

USER HANDBOOK

# HMV 1202

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FOLLOW SPOT

MARCH 1989

Nennspannung            **230 V**  
Rated voltage        **50 Hz/ 60 Hz**

ORDER CODE

HMV 1202/20 SET, SET A, SET J

HMV 1202/35 SET, SET A, SET J



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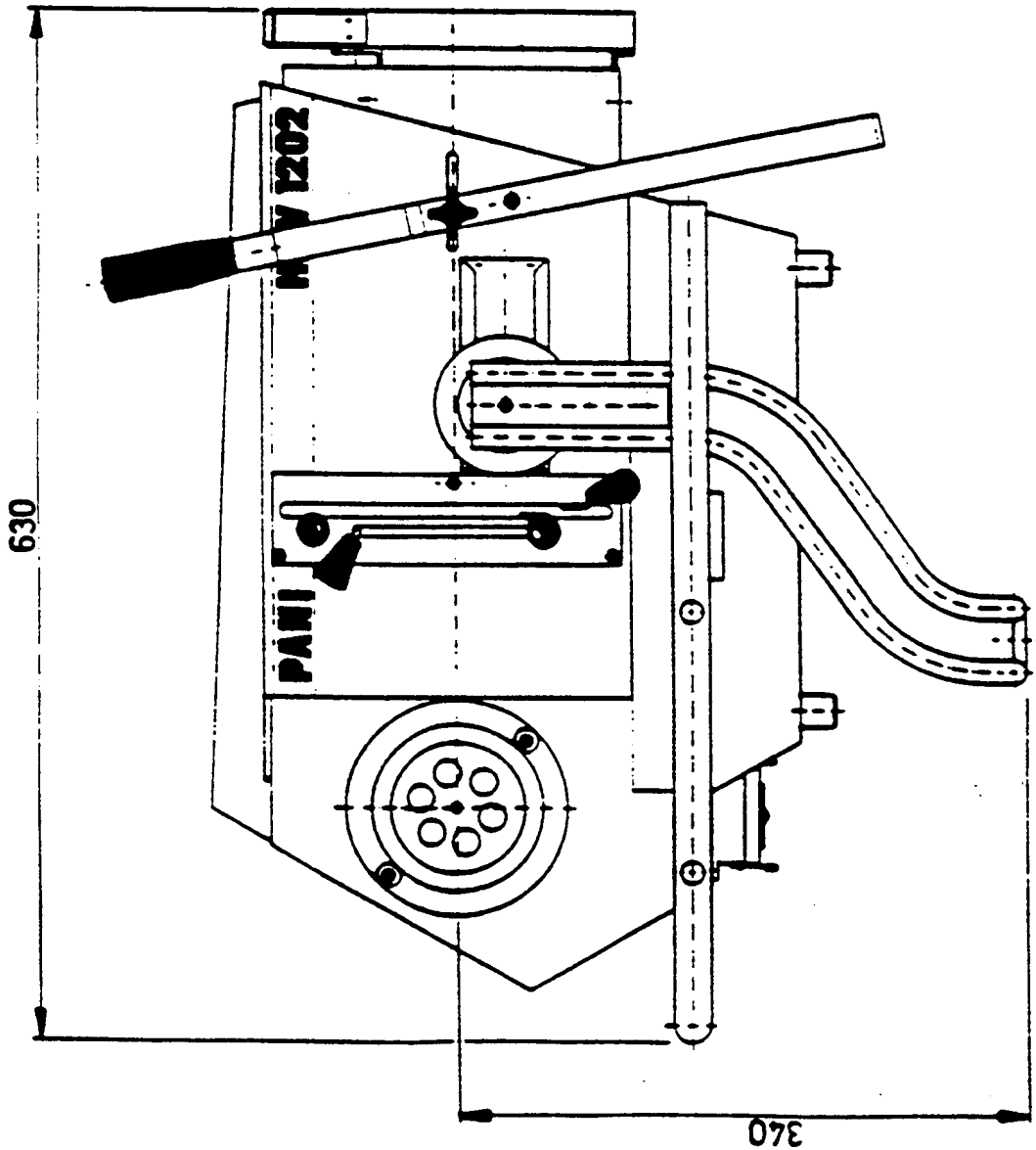
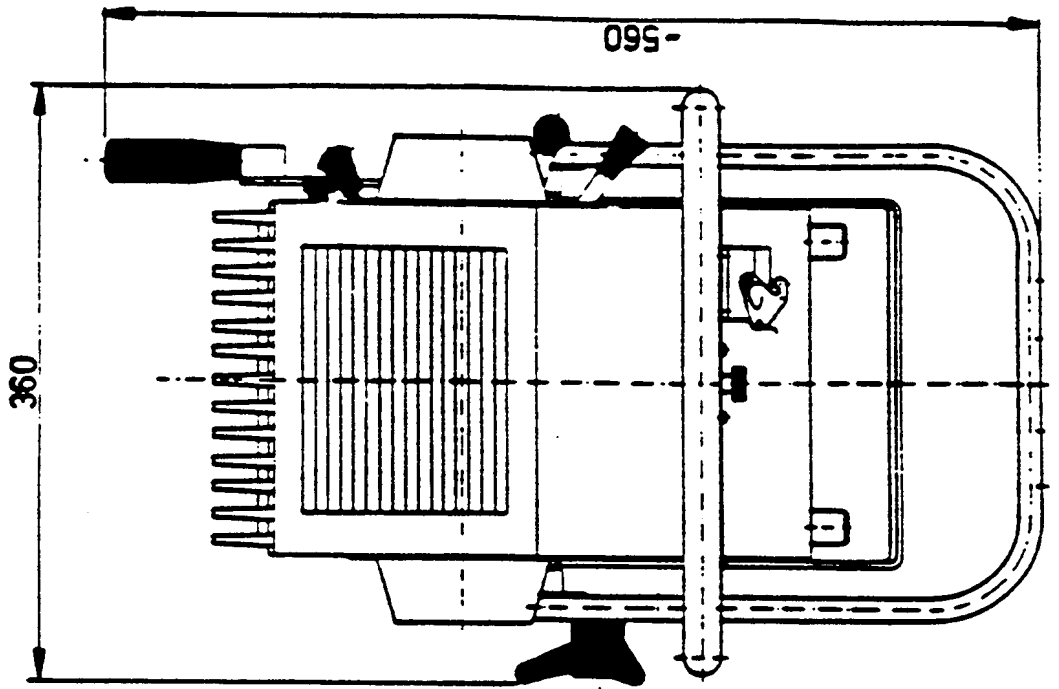
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# HMI Followspot HMI 1202/20



