

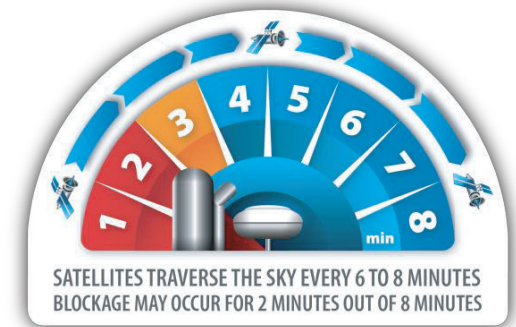


ASE - CIT02 Installation Manual

OVERVIEW

Prior to beginning the installation of the Citadel system:

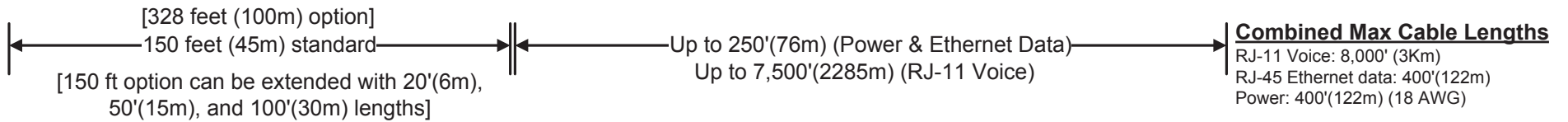
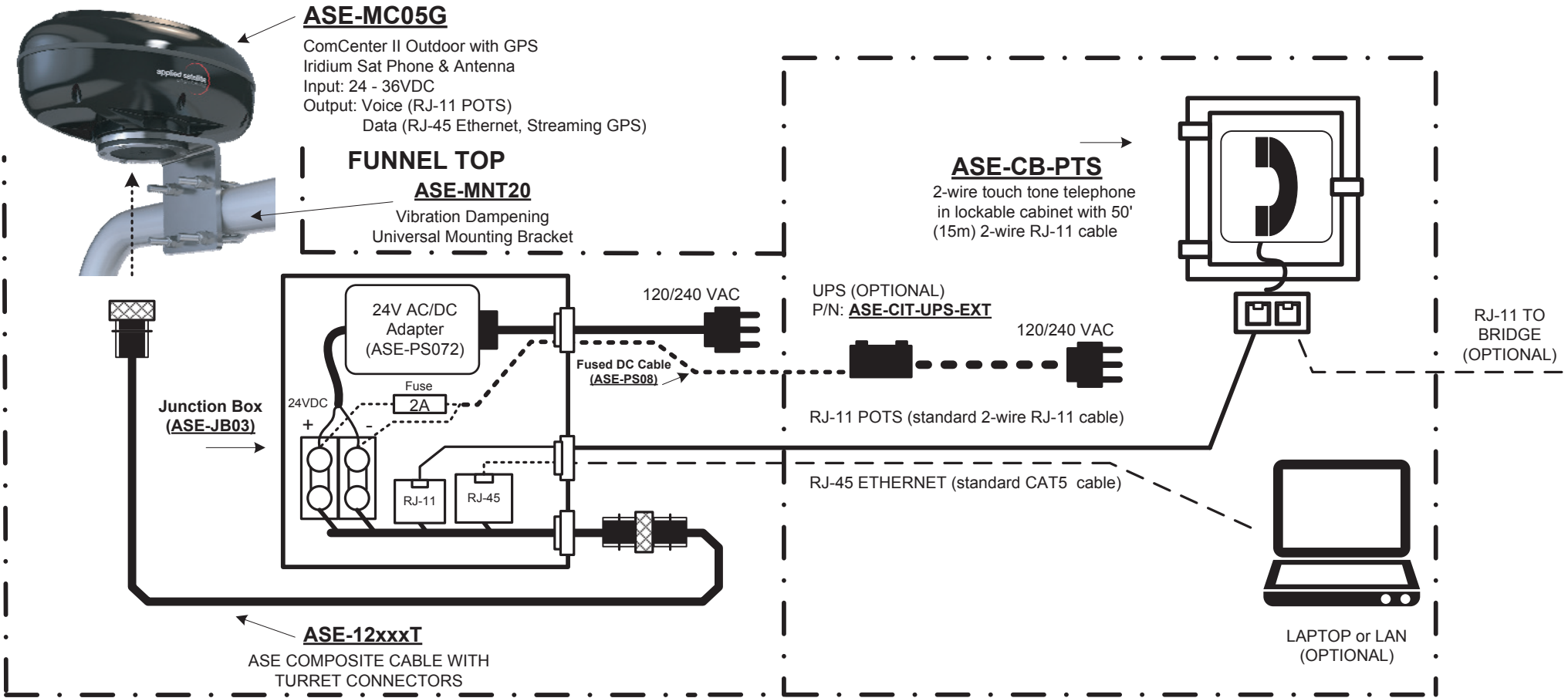
- Take a quick inventory and make sure that you have all of the necessary components.
- Survey your antenna/ADU location with an awareness to 360 degree line-of-site to horizon and maximum temperature 70° Celsius.
- Plot your cable run and verify lengths, conduit and hole diameters, and connector ends (female connects to ADU)
- Determine location of Junction Box and POTS cabinet.



