PACIFIC
AERIALS

MARINE ANTENNA
CATALOGUE

PACIFIC AERIALS LIMITED – PROFILE

Our core expertise is the design and manufacture of communications antennas. Since 1977 our antennas have been sold throughout the world to demanding customers who require the best. We have built a reputation with our customers for innovation, reliability and value.

Every antenna we make has outstanding electrical performance and mechanical durability built in. Rigorous design and testing, combined with the use of the highest quality components and advanced manufacturing techniques, mean that our antennas perform and survive where others won't. Our ISO 9001: 2008 certification ensures that the quality engineered into each design is maintained in every antenna and accessory.

A company philosophy of constant improvement and listening to our customers has led us to produce some of the best antennas available anywhere. Our innovation is most clearly demonstrated in our Pro Series marine antenna range, which was developed in response to customer demand for a fibreglass antenna that could be easily removed and then remounted, without pulling or cutting the coaxial cable.

Our experience in the global market has shown us that while all customers want a high quality, reliable product, each market has slightly different expectations about what constitutes a standard antenna. We are able to respond to those different expectations, building antennas which are tailored to suit individual markets with uncompromising quality.

VHF ANTENNAS

SEAMASTER – MAST MOUNT

P6001 *1.0m Stainless steel whip antenna with SO239 socket and mounting bracket. Use with a cablepack complete with connectors and weatherseal. A robust half wave built in an ABS housing this antenna delivers outstanding performance. The first choice for an installation where the lowest possible windage is a requirement.*

P6185 *1.0m UltraGlass half wave antenna. It has a glass filled nylon ferrule and slim line features. Complete with mounting bracket, SO239 socket and weatherseal, use with a cablepack. Detachable cable and antenna makes mast installation a breeze.*

Cablepacks *Supplied with connectors and weatherseal fitted to make the installation quick and easy. Available in 5 lengths*

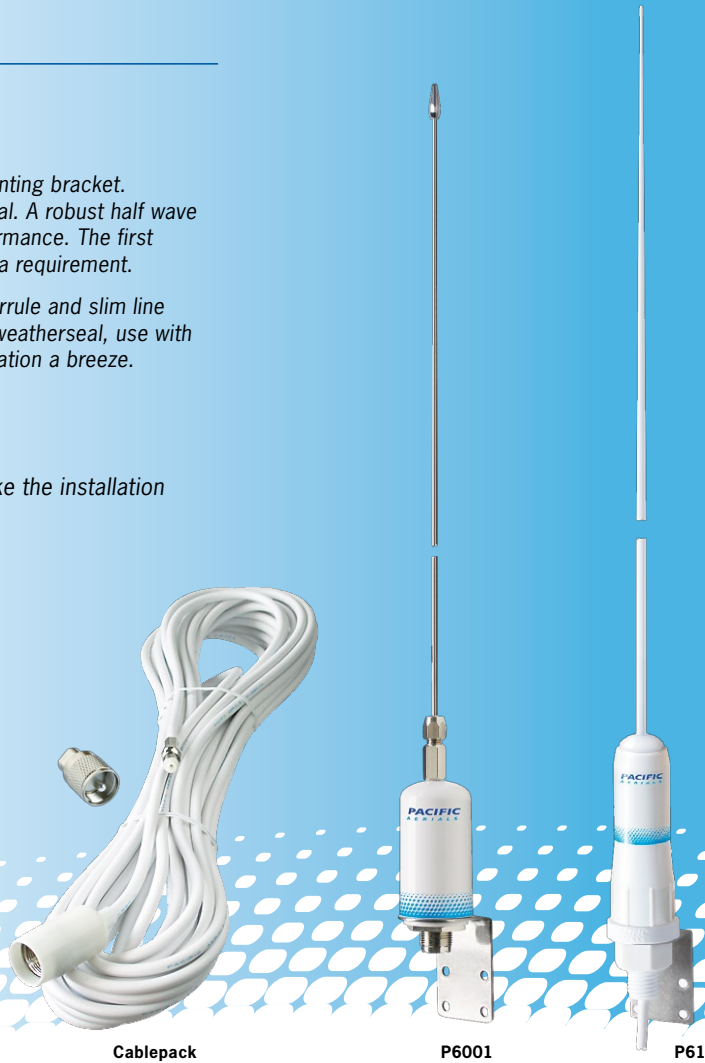
P6012 *VHF 10m cablepack*

P6013 *VHF 15m cablepack*

P6014 *VHF 20m cablepack*

P6015 *VHF 25m cablepack*

P6016 *VHF 30m cablepack*



Cablepack P6001 P6185

VHF ANTENNAS

SEAMASTER – CLASSIC RANGE

P6004 *2.5m UltraGlass antenna. An excellent solution where the mounting point is low. The extra height with an all-round clear view means that the performance is maximised. Half wave design with a glass filled nylon ferrule and hardwired with 5m cable and FastFit plugs. Mount this antenna on the P6006, P6007 or P6080.*

P6003 *1.8m UltraGlass antenna. A rugged and durable antenna which performs beyond the expectations of most small boat owners. Half wave design with glass filled nylon ferrule, hardwired with 5m cable and FastFit plugs. Mount this antenna on the P6006, P6007 or P6080.*

P6035 *1.0m UltraGlass antenna. Half wave design with glass filled nylon ferrule. An economical option with the same outstanding electrical performance as the P6003. Hardwired with 5m cable and FastFit plugs. Mount this antenna on the P6006, P6007, P6067 or P6080.*

P6091 *1.0m Antenna with laydown mount. White powder coated stainless steel whip with glass filled nylon base. This antenna is a half wave design and comes with 4m cable and FastFit plugs. Mount this antenna on a flat surface or side mount with the P7105.*

P6087 *0.6m Quarter wave antenna. Flexible design comes with 2m cable and is ideal for aluminium boats. Requires a suitable ground plane.*