# 1 General

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The Pani HMI followspot HMV 1202, with it's outstanding light output is most suitable for use in the theater, television and in long throw lighting situations. The advantages of the HMV 1202 are achieved through quality compact construction which guaranties optimum performance. The daylight spectrum of the HMI 1200 watt lamp assures outstanding color rendering.

The workings of the new HMV followspot are detailed in the following text. These instructions are essential for correct operation of the unit.

## 2 Mechanical Assembly

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The sheet metal housing with aluminium cooling fins is supported at a variable balance point by a friction free tubular yoke. A three star grip is conveniently located on the left side of the yoke. This clamp locks the followspot in vertical position. By loosening the left and right cap nuts in the center of yoke support, the followspot may positioned at the optimum balance point.

When the followspot is not to be mounted in limited spaces, such as stage scaffolding and tormentor towers, where normal mounting hardware is presumed to be already in place, it is recommended that our special stand SZ 131 be used. The stand is equipped with a height adjustment and lockable rubber casters. The horizontal movement of the spotlight (for following) is supported with ball bearings and is lockable with a grip knob.

## 3 Insert

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The Insert is a convenient modular assembly combining the iris, courtine shutters, and gobo pattern holder. This assembly can be lifted out of the followspot as a unit.

Three levers on the right side of the followspot provide the operational controls. The courtine shutter lever (16) controls the spread of the shaped light. The rotation of this shape may be achieved by adjustment of the courtine rotation lever (4). Once the correct angle of rotation is reached, the lever can be locked in position with a locking screw (23).

