

MU 1-X/...

Unity Gain $1/4 \lambda$ Mobile Antenna for the 450 MHz Band

PROCOM

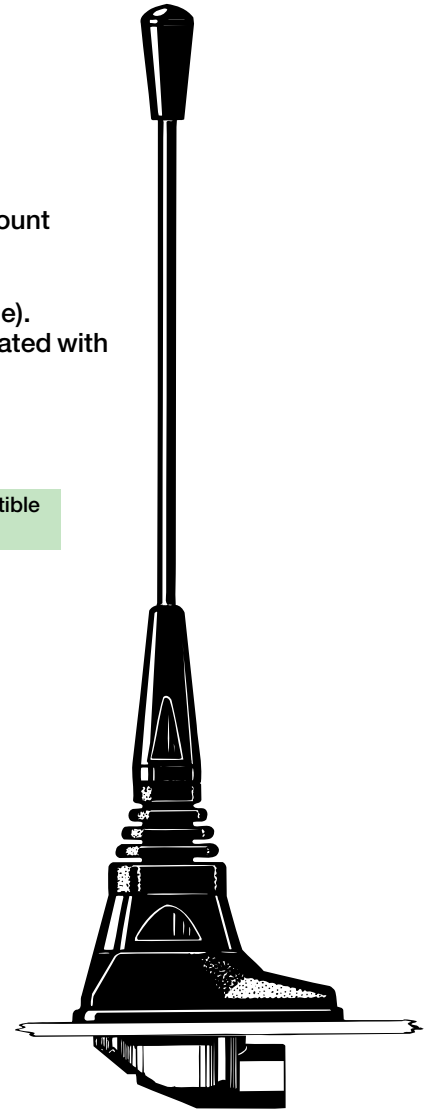
DESCRIPTION:

- ★ Black-chromed stainless steel whip.
- ★ Type MU 1-X/s covers 370–410 MHz
Type MU 1-X/l covers 406–440 MHz
Type MU 1-X/h covers 430–470 MHz
– no tuning required.
- ★ Stainless steel X-mount with M6-thread whip-fastening system.
- ★ Simple mounting exclusively with access from the outside.
- ★ Models available with X-mount (oblong), CX-mount (circular) and MM-mount (magnetic).
- ★ Choice between two connection principles:
 - ★ X-mount, MM-mount : FME-connection (supplied without cable).
 - ★ XP4-mount : Permanently attached 4 m cable terminated with FME-connector.

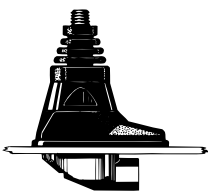
SPECIFICATIONS:

ELECTRICAL	
ANTENNA TYPE	$1/4 \lambda$ mobile whip antenna
FREQUENCY	450 MHz-band covered by three models
IMPEDANCE	Nom. 50 Ω
POLARISATION	Vertical
GAIN	0 dB (acc. to EIA RS-329)
BANDWIDTH	≥ 45 MHz at SWR ≤ 1.5
SWR	≤ 1.2 at f. res.
MAX. POWER	100 watt
MECHANICAL	
MATERIALS	Whip: Stainless steel and brass, black-chromed Mount: Black-chromed brass Environment-proof plastics Stainless steel
RECOMMENDED INSTALLATION TORQUE	4 ± 1 Nm
COLOUR	Black
HEIGHT	Approx. 180 mm
WEIGHT	X-version : Approx. 60 g XP4-version : Approx. 200 g MM-version : Approx. 268 g
MOUNTING	18 mm dia. hole

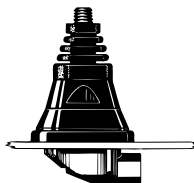
All whips are compatible with all mounts.



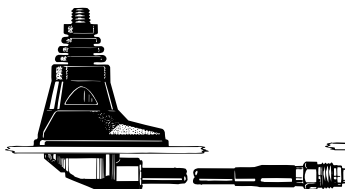
X-Mount



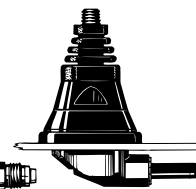
CX-Mount



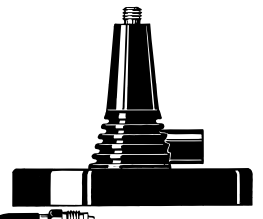
XP4-Mount



CXP4-Mount



MM-Mount



ORDERING DESIGNATIONS:

