SMART ANTENNA SELECTOR LIGHT INSTALLATION GUIDE 1.2

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1 - Introduction

Safety Information

For your own safety, and for the safety of your passengers and/or crew, be sure to read the following important notices.

WARNING

Risk of Electric Shock

To avoid electric shock, do not open the Smart Antenna Selector chassis enclosure.

WARNING

Risk of Electric Shock

If any component of the Smart Antenna Selector system becomes damaged and/or no longer functions normally, disconnect it from power, secure it from unintended operation, and contact Technical Support.

All repairs or modifications must be performed by a trained technician.

WARNING

Risk of Explosion

Do not operate the Smart Antenna Selector (or any other electrical device) in an environment where flammable gases, vapors, or dusts are present.

WARNING

Risk of Electric Shock

Failure to ground the Smart Antenna Selector system properly may cause an unsafe floating ground condition, risking potentially lethal electric shock. Refer to the Installation Guide for details on the proper grounding of the equipment.

System Overview

The Smart antenna selector light allows to select the RF signal coming from two antennas and route the better to a single TV distribution.

The Smart Antenna Selector is designed to work with KVH TV series and HD series antennas only.

2 - Features and interface

Installation and mounting

Plan the Smart Antenna Selector Installation:

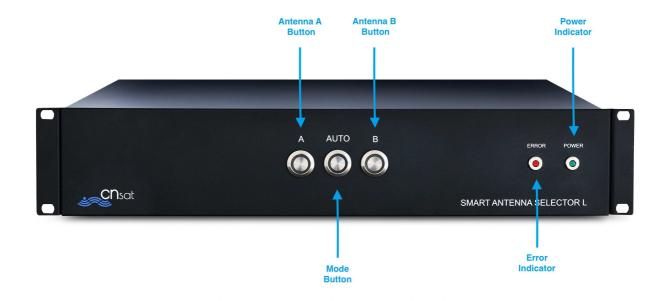
- Select a mounting location in a dry, well-ventilated area away from any heat sources or salt spray.
- The device can be mounted horizontally on a flat surface or inside a rack.
- For rack mount be sure to have enough space, the device need 2x19" rack units and 35 cm depth.
- Leave enough room behind the rear panel (horizontal mount) or below the rear panel (vertical mount) to accommodate connecting the cables and making service loops within the proper bend radius.
- Select a location where led lights and buttons will be visible to the user.

Installation

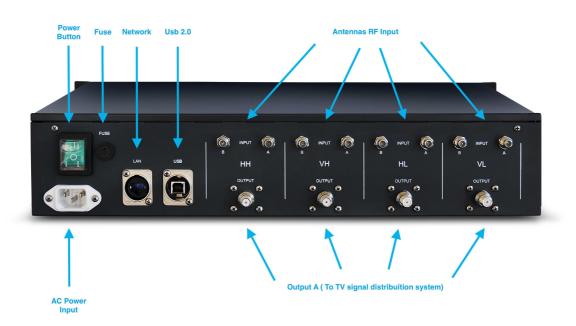
- Connect the RF cables coming from antenna A into "ANTENNA A" RF input
- Connect the RF cables coming from antenna B into "ANTENNA B" RF input
- Connect the RF cables coming from TV distribution (multiswitch) into "OUTPUT" connectors
- Connect the unit to your local area network, under the same subnet of the antennas control units. The unit has a default IP address of 192.168.1.100

Button and connector layout

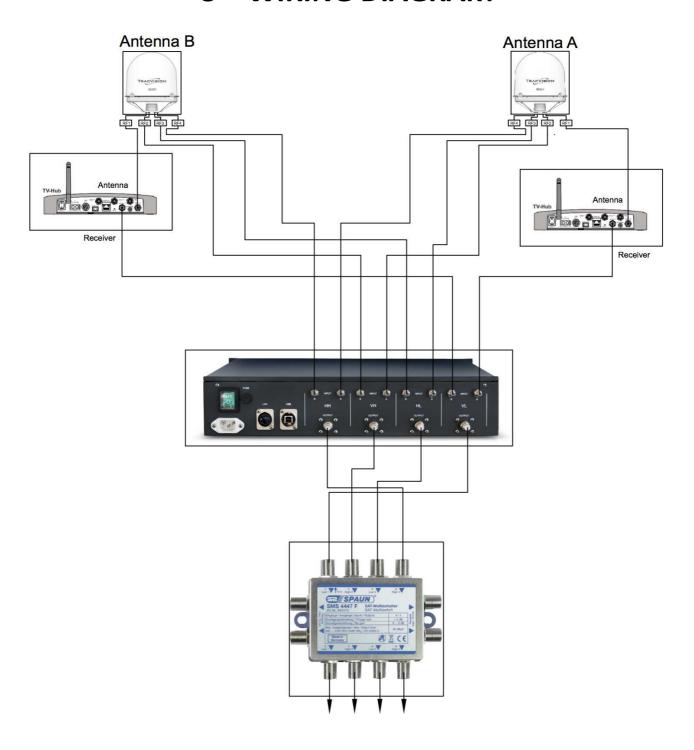
Front Panel:



Rear Panel:



3 – WIRING DIAGRAM



4 - Operating Instruction

The main working mode of this unit allow you to connect your satellite tv distribution to the best antenna in terms of position, tracking status and satellite in tracking. To do that you can use two different modes: automatic selection and manual selection.

Automatic: this mode should be used during navigation or a not steady position of the boat during anchor. The system calculate the azimuth, the signal level and the tracking status of both antennas and determine which one is in the best status. Done that the system automatically route the RF signals coming from the selected antenna to your RF distribution. If the selected antenna goes in bad status, like azimuth position inside blind angles (mast or other obstacles) or no more tracking but searching, the system will route automatically the other antenna RF signals to your distribution.

For example if you make a 360° route rotation, the sytem will keep your distribution connected to the satellite without any signal loss.

Manual: this mode should be use during steady anchor or moored. The user will select manually the antenna he wants to use. The system will not switch automatically to the other antenna even if it loose the signal, goes to searching mode or the azimuth angle is inside the blind sector.

To select the working mode you should use the front panel buttons or the PC GUI. The front panel buttons allow you only to select the working mode. The PC GUI allow you also to configure the system for the first time installation and commissioning. Is also available an Apple lpad application which require a download of the Crestron Mobile application from Apple AppStore.

The front panel has three buttons with backlight and two led indicators.

The buttons A, B and Auto allow you to select the working mode. Pressing Auto button the system will switch to automatic mode and start to calculate the best antenna to route. You will see the backlight of the Auto button switched on togheter with the currently selected antenna. If you pressa A or B buttons the system will switch to manual mode, the backlight of Auto button will switch off and will remain on only the backlight of the manually selected antenna. If you press Auto and you can't see any antenna buttons backlights on it means that the system cannot calculate the best antenna for data missing and could be due to ethernet link issue, antenna (s) switched off or antenna control unit which cannot send the data required from S.A.S. to work. In this case you should open the PC GUI and verify the status. This argument will be shown after.



Manually selected antenna A.





No data available



Automatically selected antenna A



Automatically selected antenna B

5 – Graphical User Interface

Graphical interface information

A graphical interface is also available to manage the smart antenna selector and to see various informations from antennas. (f.e. relative azimuth, AGC, SNR etc...).

To use the graphical interface you need a Windows PC and the executable file provided togheter with this manual.

A complete instruction manual is available in a separate file.