



Autoarc

**carbon
arc
lamp**

Auto arc

electronically controlled—
giving constant light output

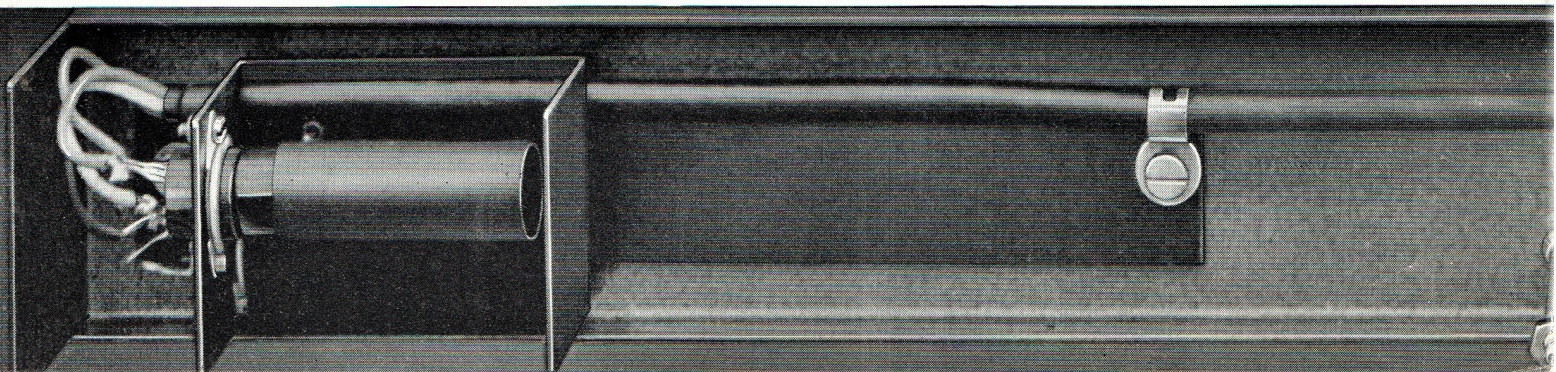
The Autoarc Carbon Arc Lamp is designed for modern cinematograph film projection and can be incorporated in any automated system. It retains all the advantages of the modern carbon arc giving a high light output and true colour reproduction.

In operation only two switches control the Autoarc. These actuate the arc striking and regulate the dowser. Once an arc is struck the electronic 'master' unit maintains a correct light output and will run unattended for up to two and a quarter hours depending on current loading and light required.

The Autoarc therefore can be operated at the projector or remotely controlled from any part of the cinema.

When installed no additional supply or rectifier beyond the normal DC requirements is necessary.

This is the electronic 'master' unit. It is the brain of the lamp and automatically controls the carbon feed to maintain the required light output.



Fully applicable to any automated system
Long running time without carbon re-trim
All the advantages of the carbon arc over other light sources
Can be powered by existing rectifiers
Low initial installation cost
Economic and reliable performance

type

Reflector type DC operated High Intensity Horizontal Arc.

carbons

8 mm × 18" (457 mm) positive (copper coated)
 6 to 8 mm × 12" (305 mm) negative (copper coated)
 according to current employed.

operating conditions

Amps	A/V	Lumens (Aperture 0.825 × 0.6)	Continuous burning minutes
50	38	12,000	135
55	39	13,000	110
60	41	15,000	90
65	43	16,750	70
70	45	18,500	60
75	46	21,000	70
80	48	23,000	50

