



**Flight Light Inc.**  
 2708 47th Ave.  
 Sacramento, California, U.S.A.  
 95822-3806



**+1.800.806.3548**  
**+1.916.394.2800**

**www.flightlight.com**  
**sales@flightlight.com**

## LED CHAPI Heliport Approach Path Indicators

### Applications

Our LED CHAPI uses cutting edge LED technology to provide the pilot with safe and accurate glide slope on final approach to the helipad. A set of two LED CHAPI Light Housing Assemblies (LHAs) are seen by the pilot in combinations of white, green and red to indicate a path that is too high, too low or within the  $6^\circ \pm 0^\circ 15'$  glide slope.

The LED CHAPI system has a filter inserted between the white and red filters of each lens to provide a  $2^\circ$  wide green sector that, when visible from both units, signals the proper glide slope angle of  $6^\circ$ . Angle deviations that are too high show one or two white lights, and those that are too low show one or two red lights.

The LED CHAPI system is comprised of two separate modules: the CHAPI Controller and two LED Light Housing Assemblies (LHAs). The LHAs utilize energy-efficient LEDs which provide 50,000 hours of nominal lifetime and low power consumption requirements at 60w per LED LHA and 5w for the controller. The LED CHAPI is designed as a direct, low-maintenance, energy-efficient replacement for conventional systems.

### Features

- LED life rated up to 50,000 hours.
- Low power consumption.
- Four-leg design makes each light housing assembly very stable, resulting in fewer shut-downs for realignment thereby reducing maintenance and increasing heliport utilization. (EMT legs not included with domestic orders.)
- Tilt-switch interlock designed to turn off the system if a Light Housing is offset for more than 15 seconds.
- LED indicator identifies tilt switch circuit fault.
- Fully gasketed dust proof light housing assembly (LHA) improves performance and reduces maintenance.

- No optical bench or special tools required for servicing.
- Solid-State Relay used for noise-free, long-life operation.
- Superior Surge Protection with 70kA 8/20uS current rating and UL 1449 compliance.
- Photocell control automatically dims the lights to 50% intensity at night.
- Lights can be manually set to a specified night operation intensity level.
- NEMA 4 enclosure for weatherproof protection.

### Options

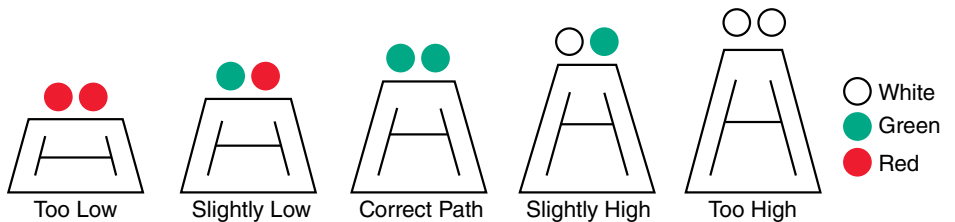
- Custom configured remote control uses radio modems instead of hard wiring to control CHAPIs.
- Aiming device kit (with spirit level) simplifies setting tilt switch and azimuth angles. Lamps are adjusted to the correct glide slope angle ( $\pm 3'$  of arc).
- International packing - four 2" EMT legs per LHA with all units and hardware double boxed.

### Specifications

- Environmental operating conditions of  $-30^\circ$  to  $+70^\circ\text{C}$  ( $-22^\circ$  to  $+158^\circ\text{F}$ ).
- Operates from input voltages of 100 to 250VAC.



*Four legs equipped with frangible floor flanges provide extra stability.*



**Visit our web site: [www.flightlight.com](http://www.flightlight.com)**



Flight Light Inc.  
 2708 47th Ave.  
 Sacramento, California, U.S.A.  
 95822-3806



