User manual for the Optogate models PB-09

No time for manuals? No problem, this will take only 3 minutes of your time to read it and you will have more fun and success with your new Optogate device.

The PB-09 is a mic table stand with an implemented "Mic on" button, a galvanic separated trigger input and the Optogate function. It works with 48V Phantom power. The Phantom power passes the mic. The current consumption is 3,8 mA

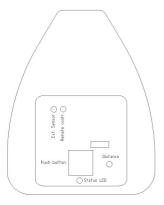
Optogate function: You can see the 2 lenses on the frontside. These are the infrared transmitter and the receiver. You can enable the optical function when you switch on the dip switch 1 on the right side under the face plate. The Optogate will switch on the mic if somebody is in front of it and will switch off the mic if nobody is present anymore. The trigger distance from the mic to the person in fron of the PB-09 is adjustable with the help of a 12-turn spindle potentiometer inside. The distance will increase by turning the pot to the right until the maximum distance of about 4 feet. When you start to turn the pot clockwise, you will find that the distance range will change very slowly in the first few turns. After a few turns, the distance will change more rapidly until you reach the maximum range. If you turn the potentiometer clockwise (right) out of the useable area, the mic will be switched on completely. If this happens, just turn the pot slightly to the left until the Optogate works again. The maximum distance depends from the following circumstances:

- 1.) The color and material of the reflection surface. Please aware that some dark materials are not able to reflect infrared signals very well, which might decrease the distance. As a rule the closer the speaker is on to the mic, the better the results. The usuable angle in front of the PB-09 is 15 degree.
- 2.) Changing of ambient light. Like every other infrared device on the market the Optogate units doesn't work correctly if direct sunlight or other very high power infrared signals hits the sensor. That is in the "nature" of the infrared technology due to the high power random infrared spectrum in the sunlight. You can try it with your remote control of your home sound system. No infrared sensor of CD-players, TV's etc. will work in direct sunlight. If direct sunlight hits the Optogate sensor, the trigger distance will change until the mic will be switched on. The unit will work again if somebody moves between the sun and the sensor. Normally you can use the Optogates on almost every open-air stage without any problems. It is always a good idea to check the range of your Optogates together with the performer when changing venues, especially outdoors with direct sunlight.

Button functions: The button will be enabled by switching on the dip switch 3. Two different modes are possible: The "Push To Talk" mode is active when the dip switch 2 is in the "off" position and the mic is switched on only when the button is pressed. The other mode is the "Mic Latch" function and is enabled when the dip switch 2 is on. One push on the button will switch on the mic and the next push will switch off the mic.

Remote Sensor function: The internal sensor can be disabled with the dip switches 4 and 5. If you want to use an external sensor with the PB-09 just switch off dip 4 and 5 and connect your external sensor to the left connector what appears on the face plate. The ring connection is the transmitter and the tip connection is the receiver.

Remote function: The right connector is for an external cable based remote control. A separated trigger voltage between 2,6 and 30V, to be connected on the right connector will switch on the mic. The ring is – and the tip is +. This trigger input is galvanic separated to the rest of the circuit. The mic will be switched on when the trigger input is high. This function is always active, no matter what dip switch is active. The package contains a small connector cable with a plug for your application.



An optional mic support plate for mic clamps can be fixed with 2 screws though the 2 holes on the top of the PB-09.

The Optogate devices were developed for use with professional equipment and should be used by professional trained system engineers and operators only. Please be aware that we are not responsible for any hazards, damages or disadvantages due to the use of the Optogate devices. The Optogate devices are registered under the number DE54933725 WEEE as B2B devices. We also declare that they conform to the CE and ROHS for the European market.

Please don't hesitate to contact us at: info@optogate.com if you have further questions