

## 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.

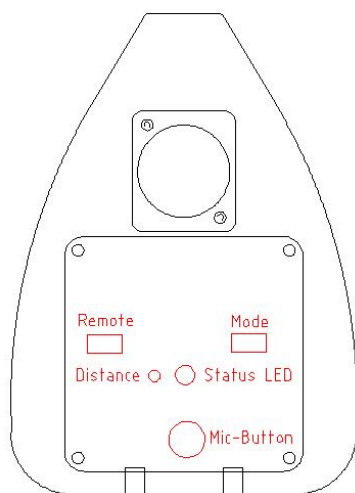
The PB-09 is a mic table stand with a „Mic on“ button, a galvanic separated trigger input and an Optogate function. It works with 48V Phantom power. The Phantom power passes the mic. The current consumption is 3,8 mA

**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 with the dip switch 1 on the right side under the face plate. Just switch it on with the help of a small screwdriver and the Optogate function is on. 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 distance from the mic to the speaker in which the unit opens and closes is adjustable with the help of a 12-turn spindle potentiometer inside. The distance will increase by turning the pot to the right for a maximum distance of about 2 feet. Please experiment with the potentiometer to fine-tune the distance together with the speaker before using live. 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 back very well, which in turn might decrease the distance. As a rule the closer the speaker is on to the mic, the better the results will be due to eliminating the concert lighting variables. The usable angle in front of the PB-08 is 15 degree.
- 2.) **Changing of ambient light.** Like every other infrared device on the market the Optogate units do not 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 random high power 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 sensor of the Optogate the distance will decrease until the mic will be switched off. 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 2. Two different modes are possible: The „push to talk“ mode is active when the dip switch 3 is in the „off“ position and the mic is only be switched on when the button is pressed. The other mode is the „mic latch“ function and is enabled when the dip switch 3 is on. One push on the button will switch on the mic and the next push will switch off the mic.

**Remote function:** On the left side of the PB-09 is a small hole with a 2 pin connector under the faceplate. You can remote control the PB-09 with an external trigger voltage between 2,6 and 30V. The contact on the outside is the minus pin and the contact on the inside is the plus pin. 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 through 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 only professional trained system engineers and operators. 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.

If you have further questions please don't hesitate to contact us at: [info@optogate.com](mailto:info@optogate.com).

