TYPICAL S.W.R. RESPONSE TYPICAL S.W.R. RESPONSE S.W.R. Moda: CX 140 U/V Hic F-02-034 S.W.R. Model: CX 144 U/V Hic F-02-035 2.8 2.8 2.6 2.6 2.2 2.2 2.0 1.B 1.B 1.6 1.4 1.0 139.5 142 144.5 143 146 f.(MHz) f.(MHz) S.W.R. Model: CX 192 U/V ΠIe - Γ C2 037 S.W.R. Model: CX 148 U/V File F €2 036 Вā 2.6 2.6 2.6 2.4 2.2 2.2 2.0 2.0 1.B 1.B 1.6 1.6 1.4 1.2 150 153 154 157 f.(MHz) f.(MHz) S.W.R. Model: CX 156 U/V File F €2 038 S.W.R. Model: CX 160 U/V file | Γ €2 039 3.0 2.6 2.6 2.6 2.6 2.4 2.4 2.2 2.0 1.B 1.6 1.4 1.2 162 155 158 151 159 155 f.(MHz) f.(MHz) S.W.R. Middl: CX 164 U/V File F €2 040 S.W.R. Model: CX 168 U/V File F €2 041 3.0 2.6 Ba 2.6 2.6 2.4 2.6 2.4 2.2 2.2 2.0 2.0 1.6 1.2 170 163 166 159 f.(MHz) f.(MHz) TYPICAL RADIATION PATTERN in E-plane at mid-band S.W.R. Middl: CX 172 U/V Πie - Γ 02 042 Scole: linear 3.0 2.6 2.6 2.4 2.2 2.0 174 177.5 171.5 f.(MHz) © Copyright SIRIO antenne - Technical Data are subjected to change - Printed in ITALY - Rev. 02/12/2005 - Cod. ID062

CX 2m series

VHF Base Station Antennas 140...176 MHz



Installation Manual

DESCRIPTION

 $3/4 \lambda$ VHF antenna for base station service made of high quality materials to get the best performance and the maximum efficiency. It is completely manufactured with aluminium tubes and nylon for its great robustness and it is supplied with a solid steel bracket for an easy and safe installation. Its Gamma Match feed makes it earthed for a perfect protection against the static discharges. In the mentioned range of frequencies, adjustments are not required. Simple and strong it is particurly recommended for a professional use.

SPECIFICATIONS

Electrical Data

Type 3/4 λ Coax. J-Pole

Frequency Range @ SWR ≤ 1.5: CX 140 U/N 140 - 144 MHz

CX 144 U/N 144 - 148 MHz CX 148 U/N 148 - 152 MHz CX 152 U/N 152 - 156 MHz

CX 156 U/N 156 - 160 MHz CX 160 U/N 160 - 164 MHz CX 164 U/N 164 - 168 MHz CX 168 U/N 168 - 172 MHz

CX 172 U/N 172 - 176 MHz

50 Ω Unbalanced Impedance Radiation (H-plane) 360° Omnidirectional Radiation (E-plane) Beamwidth at -3 dB = 68°

Radiation angle deg.

Polarization Vertical

Gain 2 dBd - 4.15 dBi

Bandwidth @ SWR 2.0 $CX 140 \ge 6.9 \text{ MHz}, CX 144 \ge 7.2 \text{ MHz}, CX 148 \ge 7.5 \text{ MHz}$

 $CX 152 \ge 7.7 \text{ MHz}, CX 156 \ge 8.0 \text{ MHz}, CX 160 \ge 8.3 \text{ MHz}$

 $CX 164 \ge 8.3 \text{ MHz}, CX 168 \ge 8.9 \text{ MHz}, CX 172 \ge 9.2 \text{ MHz}$

SWR @ res. freq. ≤ 1.2 Max Power 250 Watts

Feed System / Position Gamma Match / Base Connector CX series U: UHF-female

CX series N: N-female

Mechanical Data

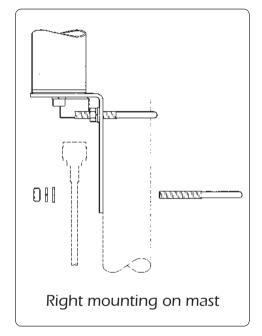
Materials Nylon, Brass, Steel, Aluminium Wind Load / Resistance 51 N at 150 Km/h / 180 Km/h

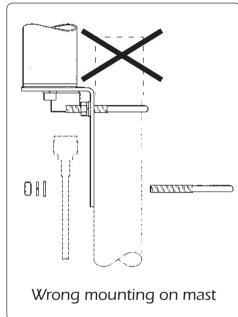
Wind Surface 0.04 m^2

Height (approx.) from 1370 mm to 1660 mm

Weight (approx.) 750 gr Mounting Mast Ø 35-42 mm

MOUNTING INSTRUCTIONS





HARDWARE PARTS LIST	
Oty	Descriptions
n.2	U-bolts
n.4	M6 flat washer
n.4	M6 lock washer
n.4	M6 hex nut

