

BUMP-138174-DUAL

Features

- Front and Rear Antenna for covert applications
- 138-174 MHz, 3-14 MHz bandwidth
- Field tunable for optimal VSWR and bandwidth
- Flexible radiating element
- Easy to deploy
- Can be installed in Bumper area
- Compatible with any vehicle model or manufacturer

Description

Comprod Bumper Antenna BUMP-138174-DUAL is designed for covert operations which require effectively invisible antenna hidden inside the front and rear bumper of a vehicle. The bumper covers must be plastic, and the vehicle frame is used by the antenna as a ground plane.

Featuring a unique and compact design that integrates radiating elements on flexible substrate, this antenna can be easily deployed on uneven surfaces, allowing simplicity and versatility for installation. It is an ideal all-round antenna solution for fitting into narrow spaces in applications where completely discrete antenna is required.

The antenna is provided with 24 feet RG-8X feed cable.

Note:

The connectors is provided but not installed for ease of cable running inside the vehicle. The connectors will need to be installed on the cable by the customer. Other connectors and cable configuration options are available.

For optimal performance two bumper antennas are installed, one at the front of the vehicle and one at the rear. The Comprod power splitter is provided for this purpose, helping to create an omni-directional pattern around the vehicle and enabling better network coverage.

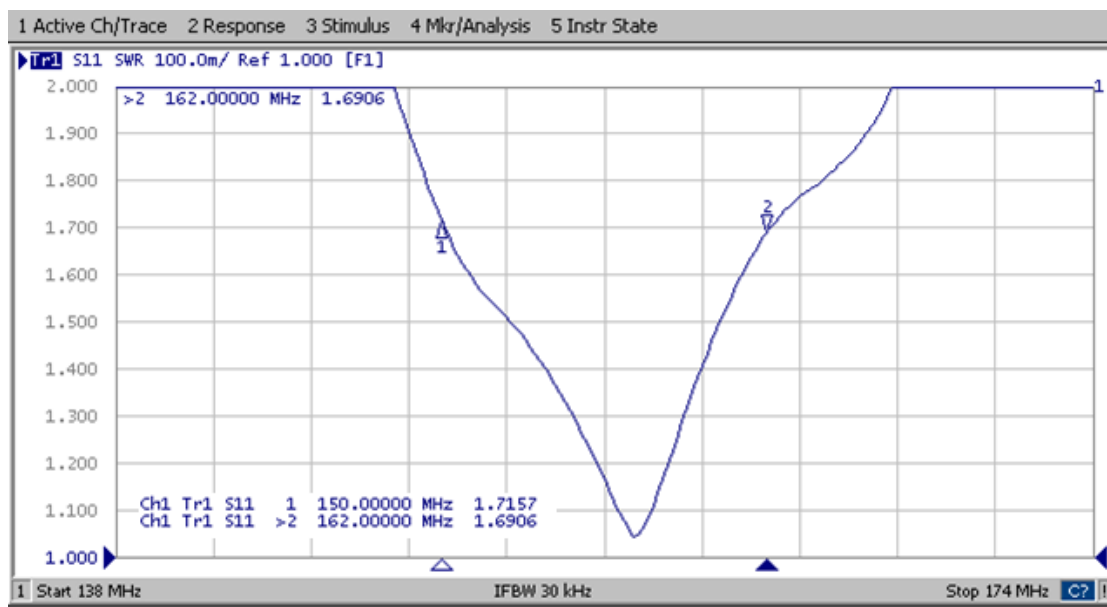


Electrical Specifications

Frequency Range, MHz	138-174
Bandwidth: 2:1 VSWR, MHz	3-14
Nominal Gain (dBd)	Unity
VSWR	2:1
Polarization	Vertical
Nominal Impedance, Ohms	50
Pattern	Omnidirectional
Power Handling (max), Watts	50
Standard Termination	N Female

