



POINT HELIPORT LIGHTING

VAGS-SAGA LED

VISUAL ALIGNMENT GUIDANCE SYSTEM

SYSTEM ALIGNMENT GUIDANCE APPROACH

Compliances: ETL Listed to UL 1598A Marine Vessels, IP66 & IP67
 ETL Listed to CSA C22.2 No. 137:1981 & No. 250.0:2018 Canada
 ETL Listed to UL 1598 at -40 deg C to +55 deg C
 Class I, Division 2, Groups A B C D, T5 at -40 deg C to +55 deg C
 Class I, Zone 2, Groups IIA IIB+H2 IIC, T5 at -40 deg C to +55 deg C
 ICAO Annex 14, Volume II, Heliports, 5th ed. (2020)
 ICAO Doc 9261, 5th ed. (2021), Part II
 Registered ISO 9001:2015

VAGS-SAGA is a system for use as visual horizontal alignment on heliports and offshore helidecks. VAGS is the ICAO nomenclature appearing in Annex 14, Volume II, Chapter 5 "...located such that a helicopter is guided along the prescribed track towards the FATO." This is also popularly referred to as SAGA. One VAGS system is for one helicopter approach path using board mounted LEDs. The two units are installed facing the approach and arranged for left & right signals. Digital leveling and aiming by hand held field programming device. Brightness control is standard.

Point Type	Voltage	Classification	Form*	Options
VAGS-89021	1: AC, 96-264V 50/60 Hz 3: 24 volts DC	(blank): Safe Area EX: Class I, Division 2	F: Frangible	See page 2

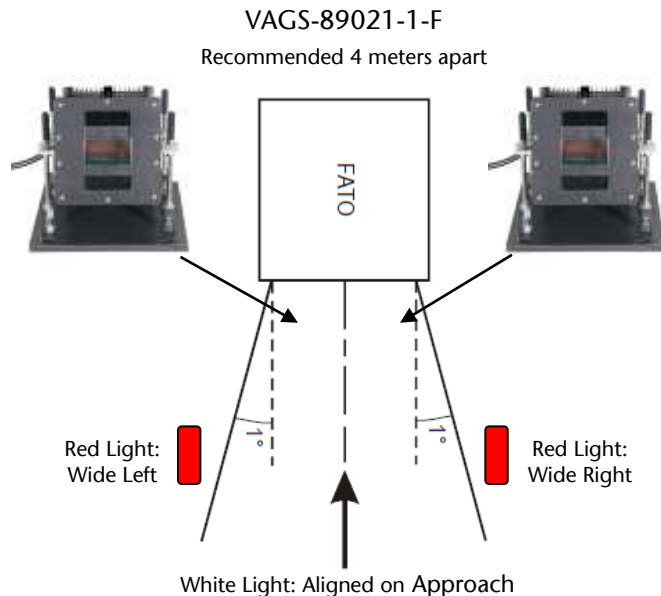


* The frangible universal mounting is less than 25 cm tall when installed. Frangible mounting includes four threaded legs with frangible couplings, mounting plate & anchor bolts. The VAGS unit includes a 3m cable loop as standard.

For each of two (2) units:

Dimensions: L: 15.5 (394)
 Light Unit W: 12.0 (305)
 Inches (mm) H: 9.5 (241)
 Power Use: 70 watts 75 VA
 Adjustment: 0° to 15°
 Brightness: Three (3) steps
 Control
 Alarms: LED Array Failure
 Alignment

Weights: lbs. kg.
 Light Unit 25 11.3
 Hardware Kit 15 6.8
 PLS Assembly 12 5.4
 PLS Assembly 14 6.4
 Multiply above by 2 for a system.
 ROS/ROSW 15 6.8
 Note: One per system.



Important Note:

The VAGS system is a visual horizontal guidance aid to assist the pilot in aligning the aircraft for approach to landing. It does not replace the pilot's judgment, skill and responsibility to land the aircraft safely with or without this visual aid.