+1.800.806.3548  
 +1.916.394.2800

www.flightlight.com  
 sales@flightlight.com

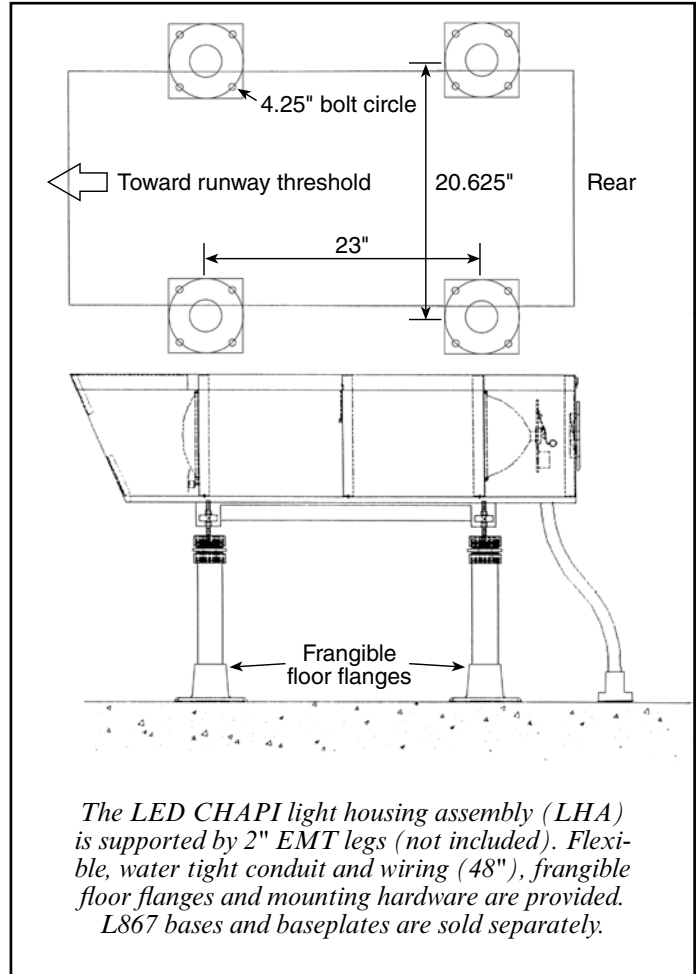
## LED CHAPI Heliport Approach Path Indicators

### CHAPI: Cramp's Helipad Approach Path Indicator

The 'C' in CHAPI stands for 'Cramp', the name of person who invented the system 40 years ago to help train pilots returning from Vietnam. Dave Cramp was a training captain for Bristow Helicopters in Dubai, "I was tasked with training ex-Vietnam pilots we had just employed. They were all very experienced pilots, but they had problems flying in a civilian environment where they weren't being fired at. My job was to 'civilianize' them. The big problem was getting them to fly steep approaches instead of coming in very low with a big flare just before 'crashing' on to the helipad. I needed a way to get them to see and adopt a 6 degree slope. Hence the CHAPI. It was originally made of wood with a slot at the front. My next prototype was constructed out of a plastic water container. I used this for 3 years before a company in Rugby, UK offered to further develop the device. The first commercial sale was to Aberdeen Airport in Scotland in 1982 and it is still being used there today."

### Common Renewal Parts

Part Description	Part Number
Frangible cast aluminum floor flange	15-FFF2X425
Tilt switch assembly	15-201TSA
Photo control 208-277 VAC	77-104FAANTD
CHAPI filter assembly (white/green/red)	15-CHAPIFILTERASSY
Filter spring	80-021253
Reflector assembly	80-021254
Relay, contactor - 30 amp DPDT, 240 VAC	77-W199AX-15
Tool for WAGO terminal blocks	77-777-310
Timer, D-O-B adjustable - 24 VAC/DC	77-RTE-P21
Photo control base	77-TB20199
Precision spirit level, 6"	77-#98-6



### Ordering Codes

Num. of Systems	Num. of Aiming Dev.	Designation	Unit	Style	Voltage (Style A only)	Class	Aiming Device Glide Slope
Specify	Specify	HL881C: 2 LHAs	857L: LED, 2 light channels	A: Voltage E: 48VDC	1: 240V, 60Hz 2: 120V, 60Hz 3: 220V, 50Hz	1: -35°C	6°: Standard Specify

--	--	--	--	--	--	--	--

Visit our web site: [www.flightlight.com](http://www.flightlight.com)