

## VEHICLE ANTENNA MOUNTING

CODE	TYPE	CONSTRUCTION	
GM1	16mm hole 'L' guard mount	304 stainless steel	
GM2	16mm hole 'Z' guard mount	304 stainless steel	
GM5	13mm slot 'L' slotted guard mount	304 stainless steel	
GM6	16mm slot 'L' slotted guard mount	304 stainless steel	
MRM-SS	16mm hole Clamp mirror mount	304 stainless steel	
ATLM-BK	16mm hole Clamp mirror mount	Black powdercoated zinc alloy	
ATLM-CH	16mm hole Clamp mirror mount	Chrome zinc alloy	
BBM-SS	16mm hole Clamp mirror mount	304 stainless steel	
BBML-SS	16mm hole Clamp mirror mount	304 stainless steel	
BBMXL-SS	16mm hole Clamp mirror mount	304 stainless steel	
BBKB-B	16mm hole Clamp mirror mount	Black powdercoated zinc alloy	

## FIXED POSITION MOUNTING

CODE	TYPE	CONSTRUCTION	
A-4266 Series	Mast mount adaptor for SG series 1/2" BSW thread	Corrosion resistant aluminium	
A-6211	Light-duty fascia/wall mount 16mm hole	304 stainless steel	
EB1-SS	Medium-duty parallel clamp 20-50mm	304 stainless steel	
UB1-SS	Medium-duty right-angle clamp 32 & 50mm	304 stainless steel	
UB2-SS	Medium-duty right-angle clamp 20-50mm	304 stainless steel	
UB3-SS	Medium-duty parallel clamp 20-50mm	304 stainless steel	
RB8	Light-duty right-angle clamp 20-40mm	Galvanised steel	
NSM-B20M	Plastic wall mount 20mm hole	Toughened nylon	
NSM-CL3642	Plastic wall mount 32mm hole	Toughened nylon	
NSM-218	Plastic nylon wall mount 38mm hole	Toughened nylon	
NSM-223	Plastic wall mount 50mm hole	Toughened nylon	

## WHY BUY A ZCG ANTENNA?

### INDIVIDUALLY BUILT AND TUNED

An antenna should transmit and receive, and we ensure ours will do so. A properly designed, manufactured and tuned antenna means the best possible transmission and receive of signal. Our robust internals of silver soldered brass outmatch other antennas on the market with internal printed circuit boards. ZCG ensures each antenna is performing to its stated performance level, because we know you need an antenna to rely on, no matter the situation.

### PROUDLY MANUFACTURED IN AUSTRALIA FOR OVER 40 YEARS

Our antennas are tried and tested. For over 40 years, ZCG has been refining and improving our products to suit our customer's needs - we know what works and our products are built to suit.

### MATCHING RANGE AND LOOKS

Combining rugged tried and tested design, quality performance and modern styling, there is a ZCG product to suit every vehicle and every adventure. We style match our range to ensure the aesthetics of your vehicle is not compromised.

### BUILT TOUGH FOR EXTREME CONDITIONS

Your antenna needs to be able to withstand any extreme environments no matter the location, from tropical forests, sandy deserts to snow-capped mountains, your antenna needs to work reliably year in, year out.

### TRUSTWORTHY WARRANTY

ZCG understand that quality antennas must be backed with a reliable warranty. All vehicle mount antennas are backed by a 1 year Australian warranty on faulty components or workmanship.



AUSTRALIAN MADE  
QUALITY  
RF SOLUTIONS

## WHICH ANTENNA IS BEST SUITED FOR MY NEEDS?

Low gain antennas (2.1dBi) are better suited for hilly, mountainous terrain or inner cbd locations. Medium gain antennas (6.1dBi) are best suited for suburban or general country-side locations. High gain antennas (8.1-11.1dBi) are ideally suited for flat terrain such as the Australian outback or vast deserts.

A combination of an exchangeable low gain and medium gain whip antenna is the most ideal solution for general public use, flexible for changeable terrain.

A barrel spring is suited for medium to heavy-duty applications such as a tough 4WD expeditions, heavy vehicles or constant motorway travellers, this spring is a larger diameter and will ensure your antenna is kept in the optimal vertical orientation.

If you are a city commuter or light-duty vehicle, a parallel spring is ideal. The parallel spring is smaller diameter and less obtrusive but will still ensure your antenna stays in the optimal vertical orientation.