**Blackout:** For quick blackouts, set the courtine rotation lever in it's center position. At the desired moment quickly pull down the courtine shutter lever (16).

The iris aperture is regulated with the iris lever (17). Downward movement of this lever will decrease the size of the iris aperture.

**Insert removal:** Loosen the retaining screws (27) on opposing sides of the insert. Move all control levers to their center positions and slowly withdraw the insert. If the three levers are not centered the insert cannot be removed.

When replacing the insert, all levers must be returned to their center positions.

## 4 Gobo Replacement

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The desired gobo pattern may be placed in the previously described holder (24). With the aid of the courtine rotation lever (4) the gobo pattern can be rotated. During this procedure take care not to operate the courtine shutter lever (16).

## 5 Iris Replacement

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For servicing, the iris assembly may be replaced. A level horizontal work surface should be provided. Rotate the knob of the iris lever downwards. Loosen the iris retaining screws (20) and draw out the entire assembly including the heat shield (18). Do not loose the heat shield retaining screws (19).

Install a new iris in reverse order of removal.

## 6 Optical System

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Depending upon the desired beam angle and the required throw distance, either of two available objective lens focal lengths may be selected. The objective lens  $f=20$  cm produces a beam angle of  $12.6^\circ$ , and is best suited for short throws. The objective lens  $f=35$  cm produces a beam angle of  $7.5^\circ$  and may be utilized for longer throws.

To adjust the focus of the objective lens, loosen the left and right locking bolts on the focus adjustment lever. Through continuous adjustment of the focus lever during operation (following) an exact focus can be maintained. The focus travel limit may be altered with the set screws.

## 7 Electrical Section

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A Ballast is required for operation of the HMV 1202 HMI follow-spot. A built in choke limits lamp current to 13.8 amps (220V). Electrical regulation of lamp power is not possible (No dimming).

Illumination of the red "OFF" lamp indicates that the unit is ready for use. When the green "ON" button is pressed power is applied, the igniter circuit closed, and high voltage ignition of the lamp takes place. Note that on cold start-up the lamp will reach full intensity 2 - 3 minutes after ignition. To switch the unit off simply press the red "OFF" button.

Above the multipolar plug (connection to the projector) there is placed a red switch.

This switch serves to change the ignition mod from a "normal-ignition" to a "soft-ignition".

The advantage of the "soft-ignition" is the low noise during the ignition.

For lamp replacement, remove the left and right lamp covers by turning the fasteners. The circuits will be disabled by the safety switches (SEE LAMP REPLACEMENT).

For servicing, the compact electrical unit may be removed (after lamp removal).

## 8 Main Power

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Main power is supplied through a 3 wire (3 x 2,5mm<sup>2</sup>) multi conductor cable, connected to a single phase 220V power source.

Should the HMV 1202 be required to operate at voltages other than 220V/50Hz., the following system order codes for the desired power source should be used:

