User Manual for the New Optogate Model PB-06

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

The PB-06 can be mounted in Lecterns, Podiums, Tables, Recording Studios, anywhere you want a hidden or remote infrared or standard microphone switch. It works with 48V Phantom power. The Phantom power is needed to power the unit. The current consumption is 3.8 mA.

Optogate function: You can see the 2 lenses on the front side. These are the infrared transmitter and the receiver. You can enable the different modes of optical functions when you set the 3 dip switches (More below). The trigger distance from the mic to the person in front of the PB-06 is adjustable with the help of a **12-turn** spindle potentiometer inside. **The distance will increase by turning the pot to the right** (clockwise) until the maximum distance of about 4 feet. The minimum distance is about 6-10 inches, turning it counter clockwise, (you cannot overturn the pot). 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 usable left, right angle in front of the PB-06 is a +/- 10-degree wide spread**.

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 high power random infrared spectrum in the sunlight. You can try it with your own remote control of your home sound system or TV's.

NOTE:
Infrared sensor devices like CD-players, TV's etc. will not work properly in direct sunlight. If direct sunlight hits the Optogate sensor, the trigger distance will change until the mic is just switched on. The unit will work again if someone moves between the sun and the sensor. **But, 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.

OK, now the good stuff!
There are four simple but different functions using the 3 Dip switches and the Push Button:

The 3 dip switches under the face plate labeled **"mode"** are as follows; #1 far left side, #2 middle and #3 right side, Up being on.
The Red LED below the button always tells you the current status

Mode 1) Probably the most common set-up like the PB-05M and D with the by-pass switch, would be to use the new PB-06 in the default setting, with **all three switches in the up (on) position**. This would give you normal infrared switching, and the button would be used to manually pass the signal, (bypass mode) kind of a Panic Button, push it again and it's back to infrared.

But Next is why the new PB-06 is so versatile via those little dip Switches!

Mode 2) #1-up #2-down #3-up would give you infrared function, but the push button acts as a **momentary switch** letting the signal through while holding down the button.
Mode 3) #1-down #2-down #3-up would give you NO infrared functions but a **momentary** push to talk. Kind of like a talk-back button in a recording studio.
Mode 4) #1-down #2-up #3-up would give you NO infrared functions but a **latching, (stays on)** push to talk button.

Play around with them, you are sure to find a perfect combination for your audio needs!

**If you are using very high current mics, set the two dip switches in upper left face plate to the off-down position otherwise leave them "up"

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.

NOTE:
Removal of face plates and/or tampering with electronics voids warranty.

If you have further questions please don't hesitate to contact us:
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