## HOW DO I LOOK AFTER MY ANTENNA?

A regular maintenance check of all components of your antenna system, from the radio/device, terminations, coaxial cable, mounting and antenna should be undertaken to ensure your communications system is working as intended.

Check your terminations/connectors are free from dirt/debris/moisture as well as tight prior and after any tough expeditions or long journeys. Ensure your antenna's coaxial cable is free from damage/wear. Ensure your antenna mounting is tight and secure. And regularly test your radio and antenna function, because you don't want to be caught short in an emergency.

Remove all debris such as mud/sticks from your antenna's base/spring to keep the flexible movement of your antenna free.

## COAXIAL CABLE CARE

The coaxial cable leading from your antenna to your communication device should be free from sharp kinks, sources of heat or electric interference. All of these could lead your installation to have reduced performance or complete failure.

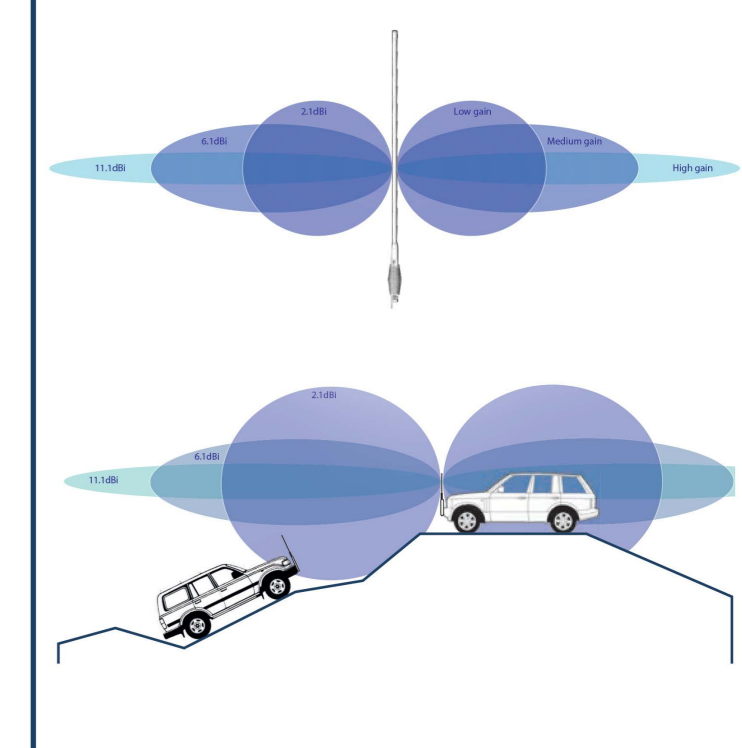
A strain relief length of coaxial cable should be left from free, from beneath your antenna mounting spring/base, this will allow for free movement when the spring is under tension.

## MOUNTING TIPS

SEE RIGHT HAND PAGE FOR MOUNTING POSITION

- Mount as high up on the bullbar, vehicle, structure as possible. Mounting on the main bullbar structure behind the uprights will diminish performance.
- Ensure the antenna is mounted vertically, slanted or tilted antenna will not propagate in the horizontal direction, leading to reduced performance.
- Separate antennas by at minimum 350mm spacing, or as far apart as possible to reduce interference or coupling, which will lead to reduced performance.
- Ensure all brackets/mounting are tight and secure
- Ground plane dependent antennas require a metallic mounting surface to perform, mounting via brackets or on bullbars will diminish performance.
- Routinely check entire communications system to ensure all terminations are tight, coaxial cable and antenna are free from damage, and that your system is working to specified levels prior to undertaking an expedition.

## GAIN DIAGRAM

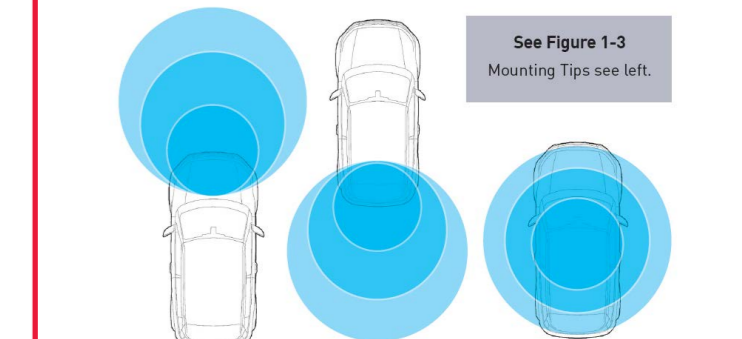


## MOUNTING POSITION

The position chosen to mount an antenna on a vehicle will determine the propagation direction. If mounted on the front of your vehicle, propagation towards the rear will be limited by the cabin of your vehicle. If mounted on the rear of your vehicle then propagation forwards will be hindered by the cabin of the vehicle. Mounting the antenna on the highest central location of your vehicle will give clear propagation around your entire vehicle or an omni-directional signal.

