# INSTALLATION GUIDE

AM/FM Radio, DAB
Radio and Digital TV
receive whip + base
PLEASE NOTE:
No signal will be received by the
SM39-DAB where no signal transmission is



#### ANTENNA DESCRIPTION

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Requires a 16.5mm hole for base through

0 0 0

Mounts to any antenna base with 5/16"-26 brass

UV Stabilised heatshrink

Multiple windings on fibreglass core

male

0

Kit includes: Whip + mount cable base

Standing 850mm tall, our SM39-DAB is a very effective multiband receive whip to receive AM/FM Radio, DAB+ Radio and Digital TV transmissions. Factory tuned to receive all the above stated transmissions, mount the whip to the supplied antenna base terminated with 4.7 metres of cable.

Our SM39-DAB is a low cost alternative to a broadband discone base station antenna. It is also ideal for clients requiring a broadband receive whip of a practical size to mount on a vehicle or vessel

Construction consists of multiple windings on a heavy-duty fibreglass core with a black UV stabilised heatshrink covering and chrome plated brass ferrule and a detachable black jacket coaxial cable base terminated with an Australian standard whip mount base and male radio termination supplied.

## Please note that ZCG provide this antenna for legal use only and not for unauthorised listening.

A detailed specification sheet is available to download from our website www.zcg.com.au

### **SELECTING THE MOUNTING POSITION**

The whip can be mounted in various positions on a vehicle, vessel or ina fixed location.

To achieve best performance from your antenna, these are the important principles you should consider when selecting the mounting point:

- The antenna mounting base will require a metal ground plane for effective performance (approx. 1/4 wave radius at 87.5 = 900mm).
- 2. Mount the antenna in as high a place as possible.
- Mount the antenna as far away from other antennas and metallic objects as possible to avoid interference and distortion of the 360° omnidirectional pattern. At least 350 mm side clearance is desireable, preferably more.
- Ensure the mount base has good connection with your metallic ground plane - no rust/non-conductive coatins and adequately secured.
- 5. Mount the antenna vertical, not at an angle.

#### TUNING - NOT REQUIRED

The antenna has been manufactured and factory tuned for AM/FM radio, DAB radio and Digital TV receive only purposes. The typical average VSWR is 1.9:1. This antenna is not suitable for transmit purposes.

The windings and incorporated chokes on this antenna are designed to give strong resonances at the stated transmission bands stated above.

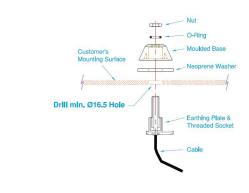
The whip tuning cannot be altered.

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- 1. Remove all contents from bagging.
- Dis-assemble and install your Australian standard base and cable through your mounting hole and re-assemble the base (see diagram below for configuration.)
- 3. Route your coaxial cable (avoiding areas of high heat, moving objects and or high electrical interference ie fuse boxes). The connector has not been terminated onto the cable for ease of routing. Secure your coaxial cable using uPVC cable ties, do not overtight as to crush the coaxial cable, this may cause failure of your system.
- Terminate the male radio connector onto your cable and insert into your radio/receiver or equipment.
- 5. Screw the whip onto your base and ensure adequate tension is applied as to not let the whip rotate. DO NOT overtighten as this can cause the threads to bind and or strip leading to a lose connection and possible separation of the whip to base.
- Test the signal signal receive/clarity on your device/ equipment.

#### Male radio connector - stip dimensions







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