

YOYO

NOTE:

DHA's YOYO is only available to special order. Please contact DHA's Moving Effects department for a quotation and delivery estimate.

The DHA Yoyo moves a standard B-size gobo up and down (or side-to-side) within the gate of a profile spotlight. Provision is also made for holding a second static gobo in the Yoyo so that the two images interact.

Operation

The Yoyo mechanism performs one cycle (up and down) for each revolution of the motor. The longitudinal travel is adjustable from 12 to 40mm of throw by alignment of the eccentric drive wheel on the rear of the unit.

Motor options

Yoyos can be supplied for 120V AC or 230V AC operation with fixed-speed, reversible, synchronous motors of 0.25, 1, 2, 5 or 10 rpm; or alternatively with variable-speed 12V DC motors for use with a DHA DC Controller.

Using Yoyos

The regular cyclic movement produced by the DHA Yoyo is ideal for such effects as waves (one or two gobos), branches moving outside a window (the window can be a fixed gobo), under water movement etc.

For most lanterns where gobo holders are inserted from the top, the Yoyo motion is up and down. To achieve side-to-side movement the gate of the lantern (or the lantern itself) must be rotated so that the Yoyo can be inserted from the side.

Note that, as there is some separation between the gobos, one or both will always be somewhat out of focus. By focusing on the static gobo with the moving one defocused, or by having both out of focus a wide range of more impressionistic effects is possible.

As Yoyos accept any DHA B-size gobo the applications are unlimited.

Indexing Yoyo

Indexing is an option for the DHA Yoyo. It allows "one shot" movement between defined positions and is intended for use with effects such as opening and closing doors, venetian blinds, rising sun etc.

The indexing system consists of a modified Yoyo (housing the indexing reference mechanism) and a separate, dedicated remote control box. The front panel controls comprise a switch and a neon indicator.

Generally the Yoyo will perform one half of its cycle with the control switch in one position and then stop. The neon indicator on the box lights when the Yoyo has reached this stopped position. When the switch is toggled the Yoyo will complete its cycle and stop again. Indexing is controlled by a cam inside the motor housing which can be customised to provide a range of options for the position of stop points.

Warning: Yoyos are not generally suitable for extended operation at continuous high light levels. If in doubt please contact DHA.

YOYO FITTING REFERENCE

1
May require gate adaptor
- please ask DHA for
details

3
May require spacer kit
(SP/CCT)

4
Unsuitable for extended
use due to intense heat
at the gobo gate
(particularly with 230V
lamp)

Unit	Gobo Size	Lantern
YOY002	B	Strand Cantata ¹
YOY003	B	Altman 1KL ⁴ ETC Source Four
YOY004	B	Strand Leko 15, 20, 30, 40, 50, Euro Leko CCT Silhouette, Project ³ Selecon Zoomspot 1200
YOY/INDEX		Lee Colortran Windsor Profile Additional indexing hardware

WAVES



1 rpm

Yoyo
moving
Gobo 238-275
fixed
Gobo 960

Alternative gobos:

Water-4 958, Flames-4 960, Swell 425,
Leaf Breakup 806, Breakup (small)
238-221. Experiment with swapping the
two gobos and changing the focus. Try
split colour.

UNDER WATER



5 or 10 rpm

Yoyo
moving
Gobo 504
fixed
Gobo 806

Alternative gobos:

Breakup 238-221, Soft Breakup 811, Swell
425, Cloud 170.

Focus should be set so that the fixed gobo
is slightly blurred and the moving gobo right
out of focus. This effect is greatly
enhanced by split colour (greens & blues) in
front of the lantern.

RISING OR SETTING SUN



1 rpm

Indexing Yoyo
moving
Gobo 961
fixed
Gobo 906

Works well with split colour - red at the
bottom, orange or yellow higher up.

Using the indexing option ensures precise
end-to-end travel.

OPENING OR CLOSING DOOR



10 rpm

Indexing Yoyo
moving
Gobo 905
fixed
Gobo 905

The indexing option allows the door to be
opened and closed to cue.

To operate the yoyo horizontally it is usually
necessary to rotate either the gate or the
entire lantern through 90 degrees. Note:
some lamps used in theatre luminaires
should not be operated on their sides.