OPTIONS & ACCESSORIES

EX	Hazardous Area Class I, Division 2 (Zone 2) VAGS unit.
JB JBX	Junction Box safe area (JB) or Class I, Division 2 (JBX): For mating the cable loop connection at each VAGS unit with contractor supplied conduit/cabing to the remote mounted PHC, ROS or ROSEX.
PHC	See PHC system controller data files HL409 & HL411. VAGS operation <u>requires</u> either a PHC controller with option -VC or that one of the -ROS options below must be added to the VAGS.
ROS	Remote Operator Station: Includes ON-OFF switch, brightness control, surge protection, alignment alarm indication and remote alarm contacts in a NEMA 4X (IP66) enclosure. Required except when the control unit is integral with a PHC system controller.
RF	Radio Frequency wireless ON-OFF operation via a key fob operating at 918 MHz when set in the AUTO position. The fob is paired to the VAGS ROS. Note that the ROS unit is hardwired to the VAGS; only the key fob operation is wireless.
ROSEX	Same as -ROS except Class I, Division 2 (Zone 2) & NEMA 4X (IP66) enclosure. It is available with option -RF wireless operation.
SS	Stainless Steel 316L enclosure when used with -ROS or -ROSW.
SOL	Solar Powered including solar array & controller with connection for remote ON-OFF switching using option -RF wireless operation. Requires option -ROS.
PLS	Adds the PLS-40304 wiring junction box recessed in the pavement with baseplate & cable gland for the VAGS's standard cable loop. For land-based installations only.

RECOMMENDED OR REQUIRED ACCESSORIES

Required	PL11248-VAGS This handheld device is required to install and maintain the VAGS system. It plugs into the VAGS unit to set the leveling and the aiming angle.
Optional	PPC-40700-1-34T Photoelectric Control FAA photoelectric control used with ROS set in AUTO position.

View our YouTube flight test video of the HAPI & VAGS Systems at:

<https://youtu.be/Snmx5vEYuCQ>

Please follow Point Lighting Corporation on:

FACEBOOK INSTAGRAM YOUTUBE LINKEDIN

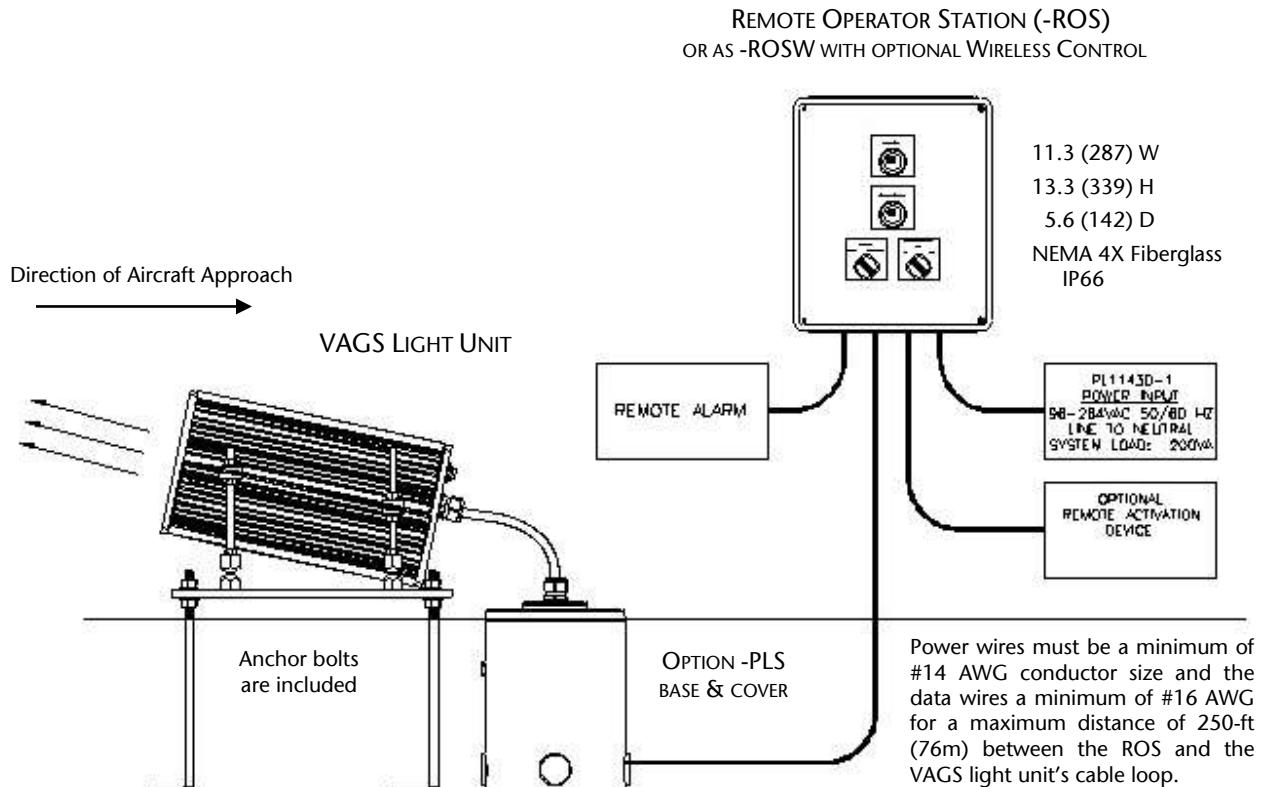


POINT LIGHTING

POINT HELIPORT LIGHTING VAGS-SAGA LED VISUAL ALIGNMENT GUIDANCE SYSTEM SYSTEM ALIGNMENT GUIDANCE APPROACH

TYPICAL STANDALONE FRANGIBLE INSTALLATION

Note: Each VAGS-SAGA system has two light units (left & right) with one ROS control unit or a PHC controller with the required options.



