

NETWORK DIAGRAM



DESIGNED BY:

GEM RAYMUND L. CASTRO

PROFESSIONAL ELECTRONICS ENGINEER

PRC NO: 1576 TIN: 281035059 PTR NO: 7705349 ISSUED ON: MAY 27, 2025 PROJECT NAME:

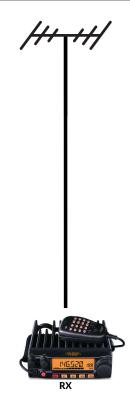
SUPPLY, DELIVERY, INSTALLATION & COMMISSIONING OF BASE RADIO

ISSUED ON: MAY 27, 2025 LOCATION: BRGY. CATMONAN, MUNICIPALITY OF CALAPE ISSUED AT: TUBIGON, BOHOL COORDINATES: 9.887501463053662, 123.88057826716334

APPROVED BY:

HON. ELEORA C. SY PUNONG BARANGAY SHEET NO:

1 2



CIGNUS F23H BASE ANTENNA (TX/RX)

FREQUENCY RANGE: 137 - 174 WITH CUTTING CHART TO MATCH THE IMPEDANCE OF THE ASSIGNED VHF FREQEUENCY



CIGNUS 828MINI VHF STATION BASE RX & TX

POWER: 25 WATTS FREQUENCY: 137 - 174 Mhz NTC TYPE APPROVED



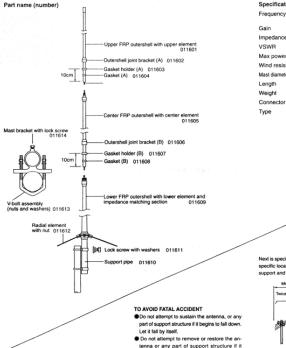
RADIO POWER SUPPLY

OUTPUT VOLTAGE: 13.7V MAX CURRENT: 30A **BATTERY CHARGER**



DEEP CYCLE BATTERY

CAPACITY: 100AH **VOLTAGE RATING: 12V**



tenna or any part of support structure if it touches a electric power line by chance. Let it be as it is, do not touch it, and call your local electric power company immediately

IN CASE OF AN ACCIDENT

- Do not touch a person or an animal who is or seems to be in contact with the antenna or any support structure which is fallen on a live electric power line. Touching one may lead you to
- Do not attempt to separate a person or an animal who is or seems to be in contact with the ntenna or any support structure which is fallen on a live electric power line by yourself. Call or have someone call a police officer, ambulance, docotor immdeiately

ANTENNA INSTALLATION PRECAUTIONS

To determine antenna installation location, there thing is antenna propagation direction to specific target stations. As to whether there is any obstacles such as tall buildings on the line of sight. Wind resistance 40m/sec (90Mph) Mast diameter accepted: 30 to 62mm

Specifications:

: 2kg Weight Connector : UHF female

: 5/8 wave three-element

5.2m

: 7.8dB : 50ohms

: Less than 1.5:1

: 350W Max



Next is specific installation location. As to whether specific location is adequate in terms of ante support and surronuding safety.



- Do not attment to install the antenna by your self if you do not have any experience in installing base station antenna. Ask your experienced friends or professional for help.
- Do not attempt to install the antenna at a location where does not have enough distance from nearby electric power lines. It is advised to install the antenna at least twice of total antenna height from nearby electric power lines.
- Do not install the antenna on any type of tower pole or telescopic mast which exceeds 30 feet high, if you do not have enough experience in installing the antenna on that kind of location. Ask your experienced friends or professional
- On not use more than 1/10 section if you install the antenna on iron plumber's pipe. Attach guy wire if multiple pipes are used to in-

VHF BASE RADIO SINGLE LINE DIAGRAM





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FOR YOUR SAFETY

ing assembling the antenna.

from any electric power lines.

not grounded properly.

Read the following safety precautions before start-

Assemble the antenna on the ground or wide

and flat place such as on balcony before instal-

Do not assemble or install the antenna on a

place where you can not have enough distance

Do not attempt to install the antenna only by

Installing the antenna alone on the roof may lead

you dangerous accident. Always ask your friends for help installing the antenna.

 Do not use iron or aluminum ladder at a reachable distance from any electric power lines.

Do not install the antenna on a mast which is

Do not have your family members or friends

touch or come close to the antenna, unless they have realized its potential danger.

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VHF ANTENNA MOUNTING PROCEDURES