



# Installation and Operating Instructions DC100 Door Chime Module

Congratulations and thank you for choosing this Knöll product. The DC100 door chime module is specifically designed for use with the MVP64 and Grande controller-amps as well as the Ultimo and MR640 controllers. It features connections for up to three lighted or non-lighted push button door buttons (front, side and rear door) with has two sound bank selections (6 chime sounds in all).

When activated by pressing any of the three door buttons, the DC100 sends a digital signal to the amp or controller to turn on or "override" all zones to a preset volume then runs the chime sound at a gain set by the installer. After the door chime sound ends, all zones revert to their previous volume and input states.

## Installation

The DC100 requires that door buttons are normally open, momentary style. Lighted buttons should be 12-24 volts that short out while the button is pushed. The system should only be installed with the amp-controller powered off and the mains power is unplugged.

Power for the DC100 is from the PS1202 power supply (included) and is usually left on.

## Running wire

Any conventional two-conductor wire is adequate for most installations. Runs longer than 100 feet (33 meters) should use minimum 18-gauge wire, as the power to the lighted door buttons will be limited. Run a home run from each of the up to three door button locations to the DC100. Connect the wires and install the door button as the manufacturers instructions advise.

**Caution:** In retrofit applications make sure the "old" power supply is disconnected from the door button wires or major system damage could occur.

## Connecting door buttons to the DC100

The detachable four-position connector on the DC100 is connected to the up to three door chime buttons. Each of the three positions run two different chime sounds depending on the bank position switch.

### Chime Sounds

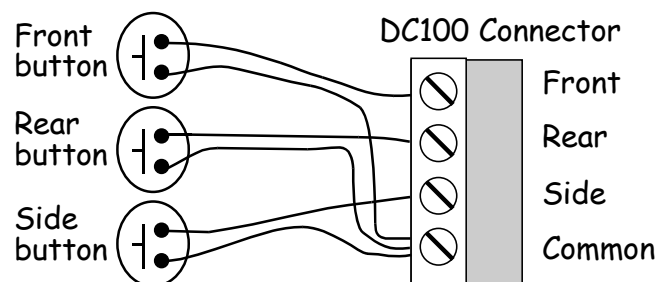
Bank Switch	Front	Rear	Side
Switch In	Ding (high tone)	Ding Dong (high tone)	Ding Dong Ding (high Tone)
Switch Out	Big Ben (8 tones)	Ding Dong (low tone)	Ding Dong Ding (low Tone)

Some chime sound experimentation may be required. Smaller speakers generally do better with low tones and larger speakers do better with high tones. All three chime sounds have to come from the same bank (in or out).

Connect one of each of the up to three wires from each of the door buttons to the detachable connector labeled "G". Most lighted door buttons do not have polarity.

Connect the conductor of one of the door buttons to front, rear or side position of the detachable DC100 connector.

Connect the conductor of the next button to one of the two open positions on the detachable connector. Connect the last conductor to the last open terminal on the detachable connector.



If two buttons are connected to the same detachable terminals, the DC100 will chime the same for the two buttons. It also may not provide enough power for lighted buttons.

Do not terminate or connect unused detachable terminal connections.

## **Connecting the DC100 to the amp or controller**

If the Source 4 input on the controller or controller amp is not being used skip the rest of this paragraph. If you are still reading this, then connect the stereo source input planned for Source 4 to the "In" RCA jacks on the DC100 chime module.

Next connect the DC100 "Out" RCA jacks to the controller or controller-amp Source 4 inputs using a gold stereo RCA wire.

If this installation has more than one controller and/or controller-amp use good quality Y cords to connect each of the controller Source 4 jacks (in parallel) to the DC100 stereo jacks labeled out.

Next connect the DC100 data port to the controller or controller-amp data port using the supplied 3.5mm stereo jack/cable.

## **DC100 Power**

Using the provided PS1202 power supply connect the power supply to the DC100 and plug the power supply into full time unswitched power. If the power is switched off then the door chimes will not work!

## **Setting the gain.**

The controller or amp-controller should be fully installed with speakers to test it and set the gain. We suggest that the DC100 gain be turned down before testing the door chimes.

Turn the controller or controller amp on to standby and any extra amps connected into the system.

Have someone push the door button and listen to the level. Adjust it as desired. Some experimentation with the chime sounds may be in order. Most of our dealers feel the ding dong (low tone) chime sound is the best to start with. After adjusting the level it is important to check all of the other zones to hear if they are being overloaded by the chime sound. If they are, then the DC100 gain (of the whole system) has to be lowered.

## **Operation**

The system operation should be quite straightforward.

Press the door chime button and the chime is sounded throughout the system.

When activated by pressing any of the three door buttons, the DC100 sends a digital signal to the amp or controller to turn on or "override" all zones to a preset volume then runs the chime sound at a gain set by the installer.

After the door chime sound ends, all zones revert to their previous volume and input states.

Occasionally the system may become confused if a door chime was pressed while something else was going on in the command system of the controller or amplifier controller. In this case just change the input or shut the system down as desired from any keypad. If this does not work turn the power off then on to the controller or controller amp and the system will reset.

DC100 size is 143x83x45mm (5.6"x3.25"x1.75").

**Knoll Systems** Point Roberts, WA USA and  
Richmond BC Canada tel: 604 272 4555

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