SYSTEM COMPONENTS

1	ASE-MC05G	1	ComCenter II Outdoor transceiver with GPS and integrated antenna
2	ASE-MNT20	1	Universal Mounting Bracket with vibration dampening
3	ASE-12150T	1	150' (45m) Composite Cable (ASE-CIT01 package)
4	ASE-12328T	1	328' (100m) Composite Cable (ASE-CIT02-EXT package)
5	ASE-JB03	1	Junction Box for ADU cable with RJ-11, RJ-45, and power (optionally includes AC/DC adapter)
6	ASE-PS08	1	Fused DC Cable - if bypassing the AC/DC adapter
7	ASE-CB-POTS	1	POTS Phone in Lockable Cabinet with 50' (15M) RJ-11 cable
8	ASE-CB-UPS EXT	1	Uninterrupted Power Supply (UPS) battery backup (optional)

CITADEL INSTALLATION and WIRING DIAGRAM



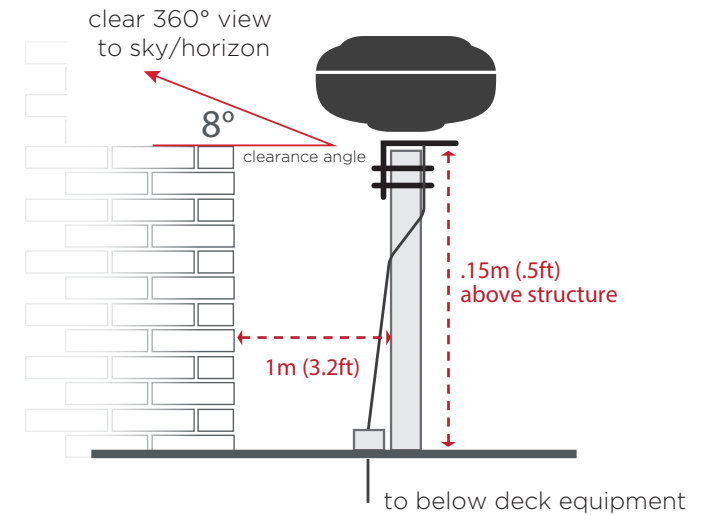
ENGINE ROOM (CITADEL SAFE ROOM)

ABOVE DECK UNIT (ADU)

The Above Deck Unit (MC05G) has the antenna and tranceiver all contained in one unit.

THERE ARE SOME CRITICAL INSTALLATION DETAILS BELOW. PLEASE REVIEW CAREFULLY.