P6004 P6003 P6035 P6091 P6087

P6006 P6007 P6067 P6080 P7105

VHF ANTENNAS

SEAMASTER – PRO RANGE

P6102 *2.5m UltraGlass antenna. The extra height is an advantage if the mounting point is low. Half wave design with glass filled nylon ferrule. Mount this antenna on the P6111, P6113 or P6115. These mounts have 5m cable and FastFit plugs.*

P6101 *1.8m UltraGlass antenna. Superb performance and convenient size makes this antenna the industry standard. Half wave design with glass filled nylon ferrule, choose the P6111, P6113 or P6115. Mounts have 5m cable and FastFit plugs.*

P6184 *1.0m UltraGlass antenna. A kit comprising the P6182 antenna and P6115 mount, with a stainless steel mounting bracket and FastFit plugs.*

P6182 *1.0m UltraGlass antenna. Half wave design, this is an economical option with the same outstanding electrical performance as the P6101. It has a glass filled nylon ferrule. Mount this antenna on the P6111, P6113, P6115 or P6168. These mounts have 5m cable and FastFit plugs.*

P6106 *450mm Heliflex antenna. Excellent choice for RIBs and tenders communicating over short distances. Mount this antenna on the P6111, P6113, P6115 or P6168. These mounts have 5m cable and FastFit plugs.*

PACIFIC AERIALS

VHF ANTENNAS

LONGREACH – CLASSIC RANGE

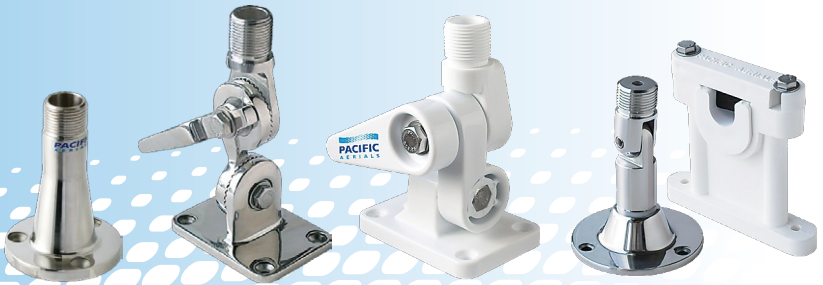
P2035 *7.3m UltraGlass colinear antenna. Top of the range antenna for the discerning boat owner. Looks exceptional when twinned with the P2032 HF/SSB antenna. Mount with P9055.*

P2034 *4.9m UltraGlass colinear antenna. High gain, rugged construction, an excellent performing antenna. Looks exceptional when twinned with the P2031 HF/SSB antenna. Mount with the P9055.*

P6051 *2.5m UltraGlass colinear antenna. A high gain antenna which gives exceptional performance. It has a stainless steel ferrule hardwired with 5m of cable and FastFit plugs. Mount on the P6071, P6078 or P6079.*

P6059 *2.5m UltraGlass antenna. Half wave design with a stainless steel ferrule and 5m cable hardwired. Mount this antenna on the P6071, P6078 or P6079.*

P6053 *1.8m UltraGlass antenna. Half wave design with 5m cable hardwired. The stainless steel ferrule makes this an elegant looking antenna with excellent performance. Mount this antenna on P6071, P6078 or P6079.*



VHF ANTENNAS

LONGREACH – PRO RANGE

P6121 *1.8m UltraGlass antenna. Half wave design with a stainless steel ferrule. Elegant looks and superb performance. Mount this antenna on the P6151, P6159 or the P6166. These mounts all have 5m cable and FastFit plugs.*

P6123 *2.5m UltraGlass antenna. Half wave design with a stainless steel ferrule. Perfectly proportioned for the larger boat. Mount on the P6151, P6159 or P6166. These mounts all have 5m cable and FastFit plugs.*

P6122 *2.5m UltraGlass colinear antenna. A high gain antenna which gives exceptional performance. Essential for boats that need to talk to distant stations. Mount this antenna on the P6151, P6159 or P6166. All mounts have 5m cable and FastFit plugs.*

P6151

P6159

P6166

P6121 P6123 P6122

VHF ANTENNAS

DEEPSEA – COMMERCIAL

DeepSea antennas are the first choice for those who earn their living on the water. Constructed in an industrial grade UltraGlass with stainless steel sleeve and recessed N-type socket.

P6029 *2.5m x 32mm UltraGlass antenna. Colinear design, with extra gain and height for maximum performance.*

P6025 *1.5m x 32mm UltraGlass antenna. Half wave design, this is the standard antenna for workboat installations.*

P3253 *Stainless steel U Bolts. Use these for mounting the P6025 or P6029 antenna.*

P6029

P6025

P3253

VHF ANTENNAS

SEAMASTER

SEAMASTER EMERGENCY VHF ANTENNA

P6031 *VHF 1.1m telescopic antenna in stowage pack. The telescopic whip extends to become a full-performance marine VHF antenna. With velcro straps and connectors to suit most fixed and handheld VHF radios.*

SEAMASTER BAND SPLITTER

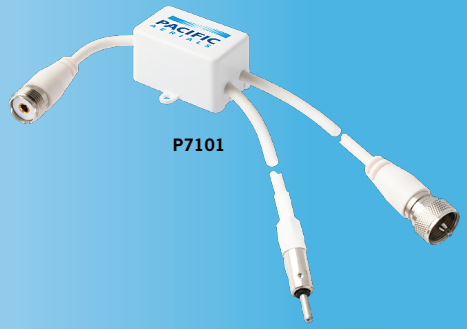
P7101 *VHF/AM/FM broadcast band splitter, with VHF and car radio plugs. The splitter uses the VHF antenna to provide AM/FM reception without degrading the performance of the antenna at VHF frequencies.*

SEAMASTER ANTENNAS FOR VHF PORTABLE RADIOS

P6081 *VHF flexible antenna - with either BNC, TNC or SMA connector. Specify when ordering.*

P6082 *VHF telescopic antenna - with either BNC, TNC or SMA connector. Specify when ordering.*

These antennas screw directly onto handheld radios.



