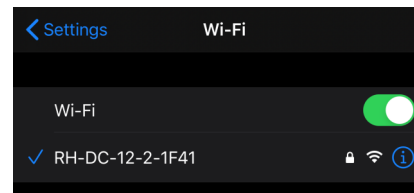


## DC12/2 Quick Start Guide

Rev. 2.0 March, 2020

Congratulations on the purchase of the Renkus-Heinz DC12/2 Digitally Steerable Column Array! This document intends to guide the user through the set up and configuration work-flow of the DC12/2 and its companion Smart Phone App, RH:APP (available on Android, and iOS). Renkus-Heinz has made serious efforts to ensure this product is easy to use, and simple to set up. This was accomplished by evaluating all of the complex interactions that take place between the acoustic space and the DC12/2 and boiled them down into a few simple decisions in order to generate beam-steered coverage through RH:APP, resulting in consistently great results with minimal time and effort.

1. Mount the loudspeaker to the wall or other surface with the included mounting bracket. Note: For best performance Renkus-Heinz recommends that the DC12/2 be mounted between 4-12 ft./1.2-3.7 m above the finish floor to the bottom of the loudspeaker. Screw or bolt the wall bracket to the wall using anchors appropriate to the mounting surface. Do not mount solely to drywall/gypsum board, find a stud or use other reinforcement. Screw the speaker half of the bracket to the DC12/2, then use the included bolts to secure the DC12/2 to the wall mount bracket. Select the desired horizontal aiming angle and tighten the bolts to lock it in. \*\*\*
2. If the DC12/2 is not intended to be wall mounted, unscrew the use the included M10 threaded pole-cup adapter and mount the DC12/2 on a speaker stand, or on top of a subwoofer.
3. Through the Google Play Store, or the App Store install RH:APP on an Android or iOS device.
4. Prior to opening RH:APP, go to the mobile device's Wi-Fi Settings to connect to the built in Wi-Fi access point in the DC12/2. The default SSID for the DC12/2 is "RH-DC12-2-XX-XX" (XX-XX will be the last 4 characters of the DC12/2's MAC address) and the default password is "Renkus-Heinz."
5. After connecting to the Wi-Fi access point in the DC12/2 open RH:APP. If connection to the DC12/2 is unsuccessful, or there is no DC12/2 to connect to, RH:APP will prompt the user to connect to a DC12/2 before using the app.
  - If there is no connection to a DC12/2 RH:APP will give the user the option to close the app, or explore the app in a "Demo Mode".
6. RH:APP will look for a firmware update automatically upon connection, if there is a firmware update, follow the on screen prompts to update your firmware.
7. RH:APP has 4 main tabs: Mounting, Height, Coverage, and Audio, which you can freely swap between using the tab buttons on the bottom of the app.
  - **Mounting:** Select the mounting conditions of the DC12/2
  - **Height:** Select height of the DC12/2 above finished floor
  - **Coverage:** Select the coverage distance needed
  - **Audio:** Controls for Gain, Mute, and Equalization.



Current firmware version: v05\_2019050111

**New firmware version is available**

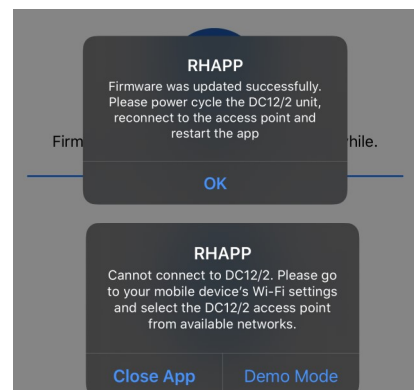
v07\_2020022112

Update



Firmware is uploading, this might take a while.  
Please, wait...

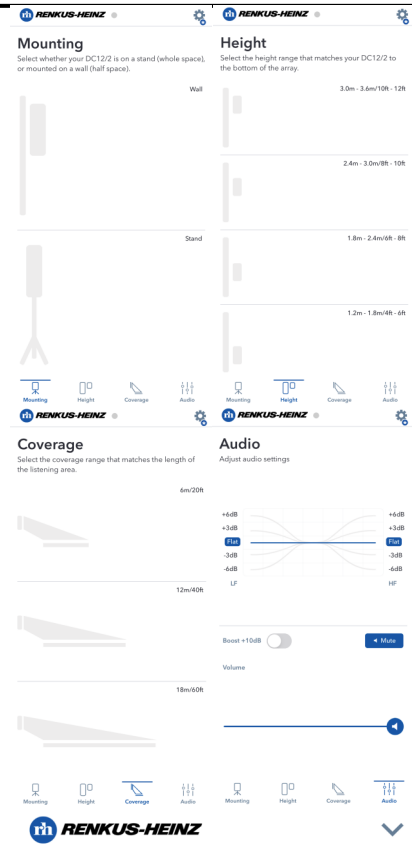
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8. The Mounting, Height, Coverage, and Audio pages are essential for determining the overall performance the DC12/2. If the selected choices match the conditions of the space, the DC12/2 should give near perfect results very quickly. Detailed descriptions of the four main pages are as follows:

- **MOUNTING:** Is the speaker mounted directly on the wall (half-space loaded), or on a pole/tripod (whole space loaded)? This choice will generate slightly different settings to accommodate for the half-space loading conditions for some frequencies when the DC12/2 is mounted on a wall, vs the whole-space loading conditions for all frequencies when the DC12/2 is in free air.
- **HEIGHT:** How high is the bottom of the column from finished floor? We have 3 pre-defined height ranges to choose from, 6-8 ft, 8-10 ft, 10+ (max recommended height of 12 feet AFF). Choose the height option that is the best match to the conditions of the installation.
- **COVERAGE:** How deep is the intended audience area? RHAPP has three pre-defined audience area distance ranges that should cover most venues, 5-20 ft, 5-40 ft, and 40 feet and beyond (maximum recommended coverage distance depends on the venue's acoustic characteristics, 60 feet is typical).
- **AUDIO:** The Audio page offers simplified HF and LF shelving equalization that give as much as 6 dB boost or cut, in 3 dB steps. Just tap the value on the HF or LF shelving filter to select your boost or cut. The Audio page also has a Gain slider to adjust the output gain of the system, as well as a "Boost" function, which increases the input gain of the system by 10 dB to accommodate low gain sources.

- The settings previously adjusted on any of the main pages can be changed on demand, and settings are saved automatically as changes are made.
- There is also a "Settings" page accessible via the gear button in the Right corner of RH:APP's title section. The Settings page gives access to Network Security Settings where the SSID name and password can be changed to further enhance the system security.
- In addition to the Network Security Settings in RH:APP's settings, there is also a "Reset Steering and EQ" Button at the bottom of the page which removes all of the Steering and EQ data selected, and restores Factory Default audio performance.
- The DC12/2 and RH:APP also support a "Wink" feature that lights up the blue LED on the front of the DC12/2. The Wink LED is turned on via the small grey button on the Title Section of RHAPP, it will turn blue when activated.



The screenshot displays the RH:APP settings interface, which is divided into four main sections: Mounting, Height, Coverage, and Audio. Each section has a corresponding icon and a brief description of the settings. The Mounting section allows users to select whether the DC12/2 is on a stand (whole space) or mounted on a wall (half space). The Height section allows users to select the height range that matches the DC12/2 to the bottom of the array. The Coverage section allows users to select the coverage range that matches the length of the listening area. The Audio section allows users to adjust audio settings, including HF and LF shelving equalization, a Gain slider, and a Boost function. The interface is clean and modern, with a white background and blue accents.

## Wireless Settings

Device Name (SSID)

Password

Confirm Password

New settings will take effect after power cycling the DC12/2 unit.

Apply Settings

- 
9. The DC12/2 has 2 different reset functions for trouble-shooting purposes. Soft reset, which resets SSID and password to regain control of a locked DC12/2, and a Hard reset, which should recover the DC12/2 from a non-functional state, and restore all factory default settings.
- ◇ SOFT RESET
    - Preset RESET Button for 5 seconds
    - Wink LED will turn on and stay lit while reset is happening
    - Device will automatically cycle power when reset is finished
  - ◇ HARD RESET
    - Remove power cable
    - Depress reset button
    - Insert power cable
    - Wait 10 seconds then release reset button
    - Wait 2 minutes, then cycle power.
    - After power cycling, reconnect to DC12/2 with RHAPP
    - Navigate to the Settings page
    - Update Firmware if applicable
    - Coverage and settings will need to be redefined
13. Once satisfied with the coverage, tuning, and security of your system return to the mobile devices Wi-Fi settings to disconnect from your DC12/2 and enjoy!
- To prevent your mobile device from automatically connecting to the DC12/2 when in range, use the “Forget Network” option in your device's WiFi Settings.

\*\*\*Before hanging or flying any Renkus-Heinz loudspeaker you should be familiar with the cabinet load ratings listed in this manual along with the rigging techniques and any special safety considerations appropriate for your intended use. Use only the UMH points on the loudspeaker cabinet intended for suspending the loudspeaker. You must determine the load requirements, dynamic loading and any other contributing factors affecting the suspended loudspeakers and any necessary safety factor for specific applications. You must also calculate the required load rating of the connection to any structure. Renkus-Heinz recommends that all rigging be done by qualified personnel in accordance with and in compliance with all federal, state and local regulations.

NOTICE: As the installer, you assume all liability for proper design, installation and use of any rigging systems. Renkus-Heinz strongly recommends the following rigging system practices:

1. Thoroughly document your rigging with detailed drawings and parts lists.
2. Have a licensed structural engineer, architect or other qualified professional review and approve the rigging design and any building attachments before you hang the loudspeakers.

3. It is always best to have a qualified professional rigger install and inspect the rigging system.

WARNING! Hanging loudspeakers is a serious undertaking that should be done only by qualified and experienced personnel. Renkus-Heinz is not responsible for any non-Renkus-Heinz products or for any misuse of Renkus-Heinz products.