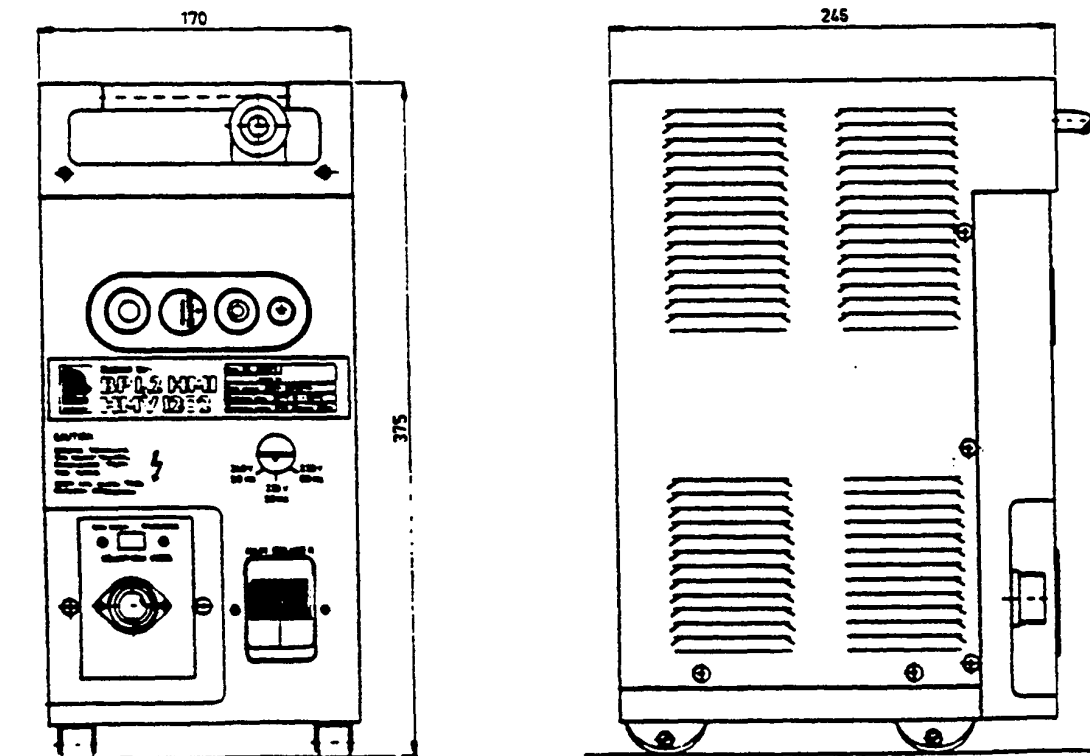
<u>Voltage</u>	<u>Order code</u>
120V/60Hz	HMV 1202/20 SET A
	HMV 1202/35 SET A
100V/50Hz	HMV 1202/20 SET J
	HMV 1202/35 SET J

## 9 Ballast / Spotlight Cable

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Provided in the ballast is a 7 pole connector for a 7 x 1,5mm<sup>2</sup> ballast to spotlight cable in addition to the main power cable. The standard lengths are 3 meters. This cable length may be extended to any cable length required. For extreme lengths however, the cable conductor size may need to be increased.

A multi-pole connector on the lower side of the spotlight housing completes the connection and secures the cable. The control panel for the followspot is located on the ballast.



# 10 Lamp Replacement

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When replacing the lamp, the ballast must be disconnected from the spotlight. NO EXCEPTIONS!

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FIG #1: Open the left and right lamp covers by turning the fasteners. Remove both flat milled nuts from the lamp. Remove the cable shoes from both sides of the lamp. Flip the movable section of the lamp support. Move the lamp towards the left and withdraw it from the other lamp support.

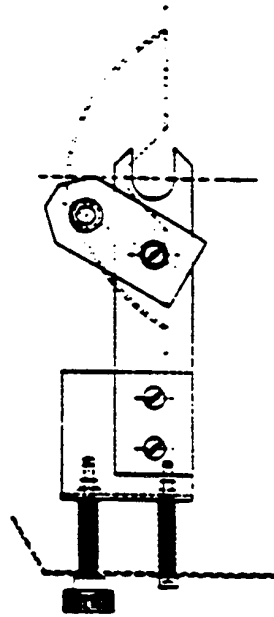


FIG #2: Insert a new 1200W HMI lamp into the right lamp support. Now insert the lamp into the left support.

ATTENTION: Do not touch the quartz lamp body with the fingers!

