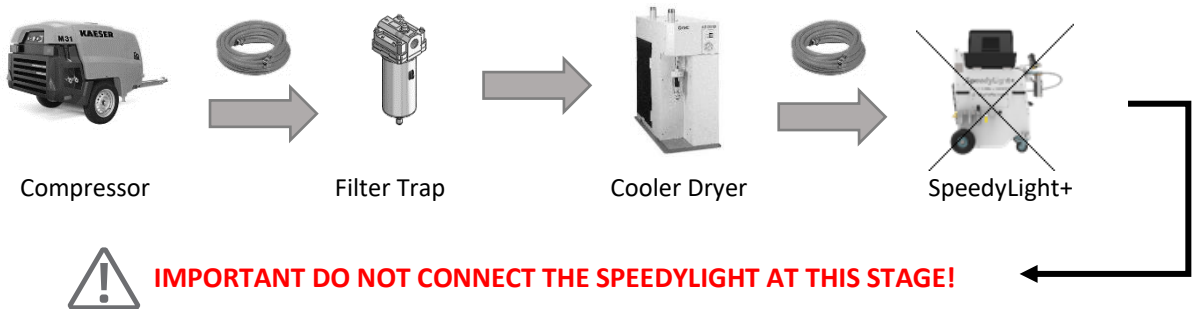


SpeedyLight(+) Operation and Maintenance

Quick Guide

Ensure that the below steps are followed correctly and in the right sequence:

1. Cooler / Dryer IDFA70 - Ensure that the air vents and filters are free of obstructions and in a clean condition
2. Connect the Cooler / Dryer to the power source and turn in on . Please be aware that it requires **at least 15 minutes** to achieve the correct working parameters.
3. Run all connection hoses between the compressor and SpeedyLight+



4. Let the air flow to run through the entire set up for **at least 5 minutes** if any signs of water are noticed the time should be extended for **additional 5 minutes**.
5. Connect the SpeedyLight without installing the curing head, ensure that the system is disconnected from the power source and let the air flow to run through both - Cooler/ dryer and the SpeedyLight for additional 5 mins.
6. Check the inside of the inversion drum and make sure it is clean and in a good conditions (i.e. clean, no solids, no water, oil, other solid-liquid residues)
7. Connect the curing head, switch on the system and check all functions prior commencing any work
8. Always try to minimize the length of the air hose from the compressor and into the cooler-dryer, as well as from the cooler-dryer into the SpeedyLight. Long hose connection have an impact on delivered pressure to the LED heads. Minimum pressure into the LED heads should be 1 bar (see attached tables for compressor flow and pressure depending on total length of SpeedyLight unit).

9. Dryer-cooler units supplied with Speedylight have a maximum drying capacity for a given air flow air from compressor. Check the technical specs of our cooler-dryer units and make sure that your compressor is not delivering a higher flow of air since this might have an impact on the drying capacity of the dryer-cooler unit, thus moisture could flow into the Speedylight's system.



REMEMBER!

- Use **dedicated**, 3/4" (*internal diameter*) hoses **ONLY**. Since dark / black increases temperature when under direct sun light it is recommend to use light colours i.e. - yellow.
- Pay attention to the right air hoses connection circuit.
- Ensure that the SpeedyLight is connected **ONLY** once any water signs are expelled completely.
- Minimize the length of the air hoses used.
- Check the water trap and filters installed within the Cooler / Dryer regularly.

10. Always check your Speedylight user's manual to determine what type of LED curing head you need to use depending on pipe diameter and liner thickness. When using L head always use centering skids provided. Not observing this could derive in a melting of the protective glass. Bear always in mind what bends you have to go through, which will also help you to determine what curing heads you need for the job. XS head will manage internal 90° bends in 100 mm diameter, S head will manage internal 90° bends in 160 mm and L head will manage internal bends of 90° in 200 mm. Still, the number of bends will also have an impact on the LED head to be used during the job.
11. Before installing the LED head to the Speedylight' hose make sure to do a visual inspection of the LED diodes and the state of the glass (always clean, use a smooth cloth impregnated with clear water, never use alcohol or chemists to clean the surface of the LED head). Should the LED diodes present a brownish color is an indication of a burned LED diode, please check with your local dealer for this.
12. Also, always make sure the front protective glass of the LED heads are clean before and after finishing a job.
13. Once all previous checks are completed, insert the LED head to the hose connector using the steel platform in your Speedylight (depending on Speedylight version)
14. Connect the yellow power cable to the puling motors unit
15. Connect the air hose out of the cooler-dryer and into the Speedylight (make sure the air valve in the Speedylight is in closed position)
16. Connect the yellow power cable to the pulling motors unit

17. Turn on your Speedylight and proceed with the following checklist:

- Turn on and off the LED head camera lights, turn on and off the LED lights (caution: when looking at LED always use UV protective goggles, otherwise there is severe risk of eye permanent damage)



NOTICE!

