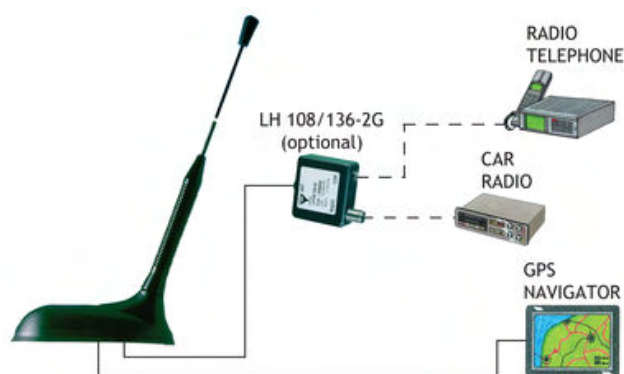


## GPS-C 2R/FM/...

GPS Antenna with a  $1/4 \lambda$  Whip with Shock Spring for the 160 MHz and FM Bands

### DESCRIPTION

- GPS antenna for fixed installations.
- External antenna whip mounted on the GPS-Combi mount.
- Full hemispherical coverage.
- Built-in high gain, low noise amplifier.
- 5 V supply voltage (3 V respectively 12 V available on request).
- DC supply via RF-connector.
- Black-chromed, conical stainless steel whip.



### ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
GPS-C 2R/FM/...	132000062
LH 108/136-2G (optional)	200000762

Can also be supplied factory-cut for the required frequency (between 144 - 175 MHz).

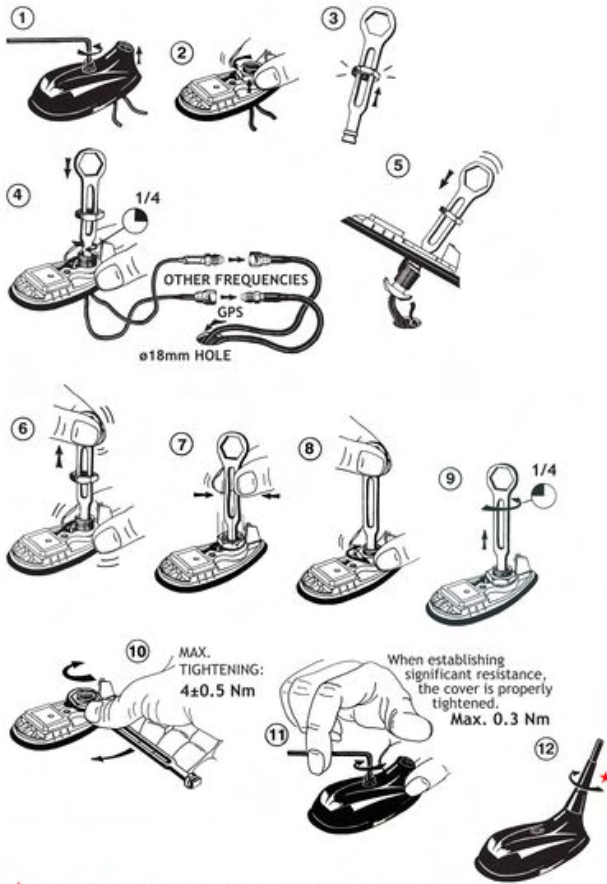
### SPECIFICATIONS FOR WHIP

ELECTRICAL	
MODEL	GPS-C 2R/FM/...
ANTENNA TYPE	$1/4 \lambda$ mobile antenna
FREQUENCY	Tunable by cutting within: 144–175 MHz FM band (88–108 MHz)
IMPEDANCE	Nom. 50 $\Omega$
POLARIZATION	Vertical
GAIN	Approx. 0 dB (acc. to EIA RS-329-1)
BANDWIDTH	2 m: $\geq 20$ MHz @ SWR $\leq 2.0$
SWR	$\leq 1.3$ @ f.res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	<b>Whip:</b> Black-chromed, conical stainless steel Black-chromed brass <b>Spring:</b> Black-chromed, stainless steel
COLOUR	Black
HEIGHT	Approx. 450 mm
WEIGHT	Approx. 50 g
MOUNTING	On the GPS-Combi mount