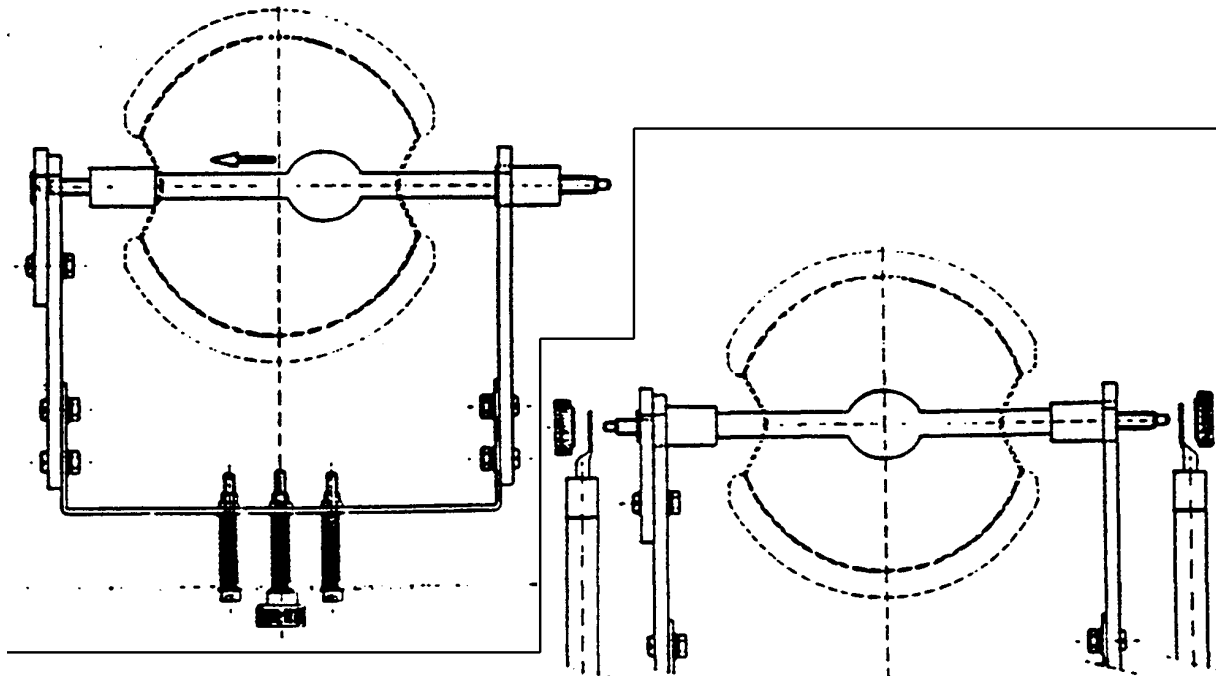
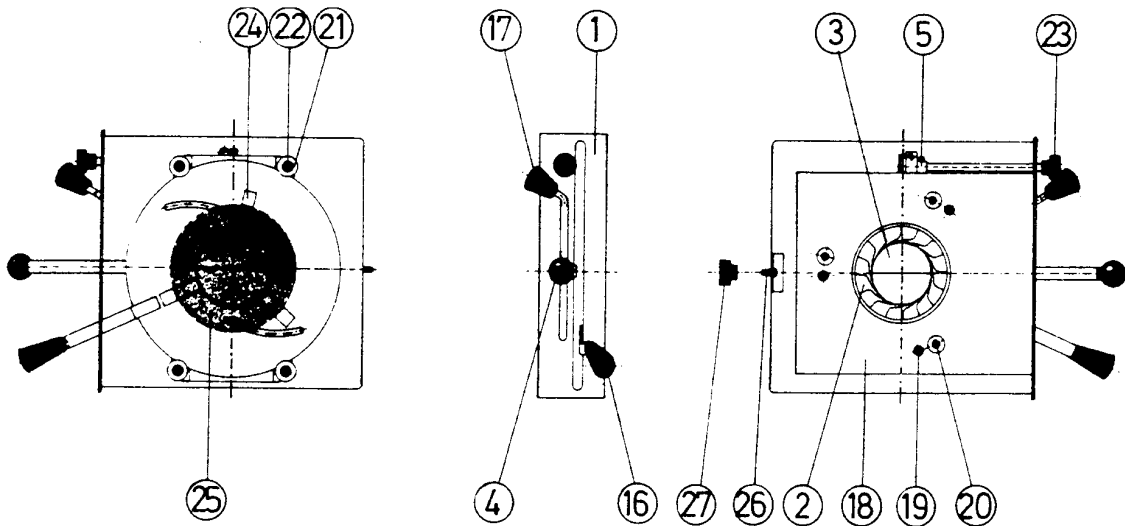


FIG #3: Attach the right cable shoe to the lamp. Replace the milled nut and tighten it securely. Attach the left cable shoe in the same manner.