P7101

P6031 P6081 P6082

AIS ANTENNAS

AUTOMATIC IDENTIFICATION SYSTEM

AIS is a marine tracking system used for identifying and locating vessels by electronically exchanging data with nearby ships. The AIS unit uses a standardised transceiver to broadcast the vessel's position and name as well as speed, course and destination.
The frequencies used to transmit this data are higher than marine VHF, so using a standard marine VHF antenna will compromise the performance of the AIS system as will using a splitter to run your AIS and VHF from the same antenna.
We recommend that you use a dedicated AIS antenna to ensure the best possible signal reception and transmission to maximise your safety.

P6005 *1.0m Masthead AIS antenna. Stainless steel whip and ABS housing with SO239 connector in the base. This antenna is supplied with a mounting bracket and can be used with any of the cablepacks P6012–P6016.*

SEAMASTER

P6105 *1.8m UltraGlass antenna with glass filled nylon ferrule. Mount with P6111, P6113 or P6166.*

LONGREACH

P6205 *2.5m UltraGlass antenna with stainless steel ferrule. The extra height gives this antenna an added advantage. With a clear all-round view the performance is greatly enhanced. Mount with the P6151, P6159 or the P6166 for a no cable look.*

P6305 *2.5m antenna. Made in a robust industrial UltraGlass radome with stainless steel sleeve. This antenna has an N-type socket in the base. Run your choice of heavy duty cable to the antenna using a P3253 U Bolt kit to mount it.*

Cablepacks

P6012 *10m cablepack*

P6013 *15m cablepack*

P6014 *20m cablepack*

P6015 *25m cablepack*

P6016 *30m cablepack*

Cablepack

P6005

P6111

P6113

P6151

P6159

P6166

P3253

P6105

P6205

P6305

QUADBAND ANTENNAS

LONGREACH PRO RANGE

Our latest product, the QuadBand antenna, is designed to give outstanding performance across all cellular bands covering the frequency ranges of 800–900–1800/1900–2100MHz.

P6401 *1.0m UltraGlass with stainless steel ferrule. Mount with P6151 or P6166*

P6402 *1.8m UltraGlass with stainless steel ferrule. Mount with P6151, P6159 or P6166*

P6403 *2.5m UltraGlass with stainless steel ferrule. Mount with P6151, P6159 or P6166*

P6404 *2.5m UltraGlass with stainless steel sleeve and 'N' socket. Mount the antenna using a P3253 U Bolt kit.*

P6404 P6403 P6402 P6401

P6151

P6159

P6166

P3253

HF/SSB ANTENNAS

LONGREACH

Superbly finished, with glossy UltraGlass and stainless steel ferrules to enhance the appearance and strength of the antenna, LongReach antennas are designed for customers who demand the best.

LONGREACH ANTENNAS

P2031 *HF/SSB 4.9m UltraGlass antenna.*

P2032 *HF/SSB 7.3m UltraGlass antenna.*

LONGREACH ANTENNA MOUNTS

P9055 *Mounting kit for 4.9m & 7.3m antennas (swivel mount and support bracket).*

HF/SSB ANTENNA INSTALLATIONS

HF/SSB antennas require a high standard of installation to work correctly. The antenna is connected to an antenna tuner through a high voltage insulator and it is extremely important that the antenna location and grounding system are correctly chosen so that the system will radiate effectively.

The longest possible antenna should be chosen for each installation.

The antenna should be installed in a position free from obstruction, and as far away as possible from other upright objects such as masts.

The ground system is a key part of the overall antenna system. A poor ground system is the most common reason for poor HF antenna performance. Consult an experienced HF radio installer if you have any doubts about the ground system on your vessel.

