

INSTRUCTIONS FOR INSTALLATION AND MAINTENANCE OF

Macbeth Electronic Motor-Controlled
CONSTANTARC LAMPS

UNPACKING

When unpacking, carefully examine the excelsior and wrapping for parts before disposing of packing material.

MOUNTING OF CONTROLS

A bracket is provided for wall mounting of the Macbeth type ABC Control. DO NOT support Controls by their handles. The type ABC Controls and Arctrons must be mounted in a vertical position (Terminal end up).

POSITIONING OF LAMPS

Camera Lamps:

To realize the full advantage of the controlled illumination from the Macbeth Motor-Driven Arc Lamps, it is advisable to operate the lamps in a fixed position relative to the copyboard. To obtain the greatest efficiency, work is usually classed into two groups: for instance, work smaller than 30" x 40" and larger than 30" x 40", but smaller than 60" x 60". The best position of the lamps is then determined for the two groups of work. In most cases, the position of the lamps for 30" x 40" will handle the vast majority of flat copy. When these two positions are determined, they should be recorded or indicated in a manner so that the lamps may be reset to the "operating position." From then on, all exposures should be made with the lamps in one of these two positions when shooting flat copy. In darkroom cameras, this usually necessitates a Macbeth carrier designed to travel with the copyboard or a carrier supplied with the camera. In cameras of the gallery type, it is advisable to mark a spot on the floor or to build a simple wooden jig. The use of a fixed position from lamps to copyboard, originally introduced by Macbeth, eliminates one of the largest variables in copyboard illumination.

Printing Lamps:

To properly locate a printing lamp with respect to the frame, a Sensitivity Guide or a Step Wedge may be used to indicate adequate illumination. A good starting point is to have the arc as far from the frame as the length of the diagonal of the frame.

DRAFTS

If possible, drafts should be eliminated in galleries where arc lamps are installed. Where drafts are unavoidable, clear glass covers for the front of the reflector can be obtained from the Macbeth Arc Lamp Company at small cost.

WIRING

Standard equipment is for use on 50 or 60 cycles alternating current. D. C. equipment is available on special order. The supply voltage should correspond to the rated voltage of the Macbeth type ABC Control, as indicated on the nameplate.

The electrical wiring should conform with minimum requirements shown on the wiring diagram and with applicable local regulations. Before installation, the range of line voltage with which the equipment will operate should be determined from the local power company or your electrical contractor. The Control wiring diagram shows the proper taps to use for your voltage range. Grounding specifications as recommended by the National Electrical Code should be followed.

BEFORE TURNING ON POWER FOR FIRST TIME

Before turning on the power, check the fusing of the switches and contactors to see that it is in accordance with the electrical data supplied on the wiring diagram. Check the oil level of the Control and make sure that the ABC Control and Arctron are mounted VERTICALLY.

CARBON ELECTRODES

Macbeth Motor-Driven Arc Lamps are designed to employ a full-length trim. The heavy copper sheathing on the electrodes carries the current to the arc and carries the heat away from the arc; therefore, no advantage is realized by trimming short. Note that with a high intensity arc, the arc gap is shorter than that obtained with low intensity flame arc.

For B-1C CONSTANTARC Camera and Printing Lamps:

		Cat. No.
50 ampere	Upper, No. 1012 High Intensity, copper-coated	L 3606
	Lower, 10mm x 12" White Flame, copper-coated	L 3215
100 ampere	Upper and Lower, No. 1012 High Intensity, copper-coated	L 3606
140 ampere	Upper and Lower, No. 1112 High Intensity, copper-coated	L 3612