



Followspot HMI 1200

ORDERCODE 40180



SHOWELECTRONICS FOR PROFESSIONALS

Congratulations!

You have bought a great, innovative product from Showtec.

The Showtec Followspot HMI 1200 brings excitement to any venue. Whether you want simple plug-&-play action or a sophisticated DMX show, this product provides the effect you need.

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We design and manufacture professional light equipment for the entertainment industry.

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You can get some of the best quality, best priced products on the market from Showtec.

So next time, turn to Showtec for more great lighting equipment.

Always get the best -- with Showtec !

Thank you!



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WARNING



CAUTION!
Keep this device away from rain and moisture!
Unplug mains lead before opening the housing!



**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY
BEFORE YOUR INITIAL START-UP!**

SAFETY INSTRUCTIONS

Every person involved with the installation, operation and maintenance of this device has to:

- be qualified
- follow the instructions of this manual



**CAUTION! Be careful with your operations.
With a dangerous voltage you can suffer
a dangerous electric shock when touching the wires!**



Before your initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

This device contains no user-serviceable parts. Refer servicing to qualified technicians only.

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

- Never let the power-cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution!
- Never remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Never run the device without lamp!
- Never ignite the lamp if the objective-lens or any housing-cover is open, as discharge lamps may expose and emit a high ultraviolet radiation, which may cause burns.
- Never lift the fixture by holding it at the projector-head, as the mechanics may be damaged. Always hold the fixture at the transport handles.
- Do not open the device and do not modify the device.
- Never look directly into the light source.
- Never leave any cables lying around.
- Do not insert objects into air vents.
- Do not connect this device to a dimmerpack.
- Do not switch the device on and off in short intervals, as this would reduce the lamp's life.
- Do not touch the device's housing bare-handed during its operation (housing becomes very hot).
- Do not shake the device. Avoid brute force when installing or operating the device.
- Only use device indoor, avoid contact with water or other liquids.
- Only operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.
- Only operate the device after having familiarized with its functions.
- Avoid flames and do not put close to flammable liquids or gases.
- Always replace the lamp, when it is damaged or deformed due to the heat.

- Always keep case closed while operating.
- Always allow free air space of at least 50 cm around the unit for ventilation.
- Always disconnect power from the mains, when device is not used, before cleaning or when replacing lamp! Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.
- Make sure that the device is not exposed to extreme heat, moisture or dust.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power-cord is never crimped or damaged. Check the device and the power-cord from time to time.
- If the lens is obviously damaged, it has to be replaced. So that its functions are not impaired, due to cracks or deep scratches.
- If device is dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- If your Showtec device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Showtec dealer for service.
- For adult use only. The device must be installed out of the reach of children. Never leave the unit running unattended.
- For replacement use lamps and fuses of same type and rating only.
- Allow time to cool down, before replacing lamp.
- This device is only allowed for an installation via the mounting bracket.
- The user is responsible for correct positioning and operating of the Followspot. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- During the initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.



OPERATING DETERMINATIONS

This device is not designed for permanent operation. Consistent operation breaks will ensure that the device will serve you for a long time without defects.

The minimum distance between light-output and the illuminated surface must be more than 1.3 meter.

The maximum ambient temperature t_a must never be exceeded.

If this device is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.

Any other operation may lead to dangers like short-circuit, burns, electric shock, lamp explosion, crash etc.

You endanger your own safety and the safety of others!

Rigging

Please follow the European and national guidelines concerning rigging, trussing and all other safety issues.

Do not attempt the installation yourself !

Always let the installation be carried out by an authorized dealer !

Procedure:


- If the projector is lowered from the ceiling or high joists, professional trussing systems have to be used.
- Use a clamp to mount the projector, with the mounting-bracket, to the trussing system.
- The projector must never be fixed swinging freely in the room.
- The installation must always be secured with a safety attachment, e.g. an appropriate safety net or safety-cable.
- When rigging, derigging or servicing the projector, always make sure, that the area below the installation place is blocked and staying in the area is forbidden.

Improper installation can cause serious damage to people and property !

Connection with the mains

Connect the device to the mains with the power-plug.