P9055

P2031 P2032

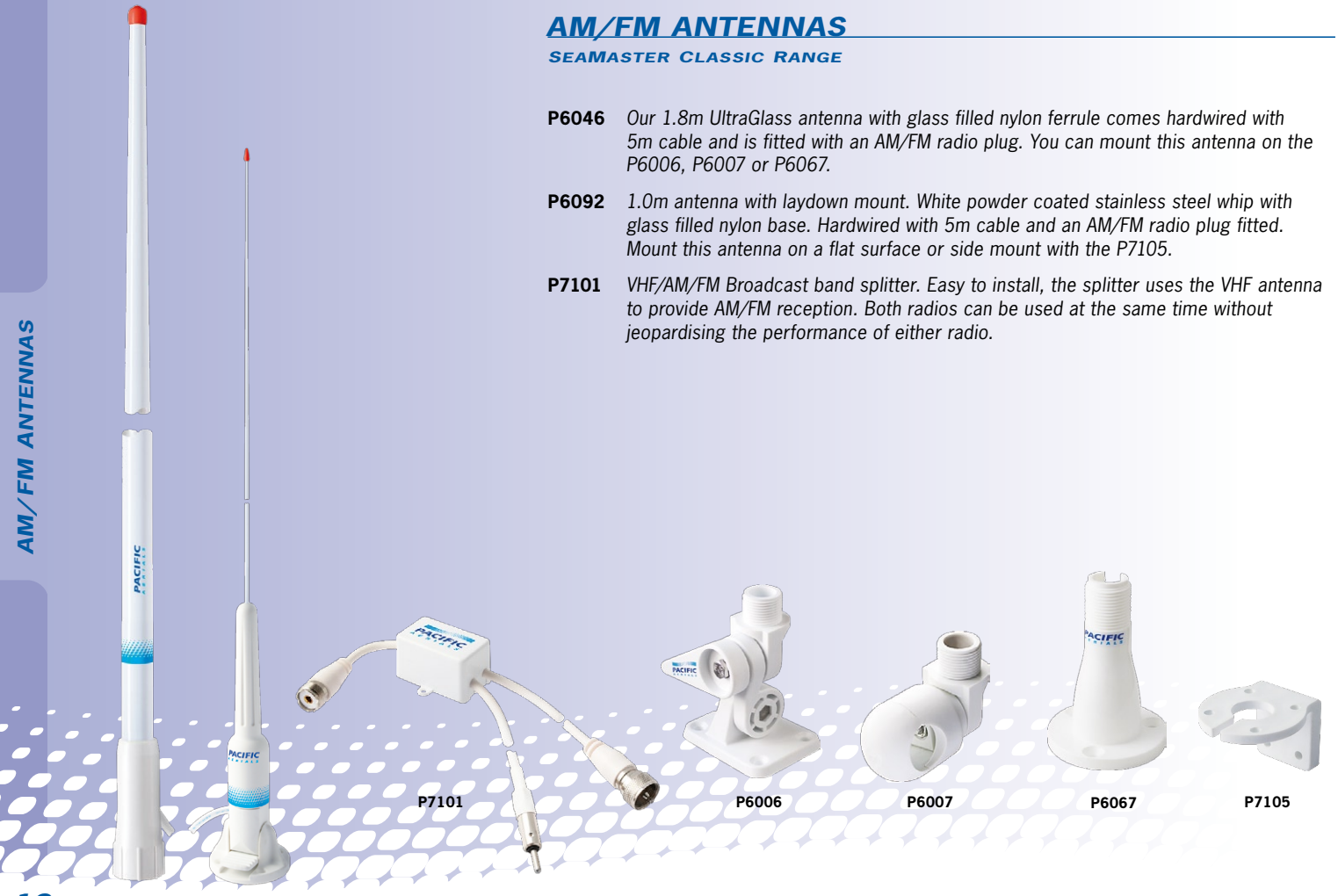
AM/FM ANTENNAS

SEAMASTER CLASSIC RANGE

P6046 *Our 1.8m UltraGlass antenna with glass filled nylon ferrule comes hardwired with 5m cable and is fitted with an AM/FM radio plug. You can mount this antenna on the P6006, P6007 or P6067.*

P6092 *1.0m antenna with laydown mount. White powder coated stainless steel whip with glass filled nylon base. Hardwired with 5m cable and an AM/FM radio plug fitted. Mount this antenna on a flat surface or side mount with the P7105.*

P7101 *VHF/AM/FM Broadcast band splitter. Easy to install, the splitter uses the VHF antenna to provide AM/FM reception. Both radios can be used at the same time without jeopardising the performance of either radio.*



AM/FM ANTENNAS

SEAMASTER PRO RANGE

P6104 *2.5m UltraGlass antenna with glass filled nylon ferrule. The extra height can mean that the antenna gets an all-round clear view and therefore maximises the performance. Mount this antenna on the P6114 or P6118. These mounts have 5m of cable and are fitted with an AM/FM radio plug.*

P6103 *1.8m UltraGlass antenna with glass filled nylon ferrule. Enables radio coverage further out to sea. Choose either the P6114, P6118 or P6169 mount for this antenna.*

P6183 *1.0m UltraGlass antenna. The slim line features of this antenna make it a popular choice for the smaller boat or for a mastmount installation. Choose either the P6114, P6116, P6118 or P6169. These have 5m of cable and an AM/FM radio plug fitted.*

P6107 *450mm flexible helical style antenna. The smallest antenna in our range. Designed for boat owners who stay close to shore but want to improve their AM/FM reception. Mount with P6114, P6116, and P6169*

P6114

P6116

P6118

P6169

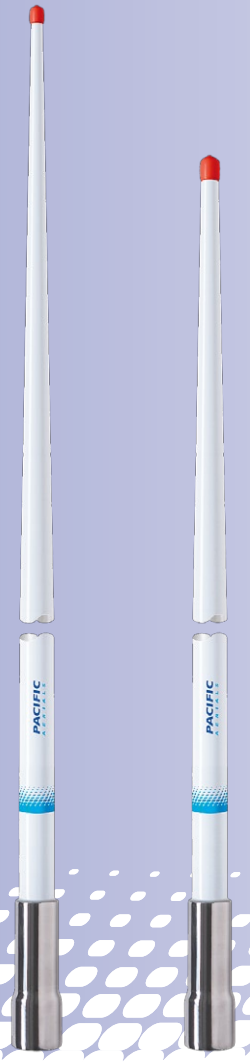
P6107 P6183 P6103 P6104

AM/FM ANTENNAS

LONGREACH PRO RANGE

P6141 *1.8m UltraGlass antenna with stainless steel ferrule. Enables radio reception further out to sea. Choose either the P6154, P6158 or P6167 mount with 5m of cable and with an AM/FM radio plug fitted.*

P6142 *2.5m UltraGlass antenna with stainless steel ferrule. The extra height can mean that the antenna can get an all-round clear view, maximising the performance. Choose either the P6154 or P6158, or for a complete no-cable look, use P6167.*



P6142

P6141

P6154

P6158

P6167

TV ANTENNAS

OMNIPRO

P8021 *VHF/UHF TV antenna & installation kit. A 450mm diameter all-band omnidirectional antenna with outstanding performance on all VHF and UHF TV bands.*

P8022 *UHF TV antenna & installation kit. At just 200mm, this is one of the smallest diameter omnidirectional antennas available. Superb performance on UHF TV bands.*

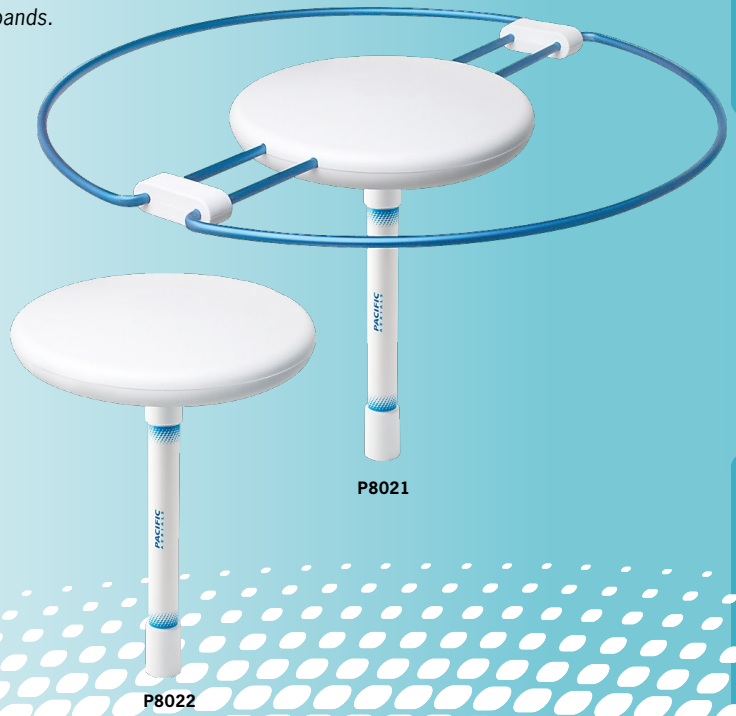
TELEVISION ANTENNAS

Marine TV antennas have to be omnidirectional (able to receive TV signals from any direction) because a boat under way or swinging at anchor is constantly changing its bearing to the TV transmitter.