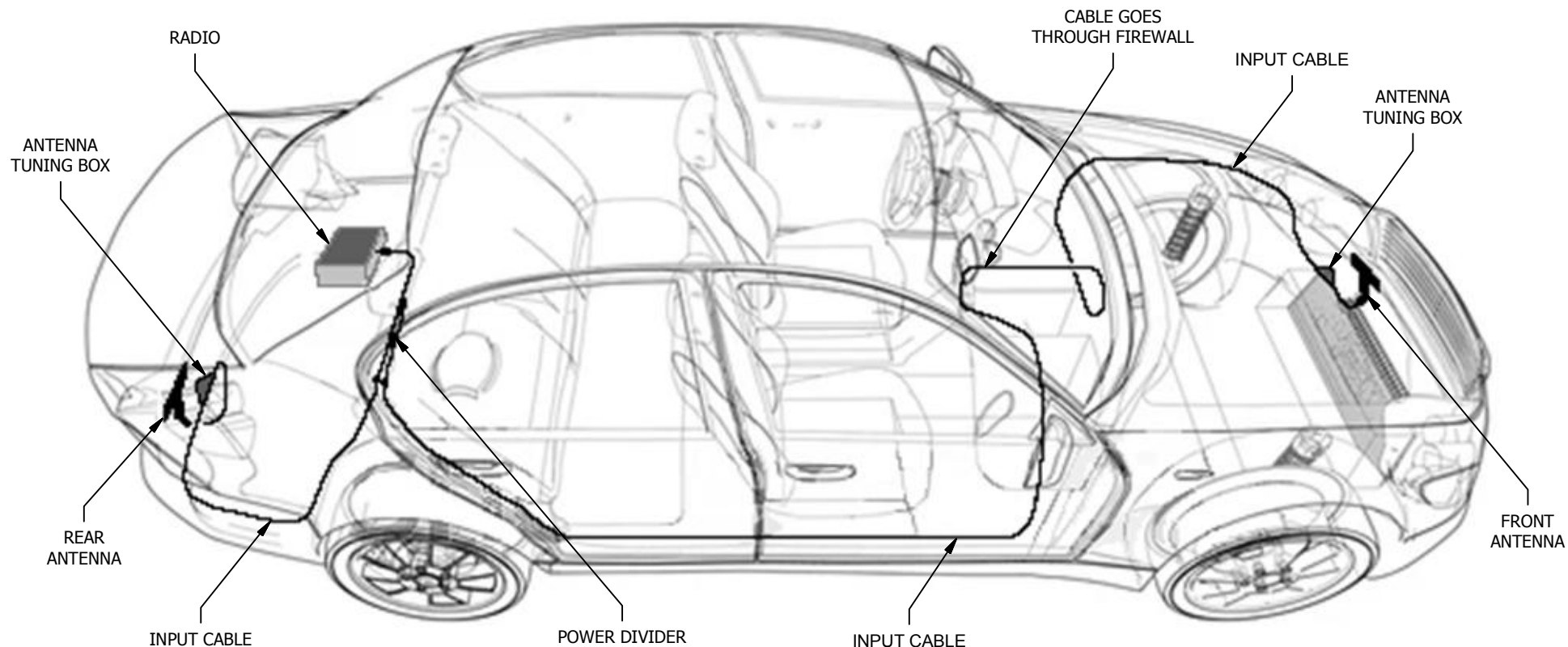
Mechanical & Environmental Specifications

Length/Height, in (mm)	16 (404.4)
Width, in (mm)	2.2 (56)
Depth, in (mm)	1.2 (30.5)
Mounting Hardware	#8-32 screws (8) provided
Operating Temperature range	-40 to +140 (-40 to +60)



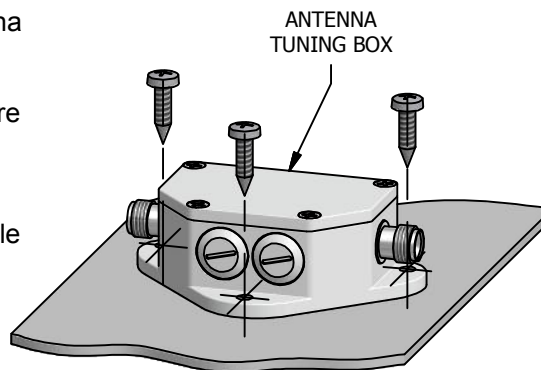
VSWR Curve of BUMP-138174 (antenna tuned to around 155 MHz central frequency)

