
BLACKY

the professional projection shutter for theater, concert, stage
and multimedia performance

Operating Manual V 2.0



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1) **BLACKY / Supplied Parts**

a) **Controller and Drive Mechanism**

The basic mechanism is comprised of a controller, a drive mechanism with a shaft with shutter attachment, DMX512/2000 input and output (XLR 5-pole male/female) jacks, a power supply input jack and a pushbutton for DMX addressing and pivot angle adjustment.

BLACKY is compatible to the standard DMX 512-1990 protocol as well as the next generation DMX 512-2000 and can be controlled by any DMX light mixer or computer and can also be controlled with the optional remote control. The remote control unit includes an adapter which can be extended with any normal microphone cable (XLR 3 pin). The power supply unit adapts to any 110-230V input.

The basic Blacky model comes with a 5-pole XLR input jack for DMX 512/2000 but can be adapted down to 3-pole XLR for DMX 512/1990.

Use only the original power supply!

b) **Shutters and Accessories**

In addition to the basic device the following accessories are included:

- 1 power supply 5V DC / 1A
- Euro-connector plug / ROW adapter
- 1 shutter for lenses up to 100 mm \varnothing
- 1 shutter for lenses up to 160 mm \varnothing
- 1 shutter holder L = 60 mm
- 2 knurled screws
- 1 washer
- 1 tension belt
- 1 metal case
- 1 Operations Manual



c) **Remote Control** (optional)

The remote control includes a special 3m adapter cable (XLR 5-pole female>XLR 3-pole male) and a LED pushbutton hand controller. The remote cable can be extended with any normal microphone cable (XLR 3 pin (max. 200 m.).

No DMX signal is necessary with the remote control and in this case the DMX-Out jack should not be used.



2) Adjustment and Assembly

a) Basic Setup and adjusting the DMX - address

Pushbutton factory presets:



DMX-Address - 001
Pivot angle No. 1 - 60°

This is the standard position mode for a use with a DMX system (channel 001) or with the remote control.

Any changes to the DMX address becomes effective immediately after typing in the new address. No RESET necessary.

b) Adjusting the pivoting angle

The standart position is No. 1 (60°), by pressing the pushbutton you can adjust the pivoting angle.

No.1 - 60°
No.2 - 90°
No.3 -135°
No.4 -170°

c) Remote and DMX Connections

DMX-IN: this jack is the input for both the DMX connection and the remote control. This device can only be operated by either DMX or remote control.

DMX-OUT: an output for extending the DMX chain to other devices. If this is the last device in the chain then an appropriate terminator should be used.

BLACKY can be used with a DMX 512/2000 system (uplink only) as well as a DMX 512/1990 system with the appropriate adapter, (XLR 5-pole>XLR-3-pole), without changing the setup.

d) DMX 512/2000 downlink

In order to avoid any interference when using a DMX 512/2000 system with a downlink function, jumper 1 and 2 **inside the device** must be changed to Position 2-3.

It is impossible, however, to use the remote control with this jumper position!

e) **Installation on a Projector**

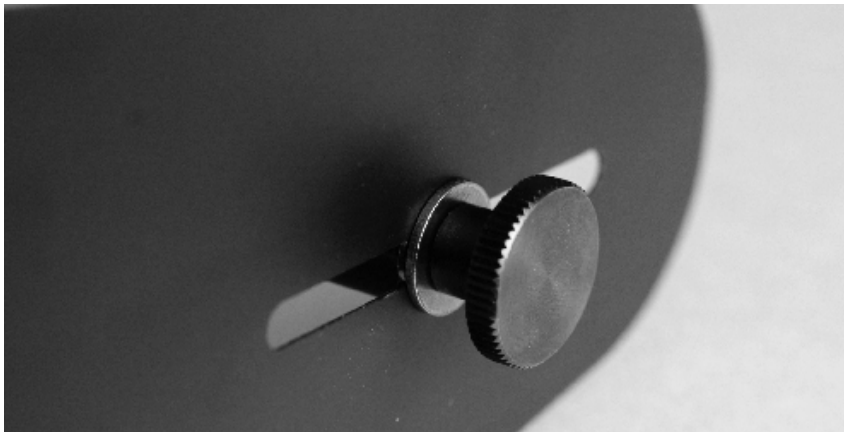
BLACKY can be placed in practically any conceivable position in front of the projector lens. The standard position is strapped on top of the projector with the included tension belt. When hanging the projector, BLACKY can also be strapped underneath. Take care to pull the tension belt through the handles and use a safety cable to help prevent accidents.

f) **Shutter Installation**

Make sure that the DMX channel is OFF or that the LED on the remote control is out and not red, indicating that the unit is closed. Make sure at this time that neither the DMX channel nor the remote control switch is inadvertently activated.

Now mount the shutter on the shaft with a spacing of ca. 15-20 mm in front of the projector lens. It is important to note that there should be no interference or obstruction to the shaft.

On the front side of the shaft is a countersink which fits exactly in the slot of the shutter plate!
Place the washer inside the knurled screw to prevent any slippage.



3) **Safety Precautions**

When used with a hanging projector a safety cable should be attached through BLACKY's handle. Installation should only be undertaken when the device is disconnected to the power supply. To avoid injury take care that no one obstructs the shutter during operation.

BLACKY may only be used with lighting devices that are fan-cooled. Using it with hot lights, etc. is potentially dangerous and is a possible fire hazard.

It is important during installation to ensure that the shutter has ample space to open and close properly. Hinderances to the shutter could cause damage to BLACKY or surrounding structures.

Damages due to false installation and other negligence on the part of the customer are not covered by the warranty.

4) Technical Specifications

Operating Voltage:	5V
Current:	max. 700mA
Apex Angles:	60°/ 90°/ 135°/ 180°
Torque:	28 N/cm
Shutter Size:	A: L 220 mm, Ø 100 mm B: L 280 mm, Ø 160 mm C: L 175 mm, Ø 100 mm D: L 300 mm, Ø 200 mm
Shutter Holder:	Standard: L: 60 mm Extra Long: L: 110 mm
Control:	DMX512/2000 / DMX512/1990 / Remote Control
Connectors:	XLR 5-pole male, XLR 5-pole female
Power Supply:	110-230 V automatic, polarity safe Power Supply Plug is fastened to device via a coupling nut pushbutton
Addressing:	pushbutton
Dimensions without Shutter:	L 190 x W 105 x H 80 mm
Case Dimensions:	L 124 x W 105 x H 51 mm
Weight:	ca. 0,8 kg
Shutter Reaction Time:	0,5-0,7 sec

5) Warranty, Guaranty, Service:

Warranty, Guaranty: 2 years.

Damage due to improper installation and operation are not covered by this warranty.

For any service questions contact: info@g-a-d.de .

6) BLACKY and Accessories

Standard Device (Supplied Items):

Standard Shutter Holder, L 60 mm
Shutter A, L 220 mm, Ø 100 mm
Shutter B, L 280 mm, Ø 160 mm
Power Supply 5V 1A DC
Tension Belt
Metal Case

Optional Accessories:

Shutter Holder, long 110 mm
Shutter C (Mini), L 175 mm, Ø 100 mm
Shutter D (Maxi), L 300 mm, Ø 200 mm
Special Shutter sizes available by request.
DMX Adapter 5>3 pole. male/ female and female/male
Remote Control with adapter cable 3m (extendable with XLR-Standard microphone cable.)