# 11 Position Drawing; Insert

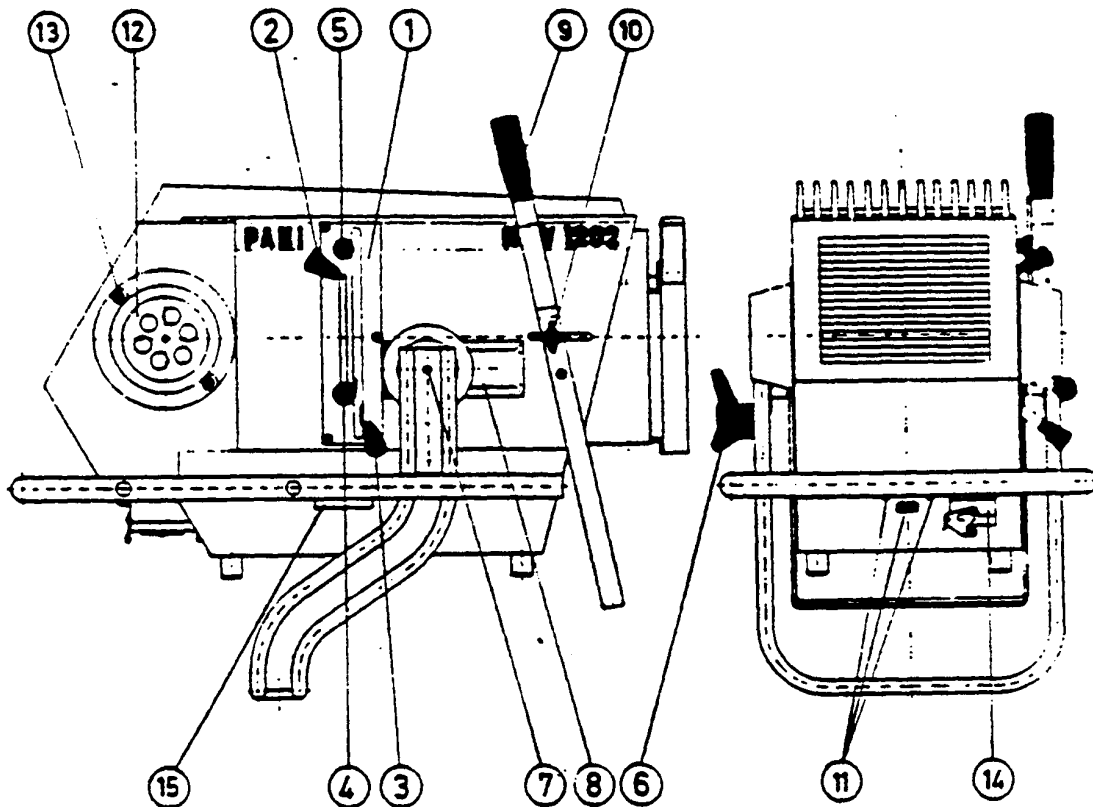
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- 1 Insert
- 2 Iris
- 3 Courtine Shutters
- 4 Courtine Rotation Lever
- 5 Courtine Retainer
- 16 Courtine Shutter Lever
- 17 Iris Lever
- 18 Heat Shield
- 19 Heat Shield Retaining Screws
- 20 Iris Retaining Screws
- 21 Guide Rollers for Courtine Rotation
- 22 Nuts for Courtine Rotation
- 24 Gobo Pattern Holder
- 25 Gobo Pattern
- 26 Assembly Fastening Bolt
- 27 Hollow Milled Nut for Mounting to HMV 1202



## Position Drawing; HMI Followspot HMV 1202



## 12 Position Drawing; HMI Followspot HMV 1202

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- 1 Insert
- 2 Iris Lever
- 3 Courtine Shutter Lever
- 4 Courtine Rotation Lever
- 5 Courtine Retainer
- 6 Clamp Grip for Vertical Movement
- 7 Cap Nuts (Loosen for adjustment of balance position)
- 8 Balance Adjustment Slide Rail
- 9 Focus Lever
- 10 Focus Locking Screws
- 11 Lamp Adjustment Srews
- 12 Lamp Cover (See Lamp Replacement)
- 13 Lamp Cover Fasteners
- 14 Ballast Connector
- 15 Hour Counter

# 13 Technical Data

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## HMV 1202 :

