Product Guide D-Series Digital Amplifiers

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The Russound Difference

Since 1967, Russound has been building advanced audio products designed to bring exceptional sound into the home. By specializing in professionally installed audio systems, Russound has gained extensive insight into building some of the best audio amplifiers and audio distribution systems available on the market today. Russound products have been recommended and supported by audio / video integration companies, home theater professionals, home builders, interior designers and architects throughout the USA and more than 80 countries around the world. Russound has used the knowledge gained from our residential and commercial installations to craft these new streaming products to enable high quality audio to be streamed anywhere in the home. The features, controls and performance built into our streaming products make them the audio professional's first choice when recommending streaming solutions for clients.

Overview

Russound's D-Series of amplifiers are synonymous with premium performance, reliability, and durability, forming the backbone of professional audio installations around the world.

The newest generation builds upon the legacy of these prestigious products and is offered in three compelling models:

D890 - 8 Channels (4 Zones) of Audio

D1290 - 12 Channels (6 Zones) of Audio

D1675 - 16 Channels (8 Zones) of Audio

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Overview

Each of these models is designed to expand an audio system into more rooms or areas or to add increased audio output for larger rooms or outdoor areas where a higher output volume is required.

While these amplifiers pack a punch with up to 90 watts per channel on the D890 and D1290 models and a massive 75 watts per channel in up to 16 channels in the D1675, these models utilize an advanced digital design which results in smaller chassis sizes than in any previous generation of Russound amplifiers. The 8 and 12 channel models are only a single rack-unit in height and the 16 channel takes up only 2 rack-units.

Being able to reduce the size of the amplifiers was a key goal of the new design, but Russound didn't want to reduce any features and even wanted to add more than we've ever offered in the past.

The new D-Series does just that by adding a new, easily configurable option to custom tailor the audio output for the desired application, from powering traditional speakers, to driving passive subwoofers added to any area of the home, indoors and out.

These new amplifiers give installers the flexibility and reliability they need to satisfy the needs of their clientele, all while keeping an acceptable project budget. And they deliver the high-quality audio performance that their customers expect.

Key Features

Source Flexibility

The D-Series amplifiers allow for up to 3 different input choices for every channel. Use either of two available bus inputs as the input for any channel, or use a dedicated input allowing for precise tailoring of any system to its needs.

Multi-Channel Power

By combining multiple zones of audio amplification into a single chassis, any audio installation can easily grow and expand to other areas in and around the home, without the need for separate amplifiers and separate audio connections for every area. One amplifier can power multiple loudspeakers, organized around the home in the way that best fits the needs of the homeowner.

Bridgeable for Even More Power Where Needed

Easy to Configure Audio Filter Options

The D-Series offers a new audio filter configuration option, normally not available in amplifiers of this price point, allowing for easy to adjust modifications to the output frequency range. Any stereo pair, zone, or even bridged speaker connection on these models can be set to output any of 3 different options:

Full Range Sound – This is the default setting and allows for a typical full range of sound between 20Hz and 20kHz to the connected loudspeaker(s).

Low Pass Filter – This setting allows the connected speakers to only receive low frequency audio signals, from about 20Hz to 160Hz, perfect to support passive subwoofers to add some extra bass to any area of the home. By filtering the output, the D-Series amplifier can more efficiently support only the frequencies that the subwoofer can support, allowing for much more efficient, more robust, and more dynamic sound.

High Pass Filter – As with the low pass filter option, this setting allows the zone or channel to focus on only the higher frequencies, from 80Hz and up, providing the same efficient, robust, and dynamic sound to traditional loudspeakers, and not wasting energy on lower frequency sounds that the speaker can't even provide.

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Key Features

Control Flexibility

The D-Series amplifiers offer three turn-on modes, allowing for easy configuration of any audio system.

Always On – On this setting, the amplifier is ready 24/7 to provide amazing sound throughout the home.

Signal Sensing – On this setting, the amplifier can reduce its energy consumption when not being used to less than 0.5 watts of power, but is ready to turn-on quickly to be ready to rock the party, play a podcast, watch a movie or TV show, or just to allow anyone's favorite music to be enjoyed.

12V Trigger – This setting allows an installer to custom configure exactly when the amplifier turns on and off, giving it the best of both worlds, proper turn on so that the amplifier is ready exactly when needed while maximizing the potential electricity savings of standby mode. The 12V trigger output allows this same turn-on signal to be cascaded to other devices in the home, including other D-Series amplifiers when used in a very large system.

