



PB-05

PB-07



PB-05



PB-06



PB-09

OPTOGATE INFRA RED AUTOMATIC MICROPHONE SWITCHES

These are automatic microphone switching units, that sense the presence of someone in front of the microphone. Equipped with an infra-red sensor, the units plug between the microphone and microphone connector.

The Optogate unit switches the microphone on when someone is in front of it, and off again when they are no longer there. A red status LED indicates when the microphone is switched on. They help eliminate unwanted background pickup by unused mics on stage, and reduce the possibility of feedback.

The sensitivity is adjustable 150mm to 1.2 metres, so can be set for optimum operation for the type of application - for example close-mic music vocals will benefit from a lower setting than conference sound reinforcement applications. All Optogate models are powered from 48V phantom power, no AC adapters or batteries are required. Inputs are XLR 3-pin female, outputs XLR 3-pin male.

They are available in a number of different housing configurations, all share the same technology and electronics.

PB-05

The PB-05 is an in-line device, designed to be plugged directly onto the microphone. This version is intended for vocal mics, acoustic instruments and talkback mics. Dimensions: 69 x 35 x 21(l x h x w) mm.

PB-06

On this model both XLR connectors are on the rear. The PB-06 is ideal for talkback mics, conferences, podiums and churches. It is easier to use than an automatic mixer or typical noise-gate and much more effective. Dimensions: 68 x 21 x 42(l x h x w) mm.

PB-07

This is similar to the PB-05, but the sensor is on the flat side. On the rear is a 4mm threaded hole to fix a clip. It can then be installed on a mic stand stem, and will be somewhat hidden from view behind the stand, but will still detect the presence of someone near the stand. The PB-07 can also be connected to a gooseneck microphone. Dimensions: 68 x 35 x 21(l x h x w) mm.

PB-09

The Optogate PB-09 is integrated into a microphone table stand. As with the other models, it will switch on the microphone if someone is in front of the mic. The stand base has a 'mic on' button that can be used as 'push-to-talk' or 'mic latch' switch; these different functions are user programmable with three hidden DIP switches. The mic circuit switching is effectively noiseless, and is fully isolated from the control circuit. A red status LED provides indication to the speaker that the mic is switched on. The PB-09 is powered from P48 phantom power and can be used in connection with both dynamic and condenser mics. The phantom power passes to the microphone. This unit provides a particularly effective noise-reduction facility for conference and meeting-room applications, removing the need for automatic mixing facilities.

The base is cast iron, and has three rubber feet to provide isolation. Dimensions: 125 x 31 x 90(l x h x w) mm. Weight 1.2kg.

Common Technical Specifications:

Connectors:	XLR 3-pin (1 = gnd, 2 = plus, 3 = minus)
Case construction:	Aluminium, black galvanized (except PB-09, cast iron, black powdercoat)
Detection distance:	Adjustable 150mm-1.2m
Detection angle:	+/-10 degrees
Switching noise:	Unmeasurable
Frequency response:	0Hz - 22kHz, -3dB, with 150 ohm microphone impedance
Signal to noise ratio:	-88dB with 100mV rms input and 150 ohm mic
Distortion:	Less than 0.05% with 100mV signal
Delay time mic on:	Less than 0.2 seconds
Delay time mic off:	About 1 second (other times available to special order)
Attenuation mic on:	0dB
Attenuation mic off:	42dB with 150 ohm microphone impedance
Usable mic. types:	All types of dynamic and phantom powered (up to 10mA current consumption)
Maximum input level:	+3dB (1.1V)
Background light range:	0-20000 Lux daylight and 0-12000 Lux electric lamp light
Distance measurement:	Active infra red reflection principle with 3-bit code
Power:	P48 phantom power (passes phantom power to the microphone)
Current consumption:	3.7mA approx.
Warranty:	2 years

58-011 OPTOGATE PB-05 OPTICAL AUTOMATIC MICROPHONE SWITCH Inline case

58-012 OPTOGATE PB-06 OPTICAL AUTOMATIC MICROPHONE SWITCH Connectors on rear of case

58-013 OPTOGATE PB-07 OPTICAL AUTOMATIC MICROPHONE SWITCH Inline case, with microphone stand clip

58-014 OPTOGATE PB-09 OPTICAL AUTOMATIC MICROPHONE SWITCH Integrated into table microphone stand