Always pay attention, that the right color cable is connected to the right place.

International	EU Cable	UK Cable	US Cable	Pin
L	BROWN	RED	YELLOW/COPPER	FASE
N	BLUE	BLACK	SILVER	NUL
	YELLOW/GREEN	GREEN	GREEN	EARTH

Make sure that the device is always connected properly to the earth!

Description of the device

Features

The Showtec Followspot HMI 1200 is a Theatrelight from Showtec with RGB-Colormixing.

- 4 DMX-Channels
- 7 Colours + White
- DMX Control
- Colour Temp correction: 3200K, 5600K, 6000K
- Strobe (1-10Hz)
- Motorized Iris
- Manual Focus
- Stand inclusive!

NOTE: Knowledge of DMX is required to fully utilize this unit

Overview



Fig. 1

Controller

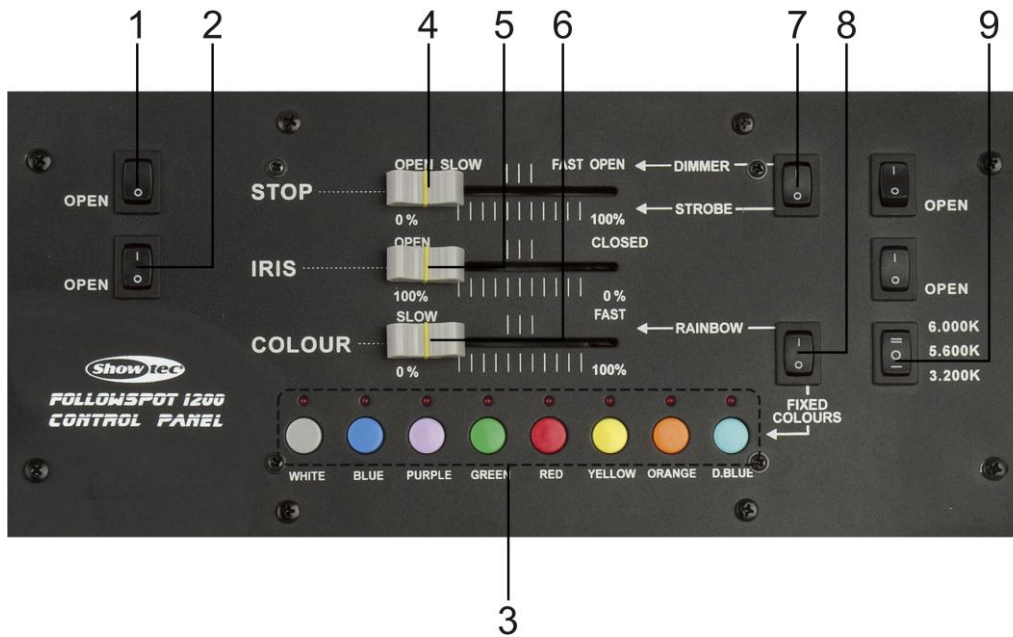


Fig. 2

- 1) Lens hood (door): This switch allows to switch the shutter ON / OFF
- 2) Aperture size switch (to change the aperture size to the maximum/minimum).
- 3) When the switch (8) is set to **Fixed Colours**, you can choose by pressing one of the colored buttons. Color Choice: White, Blue, Purple, Green, Red, Yellow, Orange, D. Blue.
- 4) Flash speed Fader: If the switch (7) is set to **Dimmer**, you can change from Open Slow – Fast Open
If the switch (7) is set to **Strobe**, you can change from 0 – 100%.
- 5) Iris Fader: Change the diameter of the Iris from Open (100%) to Closed (0%).
- 6) Colour/Rainbow Fader: If the switch (8) is set to **Rainbow**, you can alter the colours with this fader or with the 8 coloured buttons. If the switch (8) is set to **Fixed Colours** you can alter the continuous color change; With this fader you can change the speed from Slow to Fast.
- 7) Dimmer/Strobe Switch: Set this switch to your desire and use the corresponding Fader (4 or 5) to change the settings.
- 8) Rainbow/Fixed Colours Switch: Set this switch to your desired mode and use Fader (6) to change the settings.
- 9) Color Temperature switch: You can choose 3200°K, 5600°K, 6000°K. When the swicth is set to 3200°K or 6000°K the Colors Buttons (3) **Orange** and **D. Blue** are deactivated. There is no correction filter for these 2 colours

Installation

Installing the Lamp

The Showtec Followspot HMI 1200 uses a 1200W Lamp (ordercode 80902O / 80902S), as manufactured by all popular manufacturers. Use only the appropriate lamp for your unit.

