The SCU-31 is 66 channel GPS Antenna supplied with 49 feet of cable that plugs into your compatible Standard Horizon VHF radio to enable AIS and DSC. The GPS antenna delivers accuracy better than three meters by decoding the GPS correction signals from the SBAS (Satellite Based Augmentation System). Please refer to the STANDARD HORIZON products catalog or web site for compatibility.

**Owner’s Manual**

The details of the installation and operation of the SCU-31 are included in the owner’s manual of the compatible fixed mount radio, or can be downloaded at www.standardhorizon.com.

**Supplied Accessories**

- GPS Antenna Unit (49 feet cable) ................................................................. 1
- Antenna Base (Socket, Part number: RA6054200) ................................................ 1
- Screws (M3×8 SUS, Part number: U20308020) .................................................. 3

**Installing**

The SCU-31 is designed to be mounted on a base, installed on an extension pole or flush mounted. Choose a location for the antenna that has a clear view of the sky and is not located within 3 feet of radar or other transmitting antenna. Ensure there are no major obstructions or fixtures in the immediate proximity to the antenna. The antenna relies on direct “line of sight” satellite reception. If you are unsure of the location, temporarily mount the antenna to verify correct operation. If mounted close to a radar, turn on the radar and check the GPS signal strength using the GPS Status Page on the VHF.

**Base Mounting the antenna**

The thread used on the base of antenna (1 inch, 14 TPI) is an industry standard used on a wide range of commercially available mounting brackets or extension poles. Due to the manufacturing process of the mounting brackets, the antenna may not tighten all the way down onto all the threads. This is of no concern however as the antenna must be tightened until the antenna stops rotating.

1. When passing the antenna cable through a mounting bracket or extension pole, make sure to pass the cable through the antenna base.

**NOTE:**

- When routing the antenna cable along the outside of the extension pole, pass the cable through the groove as shown by the dotted lines in the figure on the right. (Please cut the blank panel with a long-nose pliers.)
- The antenna cable can be cut and spliced to ease installation. Care must be taken when reconnecting the antenna cable to protect from water and corrosion.

2. Mount the antenna base to the antenna using the supplied three screws.
3. Screw the antenna base to the mounting bracket or extension pole.
4. Install the mounting bracket or extension pole in a location that has a clear view of the sky.

**Flush Mounting the antenna**

**NOTE:** Before drilling the mounting holes, it is recommended to test the GPS antenna satellite signal strength in the desired location.

1. To ease installation use the supplied flush mount template.
2. Apply the flush mounting template sticker.
3. Drill the 0.78” (20 mm) and 0.13” (3.2 mm) holes, and remove the template.
4. Insert the cable into the 0.78” (20 mm) hole and route to the transceiver.
5. Apply a small amount or RTV to the underside of the antenna.
6. Place the antenna and screw into place using the supplied screws.

**Template**

Use this template to mark the location where the hole for the flush mount is to be cut.
### Declaration of Conformity

We, Yaesu UK Ltd. certify and declare under our sole responsibility that the following equipment complies with the essential requirements of the Directive 1999/5/EC and 2011/65/EU.

**Type of Equipment:** External GPS Antenna  
**Brand Name:** STANDARD HORIZON  
**Model Number:** SGL-1  
**Manufacturer:** YAESU MUSEN CO. LTD.  
**Address of Manufacturer:** Tennozu Parkside Building, 2-5-8 Higashi-Shinagawa, Shinagawaku, Tokyo, 140-0002 Japan

#### Applicable Standards:
- This equipment is tested to and conforms to the essential requirements of directive, as included in following standards:
  - EN 301 488-1 V1.2.2  
  - EN 301 488-3 V1.2.1  
  - EN 300 440-2  
  - EN 50581 2012  
  - GPS: L1 C/A code  
  - SBAS: WAAS, EGNOS, MSAS, GAGAN, QZSS

The technical documentation as required by the Conformity Assessment procedures is kept at the following address:

| Company | Yaesu UK Ltd.  
| Address | Unit 12, Sun Valley Business Park, Winnall Close, Winchester, Hampshire, SO23 0LB |

#### Specifications

- **Supply Voltage**
  - Normal: 13.8 VDC (Supplied from the transceiver)  
  - Operating: 10 - 35 VDC

- **Power Consumption**
  - Max: 0.3 W

- **Operating Temperature**
  - −4 °F to +140 °F (−20 °C to +60 °C)

- **Storage Temperature**
  - −22 °F to +185 °F (−30 °C to +85 °C)

- **Receiving Frequency**
  - 1575.42 MHz

- **Receiving Code**
  - GPS: L1 C/A code  
  - SBAS: WAAS, EGNOS, MSAS, GAGAN, QZSS

- **Receiver Channels**
  - 66 channels

- **Sensitivity**
  - Less than −147 dBm

- **Time to First Fix**
  - Hot start: 1 sec (approx.)  
  - Cold start: 33 sec (typical)

- **Geodetic Datum**
  - WGS84

- **Position Accuracy**
  - 2.5 m (typical)

- **NMEA 0183 Output**
  - 4800 bps, 8 bits, no parity, 1 stop bit  
  - GGA, GLL, RMC, GSA and GSV

- **Dimensions**
  - 85 x 30 mm in height (flush mounted) or 60 mm on base mount

- **Weight**
  - Approx. 3.2 oz (90 g)

- **Cable**
  - Approx. 49 feet (15 m)

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Disposal of your Electronic and Electric Equipment

Products with the symbol (crossed-out wheeled bin) cannot be disposed as household waste. Electronic and Electric Equipment should be recycled at a facility capable of handling these items and their waste byproducts. In EU countries, please contact your local equipment supplier representative or service center for information about the waste collection system in your country.