Ground independent antennas have the advantage of not requiring a large metallic surface to ensure omni-directional propagation, these antennas should be mounted as high as possible and free from metallic obstructions such as other antennas, bullbar uprights or roof mounted racking/supports.

Ground dependent antennas require a metallic ground plane to effectively propagate in an omni-directional signal pattern. Using the largest metallic surface of your vehicle, such as the centre of your roof will achieve the best performance of your antenna.



See Figure 1-3  
Mounting Tips see left.

# VEHICLE MOUNT, MARINE & FIXED POSITION ANTENNA RANGE



## VEHICLE MOUNT UHF 477MHz

CODE	FEATURES	GAIN (dBi)	CONNECTOR	COLOR	LENGTH (CM)
GID-MB402-S	Light-duty wideband 400-520MHz elevated feed whip, parallel spring base mounted	2.1	UHF Male PL259	Black or Chrome	44
GID-MB402	Light-duty wideband 400-520MHz elevated feed whip, 100 spring base	2.1	UHF Male PL259	Black or Chrome	35
GRN400	Highly flexible, radome enclosed, hat wave whip, comes with 4.3m base and lead - other frequencies available	4	UHF Male PL259	Black	33
ZN4-77-02	Highly flexible, low profile, hat wave, UHF CB antenna, FME-UHF male adaptor supplied	2.1	FME female	Black	36
ZN4-77-06	Ground independent UHF CB spring base elevated feed. Parallel or barrel spring. FME-UHF adaptor supplied	6.6	FME female	Black or White & Chrome	90-95
ZN4-77-07	Ground independent UHF CB elevated feed. No spring base. Parallel or barrel spring. FME-UHF adaptor supplied	6.6	FME female	Black & Chrome	90-95
ZN4-77-09T	Ground independent UHF CB elevated feed. No spring base. FME-UHF adaptor supplied	6.6	FME female	Black or White & Chrome	80
SGL477 / SG477-BLKR	Light-duty, radome enclosed collinear with stainless steel parallel spring base - available in all-black barrel spring base - available in all-black	6.6	FME female	Black, white or all-black	75
SG477 / SG477-BLKR	Medium-duty, radome enclosed collinear with stainless steel barrel spring base - available in all-black	6.6	FME female	Black, white or all-black	90
ZN3-77-10	Detachable, heavy-duty radome enclosed collinear with barrel spring base. FME-UHF adaptor supplied	6.6	FME female	Black or White	110
ZN3-77-11	Detachable, heavy-duty radome enclosed collinear with barrel spring base. FME-UHF adaptor supplied	6.6	FME female	Black or White	120
ZN3-77-12	Detachable, super heavy-duty radome enclosed collinear with barrel spring base. FME-UHF adaptor supplied	8.1	FME female	Black or White	210

## VEHICLE MOUNT MOBILE PHONE OR SATELLITE COMMUNICATIONS

GID-M90T-NextG-SS	Ground independent elevated feed whip for 4G & 3G 820-800MHz	5.1	FME female	Black & Chrome	45
GID-M90T-GSM	Ground independent elevated feed whip for 4G & 3G 890-960MHz	5.1	FME female	Black & Chrome	45
GID-M70T	Ground independent elevated feed whip for 4G LTE 703-748MHz	5.1	FME female	Black & Chrome	55
SGLWB / SGL-WB-BLKR	Ground independent wideband 4G LTE, 4G, 3G, 2G collinear, parallel spring base	2.1	FME female	Black, White or all-black	75
SGLDB / SGL-DB-BLKR	Light-duty ground independent wideband 4G, 3G, 2G collinear, parallel spring base	6.2 & 3.0	FME female	Black/White & Chrome or all black	75
SGDB / SGOB-BLKR	Medium-duty ground independent wideband 4G, 3G, 2G collinear, parallel spring base	6.2 & 3.0	FME female	Black/White & Chrome or all black	90
SG700-4GX / SG700-4GX-BLKR	Medium-duty ground independent 4G LTE & 4G 3G collinear, parallel spring base	5.1	FME female	Black/White & Chrome or all black	110
ZN3-SGOB-11	Detachable ground independent 4G, 3G, 2G collinear, barrel spring base	6.2 & 3.0	FME female	Black or White	120
TC1600-A	High gain, ground independent 4G & 3G collinear 825-850MHz with heavy-duty parallel spring base	8.1	FME female	White	220
ZIR-1626-RC	Medium-duty satellite communications collinear 1616-1626MHz, barrel spring base - available in all-black	3.0dB	TNC Male	Black, white or all-black	80