Depth: 6400mm (with Objective f=20cm)  
Width: 2800mm  
Height: 4900mm  
Weight:  
Lamp: HMI 1200  
Light Intensity in Lux (Throw distance = 10m):  
Objective f=20cm 6000lx 2,2m Diameter  
Objective f=35cm 18000lx 1,3m Diameter

## Ballast :

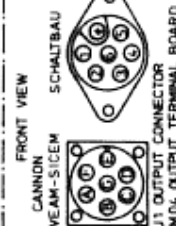
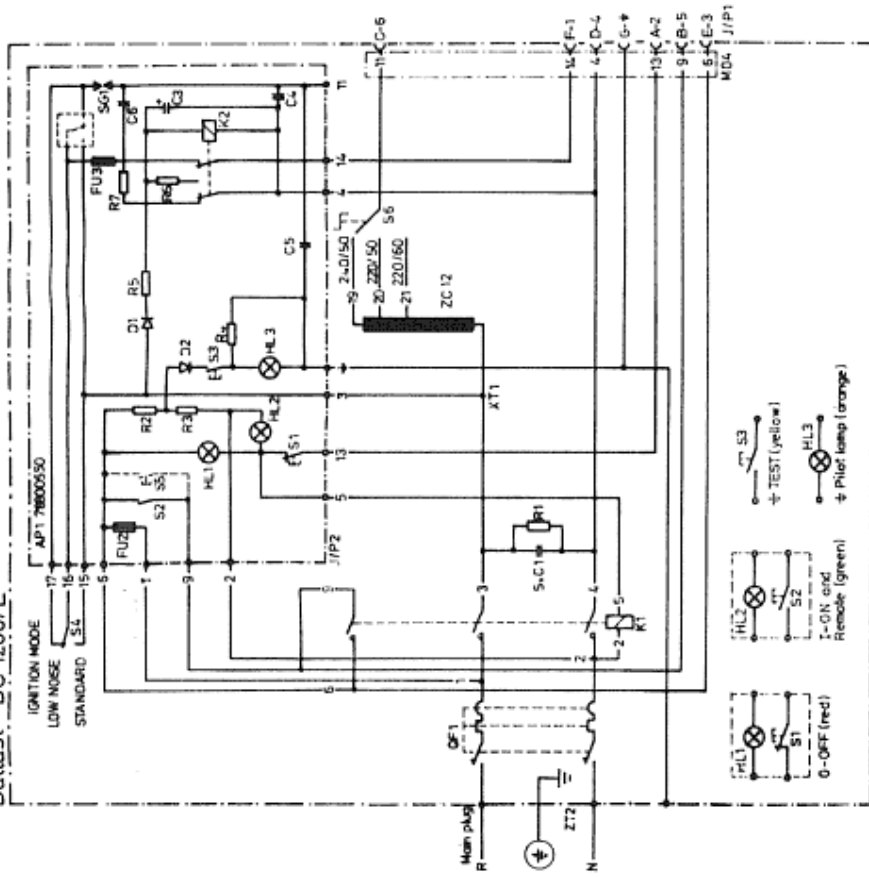
Power Source: AC 220V/16A/50Hz  
if Desired 220V/60Hz,100V/50Hz,120V/60Hz  
Depth: 2460mm  
Width: 1700mm  
Height: 3530mm  
Weight: 20kg

# 14 Accessories

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Description	Order Code
Dimming Shutter 0-100%, Hand Operated	2061/HMV/man
Dimming Shutter 0-100%, Electronic Control with Control Box	2061/HMV/el
Color Changer for 4 Colors, Hand Operated	F 1339
Color Filter Frames: Size 215mm	FR 215
Diffusion Glass: Size 215mm	SG 215
Conversion Filter 3200°K, 215 x 215mm	D 1009
UV Transmission Filter (Black Glass) complete with Frame 215 x 215mm	D 1010
Spare Lamp HMV 1200W	H 1122
Frame Insert for Gobo Pattern	D 1003
Secondary Extention Cable 8m	D 1008
Crank Operated Mobile Stand with Locking Casters	SZ 131
TV Spigot; DIN 15560, 28mm (for use with SZ 131)	SZ 128