DUAL ANTENNA INSTALLATION & CABLE ROUTING



STEPS:

- 1 - When location has been well determined, fasten the antenna tuning box with 3 self-tapping screws, to the vehicle frame.
- 2 - Clean internal bumper surface with degreaser solvent before fixing (sticking as vertically as possible) the antenna.
- 3 - Route the input cable through the engine compartment (secured with tie-wraps), through firewall and into the vehicle to the radio, keeping them away from any moving parts.
- 4 - After routing cables, attach loose connectors, supplied with the antennas.



NOTE:

- Do not connect cables to the radio until the tuning procedure is complete!
- Both antennas must be tuned independently and then connected with the power divider to the radio!

TITLE
MOUNTING INSTRUCTIONS
OF BUMP-138174-DUAL ANTENNA

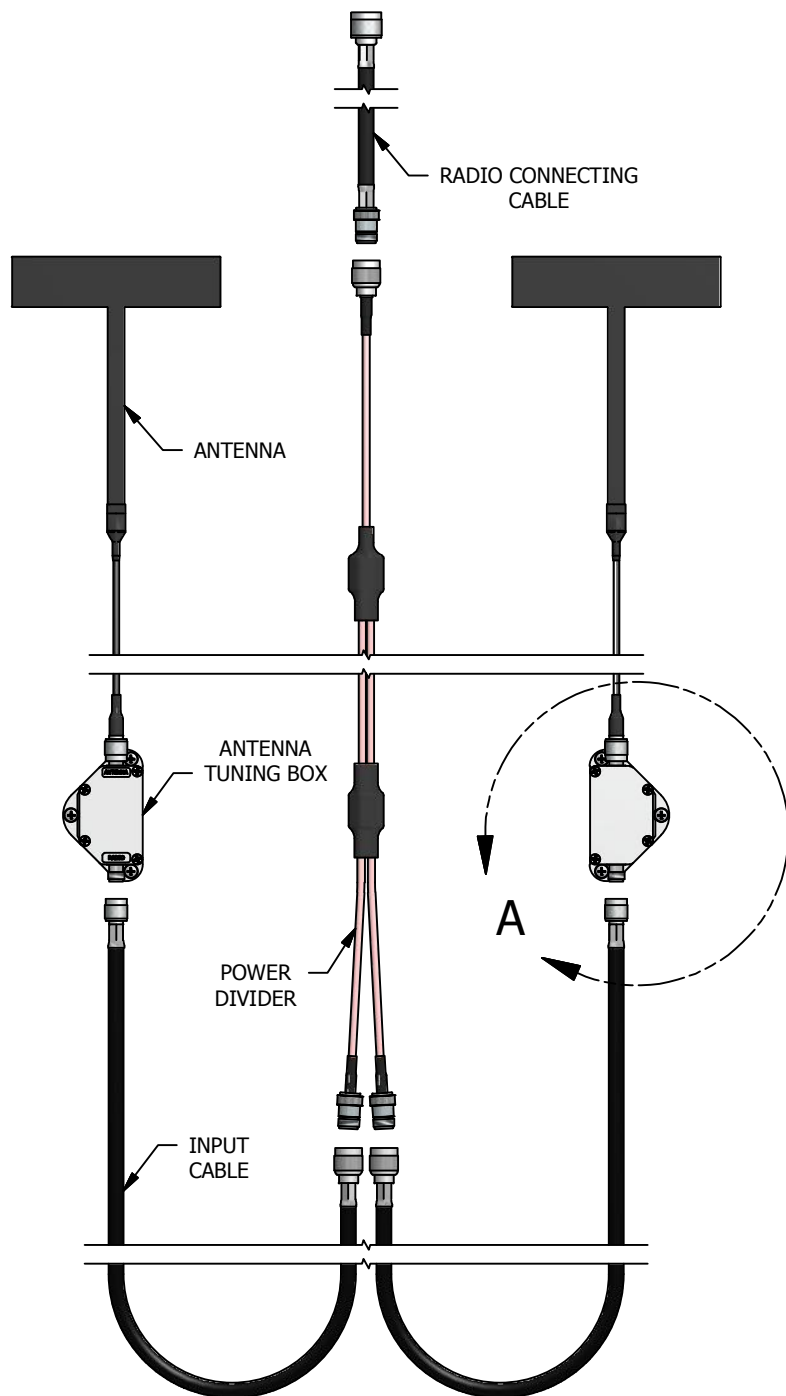
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G.M