Because omnidirectional antennas receive signals from any direction, weaker reflected signals may show on the television as "ghosts". Ghosting is most likely to be noticed in marinas where there are many reflected signals due to the number of masts. The presence of "ghosts" is confirmation the antenna is doing what it is designed to do – receive signals from all directions.

Favourite anchorages in snug bays are often in the fringe coverage areas where the TV signal is weak and variable. Pacific's amplified TV antennas will make the most of a weak TV signal; no antenna can produce a picture where there is no TV signal. In fringe TV coverage areas, shifting a few metres can make the difference between a good picture and no picture.

A top quality television is the smart choice for a boat. Some televisions are less sensitive than others and may not give a useable picture outside the main coverage areas.



P8021

P8022

INSTALLATION ACCESSORIES

CABLES / CONNECTORS / TOOLS / SPEAKERS

P1403

Coaxial cable RG58A/U 100m

P1404

Coaxial cable RF400 100m

P1405

Coaxial cable RF400 50m

P1074

Crimp tool RG58/59/62/174

P1076

Crimp tool RF400/RG213

P7104

Mini marine extension speaker

P1155

Cable weatherseal

P3030

Microphone clip

P3032

Microphone clip w spring

P6017

Cable entry cover

P6018

5m VHF cable extension

P6161, P6162

Pro Pipe Adaptor

P7102

5m AM/FM cable extension

INSTALLATION ACCESSORIES

FASTFIT RANGE CONNECTORS

P1211

F/F Plug

P1212

F/F Jack

P1213

BNC

P1214

Mini UHF

P1215

N

P1216

TNC

P1217

PL259

P1218

SMA

P1045

PL259 with Reducer

P1058

PL259

P1059

S0239 Joiner

P1080

S0239 Jack

P1145

N Plug RG58

P1147

N Jack

P1161

N Jack LMR400

P1162

N Plug LMR400

MOUNT SPECIFICATIONS

SEAMASTER / LONGREACH / CLASSIC RANGE

Model		Description	Material	Weight/Height	Base Plate Dimensions	Hole Centres/ Sizes	Cable and Plug	Use With
P3253		35mm DeepSea U-bolt kit with clamp (pair)	Stainless Steel	335g	Bolt Length 90mm	42mm Bolt diameter: 8mm	On antenna	DeepSea antennas
P6006		SeaMaster fold down mount	Glass filled nylon - UV inhibited	130g/106mm	81 x 63mm	61 x 43mm Hole Diameter: 7mm	On antenna	SeaMaster VHF and AM/FM antennas
P6007		SeaMaster rail mount	Glass filled nylon - UV inhibited	100g/61mm	Designed for 1" pipe		On antenna	SeaMaster VHF and AM/FM antennas
P6067		SeaMaster light weight deck mount	Nylon	50g/98mm	Diameter: 71mm	3 x 6mm holes on a diameter of 64mm	On antenna	P6035 and GPS antennas
P6071		LongReach heavy duty fold down mount	Nylon 6 - UV inhibited	225g/132mm	93 x 66mm	73 x 46mm Hole Diameter: 8mm	On antenna	SeaMaster or LongReach VHF and AM/FM antennas

MOUNT SPECIFICATIONS

SEAMASTER / LONGREACH / CLASSIC RANGE

Model		Description	Material	Weight/Height	Base Plate Dimensions	Hole Centres/ Sizes	Cable and Plug	Use With
P6078		LongReach deck mount	316 Grade Stainless Steel	260g/100mm	Diameter: 68mm	3 x 6mm holes on a diameter of 64mm	On antenna	SeaMaster or LongReach VHF and AM/FM antennas
P6079		LongReach fold down mount	316 Grade Stainless Steel	890g/155mm	93 x 66mm	73 x 46mm Hole Diameter: 8mm	On antenna	SeaMaster or LongReach VHF and AM/FM antennas
P6080		SeaMaster through deck mount	Glass filled nylon - UV inhibited	30g/27mm	Diameter: 35mm	Stem Diameter: 16mm	On antenna	P6035 and GPS antennas
P6087 Mount		P6087 mount	Glass filled nylon	115g/23mm	Diameter: 35mm	Stem Diameter: 10mm	2m RG-58AU with FastFit jack and PL259 plug	P6087 antenna only
P9055		Mounting kit for 4.9m and 7.3m antennas	Swivel Base: 316 Stainless Steel. Support Bracket:Acetal	515g/111mm 165g / 22mm	Diameter: 85mm Length: 120mm	3 x 6mm holes on a diameter of 78mm. 2x6mm holes 95mm apart	On antenna	LongReach 4.9m and 7.3m antennas