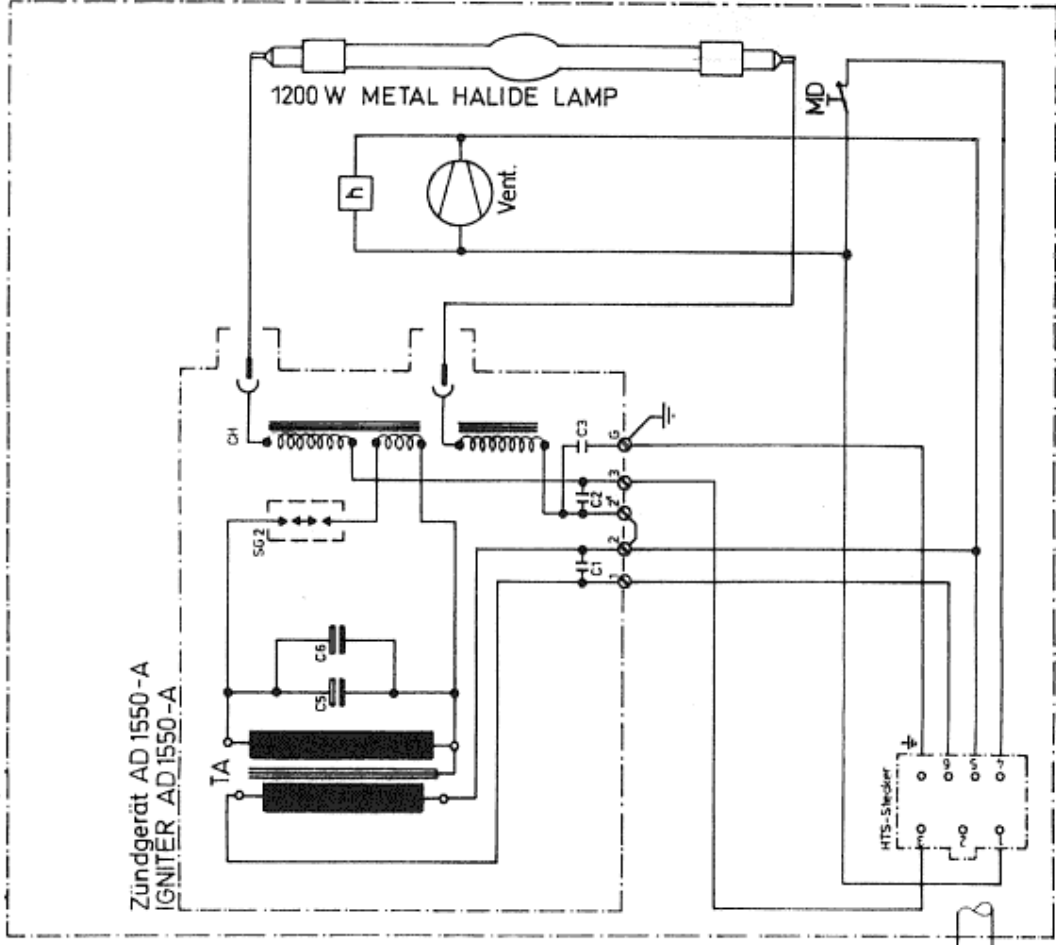
Vorschaltgerät BC 1200/E  
Ballast BC 1200/E



Verbindungskabel		Anschlußbelegung	
HTS	1 1 4 3 1 5 2 1 6	grün	gelbgrün
Schalbau	2 1 5 6 4 3 1	schwarz	schwarz
Nummerkabel	3 1 5 1 1 5 4 2	braun	gelb
neues Kabel		grün	weiß
altes Kabel		braun	rot
		blau	blau

- R- Braune Ader: Phase
- N- Blaue Ader: Neutral
- ⊕ - Gelb-grüne Ader
- R- Brown cable: Phase
- N- Blue cable: Neutral
- ⊕ - Yellow-green

HMI Verfolgerscheinwerfer HMV 1202  
HMI Followspot HMV 1202



Stromlaufplan  
Circuit diagram  
HMV 1202