SPEEDYLIGHT+ 1800W:

- Spectra 300W ONLY – With the process initiated, due to its low power consumption the operator will not be able to turn off the UV LED light by pressing the UV LED On / OFF button, HOWEVER this can be fully controlled with the main START / STOP button.



UV ERROR message might appear when:

- The process has been initiated without curing head connected to the system.
- The UV LED's temperature reaches over 75°C degrees.
- The UV LED's temperature is not present on the HMI panel although the curing head is connected to the system.
- There is no electricity flow or its value is below the limit through any of the 2 UV circuits within the curing head.
- There is no electricity flow through any of the 2 UV circuits between the CU (Control Unit) and curing head.

In case the UV ERROR message appears on the screen, please perform a visual and operational check of all UV LED's, if no obvious issues are found, try to determine if the problem is related to the curing head or system itself – simply connect another head and run additional checks.



Please contact your local dealer for assistance in case the problem persists.



- Prior to inserting the Speedylight into the Y connection check that pulling motors are working: hit 'start' in the control display and see pulling wheels are spinning
- Check that the control display is showing the air and LEDs temperature correctly
- Type the adequate curing speed into the control display using touch panel
- Make sure initial and final delay are set to a maximum (recommendable) time of 4 seconds in both cases. Setting this parameter to a higher value might burn the protective glass of the LED head
- Minimum speeds for XS and S heads are 0,2 m/min
- Minimum speed for L head is 0,2 m/min. When using L head always use centering skids

18. Once the LED head has completed the full curing distance and the final delay time is completed, keep the pressurized air flowing into the LED head to maintain positive pressure inside and to avoid water or oil penetrating inside the LED head. Proceed to pull the LED head out of the liner and into the Y connector. Then you can stop the pressurized air flow
19. Always remember to clean the air hose with a rag moistened with Isopropyl Alcohol (IPA) every 5-7 jobs to extend the life of the hose and corundum rollers

Warning !

Mechanical damage to the glass / cracks:

- Please be aware that the glass units can be **ONLY** cleaned with a clean, clear water.
- Lack of care while pushing the head into the Y connection and into the liner or while transporting from one job to other could cause fatal damage in the LED protective glass.
- It is highly recommended to store and transport all curing heads in a solid plastic case with a custom foam inserts that will fit perfectly around the head.
- When exchanging LED heads at the SpeedyLight hose connector handle all parts carefully to avoid accidental drop of the head

Electronic-electric considerations

- SpeedyLight has a good number of electronic components inside. It is not recommended to use the unit when it has been exposed to temperatures below 0°C for a long period of time or even use the unit at temperatures well below 0°C for an extended period of time. Try to be conservative when considering this prevention.
- Remember to always use the power cord supplied with your SpeedyLight unit with the embedded RCD (Residual Current Device).
- Electrical faults can electrically charge the housing of unit, increasing the risk of electrical shocks. A proper connection to PE derives the charge to earth, activating the installation safety systems (differential protections) and protecting the SpeedyLight users. Make sure that your mains outlet or power generator has protective earth (PE) connection.

Directions for choosing air compressor (flow - pressure)

Please bear in mind the following directions when using an air compressor. Examples are shown with Kaeser MobilAir line of compressors but other brands with same flow-pressure specifications are also good for SpeedyLight. Compressor must always include an adequate oil filter to avoid oil particles into the air flow to the SpeedyLight LED curing heads

SPEEDYLIGHT+ RECOMMENDED COMPRESSORS

Head size	HOSE LENGTH		
	50 m (164 ft)	70 m (230 ft)	100 m (328 ft)
XS - 300 w	M20 - 7/8 bar	M20 - 7/8 bar	M31 - 10 bar
S - 400 w (600 w)	M20 - 7/8 bar	M20 - 7/8 bar	M31 - 10 bar
L - 800 w (1200 w)	M27/M31 - 7/8 bar	M27/M31 - 7/8 bar	M31 - 10 bar

Data in brackets refers to Speedylight version

AIR COOLER AND DRYER ALWAYS MANDATORY !!!!

Kaesar MobilAir	Flow	Working pressure
M20	2000 lt/min (70 cfm)	7/8 bar
M27	2600 lt/min (92 cfm)	7/8 bar
M31	3000 lt/min (106 cfm)	7/8 bar
	2600 lt/min (92 cfm)	10 bar

LED RIG RECOMMENDED COMPRESSOR

	Kaesar MobilAir	Flow
LED RIG	M50	5000 lt/min