## VEHICLE MOUNT AM/FM RADIO RECEIVE

CR36	Light-duty fiberglass whip and base, improves AM/FM Radio reception, 4.7m cable base	Receive only	AM/FM Radio male fitted	Black & Chrome	100
CR66	Medium-duty fiberglass whip and base, improves AM/FM Radio reception, 4.7m cable base	Receive only	AM/FM Radio male fitted	Black & Chrome	150
CR66-HD	Heavy-duty fiberglass whip and base, improves AM/FM Radio reception, 4.7m cable base	Receive only	AM/FM Radio male fitted	Black & Chrome	183
SG11000 / SGL1000-BLKR	Light-duty collinear, improves AM/FM Radio reception, parallel spring base	Receive only	Solderless AM/FM male	Black, White or all-black	75
SG1000 / SG1000-BLKR	Medium-duty collinear, improves AM/FM Radio reception, barrel spring base	Receive only	Solderless AM/FM male	Black, White or all-black	90
ZN3-AMF-M-10	Medium-duty, detachable, ground independent collinear with barrel spring base	Receive only	FME female	Black or White	110
ZN3-AMF-M-11	Heavy-duty, detachable, ground independent collinear with barrel spring base	Receive only	FME female	Black or White	120
ZN3-AMF-M-12	Super heavy-duty, detachable, ground independent collinear with barrel spring base	Receive only	FME female	Black or White	210

## VEHICLE MOUNT HF & VHF

ZG40	HF 27MHz ground independent, detachable fiberglass whip and base. Available in 28MHz configuration	2.1	UHF Male PL259	Black & Chrome	160
ZN5-27-12	HF 27MHz ground dependent, base located flexible stainless steel whip	2.1	5/16-26 TPI female thread	Black & Chrome	120
BF51	VHF 70-85MHz ground independent fiberglass and stainless steel whip	2.1	N-type female	Grey & White	183
GID-1417	Broadband VHF high band 148-174MHz ground independent loaded base stainless steel whip	2.1	UHF Male PL259	Black	85
M21-WB	VHF wideband 148-175MHz ground dependent, detachable whip and base	2.1	Specify requirements	Black & Chrome	45

## MARINE 27.88MHz

ZM21-27	Ground independent 27MHz deck mount antenna. Requires MM1 or MM2 fold down base	2.1	UHF Male PL259	White & Chrome	210
ZM24-27	Ground independent 27MHz deck mount antenna. Requires MM1 or MM2 fold down base	2.1	UHF Male PL259	White & Chrome	240
ZM312H	Ground dependent 27MHz fiberglass whip and base. FME-UHF adaptor supplied - also available in all-black	2.1	5/16-26 TPI female thread	White & Chrome	64

## MARINE HF 2-30MHz

HM212	Maine HF 2-30MHz, couples via A.T.U., 316 stainless steel deck mount included	2.1	N/A	White	370
HM215	Maine HF 2-30MHz, couples via A.T.U., 316 stainless steel deck mount included	2.1	N/A	White	450
HM216-M	2-piece marine HF 2-30MHz, couples via A.T.U., mast or side mount using appropriate mounting hardware	2.1	N/A	White	600
HM223-M	2-piece marine HF 2-30MHz, couples via A.T.U., mast or side mount using appropriate mounting hardware	2.1	N/A	White	810
HM2800	Single-piece marine Coastguard 27.68-27.98MHz collinear	2.1	N-type female	White	620
HM300	3-piece free-standing marine HF 2-30MHz, requires ATU, mast or side mount or order HM300 land base	2.1	N/A	White	1000

## MARINE VHF

ZM21-VHF	Wideband Marine VHF 156-162MHz deck mount. Requires MM1 or MM2 fold down base	2.1	UHF Male PL259	White & Chrome	210
ZM24-VHF	Wideband Marine VHF 156-162MHz deck mount. Requires MM1 or MM2 fold down base	5.1	UHF Male PL259	White & Chrome	240
ZM312V	Ground dependent fiberglass whip and base, 156-162MHz, FME-UHF adaptor supplied - also available in all-black	2.1	5/16-26 TPI female thread	White & Chrome	50