MOUNT SPECIFICATIONS

SEAMASTER / LONGREACH / PRO RANGE

Model		Description	Material	Weight/Height	Base Plate Dimensions	Hole Centres/ Sizes	Cable and Plug	Use With
P6114		AM/FM SeaMaster Pro Series fold down mount	Glass filled nylon - UV inhibited	425g/106mm	81 x 63mm	61 x 43mm Hole Diameter: 7mm	5m RG62 with car radio antenna plug	SeaMaster Pro Series and Heliflex AM/FM antennas
P6115		VHF/Cellular SeaMaster Pro Series through deck mount	Glass filled nylon - UV inhibited	285g/27mm	Diameter: 35mm	Stem Diameter: 16mm	5m RG58AU with FastFit jack and FastFit PL259 plug	P6182 and Heliflex VHF and cellular antennas
P6116		AM/FM SeaMaster Pro Series through deck mount	Glass filled nylon - UV inhibited	335g/27mm	Diameter: 35mm	Stem Diameter: 16mm	5m RG62 with car radio antenna plug	P6183 and Heliflex AM/FM antennas
P6118		AM/FM SeaMaster Pro Series rail mount	Glass filled nylon - UV inhibited	400g /61mm	Designed for 1" pipe		5m RG62 with car radio antenna plug	SeaMaster Pro Series and Heliflex AM/FM antennas
P6151		VHF/Cellular LongReach Pro Series heavy duty fold down mount	Nylon 6 - UV inhibited	510g/132mm	93 x 66mm	73 x 46mm Hole Diameter: 8mm	5m RG58AU with FastFit jack and FastFit PL259 plug	LongReach Pro Series VHF and cellular antennas
P6154		AM/FM LongReach Pro Series heavy duty fold down mount	Nylon 6 - UV inhibited	560g/132mm	93 x 66mm	73 x 46mm Hole Diameter: 8mm	5m RG62 with car radio antenna plug	LongReach Pro Series AM/FM antennas

MOUNT SPECIFICATIONS

SEAMASTER / LONGREACH / PRO RANGE

Model		Description	Material	Weight/Height	Base Plate Dimensions	Hole Centres/ Sizes	Cable and Plug	Use With
P6158		AM/FM LongReach Pro Series fold down mount	316 Grade Stainless Steel	1.16kg / 155mm	93 x 66mm	73 x 46mm Hole Diameter: 8mm	5m RG62 with car radio antenna plug	LongReach Pro Series AM/FM antennas
P6159		VHF/Cellular LongReach Pro Series fold down mount	316 Grade Stainless Steel	1.11kg / 155mm	93 x 66mm	73 x 46mm Hole Diameter: 8mm	5m RG58AU with FastFit jack and FastFit PL259 plug	LongReach Pro Series VHF and cellular antennas
P6166		VHF/Cellular LongReach Pro Series 1" pipe mount	Acetal Housing	265g	Fits P6078 and 1" pipe	3 x 6mm Hole on a diameter of 64mm	5m RG58AU with FastFit jack and FastFit PL259 plug	LongReach Pro Series VHF and cellular antennas
P6167		AM/FM LongReach Pro Series 1" pipe mount	Acetal Housing	300g	Fits P6078 and 1" pipe	3 x 6mm Hole on a diameter of 64mm	5m RG62 with car radio antenna plug	LongReach Pro Series AM/FM antennas
P6111		VHF/Cellular SeaMaster Pro Series fold down mount	Glass filled nylon - UV inhibited	375g/106mm	81 x 63mm	61 x 43mm Hole Diameter: 7mm	5m RG58AU with FastFit jack and FastFit PL259 plug	SeaMaster Pro Series VHF antennas and Heliflex VHF and cellular antennas
P6113		VHF/Cellular SeaMaster Pro Series rail mount	Glass filled nylon - UV inhibited	350g/61mm	Designed for 1" pipe		5m RG58AU with FastFit jack and FastFit PL259 plug	SeaMaster Pro Series VHF antennas and Heliflex VHF and cellular antennas

Antenna	Frequency	Radome	Ferrule	Antenna Type	Gain	"Marine Gain"	Typical VSWR	DC Meter Reading	Height
P6001	VHF 156-162 MHz	Stainless Steel	ABS	Half wave	3dBi	6dB	1.2:1	Open Circuit	1.0m
P6185	VHF 156-162 MHz	UltraGlass	Nylon	Half wave	3dBi	6dB	1.2:1	Open Circuit	1.0m
P6003	VHF 156-162 MHz	UltraGlass	Nylon	Half wave	3dBi	6dB	1.2:1	Open Circuit	1.8m
P6004	VHF 156-162 MHz	UltraGlass	Nylon	Half wave	3dBi	6dB	1.2:1	Open Circuit	2.5m
P6035	VHF 156-162 MHz	UltraGlass	Nylon	Half wave	3dBi	6dB	1.2:1	Open Circuit	1.0m
P6091	VHF 156-162 MHz	Stainless Steel	Nylon	Half wave	3dBi	6dB	1.2:1	Open Circuit	1.0m
P6087	VHF 156-162 MHz	Flexi PVC	Nylon	Quarter wave	3dBi	6dB	1.5:1	Open Circuit	0.6m
P6102	VHF 156-162 MHz	UltraGlass	Nylon	Half wave	3dBi	6dB	1.2:1	Open Circuit	2.5m
P6101	VHF 156-162 MHz	UltraGlass	Nylon	Half wave	3dBi	6dB	1.2:1	Open Circuit	1.8m
P6182	VHF 156-162 MHz	UltraGlass	Nylon	Half wave	3dBi	6dB	1.2:1	Open Circuit	1.0m
P6184	VHF 156-162 MHz	UltraGlass	Nylon	Half wave	3dBi	6dB	1.2:1	Open Circuit	1.0m
P6106	VHF 156-162 MHz	Nylon	Nylon	Helical	1.2dBi	2.4dB	1.7:1	Open Circuit	0.45m
P6053	VHF 156-162 MHz	UltraGlass	Stainless Steel	Half wave	3dBi	6dB	1.2:1	Open Circuit	1.8m
P6059	VHF 156-162 MHz	UltraGlass	Stainless Steel	Half wave	3dBi	6dB	1.2:1	Open Circuit	2.5m
P6051	VHF 156-162 MHz	UltraGlass	Stainless Steel	Colinear	6dBi	9dB	1.2:1	Open Circuit	2.5m
P2034	VHF 156-162 MHz	UltraGlass	Stainless Steel	Colinear	6dBi	9dB	1.2:1	Open Circuit	4.9m
P2035	VHF 156-162 MHz	UltraGlass	Stainless Steel	Colinear	6dBi	9dB	1.2:1	Open Circuit	7.3m
P6121	VHF 156-162 MHz	UltraGlass	Stainless Steel	Half wave	3dBi	6dB	1.2:1	Open Circuit	1.8m
P6123	VHF 156-162 MHz	UltraGlass	Stainless Steel	Half wave	3dBi	6dB	1.2:1	Open Circuit	2.5m
P6122	VHF 156-162 MHz	UltraGlass	Stainless Steel	Colinear	6dBi	9dB	1.2:1	Open Circuit	2.5m
P6025	VHF 156-162 MHz	UltraGlass	Stainless Steel	Half wave	3dBi	6dB	1.2:1	Open Circuit	1.5m
P6029	VHF 156-162 MHz	UltraGlass	Stainless Steel	Colinear	6dBi	9dB	1.2:1	Open Circuit	2.5m