Note that, product versions that use other lamps, may be offered in the future. Check your product specification label for information.

Always disconnect from electric mains power supply before changing lamps.

The lamp has to be replaced when it is damaged or deformed due to the heat.

Do not install lamps with a higher wattage! Lamps with a higher wattage generate temperatures the device was not designed for.

Damages caused by non-observance are not subject to warranty.

Procedure :

1. Loosen the 2 screws on top of the housing.
2. Gently remove the lamp cover. Do not touch the lamp bulb glass. Oil on hands shortens the lamp life. (If you touch the bulb glass, wipe off the glass with a clean, lint-free towel and rubbing alcohol.)
3. Insert the lamp pins into the small holes in the lamp socket.
4. Put the lamp cover back and fasten the screws snugly.



Fig. 3

Set Up and Operation

Follow the directions below, as they pertain to your preferred operation mode.

Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

Stand-alone mode

You can use this device as a stand-alone unit, by connecting the 5-pin cable from the controller to the Followspot. Now you can use all buttons and faders as described on page 6.

DMX work mode

1. Plug the powercable into the wall.
2. Connect a DMX controller to Followspot, using a 5-pin XLR cable. The red LED lights up.
3. Connect every unit with a 3-pin to 5-pin XLR cable. Every unit is set to the same DMX work mode and the received DMX addresses are the same (001-512). When a DMX signal is received, the devices function synchronously.

DMX Dip Switch Setting

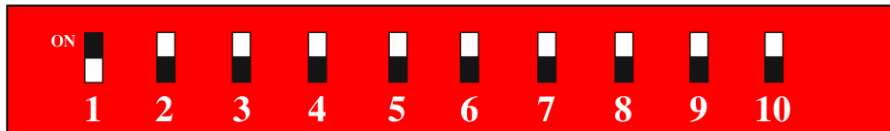
DMX products must have their own "address" to receive DMX signals. Addresses on the Showtec Followspot are set by flipping the appropriate DMX dip switches. A standard DMX address for a Showtec Followspot, which has 4 channels is as follow:

Followspot	Address Value	DMX Dip Switches "ON"
Unit 1	1	#1
Unit 2	5	#1, 3
Unit 3	9	#1, #4
Unit 4	13	#1, #3, #4

Explanation: Since each unit has 4 channels, each address advances 4 values (See Address Value above).

Once address values are determined, set appropriate DMX dip switches on each unit.

Note: If Dip Switch #10 is set to ON, the Followspot runs its built-in test program.



Dip Switch no.

Starting address 1 2 4 8 16 32 64 128 256 Test Mode

Example:

1. If you want to give a Followspot DMX address 133, you first have to find the number 133 in the DMX Chart.
2. Then look at the left side (Dip Switches #1-#5) horizontally from 133. In the Table you'll see #1=ON, #2=OFF, #3=ON, #4=OFF, #5=OFF.
3. Finally look at the upper side of the table (Dip Switches #6-#9) vertically from 133. In the Table you'll see #6=OFF, #7=OFF, #8=ON, #9=OFF.

DMX Address Quick Reference Chart

DMX DIP SWITCH SET					#9	0	0	0	0	0	0
0=OFF					#8	0	0	0	0	1	1
1=ON					#7	0	0	1	1	0	0
					#6	0	1	0	1	0	1
#1	#2	#3	#4	#5							
0	0	0	0	0							
1	0	0	0	0							
0	1	0	0	0							
1	1	0	0	0							
0	0	1	0	0							
1	0	1	0	0							
0	1	1	0	0							

	32	64	96	128	160
1	33	65	97	129	161
2	34	66	98	130	162
3	35	67	99	131	163
4	36	68	100	132	164
5	37	69	101	133	165
6	38	70	102	134	166