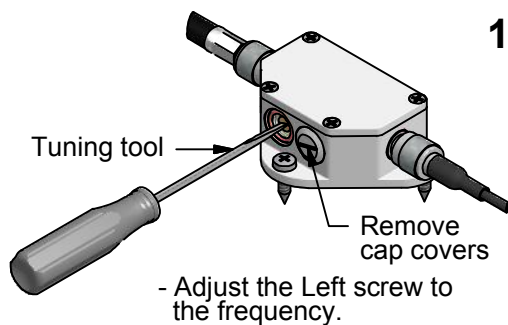
Approved by
J.A

Date
JAN-18-2022

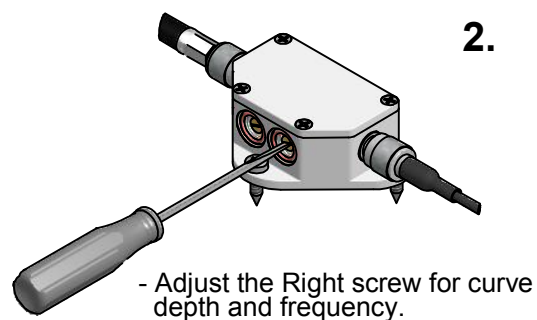
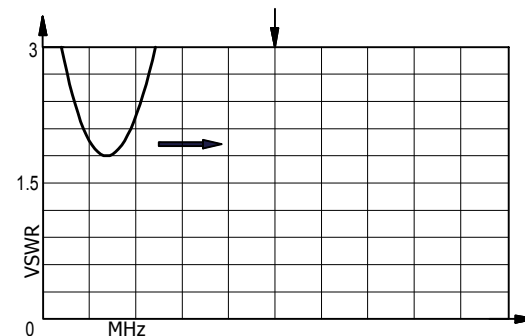




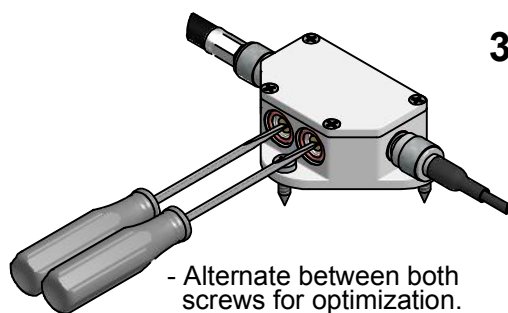
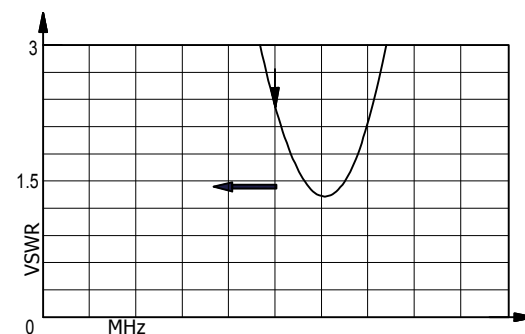
ANTENNA TUNING - DETAIL A



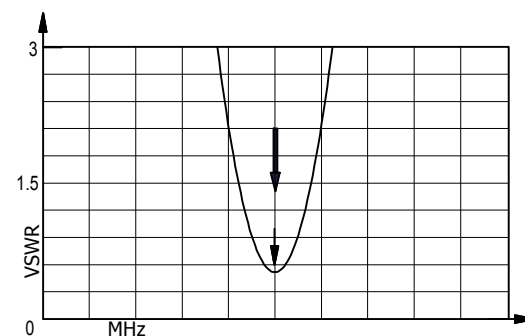
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