



Installation and Operating Instructions MR171 Paging Module

Congratulations and thank you for choosing this Knöll product. The MR171 is a microphone paging module suitable for use with most types of condenser and dynamic microphones as well as line level sources. It is specifically designed for use with the MVP64 and Grande controller-amps as well as the Ultimo and MR640 controllers. It features automatic 30-volt phantom power, adjustable gain and adjustable activation threshold sensitivity. It can be triggered by either microphone or line activity or by shorting its manual connector input with a switch. When activated the MR171 sends a digital signal to the amp or controller to turn on or "override" all zones to a preset volume then broadcast the page then automatically return all zones to their previous volume and input states.

Installation

The MR171 should only be installed with the amp-controller powered off and the mains power is unplugged. Power for the MR171 is from the PS1202 power supply (included) and is usually left on.

Connecting a microphone

Use a conventional good quality microphone cable with XLR connectors to connect the microphone to the MR171. The MR171 is normally located behind the controller or controller amp but does not have to be. Some lower cost microphones will only have two wire leads. We do not suggest using these, but if required to do so, make sure before connecting them that they will not be destroyed by the 30 volt DC full time phantom power provided by the MR171. Connect it to the mic plug (pins 2 and 3).

Connecting a line level paging input

Use a conventional good quality RCA line to connect the source to the line level input. The MR171 has a balancing transformer to reduce (but not necessarily eliminate) hum from the cable.

Long cable lengths may require full balancing at the source end.

Note: Never connect a microphone and a line level paging input together on the MR171.

Connecting the data line(s)

Use the provided 3.5mm to 3.5mm connecting wire to connect the data port on the MR171 to the data port on the controller or controller-amp.

If this system has more than one controller and/or controller-amp, then the three wire data ports (stereo 3.5mm jacks) need to be run in parallel. The jack tips (inserted in the 2 or 3 controllers and the MR171) all have to be connected together. The three sleeves are connected together and the three bases are connected together.

Connecting the stereo music source

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" jacks on the MR171 paging module.

Next connect the MR171 "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 MR171 stereo jacks labeled out.

Connecting for Manual Activation

Manual activation of the MR171 is features a faster activation time than automatic voice activation. A normally open single pole switch is usually placed on or near the microphone. When it is momentarily closed, paging is activated. Run a wire pair (any kind of suitable wire will do) from the activation switch to the MR171 "Manual" screw terminal connector.

Be sure the MR171 "Auto" switch is in the "in" position to prevent automatic voice activation.

Otherwise leave the "Auto" switch in "out" position for automatic voice activation.

Setting Gain and Sens

Manual switch activation. The MR171 "Auto" button should be in the "in" position. Everything should be now wired and ready to test. Before turning on any controllers or amps, plug in the PS1202 power supply for the MR171.

Press the manual activation switch, hold it on and either speak loudly to the mic or if this system is connected to the line level input, turn that source on and give it some input. See if the red clip light is on or flashing. If it is not, turn up the MR171 gain while speaking loudly until it just blinks on with the loudest voices and then reduce the gain a little. Release the manual switch.

Next turn on the fully installed controller or controller-amp.

Press the manual activation switch and speak at a normal to slightly high level. Adjust the MR171 gain until the paging level is acceptable.

Automatic voice or signal activation

The MR171 "Auto" button should be in the "out" position. Everything should be now wired and ready to test. Before turning on any controllers or amps, plug in the PS1202 power supply for the MR171.

Speak loudly to the mic or if this system is connected to the line level input, turn that source on and give it some input. See if the red clip light is on or flashing. If it is not, turn up the MR171 gain while speaking loudly until it just blinks on with the loudest voices and then reduce the gain a little.

Microphones and different sources can have a wide range of outputs so the MR171 gain may only have a small range between clipping and apparently not working.

Next while speaking into the mic at a normal level or with the line level activated adjust the MR171 sens pot up (clockwise) until the green led (In use) is on. Stop talking into the mic or shut off the line input until, wait 3-4 seconds and slowly reduce the sens (counter clockwise) slowly until the green led (In use) goes out.

Next, with the green led (In use) off, turn on the fully installed controller or controller-amp.

Speak at a normal to slightly high level into the mic or turn on the line level source and adjust the MR171 gain until the paging level is acceptable. If there is no sound over the system adjust the sens pot until the green led (In Use) turns on, then speak at a normal to slightly high level into the mic or turn on the line level source and adjust the MR171 gain until the paging level is acceptable.

Wait 3-4 seconds after the speaking into the mic has stopped to see if the MR171 green led (In use) goes out. If it does the system is now ready to use. If it does not go out slowly reduce the sens pot and wait to see if the green led goes out. If it still does not go out, slowly reduce the sens some more and wait. Repeat this until it goes out. Try speaking into the mic again. The system should activate and page. If it does not, increase the sens a small amount and try again. Repeat until the sens is set properly.

Operation

The system operation should be quite straight forward. **For manually switched activation**, simply push the activation button and start paging. Paging can commence about 1-2 seconds after the activation button has been pressed. At the end of the page, release the activation button and all zones will return to their previous settings. Paging operators may need some basic level training as to speaking at a firm, loud level, slowly and clearly.

For automatic activation, simply start the page. Paging can commence about 2-3 seconds after the activation sound has commenced. We suggest that a start page announcement like "Rumple-stilt-skin" be annunciated at a firm, loud level followed by a short one-second gap before the real page begins. At the end of the page, simply stop annunciating and all zones return to their previous settings. Paging operators may need some basic level training as to speaking at a firm loud level, slowly and clearly.

MR171 size is 143x83x45mm (5.6"x3.25"x1.75").

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