Antenna	Frequency	Radome	Ferrule	Antenna Type	Gain	"Marine Gain"	Typical VSWR	DC Meter Reading	Height
P6031	VHF 156-162 MHz	Telescopic	ABS	Half wave	3dBi	6dB	1.2:1	Short Circuit	1.1m
P6081	VHF 156-162 MHz	Nylon	Nylon	Helical	1.2dBi	2.4dB	1.5:1	Open Circuit	0.3m
P6082	VHF 156-162 MHz	Telescopic	Nylon	Half wave	3dBi	6dB	1.2:1	Open Circuit	1.0m
P6401	Quad Band	UltraGlass	Stainless Steel	Colinear	3dBi	3dB	1.5:1	Open Circuit	1.0m
P6402	Quad Band	UltraGlass	Stainless Steel	Colinear	3dBi	3dB	1.5:1	Open Circuit	1.8m
P6403	Quad Band	UltraGlass	Stainless Steel	Colinear	3dBi	3dB	1.5:1	Open Circuit	2.5m
P6404	Quad Band	UltraGlass	Stainless Steel	Colinear	3dBi	3dB	1.5:1	Open Circuit	2.5m
P6046	AM/FM	UltraGlass	Nylon	Tuned Dipole				Open Circuit	1.8m
P6047	AM/FM	UltraGlass	Nylon	Tuned Dipole				Open Circuit	2.5m
P6107	AM/FM	Nylon	Nylon	Helical				Open Circuit	0.45m
P6183	AM/FM	UltraGlass	Nylon	Tuned Dipole				Open Circuit	1.0m
P6103	AM/FM	UltraGlass	Nylon	Tuned Dipole				Open Circuit	1.8m
P6104	AM/FM	UltraGlass	Nylon	Tuned Dipole				Open Circuit	2.5m
P6141	AM/FM	UltraGlass	Stainless Steel	Tuned Dipole				Open Circuit	1.8m
P6142	AM/FM	UltraGlass	Stainless Steel	Tuned Dipole				Open Circuit	2.5m
P6005	VHF 161-163 MHz	Stainless Steel	ABS	Half wave	3dBi	6dB	1.2:1	Open Circuit	1.0m
P6205	VHF 161-163 MHz	UltraGlass	Stainless Steel	Half wave	3dBi	6dB	1.2:1	Open Circuit	2.5m
P6105	VHF 161-163 MHz	UltraGlass	Nylon	Half wave	3dBi	6dB	1.2:1	Open Circuit	1.8m
P6305	VHF 161-163 MHz	UltraGlass	Stainless Steel	Half wave	3dBi	6dB	1.2:1	Open Circuit	2.5m

ULTRAGLASS FIBREGLASS

Our UltraGlass fibreglass is a true marine grade fibreglass, finished with a two-pot polyurethane coating which provides unparalleled UV protection to keep the antenna looking good for years. In comparison, the wall thickness and superior finish of our fibreglass is clearly ahead of our competitors'.

FASTFIT CONNECTOR SYSTEM

The Pacific Aerials FastFit connector system makes fitting plugs easy. Our VHF and cellular antennas are supplied with factory fitted FastFit jacks. The FastFit jack adds only a couple of millimetres to the cable diameter (as shown) so it can still be run easily through small holes. When the cable run is completed, the FastFit plug supplied with the antenna is simply screwed onto the jack, making a sound electrical connection without the need for cable cutting, trimming, crimping or soldering. No tools required. Our marine antennas are truly plug and play.

PACIFIC AERIALS PRO SERIES ADVANTAGE

- *Unbeatable convenience*
- *World's first removable marine antenna*
- *FastFit plug makes installation easy*
- *Outstanding performance*

ANTENNA INSTALLATION FOR MAXIMUM PERFORMANCE

To maximise antenna performance, install the antenna as high as possible with a clear all-round view. The higher the antenna is above the water, the greater its range will be.

Avoid installing the antenna in positions where it will be shielded by the boat's structure, or by the person driving the boat.

When installing more than one antenna, site them as far away from each other as possible.

The installation of cellular antennas requires special consideration, as the losses in the cable can quickly negate the advantage of height.

RANGE

For maximum range, get the top of the antenna as high as possible, either by selecting the biggest antenna that is practical for the boat, or by installing a smaller antenna at the highest point on the boat.

The formula below can be used to calculate the theoretical range between a receiving antenna and a transmitting antenna. Other factors will affect the achievable range.