DMX Address Quick Reference Chart

Dip Switch Positior

DMX DIP SWITCH SET 0=OFF 1=ON					#9	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	
					#8	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
					#7	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
					#6	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
#1	#2	#3	#4	#5																	
0	0	0	0	0		32	64	96	128	160	192	224	256	288	320	352	384	416	448	480	
1	0	0	0	0	1	33	65	97	129	161	193	225	257	289	321	353	385	417	449	481	
0	1	0	0	0	2	34	66	98	130	162	194	226	258	290	322	354	386	418	450	482	
1	1	0	0	0	3	35	67	99	131	163	195	227	259	291	323	355	387	419	451	483	
0	0	1	0	0	4	36	68	100	132	164	196	228	260	292	324	356	388	420	452	484	
1	0	1	0	0	5	37	69	101	133	165	197	229	261	293	325	357	389	421	453	485	
0	1	1	0	0	6	38	70	102	134	166	198	230	262	294	326	358	390	422	454	486	
1	1	1	0	0	7	39	71	103	135	167	199	231	263	295	327	359	391	423	455	487	
0	0	0	1	0	8	40	72	104	136	168	200	232	264	296	328	360	392	424	456	488	
1	0	0	1	0	9	41	73	105	137	169	201	233	265	297	329	361	393	425	457	489	
0	1	0	1	0	10	42	74	106	138	170	202	234	266	298	330	362	394	426	458	490	
1	1	0	1	0	11	43	75	107	139	171	203	235	267	299	331	363	395	427	459	491	
0	0	1	1	0	12	44	76	108	140	172	204	236	268	300	332	364	396	428	460	492	
1	0	1	1	0	13	45	77	109	141	173	205	237	269	301	333	365	397	429	461	493	
0	1	1	1	0	14	46	78	110	142	174	206	238	270	302	334	366	398	430	462	494	
1	1	1	1	0	15	47	79	111	143	175	207	239	271	303	335	367	399	431	463	495	
0	0	0	0	1	16	48	80	112	144	176	208	240	272	304	336	368	400	432	464	496	
1	0	0	0	1	17	49	81	113	145	177	209	241	273	305	337	369	401	433	465	497	
0	1	0	0	1	18	50	82	114	146	178	210	242	274	306	338	370	402	434	466	498	
1	1	0	0	1	19	51	83	115	147	179	211	243	275	307	339	371	403	435	467	499	
0	0	1	0	1	20	52	84	116	148	180	212	244	276	308	340	372	404	436	468	500	
1	0	1	0	1	21	53	85	117	149	181	213	245	277	309	341	373	405	437	469	501	
0	1	1	0	1	22	54	86	118	150	182	214	246	278	310	342	374	406	438	470	502	
1	1	1	0	1	23	55	87	119	151	183	215	247	279	311	343	375	407	439	471	503	
0	0	0	1	1	24	56	88	120	152	184	216	248	280	312	344	376	408	440	472	504	
1	0	0	1	1	25	57	89	121	153	185	217	249	281	313	345	377	409	441	473	505	
0	1	0	1	1	26	58	90	122	154	186	218	250	282	314	346	378	410	442	474	506	
1	1	0	1	1	27	59	91	123	155	187	219	251	283	315	347	379	411	443	475	507	
0	0	1	1	1	28	60	92	124	156	188	220	252	284	316	348	380	412	444	476	508	
1	0	1	1	1	29	61	93	125	157	189	221	253	285	317	349	381	413	445	477	509	
0	1	1	1	1	30	62	94	126	158	190	222	254	286	318	350	382	414	446	478	510	
1	1	1	1	1	31	63	95	127	159	191	223	255	287	319	351	383	415	447	479	511	

