

MODEL 3100 & 3150

Silver Film Duplicators

- The industry standard for quality and high speed duplicating
- Adjustable speed and light intensity for unmatched flexibility
- The fastest-running unit available today
- Long-life components for minimal adjustments and maintenance

Extek offers two freestanding, high-production roll-to-roll silver film duplicators:

- Model 3100 processes 16/35mm film
- 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.
- Proven in extensive use at microfilm centers throughout the world. Design simplicity and quality manufacturing account for excellent reliability and performance
- Caster-mounted for mobility and ease of maintenance
- Two storage drawers each; one light-tight for storing unexposed film; one with large storage space
- 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.

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 MODELS

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

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



extek Microsystems

OPTIONAL FEATURES

Counter

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

Sequential Density Programmer

- Produces duplicates having uniform density from a master with up to eleven segments of differing densities
- Correction is made on a segment-to-segment basis (versus 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

- 1" and 5/16" diameter spindles are available individually and readily interchanged
- 5/16" spindles may be used on the Model 3150, but are not suitable for 105mm film

continued on next page

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, Vesicular	
Duplicator	Silver Halide	Print film (image reserved) Direct duplicating film (image not reserved)

16mm and 35mm films may have sprocket holes; 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 five times the core diameter
- For take-up spindles, the maximum roll diameter for all spindle and core sizes is 10" (25 cm)
- Larger roll sizes can be accommodated upon request

Duplicating Speed

325' 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 in	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" (8mm) diameter spindles accepts standard camera-type reels
- 1" (25mm) diameter spindles accept standard plastic film cores
- 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)
3100T & 3150T	31 in (77 cm)	41 in (104 cm)	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)

Specifications subject to change without notice