



Optical Printer Magicseries

Linear, blow-up & reduction optical printing

features

Modularity: linear, blow-up & reduction
Unique film transport system
Full computerized printer control system
New optical system
Archive kit for shrunken and fragile material
New sound head

advantages

Fully computerized, the machine can be controlled by Internet
Better steadiness
Quiet in operation
Lower solvent fume level
Easy access to main components

RANGE

Model	Designation
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TAI 16-S16/35/S35	16-S16/35/S35 blow-up printer
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TAI 35/ 16	35/16 reduction printer
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TAI 16/16	16mm step optical printer
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TAI 35/35	35mm step optical printer (archive suited 35/35 & 35mm/3 perfs)
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DIMENSIONS

Width: 220 cm

Depth: 100 cm

Height: 214 cm

Weight: 475 kg

Shipping: 675 kg

Power: AC 220/380V,
50Hz, 3 phases, 5kw
110V/208V
60Hz, 3 phases, 5kw

OPTIONS

Reference Designation

OP 707

35mm
4 perf liquid gate film transport mechanism + sprocket assembly for shrunk film (archive)

OP 708

35mm
2 perf liquid gate film transport mechanism + sprocket assembly

OP 709

16 to 35 &
35 to 16 zoom and optics

OP 710

35 to 35 zoom & optics

OP 715

Take up and feed tension adjustment neg. Picture (archive)

OP 716

Adaptation of a framing control system by video camera

OP 717

Adaptation of a focus device

OP 728

Optics for techniscope
1.66: scope

OP 720

35 analog/digital sound head printing (SR, DTS, SRD)



Optical printer

Magicseries

• MODULARITY

linear, blow-up & reduction

Extremely versatile design catering for the needs of high quality printing. It can also be a 16-S16/35/S35 blow-up printer, a 35/16 reduction printer and a 35/35 archive suited & 35mm/3perfs printer. Special picture optical block, which can be shifted by micrometer screw on a X, Y, Z axis, allowing the print out of standard prints combining: film-lens distance adjustment, lateral adjustment, longitudinal adjustment & film to film distance adjustment. With this option, 1.66->scope can also be done.

• UNIQUE FILM TRANSPORT SYSTEM

This film transport system is rendered unique by the use of a pin and registration pin, as driven by a DC servo-control motor, to mount the film directly on the main shaft, thus eliminating the need for belts. This system simplifies the film-threading path. Gentle film transport is safe for original camera negatives and minimizes inter-negative wear over long print runs. Silent operation and better steadiness become a reality.

• FULL COMPUTERIZED PRINTER control system

The new computerized printer control system DM800, including PC monitor and keyboard, accepts light valve, fader and frame count cue control data entry from either 3-1/2 inch floppy disks or traditional punched paper tapes. The use of monitor and keyboard eliminates many switches and indicators (along with their associated wirings) and provides a more reliable system. Several security systems are included. Upgrade: For existing printers using previous DM80 rack, these can be upgraded to the new DM800 rack and biphas pulse generator.

• ARCHIVE KIT

for shrunken and fragile material

In order to guarantee the safe passage of an original through the printer gate and a stable image for the duplicate, the **MAGIC** optical printer is equipped with a built-in adjustable mechanism allowing for the reproduction of shrunken and fragile material and capable of bringing out the most delicate of visual details.

• NEW SOUND HEAD

Our sound head allows for printing by contact as it is composed of a large-diameter revolving sprocket upon which both negative and positive films are wound, perfectly maintained on the printing gate, thus having no opportunity to become entangled or slip off of the tracks. Motion is mechanically regulated. The printing lamp is composed of 20 individual 6-volt Halogen lamps. A digital voltmeter ensures control of voltage stability. The sound head also allows for the future addition of digital optical sound track printing components (SRD).

• NEW OPTICAL SYSTEM

The entire optical system mounted on the front of the main plate provides the easiest, most straight-forward optical path. 3 high electronic light valves modulate the Red, Green & Blue components of the print exposure beam (5ms from 0 to 50). New original optical components along with a reduced distance between the lamp house and the optical bar provide a major increase in light available at the printing aperture. Uniformity of illumination is within 0.025 Log E across aperture width. In addition, light beams dichroic splitter with parallel rays allows to obtain an increased selectivity.

TECHNICAL SPECIFICATIONS

Film capacity

610 meters (1800 feet), 1200 meters (4000feet), in option

Operating speed

from 5 to 25 fps unidirectional wet

Uniformity of illumination

within 0,025 Log E across aperture width

Preselected speeds

5, 10, 15, 20, 25 frames/sec

Shrinkage

Up to 3% horizontal and 2.2% lateral shrinkage in original film

Acceptable pitch

from 4,65 to 4,75

Lateral dimension

34,2mm to 35mm

5 counting modes

Batch/frame
Batch/footage & frame
Milestone/frame Milestone/footage & frame Light

Standard programmable fade lengths

16, 24, 32, 48, 64, 96, and 128 frames.

Trim setup

from 0 – 24 steps for each color appropriate to the stock to be used.

Fades curves

end user can create 32 different fade curves with his own parameters