### SPECIFICATIONS FOR GPS-COMBI MOUNT

ELECTRICAL General specifications	
MODEL	GPS-COMBI MOUNT
ANTENNA TYPE	Active patch antenna
FREQUENCY	1575 MHz
IMPEDANCE	Nom. 50 $\Omega$
POLARIZATION	Circular right-hand
COVERAGE	Hemispherical
GAIN	28 dBic in axial direction (typ.)
CROSS-POLARIZATION ATT.	> 10 dB (typ.)
SELECTIVITY	> 45 dB down @ $\pm 45$ MHz
BUILT-IN AMPLIFIER	
GAIN	> 30 dB (typ.)
NOISE FIGURE	< 1 dB (typ.)
P 1dB	Approx. +7 dBm
SWR (output)	$\leq 2.0$
SUPPLY VOLTAGE	5 $\pm$ 0.5 VDC (3 V resp. 12 V on request)
CURRENT CONSUMPTION	Approx. 25 mA
MECHANICAL (only for the GPS part)	
MATERIALS	Cu-nite brass Stainless steel Reinforced thermoplastic
ANTENNA COLOUR	Black
TEMP. RANGE	-35° C $\rightarrow$ +75° C
CONNECTOR	FME (male for GPS) + FME (female for mobile antenna)
RECOMMENDED INSTALL. TORQUE	4 $\pm$ 0.5 Nm
DIMENSIONS (H x L)	Approx. 30 x 89 mm
ROOF THICKNESS	Max. 2.0 mm
WEIGHT	Approx. 114 g
MOUNTING	$\varnothing 18$ mm dia. hole (For roof thickness 2.5 mm, mounting hole should be $\varnothing 18.5$ mm dia.) Tools for mounting included

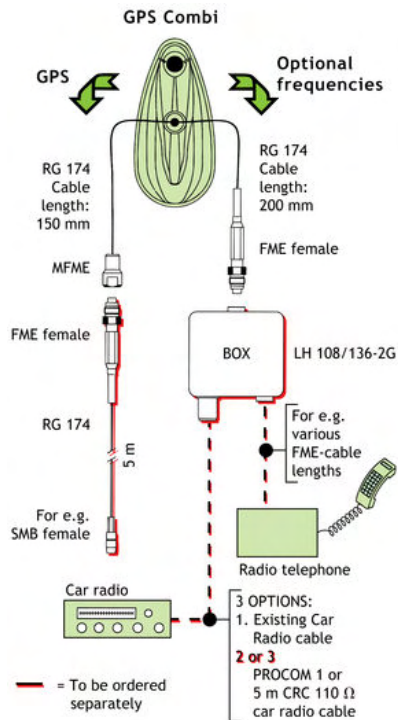
## MOUNTING INSTRUCTIONS



★ The whip should always be dismantled during car wash.

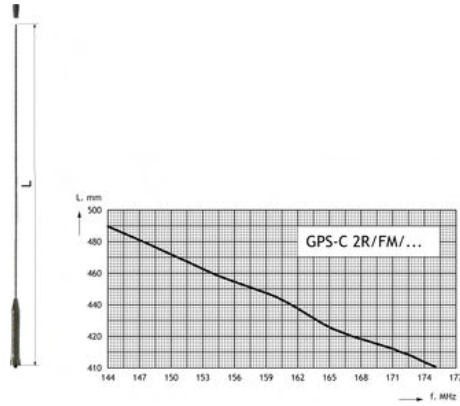
Do not use sealer on rubber gasket or other places.

## CABLE MOUNTING

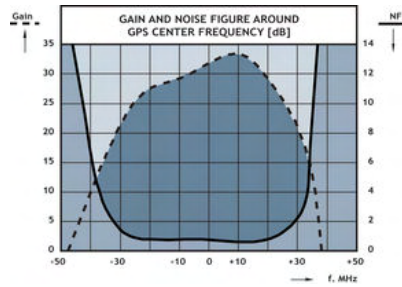
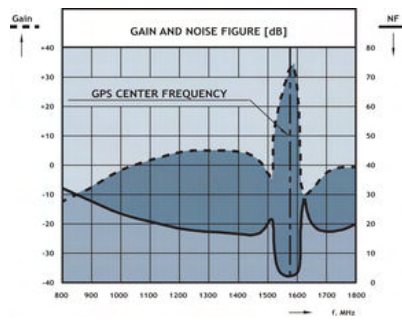


## TUNING

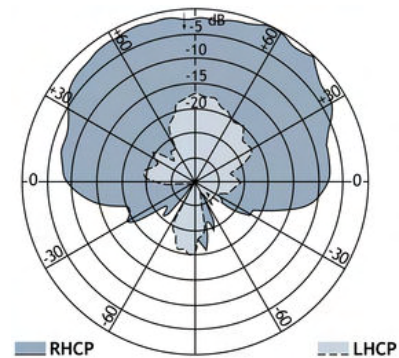
The antenna should always be tuned using an SWR-meter. The cutting diagram below serves as a guide for this procedure.



## TYPICAL RESPONSE CURVE



## VERTICAL RADIATION PATTERN



PROCOM A/S reserve the right to amend specifications without prior notice.

10/11/2010