The 3-meter cable loop consists of seven (7) conductors all #16 AWG: Line-Neutral-Ground and four (4) data wires.





VAGS UNIT
FRANGIBLE MOUNTING

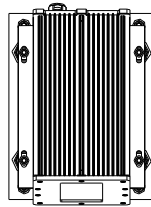


VAGS LEG ASSEMBLY DETAIL
SHOWING BEVELED WASHERS FOR
POSITIVE MECHANICAL CONTACT



HAPI-89001

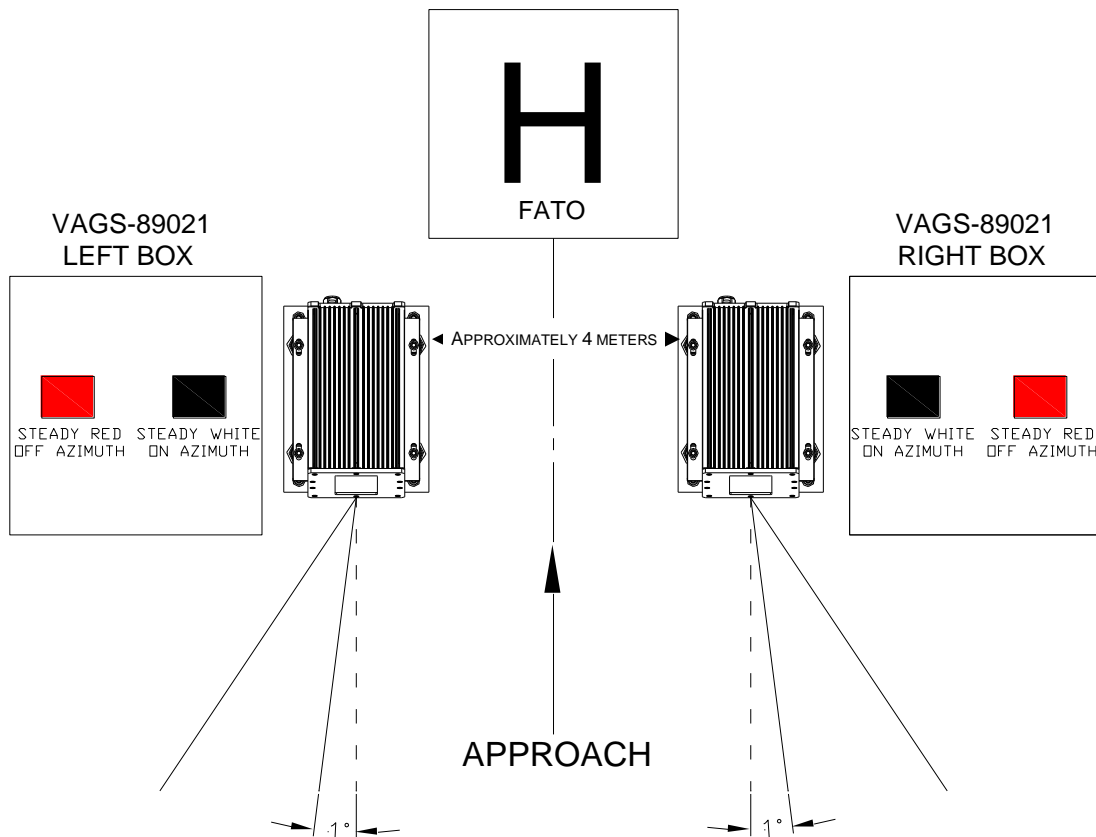
HAPI SIGNALS	
	FLASHING GREEN TOO HIGH
	STEADY GREEN ON SLOPE
	STEADY RED BELOW SLOPE
	FLASHING RED TOO LOW



AIMING:

If the VAGS system is installed with a HAPI system, both systems should be aimed at the same vertical angle. We recommend an On Slope vertical angle setting between 5 and 10 degrees. The HAPI angle must be set so the transition line to flashing red allows the aircraft to clear any obstacles in the approach path.

Not to Scale



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