

**BHP INC.**

# 6131F

MODEL 6131F OFFERS BOTH TOTAL IMMERSION  
WET PRINTING AND BI-DIRECTIONAL DRY  
PRINTING IN A COMPACT MODEL WITH 3,000  
FOOT FILM CAPACITY.

## Wet/Dry Modular Printer

BHP, Inc., the world's most experienced manufacturer of precision motion picture film laboratory equipment, presents the latest model of its wet/dry modular continuous contact motion picture film printer in which printer control data can be now entered from either 3-1/2 inch floppy disks or traditional paper tapes.

BHP Model 6131F Wet/Dry Printers have been designed to maximize print quality, negative safety and production efficiency. The simplified film threading path and fast bi-directional film transport system also provides efficient, high quality dry release printing. Further use of the optional electronic fader in either dry or wet printing modes permits fast preparation of intermediate negatives with unmatched quality, accuracy and safety of original camera negatives.

### Interchangeable Film Formats

Model 6131F Printers accept interchangeable picture and sound printing heads to enable printing both 16mm and 35mm format films on the same printer. Printing head/film format changes may be done quickly and easily without tools. Sprocket location, dual format film transport rollers and printing aperture gate rollers are all factory pre-aligned. Safe light threading lamps are provided on the printer above each printing head.

### Unmatched Print Steadiness, Gentle Film Handling

The patented film transport system utilizes a DC servo motor design that does not require feed and take-up sprockets. Its single sprocket design provides outstanding print quality at all film transport speeds for both standard printing applications and archival printing from cellulose nitrate base negatives or other shrunken film. The simplified film threading path facilitates fast, accurate set-up. The gentle film transport system is safe for original camera negatives and minimizes internegative wear over long print runs. Optional Particle Transfer Roller film cleaners improve the cleanliness of dry prints and protect the

wet printing liquid from film borne particulate contamination. The gearless drive system is quiet in operation and easy to maintain.

### Safe, Reliable Wet Printing

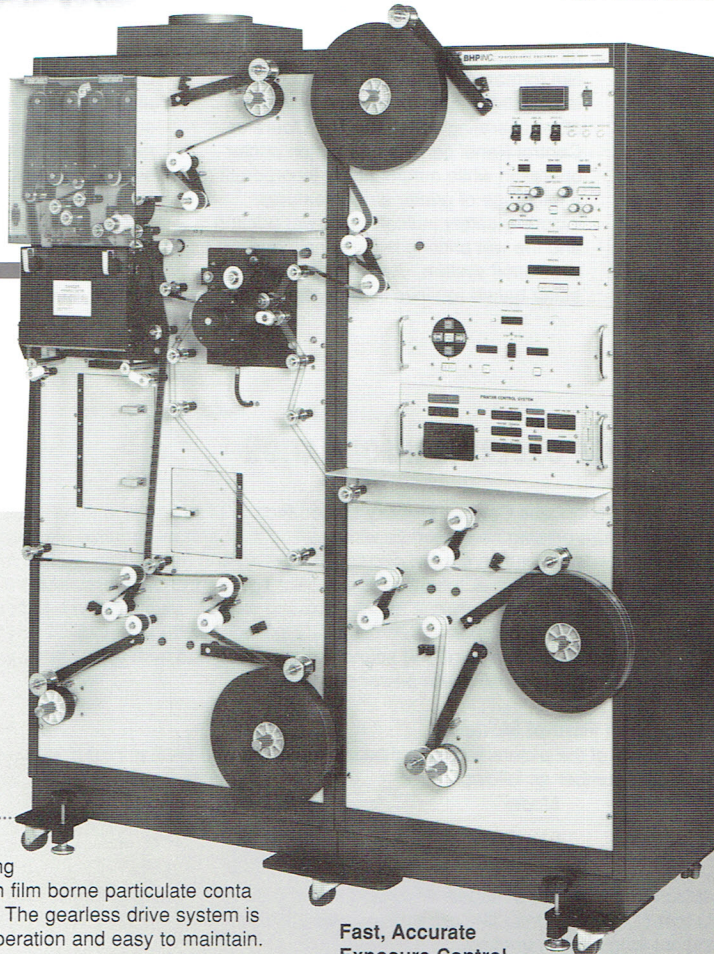
Model 6131F Printers have been designed for safe, reliable operation with economical perchloroethylene as the wet printing liquid. The wet printing system is contained entirely within the printer and includes a pump to deliver liquid from an external bulk supply to a supply reservoir in the base of the printer. Within the printer, the wet printing liquid is circulated and filtered from the supply reservoir to a working reservoir above the wet printing head. The combination of negative and raw stock wipers and a unique liquid circulation system within the printing head assures reliable, bubble free wet printing performance. After printing, another series of wipers and heated forced air dries both the picture negative and raw stock before film take-up. Exhaust hoods disburse wet printing liquid fumes making the printer safe for normal laboratory use when installed and operated in accordance with the instructions contained in the manual supplied with the printer.