Dip Switch Position

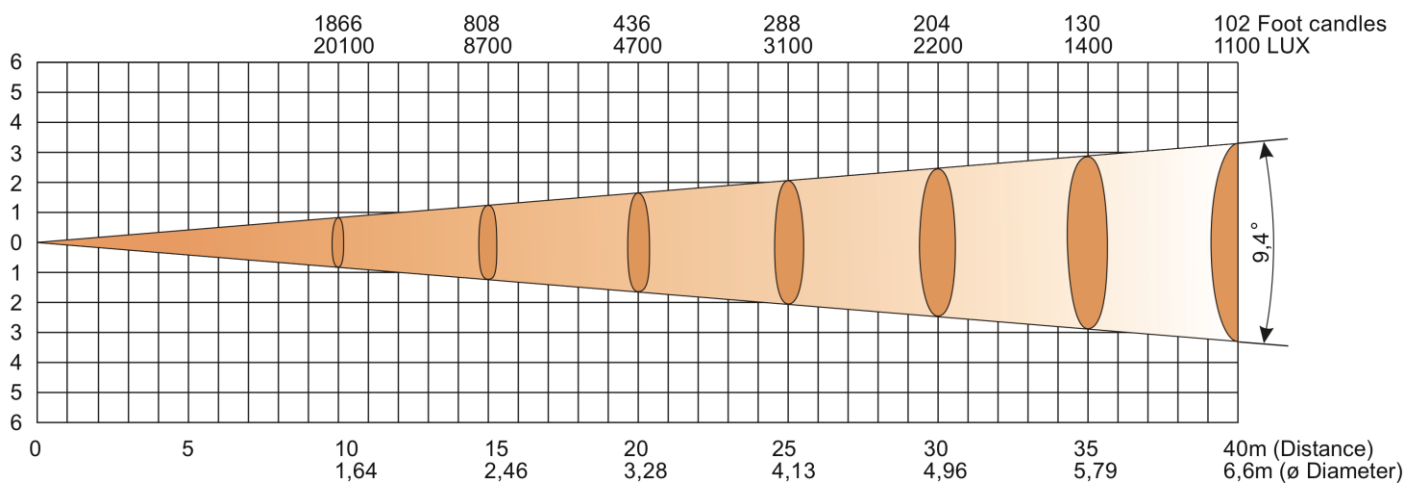
DMX Address

DMX Channels

40180 Followspot HMI-1200				
Channel	1	2	3	4
Function	Color	CTO	Iris	Shutter/Flash
255	255 Fast Rotation	255	255	255 Open
128	204 Slow Rotation	161		254 Fast
	175-203 D. Blue	160		
	150-174 Orange	81		85 Slow
	125-149 Yellow	80		
	100-124 Red			84
	75-99 Green			Shutter
	50-74 Purple			
	26-49 Blue			
0	0-25 Open	0	0	16 0-15 Closed

Beam Angle

9,4° Beam Angle



Maintenance

The operator has to make sure that safety-relating and machine-technical installations are to be inspected by an expert after every four years in the course of an acceptance test.

The operator has to make sure that safety-relating and machine-technical installations are to be inspected by a skilled person once a year.

The following points have to be considered during the inspection:

1. All screws used for installing the device or parts of the device have to be tightly connected and must not be corroded.
2. There may not be any deformations on housings, fixations and installation spots.
3. Mechanically moving parts like axles, eyes and others may not show any traces of wearing.
4. The electric power supply cables must not show any damages or material fatigue.

The Showtec Followspot HMI 1200 requires almost no maintenance. However, you should keep the unit clean.

Otherwise, the light-output will be significantly reduced. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Wipe lens clean with glass cleaner and a soft cloth. Do not use alcohol or solvents.

The front glass will require weekly cleaning, as smoke-fluid tends to build up residues, reducing the light-output very quickly.

Please clean internal components once a year with a light brush and vacuum cleaner.

Keep connections clean. Disconnect electric power, and then wipe the DMX and audio connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

Changing the Lamp

1. Disconnect mains power supply, and allow 15 minutes to cool down. Loosen the 2 screws on the housing. Gently remove the lamp cover.
2. Follow directions for installing a new lamp, page 7.

Replacing a Fuse

Power surges, short-circuit or inappropriate electrical power supply may cause a fuse to burn out. If the fuse burns out, the product will not function whatsoever. If this happens, follow the directions below to do so.