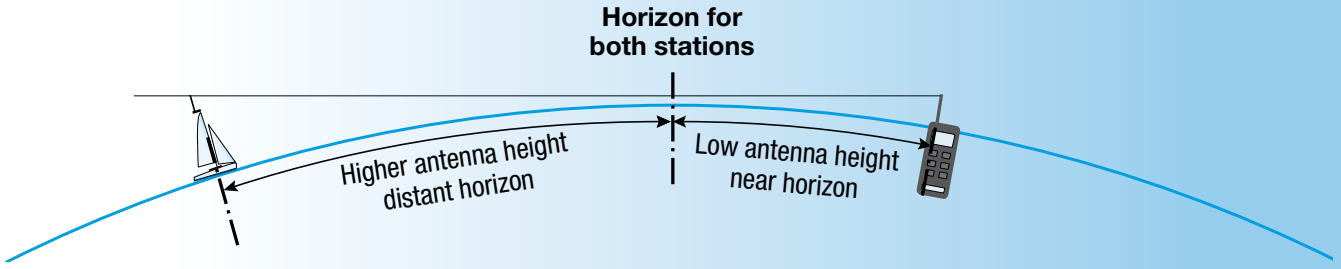
RANGE (nautical miles) = $2.08 \times \sqrt{\text{ANTENNA HEIGHT}}$ (metres)

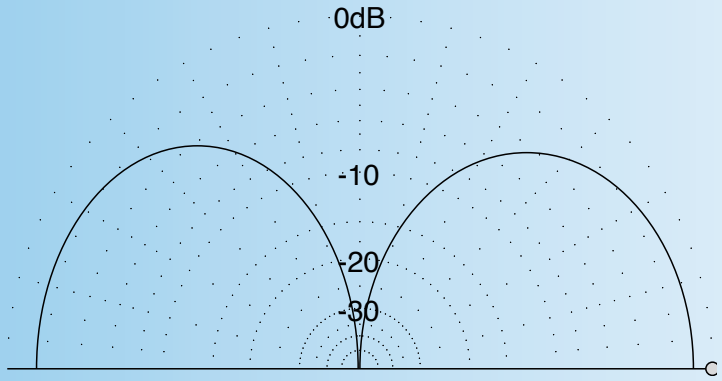
Perform the calculation for BOTH vessels and then add the results for the range between them.

LINE OF SIGHT

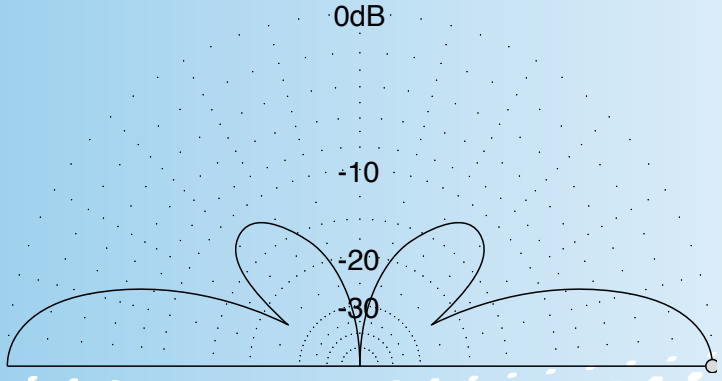
VHF, AM/FM and cellular communications require a “line of sight” between the transmitting and receiving antennas. If the receiving antenna can “see” the transmitting antenna then the signal will be received. And in exactly the same way as you climb to the top of a hill to see further, the higher up you place an antenna, the further it can transmit and receive.

How far the antenna can “see” from any particular height is governed by the curvature of the earth; at a certain distance the two antennas will no longer have a “line of sight” between them and the signal will be lost.





Radiation Pattern for a half wave antenna. Note the full lobes, allowing the antenna to be at an angle on a heeled yacht, and still contact other stations.



Radiation Pattern for a marine colinear antenna. The lobes have been flattened out, pushing the signal further, and requiring a fairly stable platform for the antenna, making colinear antennas suitable for boats over 30'.

GAIN

Gain measures how much of the energy sent from the radio to the antenna is concentrated in a specific direction, and in which direction the antenna has the greatest "reach" when receiving a signal.

The gain of the antenna is stated in decibels (dB) and measures the increase in field strength of the antenna when compared with a reference antenna, which can be either an isotropic antenna (dBi) or a dipole antenna (dBd). Comparisons can be made between dBd and dBi as follows: dBd=dBi-2.15

Some manufacturers use their own "Marine Gain", stated as plain "dB", which is not a true measurement, and simply allows them to put higher gain figures alongside their antennas. This can mislead customers into thinking that they are getting more gain for their money.

To allow comparisons of our antennas with antennas which state performance in "Marine Gain" we list both true gain in dBi and "Marine Gain" in dB.

CABLE BASICS

- Do not kink cable or fit it tightly around obstructions. Kinks and sharp bends in the cable can lead to splits in the jacket and shield as well as internal damage.
- If a join in the cable cannot be avoided, ensure high quality RF connectors are used and fitted correctly. Seal the joint with self-amalgamating tape or similar to ensure it is watertight.
- If antenna performance degrades over time, check the cable for damage and incorrectly fitted connectors.
- Some brands of VHF radio specify that a minimum of 1m separation must be kept between the radio and the antenna.
- Any excess cable should be coiled loosely. Tight coils will impair performance

ANTENNA CAP COLOURS

Frequency	Cap Colour
VHF, HF/SSB	White
AM/FM	Red
AIS	Orange
Quad	Black
Specials	Green

Along with descriptions and pictures, we have listed the technical specifications for each antenna.
The following glossary explains the terms used:

Frequency — *The frequency range, in MegaHertz (MHz), that the antenna is tuned to cover.*

Antenna Type — *The electrical design of the antenna.*

Gain — *The gain figure that can be measured on the antenna. A full explanation of gain is on page 29.*

"Marine Gain" — *The gain figures that some manufacturers use to market their antennas. We have included these figures to allow "apples with apples" comparisons.*

VSWR — *Voltage Standing Wave Ratio – a measurement of how efficiently the antenna is working at the frequency being tested. Our antennas typically measure 1.2:1 or better, which is equivalent to 99% efficiency.*

DC Meter Reading — *The reading that a DC meter will give when a test is done between the centre and the outer of the coax. The antennas work on RF, not DC.*

PACIFIC AERIALS

11b Ra Ora Drive
East Tamaki
Auckland 2013
New Zealand

PO Box 38421
Howick
Auckland 2145
New Zealand

T: +64-9 253 9450
F: +64-9 271 6483
E: info@pacificaerials.com
W: pacificaerials.com