Selector

Computer Controls: Gain, Mute, On/Standby, Input Selection
Compression, 8-Band Parametric EQ, Shelving & Rolloff
Filters, Delay, Configuration Preset Readout

Status Indicators: Power, Signal, Overdrive, Thermal, Mute, Input Pad, Failure,
Preset Configuration

Power Connector: Powercon locking connector

Finish: Black paint
Network Digital Format: 16, 20 or 24 bit PCM; 48 or 96 kHz sample rate;
selectable network latency

DSP/AMPLIFIER

Type: 8-channel, Class D amplifier/DSP processor
100 Watts RMS per channel, 150 Watts Burst

Input Impedance: >20K Ohm balanced differential
Max Input: +24 dBu (Pad in); +14 dBu @ 1V sensitivity (Pad out)

Power Rating: 100 Watts RMS per channel, 150 Watts Burst
Freq. Range: +3, -3 dB, 80 Hz to 20 kHz

THD Distortion: < 0.05% typical
Hum & Noise: <100 dB (A weighted)

Power Required: Universal 90/260 VAC, 50/60Hz. 29 VA Idle;
(per module) 500 VA @ Rated Power Output
(250 ma Idle, 4.2 Amps @RPO at 120 V)

Note: All analog inputs and outputs comply with AES Standard 48-2005 on interconnecting, grounding and shielding.



RENKUS-HEINZ

Renkus-Heinz, Inc., 19201 Cook Street, Foothill Ranch, CA 92610-3501, USA
Tel: 949-588-9997 • Fax: 949-588-9514 • Sales@renkus-heinz.com • www.renkus-heinz.com