

# DTV100 Marine TV Antenna

Installation and instruction Manual

#### 1. Introduction

Congratulations on the purchase of your DTV100 TV antenna. It is recommended that your product is installed by a professional installer, particularly when it comes to physical installation of the antenna which may require mast mounting

# 2. Before you start

You will need the following items and tools to complete the installation:

- The DTV100 system with antenna and amplifier. This is supplied with a 10m cable assembly (RG6) which can be lengthened if required
- A suitable pole, mast, deck or rail mount there are many 3<sup>rd</sup> party antenna mounts which utilise the standard 1" stud fitting and an adaptor is provided with the DTV100 to allow it to couple to these fittings
- A 12V or 24V DC power connection where the amplifier unit will be installed
- · A suitable F type connection cable from the amplifier to the TV and a similar cable for the FM stereo if required

## 2. Installation

#### Installation Step 1- Choose a mounting location for the antenna

In general, the higher the mounting position of the antenna the better. TV signals use UHF signals so range is determined by a clear line of site between antennas. The DTV100 is omni-directional and can receive both horizontal and vertically polarised TV signals. On a sail boat, installation at the top of the mast is ideal and there are many 3<sup>rd</sup> party V brackets to allow easy mounting. The antenna can also be mounted on a spreader but try and ensure it has as clear as possible 360 degree view of the horizon. A mast will shield signals Try to avoid mounting the antenna in the same plane as a radar antenna. In general, there is no interference caused between VHF antennas and the DTV100.

The DTV100 ships with a 10m cable assembly. It is RG6 75 ohm coaxial cable terminated with a factory fitted F type connector. It can be extended up to 25m using a standard F type cable assembly. You should ensure this is adequately protected and waterproofed as F type connectors are not suitable for any external installation

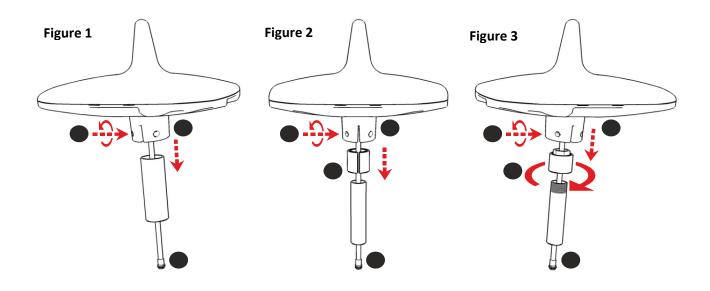
#### Installation Step 2 - Mounting the DTV100 antenna

The antenna is sealed and waterproof to IP68. The supplied RG6 cable is integrated into the antenna. Care should be taken when installing that the cable does not become kinked or damaged. The clamp arrangement of the antenna allows the antenna to be fixed in place once the fittings have been installed and the cable installed. There are three mounting possibilities:

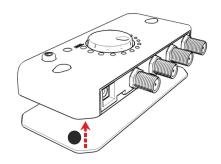
Figure 1 – Antenna fits direct to a standard 36mm diameter pole

Figure 2 - Antenna fits to a standard 25mm diameter pole using the collar adaptor supplied

Figure 3 – Antenna fits to a 3<sup>rd</sup> part 1" x 14TPI bracket or base using the threaded collar supplied



#### Installation Step 3 - Mounting the amplifier

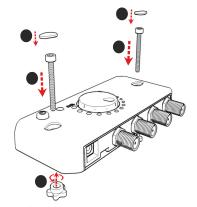


#### Option 1

The amplifier is supplied with a self adhesive patch mount allowing screwless fitting of the amplifier onto a smooth dry surface without the need for screws

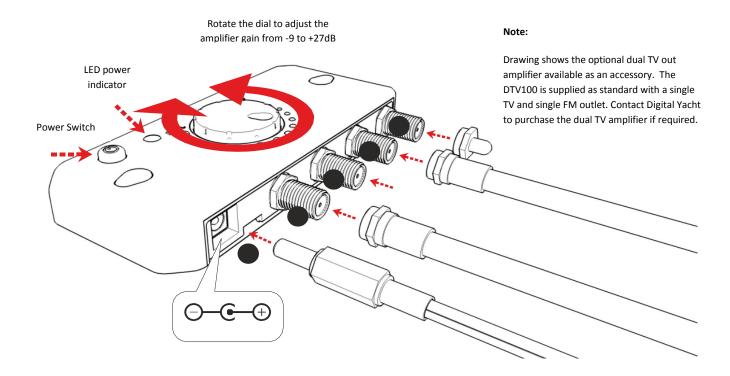


The amplifier is can be mounted using the supplied screws and thumb nuts. Fit to a bulkhead and cover the screws using the covers supplied



The amplifier should be mounted in a dry location close to the TV. It is not waterproof. In general, permanent access is not required as it will only be necessary to occasionally adjust the antenna gain or to twitch the amplifier on/off

#### Installation Step 4 - Cables & Connections



Run the RG6 coax cable assembly and connect to the ANT INPUT connector

Run a DC power cable to the amplifier box and connect to the supplied DC power cable. Power consumption is just 25mA
so connect via a small 0.5A fuse for cable protection or suitable circuit breaker. Connection colours as follows:

RED +DC 12/24V WHITE NEGATIVE

- Connect the TV via a F type patch cable (not supplied) to the TV 1 OUTPUT
- Connect the FM radio via a suitable F type patch cable to the FM OUTPUT

#### NOTE:

Drawing shows the optional dual TV out amplifier available as an accessory. The DTV100 is supplied as standard with a single TV and single FM outlet. Contact Digital Yacht to purchase the dual TV amplifier if required. If the dual TV out amplifier is utilised with only 1 TV, then the supplied 75 ohm terminator should be fitted to TV OUTPUT 2 as shown above

# 3. Operation

- Ensure all cables correctly connected as above
- Check that the power supply connected to the amplifier is 12-24V DC
- Switch Power button to ON,
- LED indicator now should now illuminate GREEN
- Set gain on amplifier to maximum and then start the channel search function on your TV. Sometimes reducing the gain of the amplifier can improve picture quality and also the number of channels received

## 4. Trouble shooting

Power LED does not light:

- Check power button is switched on
- Check 12/24V feed to unit

No Picture Received on TV

- Check cable connections from antenna to amplifier and from TV to amplifier
- Try rescanning for channels especially if the boat has moved
- Try rescanning for channels using a lower gain on the antenna