

# **HAAS ALERT**



Installation/Support







#### **Videos**

## **Tutorials**

Scan the QR code below to access online videos, installation tutorials, support and additional product information.



O Installation/Support

# **Getting started**

## **Required Tools**

Basic tools are needed for installation. If you are not comfortable with the vehicle electrical system configuration and layout, please consult schematics or contact your vehicle or apparatus manufacturer.

- Socket set
- Pin Crimper
- Deutsch Pin Crimper
- Wire Stripper / Crimper
- Terminal Rings

- Multimeter
- Soldering Iron / Solder
- Heat Shrink
- Fuses / Fuse Holder
- Screwdrivers

#### CAUTION

Incorrect wiring can cause permanent damage to the HA-5 transponder and potentially to your vehicle. An apparatus or vehicle review is recommended BOTH prior to and after installation to ensure proper functioning of all mission-critical systems.

Please review full instructions and tutorials before installing.

# Guidelines for making secure electrical connections

# Always make securely wired connections

- Soldering and heat shrinking is always recommended.
- Use of "T-Tap" or "Scotch Lock" connectors is NOT advised.
- Crimped connections should be secured with heat-shrinked wire covers.
- Make sure all connections are secure and compliant with the vehicle operating standards.
- All circuits must be fused. If unsure, wires should be fused to .5a on both the main flashing lights and main power wires.

## Low voltage / Parasitic draw

The HA-5 will turn off at +11.9V to avoid impacting battery performance to the vehicle or apparatus. Device will power back ON automatically when the battery charge reaches +12.1V.

# **Overview**

# **Indicators**



- **ம்** No Power
  - Locating Network
  - Network Connected (slow pulse)
- No Power

  - GPS Connected
  - \*Network and GPS must both be connected for Vehicle Status light to be Online. Flashing Lights status will show only when fully connected.
  - \*Test outdoors for optimal connectivity

#### **VEHICLE STATUS**

- Offline
- Online
- Location Sharing OFF (see main button overview)
- Flashing Lights ON (vehicle moving)
- Flashing Lights ON (vehicle stationary)

# **Overview Main Button**



The HA-5 connects to the main power source of the vehicle or apparatus and does not have a manual OFF/ON switch. Follow these steps to manually engage temporary features:

#### **Click once**

# **Location Sharing**

Turn location sharing OFF for 60 minutes. Click again once to cancel.



Temporarily disabled



#### 3 clicks

#### **LED Indicators**

Toggle indicator lights OFF/ON.

#### Hold down for five seconds

**Device Reset** 

# **Overview**

# **Electrical Wiring**



Locate where on the dash the HA-5 will get mounted and plan for the outgoing electrical connections.

Device requires a clear view to the sky for best performance.

\* Ask your sales rep about R2R connectivity



# **Planning and Layout**

#### Determine where the HA-5 will get mounted inside the cab

The HA-5 requires exposure towards open sky and should get mounted on the dash near access to the electrical system.

#### Identify electrical circuits

- Battery Power (+12V constant)
- Ground
- Nodes (multiplex system)
- Main warning or flashing lights master wire (E-Master on most Fire apparatus)

# **Identify components**

Probe all components and connections to determine which line will get connected to constant power and which line is active when all flashing lights sequences are engaged. Compliant vehicles should have labeled connections for all auxillary components.

Consult the vehicle or apparatus manufacturer's schematic if necessary.

#### STEP 1

# **Planning and Layout**

#### **Ground Connection**

#### Locate a ground buss bar

Always tie into home run battery grounds (Body grounds using star washers are not NFPA compliant for Fire apparatus).

## **Flashing Lights Connection**

Use multimeter tool to verify electrical circuit connection. Ground negative and test positive to ensure connectivity on a line that is active when ALL flashing light configurations and sequences are ON.

# STEP 2

# **Attach the Ground Wire**

(BLACK)



Ground / Buss bar

#### Multiplex systems

Solder and heat shrink negative ground to a ground buss bar or with a pin connection to the ground terminal block.

# STEP 3

# Fuse +12V Power and Connect Flashing Lights Master wire



## Place a fuse on Constant +12V power wire (red)

Fuse and solder the +12V constant power wire to a ring terminal or other secure connection.

#### Device only draws a few hundred milliamps

Consult manufacturer's schematic to determine if the connection can manage additional load. Always place a fuse if uncertain.

# **Connect Flashing Lights Master Wire**



Solder and heat shrink the white active trigger wire to the main warning light circuit identified.

#### At this stage...

- Ground connection (black) wire should already be hooked up
- Constant +12V (red) wire should be attached to a ring terminal
- Flashing lights master (white) wire should already be hooked up

#### STEP 4

#### **Connect +12V Power**



Remove master battery stud and tighten constant +12V power to the master stud.

# **CAUTION** - Disconnect vehicle battery power before making final connection

DO NOT touch a wrench to the body of the vehicle while the master stud is off. This will cause a short circuit if main power is not disconnected.

#### STEP 5

# **Test Setup**

### Turn vehicle power on to begin device boot-up sequence.

The HA-5 performs best with a clear view to the sky. Vehicle or apparatus should be outside for optimal GPS and cellular connectivity.



# For additional support

help@haasalert.com