FREQUENCY RANGE / MOUNT VERSION	X-mount (oblong) with FME-system	CX-mount (circular) with FME-system	XP4-mount (oblong) with 4 m cable + FME-connector	CXP4-mount (circular) with 4 m cable + FME-connector	MM-mount (magnetic) with FME-system
370–410 MHz	MU 1-X/s	MU 1-CX/s	MU 1-XP4/s	MU 1-CXP4/s	MU 1-MM/s
406–440 MHz	MU 1-X/l	MU 1-CX/l	MU 1-XP4/l	MU 1-CXP4/l	MU 1-MM/l
430–470 MHz	MU 1-X/h	MU 1-CX/h	MU 1-XP4/h	MU 1-CXP4/h	MU 1-MM/h

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

MU 1-X/... Installation

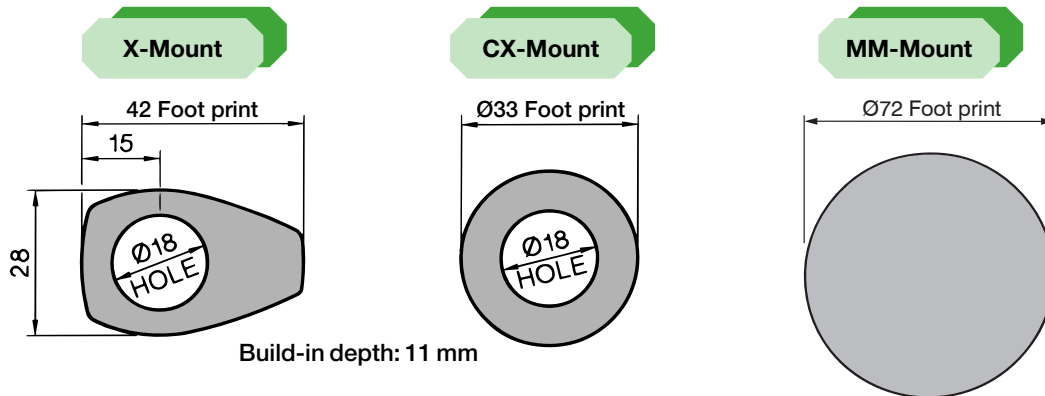


This antenna should always be mounted on the car roof to ensure best omnidirectional coverage. Mounting can take place exclusively with access from the outside when drilling an 18 mm dia. hole. Mounting can take place from the inside by drilling a 14 mm dia. hole. When mounting in a 14 mm dia. hole, remove the bottom plastic ring of the packing gasket with a sharp cutter.

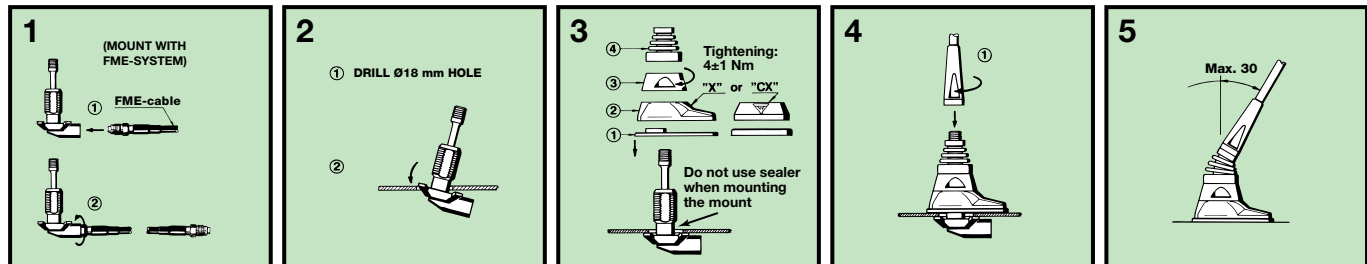
When cleaning the car in car-washing machines, remove the whip using a spanner, size 9 mm. After wash, refit the whip and tighten it lightly with the spanner.

The MiniMag (abbreviated: MM) is a small, light-weight magnetic mount with a high attaching effect. A silicone layer applied to the contact surface protects the car roof and ensures maximum friction.

1. INSTALLATION DIMENSIONS:



2. INSTALLATION STEPS:



3. TUNING/MODEL CONVERSION:

The antenna is delivered factory-tuned and requires no further tuning.

To convert an MU 1-X/s model into an MU 1-X/l model, cut off 15 mm of the top end of the whip.

To convert an MU 1-X/l model into an MU 1-X/h model, cut off 11 mm of the top end of the whip.

PLEASE NOTE:

For safety reasons:

1. When using the MU 1-MM, car speed must not exceed 140 km/h.
2. If operating the MM-mount with other whips, whip length must never exceed 320 mm, and utilizing this maximum length, car speed must not exceed 115 km/h.