## MARINE AM/FM RADIO RECEIVE

ZM09-AMFM	Ground independent AM/FM Radio receive collinear. Requires MM1 or MM2 fold down base	Receive only	Solderless AM/FM male	Black or White	90
ZM21-AMFM	Ground independent AM/FM Radio receive collinear. Requires MM1 or MM2 fold down base	Receive only	Solderless AM/FM male	White & Chrome	210
ZM24-AMFM	Ground independent AM/FM Radio receive collinear. Requires MM1 or MM2 fold down base	Receive only	Solderless AM/FM male	White & Chrome	240
ZM312B	Ground dependent AM/FM fiberglass whip and base - also available in all-black	Receive only	Solderless AM/FM male	White & Chrome	66

## MARINE UHF

ZM09-477	Ground independent UHF CB radio 477MHz collinear. Requires MM1 or MM2 fold down base	2.1	UHF Male PL259	Black or White & Chrome	90
ZM21-477	Ground independent UHF CB radio 477MHz collinear. Requires MM1 or MM2 fold down base	8.1	UHF Male PL259	White & Chrome	210
ZM21-UHF	Ground independent UHF collinear 400-520MHz, specify 1.5% bandwidth. Requires MM1 or MM2 fold down base	8.1	UHF Male PL259	White & Chrome	210

## MARINE AUTOMATIC IDENTIFICATION SYSTEM (A.I.S.)

ZM14-AIS	Ground independent deck mount collinear, 400nm cable 161.975-162.025MHz	2.1	N-type female	White & Chrome	140
ZM14-AIS-5	Ground independent deck mount collinear, 5.0m cable 161.975-162.025MHz	2.1	N-type female	White & Chrome	140
B20G-N-AIS	Ground independent mast mount collinear 161.975-162.025MHz	5.1	N-type female in base	White	320

## MARINE MOBILE PHONE & WIRELESS DATA

ZM09-CELL	All networks 4G, 3G & 2G collinear. 625-960 & 1710-2190MHz. Requires MM1 or MM2 fold down base	6.2 & 3.0	FME female	White or Black & Chrome	160
ZM21-CELLN	Lower 4G, 3G & 2G collinear, 825-960MHz. Requires MM1 or MM2 fold down base	8.1	FME female	White & Chrome	120
ZM24-CELLN	Lower 4G, 3G & 2G collinear, 825-960MHz. Requires MM1 or MM2 fold down base	8.1	FME female	White & Chrome	240
ZM21-CELLG	Lower 4G, 3G & 2G collinear, 890-960MHz. Requires MM1 or MM2 fold down base	8.1	FME female	White & Chrome	240
SGDB-SS-S	Oceanic, sealed ground independent 4G, 3G, 2G collinear, stainless steel mast mount adaptor fitted	6.2 & 3.0	FME female	Black	90

## BASE STATION FIXED POSITION

ZM100A	Omni-directional ground independent HF 27.88MHz collinear	2.1	N-type female in base	White	280
B20G-N	Omni-directional, ground independent marine VHF collinear 156-162MHz	5.1	N-type female in base	White	340
ZN2-77-06-AC	Omni-directional ground independent UHF CB 477MHz collinear	8.1	N-type female in base	White	250
ZN2-77-09-AC	Omni-directional ground independent UHF CB 477MHz collinear	12	N-type female in base	White	330
CM1600AM	Omni-directional ground independent lower 4G/3G collinear 825-960MHz	8.1	N-type female in base	White	240
CM1600AM-4GX	Omni-directional ground independent all networks 4G LTE collinear 700-788MHz	8.1	N-type female in base	White	185
CMG1600AM	Omni-directional ground independent lower 4G/3G collinear 890-960MHz	8.1	N-type female in base	White	240
SGDB-TPM	Omni-directional, ground independent, all networks 4G, 3G, 2G collinear threaded mount	6.2 & 3.0	FME female	Black, White or all-black	80
CLV3	Omni-directional, ground independent VHF collinear 151-152MHz	4.5	N-type female in base	White	330
CLU3	Omni-directional, ground independent UHF collinear 400-520MHz, specify 1.5% bandwidth	4.5	N-type female in base	White	170

\*Please note, antenna images are not scaled\*



For more information on our full range of ZCG products visit:

[www.zcg.com.au](http://www.zcg.com.au)