

MODEL 3100 & 3150

Silver Roll Film Duplicators



- *The Industry Standard*
- *Adjustable Speed and Light Intensity For Unmatched Flexibility.*
- *The Fastest-Running Unit Available Today*
- *Long-Life Components Mean Minimal Adjustments And Maintenance*



- Extek offers two free standing, high production roll-to-roll silver film duplicators. Model 3100 is for 16mm and 35mm film; the Model 3150 handles 16mm through 105mm film. Both employ Extek's patented vacuum registration method to insure high quality copies free from optical distortions and film slippage.
- The duplicators have proven themselves in extensive use in microfilm centers throughout the world. Design simplicity and quality manufacturing account for the excellent reliability and performance reported by users.

- The Model 3100 and 3150 are free standing units. Casters are mounted for mobility and ease of maintenance. Both have two storage drawers, one of which is light-tight for storing unexposed film with a large storage space below.
- Optional features and accessories extend the utility of the basic units. These include a variety of loop modules, a counter, a sequential density programmer, and different spindle sizes. A table top mounting unit is available. All models can be configured to operate from foreign power sources.

HOUSTON FEARLESS 76, INC.™

EXTEK® MODEL 3100 & 3150 SILVER FILM DUPLICATORS

VACUUM HEADS:

A vacuum head is required for each film size to be duplicated. Heads are operator changeable. Standard sizes are:

Head (Film) Size:	Use With Model:
16mm	3100 & 3150
35mm	3100 & 3150
70mm	3150
3 1/4" (82.5mm)	3150
105mm	3150

Other sizes available on special order.

LOOP MODULES

Model:	Film Size:	Max Loop Length	Crated Wt.
3101	16mm, 35mm	102 ft (31 m)	120 lbs (54 kg)
3102	16mm, 35mm	220 ft (67 m)	180 lbs (82 kg)
3151	105mm	44ft (13 m)	120 lbs (54 kg)
3152	16mm, 35mm, 105mm	102 ft (31 m) 44 ft (13 m)	120 lbs (54 kg)

Minimum loop length is 8 ft. (2.4 m) for all models and film sizes. Height above duplicator is 42 inches (107 cm).

OPTIONAL FEATURES:

Counter -

Halts operation of duplicator after a present number of counts. Operator preset to desired number of copies of a looped master. May also be used to select a predetermined film segment for duplication. Actuated by reflective markers placed on master film.

Sequential Density Programmer -

Production of duplicates having uniform density from a master having up to eleven segments each of which has a different density. Correction is made on a segment-to-segment basis (not frame-to-frame).

230V/50Hz Configuration -

Allows operation from a 230V, 50Hz electrical power source.

Accessories:

Spare Parts Kit -

Contains an assortment of replaceable parts.

Spindles -

One-inch and 5/16 inch diameter spindles are available individually. Spindles are readily interchanged. The 5/16 inch spindles may be used on the Model 3150, but are not suitable for 105mm film.

Covered by U. S. Patent No. 3,468,606 and other, U. S. and Foreign.

Note: Specifications subject to change without notice.

SPECIFICATIONS:

Model:	Width:	Thickness:
3100	16mm, 35mm	1.5 to 8 mil
3150	16mm through 105mm	1.5 to 8 mil

Master and duplicate film may be different thickness.

FILM TYPE:

Master	Silver Halide, Diazo or Vesicular	
Duplicator	Silver Halide	Print film (image reversed).
		Direct duplicating film (image not reversed)

16mm and 35mm films may have sprocket holes; however, sprocket hole registration is not maintained.

Film Capacity (Supply Spindles):

Spindles (Core) Dia.	Max. Roll Dia.	5.4 mil	2.5 mil
1 in (3 in)	10 in (25 cm)	1100 ft (335m)	2400 ft (730m)
5/16 in (1 in)	5 in (13 cm)	300 ft (91 m)	600 ft (183 m)

Diameter of full roll must not be greater than 5 times the core diameter. For take-up spindles the maximum roll diameter for all spindle and core sizes is 10 in (25 cm).

Larger roll sizes can be accommodated upon request.

Duplicating speed:

325 ft per minute (100m per minute)

Exposure lamp:

250 watt quartz-halide, 1,000 hours life at rated output.

Electric:

100 to 130V, 60Hz, 15Amp max or 210 to 250V, 50Hz, 8Amp max.

Environmental:

Darkroom operation: allowable light level depends on duplicating film used.

Recommended relative humidity range is 60% to 85%.

Heat load is less than 200 BTU per hr (60 watts) in standby.

5900 BTU per hr (1725 watts) max when duplicating.

Spindle Configuration (Standard):

Location:	Model 3100	Model 3150
Master Supply	5/16	1 in
Duplicate Supply	1 in	1 in
Master Take-up	5/16 in	1 in
Duplicate Take-up	5/16 in	1 in

5/16 in (8mm) diameter spindles accept standard camera-type reels. One inch (25mm) diameter spindles accept standard plastic film cores. The Model 3150 is supplied with adapter hubs for use with paper cores.

Size:

Model:	Height:	Width:	Depth:
3100 & 3150	65 in (165 cm)	41 in (104 cm)	24 in (61 cm)
3100 & 3150	31 in (77 cm)	41 in (104)	24 in (61 cm)

Weight:

Model:	Basic Unit Wt.	Crated Wt.
3100 & 3150	360 lbs (163 kg)	600 lbs (272 kg)
3100T & 3150T	250 lbs (113 kg)	365 lbs (166 kg)