### Fast, Accurate Exposure Control

Model 6131F Printers include the BHP additive color light source incorporating high speed BHP Electronic Light Valves. New 1/2 step Light Valve trim controls permit precise sensitometric control. The BHP Electronic Fader is available as an option for smooth, accurate fades and dissolves. Simplified servo motor construction of both the Electronic Light Valve and Fader virtually eliminates maintenance and produces a significant breakthrough in accuracy and reliability of operation.

### Modern, Flexible Printer Control

The Printer Control System provides for electronic storage of color, fade and frame count cue data. Control tape data may be entered from either 3-1/2 inch floppy disks or traditional paper tapes. Electronic Light Valve "trim" settings, Electronic Fader curve selection, and a variety of printer set-up functions may be quickly and accurately made at the Printer Control System.



# 6131F

**Operator Friendly**

Other set-up and operating controls are grouped in convenient control panels. The Set-Up Control Panel is used for printer set-up and includes selector switches for film transport speed, printing mode and film format. A digital voltmeter is provided to selectively monitor printing lamp and other operating voltages. The Operator Control Panel permits one button printer operation while automatically incorporating a full range of printer safety features including safety indicators for wet printing and the wet printing liquid supply and circulation system. A series of microcontroller based routines incorporated in the

Set-Up and Operator Control Panels simplifies several printer set-up and maintenance functions.

**Ease of Maintenance**

The Printer Control System and Operator Control Panel are rack mounted on rails and may be slid out for adjustment and service. Printed circuit boards are plug-in modules and are easily removable for service convenience. All major mechanical components including the main drive system, light valves, and the fader assembly are readily accessible from the rear of the printer. The wet printing liquid circulation system, and the film drying heaters and

blowers are also readily accessible to facilitate changing wet printing liquid and film drying filters.

BHP Model 6131F series printers have been designed to be among the world's finest continuous contact wet/dry motion picture film printers. Each model provides high quality print reproduction, gentle film handling, reliability of operation and ease of maintenance. All BHP printers are backed by a comprehensive product warranty and the resources of the BHP field/factory service department.

## MODEL 6131F ORDERING INFORMATION

**Description**

Model 6131F: Continuous Contact Wet/Dry Motion Picture Film Printer with wet picture printing system including one wet picture printing head module with solution tank and wet printing film transport system, solution fume exhaust system, solution supply, circulation, filtering and bubble trap system and film drying assemblies, one dry sound printing head, automatic additive color light source with three electronic light valves, PCS microprocessor color/frame count cue memory system with 1/2 step trims, program tape reader and 3-1/2 inch floppy disk reader, microcontroller set-up/diagnostics, single 3,000 foot (915 m) raw stock feed and take-up system, 3,000 foot (915 m) picture and sound negative feed and take-up systems, and picture printing lamp and sound printing lamp rectifier and power supplies.

**Standard Film Format Models**

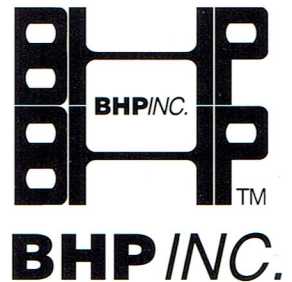
The film format of the picture and sound heads furnished with each printer is identified by a letter suffix to the printer model number as follows:

<i>Format</i>	<i>Model</i>
35mm	6131FD
16mm	6131FJ

In addition to the standard models described in this brochure, special printer models are also available with 6,000 foot (1,830 m) 35mm film capacity, and for 65/70mm motion picture film printing and 70mm still (instrumentation) long roll film printing.

**Interchangeable Film Format Printing Heads and Accessories**

<i>Part Number</i>	<i>Description</i>
<b>Printing Heads</b>	
038412	35mm Wet Picture Printing Head
038413	16mm/Super 16mm Wet Picture Printing Head
038414	35mm Dry Picture Printing Head
038409	16mm Dry Picture Printing Head
038326	Super 16mm Aperture Assembly
038409	35mm Analog Sound Printing Head
038410	16mm Analog Sound Printing Head
038562	35mm Analog/Digital Sound Printing Head
<b>Accessories</b>	
038533	Electronic Fader
038364	Particle Transfer Roller Film Cleaner – Negative
038526	Dolby Digital Sound Printing Light Source
038636	BHP PCS Printer Control Editor® Software
<b>Spare Parts</b>	
038003	Electronic Light Valve
038143	Program Tape Reader Head
038663	Wet/Dry Printer Spare Parts Kit
316994	35mm Particle Transfer Roller



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