1. Unplug the unit from electric power source.
2. Insert a screwdriver into the slot in the fuse cover. Turn the screwdriver to the left, at the same time gently push a bit (Turn and Push). The fuse will come out.
3. Remove the used fuse. If brown or unclear, it is burned out.
4. Insert the replacement fuse into the holder where the old fuse was. Reinsert the fuse cover. Be sure to use a fuse of the same type and specification. See the product specification label for details.

Troubleshooting

This troubleshooting guide is meant to help solve simple problems.

If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.

1. If the device does not operate properly, unplug the device.
2. Check the fuse, power from the wall, all cables etc.
3. If all of the above appears to be O.K., plug the unit in again.
4. If you are unable to determine the cause of the problem, do not open the device, as this may damage the unit and the warranty will become void.
5. Return the device to your Showtec dealer.

No Light

This troubleshooting guide is meant to help solve simple problems. If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.

If the light effect does not operate properly, refer servicing to a technician.

Response: Suspect three potential problem areas: the power supply, the lamp, the fuse.

1. Power supply. Check that the unit is plugged into an appropriate power supply.
2. The lamp. Replace the old lamp with a new one with the same specifications. See page 11 for Replacing the lamp.
3. The fuse. Replace the fuse. See page 11 for replacing the fuse.

No Response to DMX

Response: Suspect the DMX cable or connectors, a controller malfunction.

1. Check the DMX setting. Make sure that DMX addresses are correct.
2. Check the DMX cable: Unplug the unit; change the DMX cable; then reconnect to electrical power. Try your DMX control again.
3. Determine whether the controller or light effect is at fault. Does the controller operate properly with other DMX products ? If not, take the controller in for repair. If so, take the DMX cable and the light effect to a qualified technician.

Product Specification

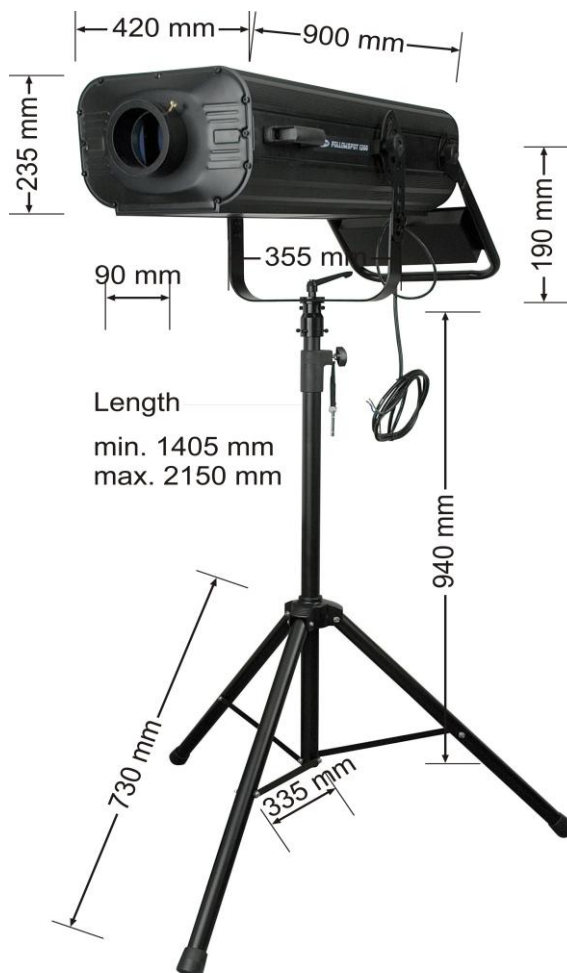
Model: Showtec Followspot HMI 1200
Voltage: AC 230V-50Hz (CE)
Cooling: 3x Ventilator
Fuse: 15A
Dimensions: 1055 x 460 x 320 mm (LxWxH)
Weight: 40 kg

Operation and Programming

DMX-control via standard DMX-controller
DMX Channels: 4
Signal input 5-pin XLR male
Signal output 3-pin XLR female

Lamp

Allowed lamp models*:
Osram HMI 1200 (750 hr) ordercode 809020
Sylvania HMI 1200 (1000hr; 5600K) ordercode 809025



*: Versions for other lamps may be produced. Please check the specification label on your product.

Design and product specifications are subject to change without prior notice.



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