optics

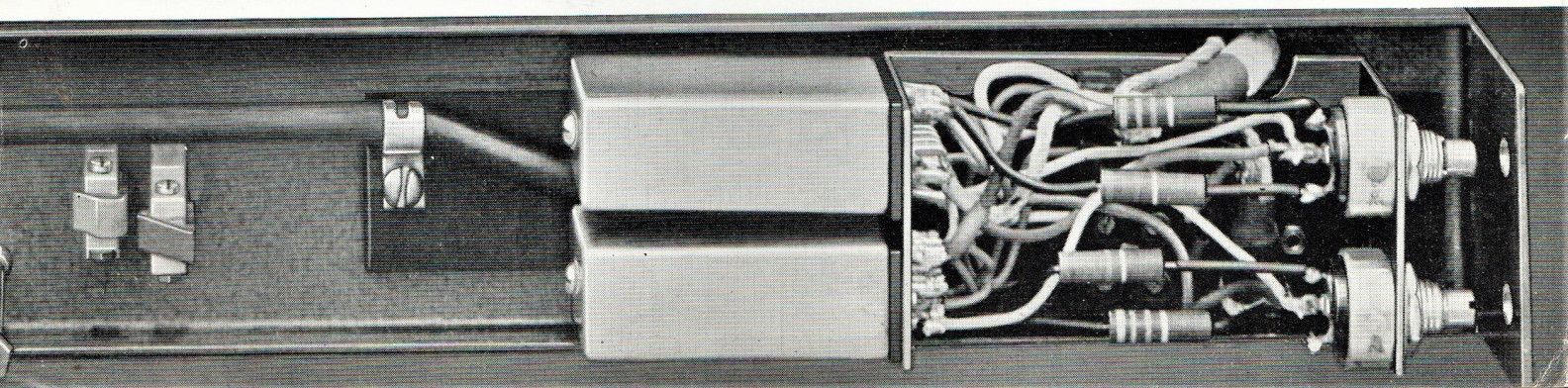
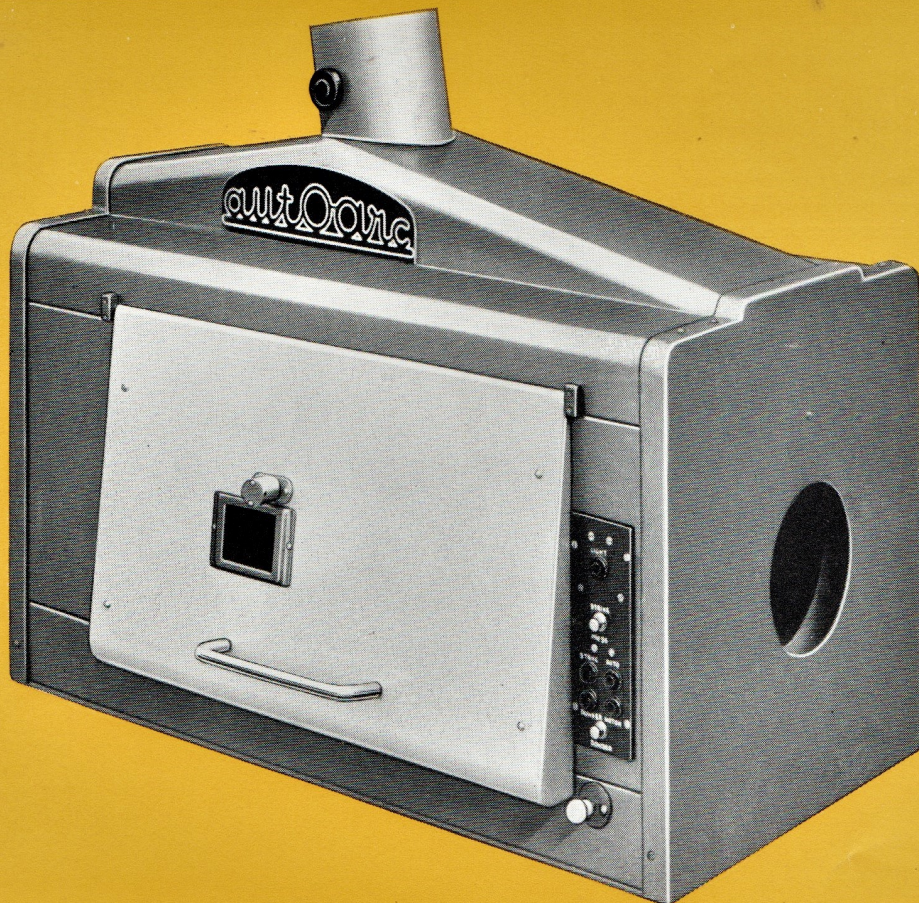
Ellipsoidal Mirror—Diameter 14.0" (355 mm)
 Minor Focus 5.2" (133 mm) Major Focus 34.0" (864 mm)

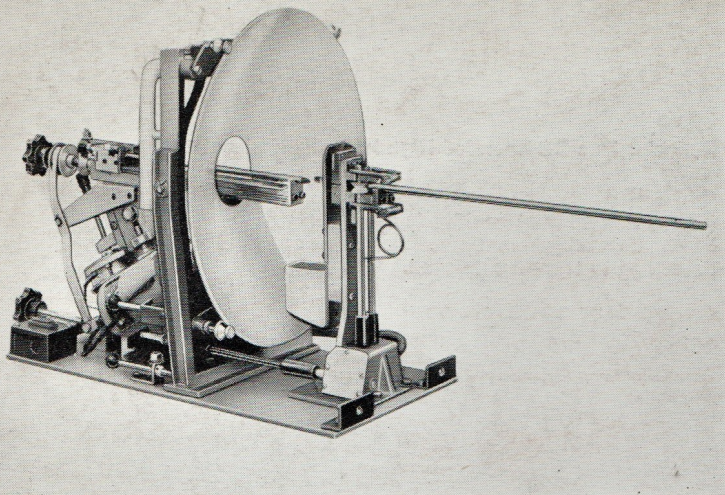
optical height

9" (229 mm)

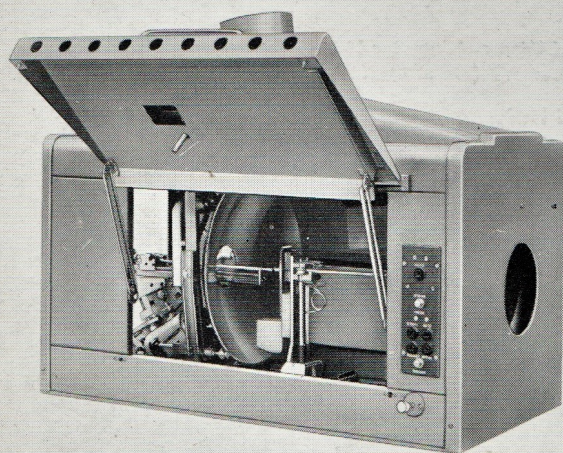
size of lamphouse

Overall length: 38" (965 mm)
 width 22.5" (572 mm) height 25" (635 mm)





The Autoarc light unit showing the carbon rods in position



The Autoarc with side plate elevated and the light unit in situ.

method of operation

striking the arc

The arc is struck by the forward movement of the negative carbon holder. This is achieved by the simple action of pressing a button which operates a DC solenoid.

carbon control

The carbons are initially positioned by means of a simple guide. As the arc is struck an optical electronic device automatically takes over control of both carbons and maintains them in their correct position to within 0.25 mm during the whole time the arc is burning.

the dowser

The dowser is coupled to the mirror shield and is opened and closed by means of a switch operating a DC solenoid.



Patents applied for :

British Arc Lamp Carbon Manufacturers Association

Chadwell Works, Grove Road, Chadwell Heath, Essex
Telephone: Goodmayes 2421