Product Specifications

| | D890 | D1290 | D1675 |
|---------------------------|--|--|--|
| Number of Channels | 8 | 12 | 16 |
| Bridgeable | Yes | Yes | Yes |
| Filter Options | High Pass, Low Pass, Full Range | High Pass, Low Pass, Full Range | High Pass, Low Pass, Full Range |
| Power Output | | | |
| 4 ohm | 90W /Channel, 1kHz One Zone Driven | 90W /Channel, 1kHz One Zone Driven | 75W /Channel, 1kHz One Zone Driven |
| 8 ohm | 45W /Channel, 1kHz, One Zone Driven | 45W /Channel, 1kHz, One Zone Driven | 37W /Channel, 1kHz, One Zone Driven |
| 8 ohm - Bridged | 180W, 1kHz, One Zone Driven | 180W, 1kHz, One Zone Driven | 150W, 1kHz, One Zone Driven |
| Frequency Response | | | |
| Full Range Mode | 20Hz to 20kHz +/-3dB at 1W output into 4 | 20Hz to 20kHz +/-3dB at 1W output into 4 | 20Hz to 20kHz +/-3dB at 1W output into 4 |
| | or 8 Ohms | or 8 Ohms | or 8 Ohms |
| Low Pass (LP) Mode | 20Hz to 160Hz +/-3dB at 1W output into 4 | 20Hz to 160Hz +/-3dB at 1W output into 4 | 20Hz to 160Hz +/-3dB at 1W output into 4 |
| | or 8 Ohms | or 8 Ohms | or 8 Ohms |
| High Pass (HP) Mode | 80Hz to 20KHz +/-3dB at 1W output into 4 | 80Hz to 20KHz +/-3dB at 1W output into 4 | 80Hz to 20KHz +/-3dB at 1W output into 4 |
| | or 8 Ohms | or 8 Ohms | or 8 Ohms |
| Input Sensitivity | | | |
| 4 ohm, One Zone | 620 mV for 90W @ 1kHz | 620 mV for 90W @ 1kHz | 620 mV for 75W @ 1kHz |
| 8 ohm, One Zone | 690 mV for 45W @ 1kHz | 690 mV for 45W @ 1kHz | 690 mV for 37W @ 1kHz |
| Other Specifications | | | |
| Input Impedance | >22k ohms Line Input | >22k ohms Line Input | >22k ohms Line Input |
| Signal to Noise Ratio | >90dB A-weighted | >90dB A-weighted | >90dB A-weighted |
| Trigger Input | 12V, Global | 12V, Global | 12V, Global |
| Trigger Output | 12V, Global | 12V, Global | 12V, Global |
| Volume Gain Adjustment | By Zone | By Zone | By Zone |
| Line Inputs | Selectable: Bus A, Bus B, Zone | Selectable: Bus A, Bus B, Zone | Selectable: Bus A, Bus B, Zone |
| Speaker Connectors | Detachable Screw-down, up to 12 gauge | Detachable Screw-down, up to 12 gauge | Detachable Screw-down, up to 12 gauge |
| Operating Temperature | 32°F to 104°F | 32°F to 104°F | 32°F to 104°F |
| | (0°C to 40°C) | (0°C to 40°C) | (0°C to 40°C) |
| Altitude | 0 to 9,843' | 0 to 9,843' | 0 to 9,843' |
| | (0-3,000m) | (0-3,000m) | (0-3,000m) |
| | Power | Requirements | |
| North American Model | 115-120VAC, 60Hz (600W Max) | 115-120VAC, 60Hz (800W Max) | 115-120VAC, 60Hz (1000W Max) |
| International Model (-i) | 220-240VAC, 50Hz (600W Max) | 220-240VAC, 50Hz (800W Max) | 220-240VAC, 50Hz (1000W Max) |
| Fuse Rating | | | · · · · · · · · · · · · · · · · · · · |
| North American Model | 6.3A, 250V FA | 10A, 250V FA | 10A, 250V FA |
| International Model (-i) | 6.3A, 250V FA | 10A, 250V FA | 10A, 250V FA |
| Power Connector | IEC C14 | IEC C14 | IEC C14 |
| Standby Power Consumption | 0.3W | 0.3W | 0.3W |
| | Di | mensions | |
| Des durat Disconstinue | 17.125"(W) x 1.75"(H) x 9.75"(D) | 17.125"(W) x 1.75"(H) x 9.75"(D) | 17.125"(W) x 3.5"(H) x 9.75"(D) |
| Product Dimensions | (43.5 x 4.4 x 24.8 cm) | (43.5 x 4.4 x 24.8 cm) | (43.5 x 8.8 x 24.8 cm) |
| Product Weight | 8 lbs (3.6 kg) | 9 lbs (4.1 kg) | 12.8 lbs (5.8 kg) |
| Shipping Dimensions | 20.2"(W) x 4.9" (H) x 14.3" (D) | 20.2"(W) x 4.9" (H) x 14.3" (D) | 20.2"(W) x 6.7" (H) x 14.3" (D) |
| | (51.33 x 12.5 x 36.3 cm) | (51.33 x 12.5 x 36.3 cm) | (51.33 x 17 x 36.3 cm) |
| Shipping Weight | 9.5 lbs (4.3 kg) | 10.6 lbs (4.8 kg) | 14.8 lbs (6.7 kg) |
| Limited Warranty | 2 Years | 2 Years | 2 Years |

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The Story Behind Russound The Russound Difference from Design to Installation

About Russound

Russound was founded in 1967 in Newmarket, NH. Russound was one of the first companies to recognize the marketplace's enthusiasm for quality music throughout the home. This led us to innovate and become the leader in multiroom audio and the custom installation channel.

Over the decades, Russound has sold millions of volume controls and our speaker selectors, amplifiers and distributed audio systems have become the industry standard. With systems that scale up to homes as large as 48 independent zones of audio, Russound has products that are sure to meet any installation need. While many of Russound's products are designed to be hidden from view, our award-winning user interfaces provide elegant, intuitive control options for homeowners to easily access their favorite music from anywhere in their home.

Throughout its rich history, Russound has received many industry awards for product design and has patented several key technologies for the custom installation field. While not a famous brand name to the typical consumer, Russound is one of the best known and most trusted brands among audio installation specialists around the world.

The Russound website at www.russound.com has all of the core consumer-level information about our key products, while our registered dealers have additional access to installation manuals, tech tips, white papers, product imagery, and system wiring diagrams that are of use to any installation professional.