- 1) Although a funnel installation is recommended as a stealth solution, this device is not suitable for all funnels. Be sure to install in a location that does not exceed 70° C or damage can occur.
- 2) The ADU needs 360° line-of-site to 8° off horizon to be in constant contact with the satellites. Locate the centerline of the ADU at the same height as the retaining wall and 1 M inward.
- 3) The Universal Pipe Mount supports the installation of horizontal or vertical pipes of 1" to 2" in diameter. Mount the antenna with the "seam" parallel with the horizon and keep blockage to a minimum. Once you have identified your preferred location of antenna installation, adjust the V-Bolts to accommodate either a vertical or horizontal placement.



Cable Routing and Attachment to the Antenna

Choose the best pathway and route the cable from the antenna to the Citadel location. If extensions are used, connect these as needed. Care must be taken when routing the cable. The max connector diameter needs to be considered when passing through holes or running in conduit. The max bend radius is important to consider to prevent damaging internal wires.

Cable Diameter	.325" (8.26mm)
Max Connector Size	1.25" (31.75mm)
Max Bend Radius	.98" (25mm)
Max Temperature	105°C

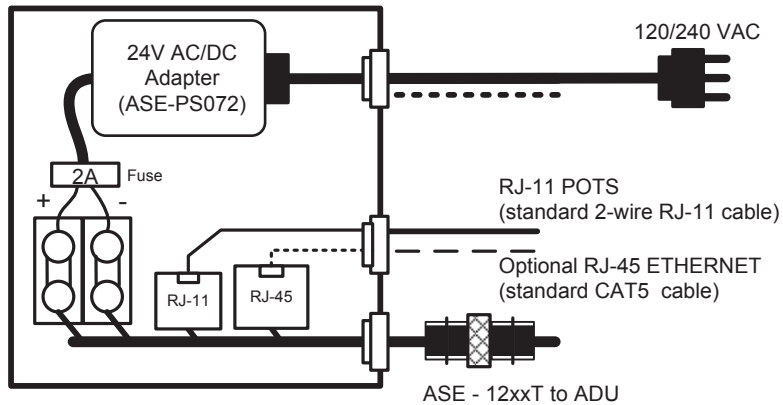


JUNCTION BOX

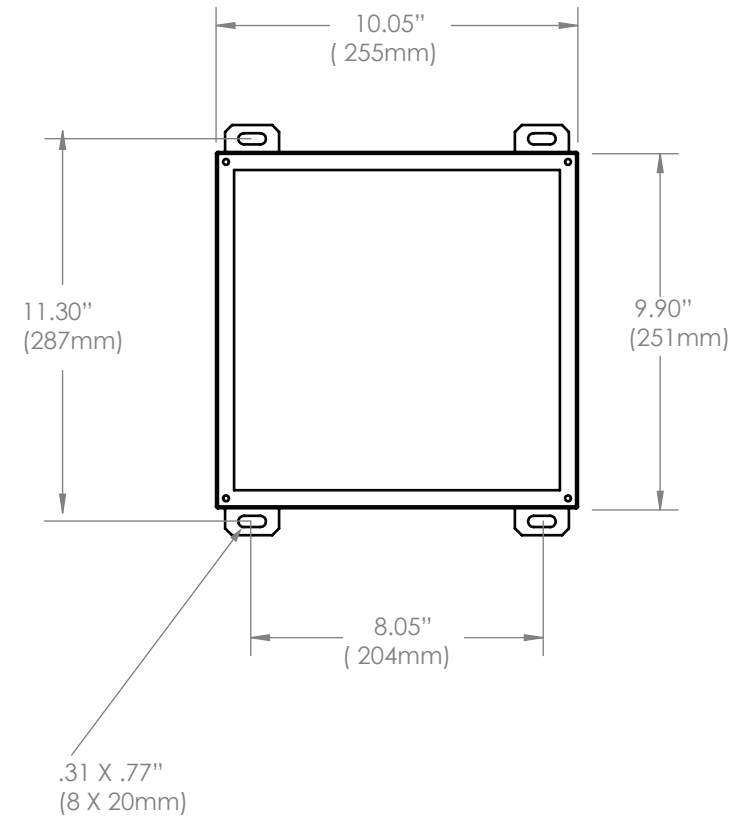
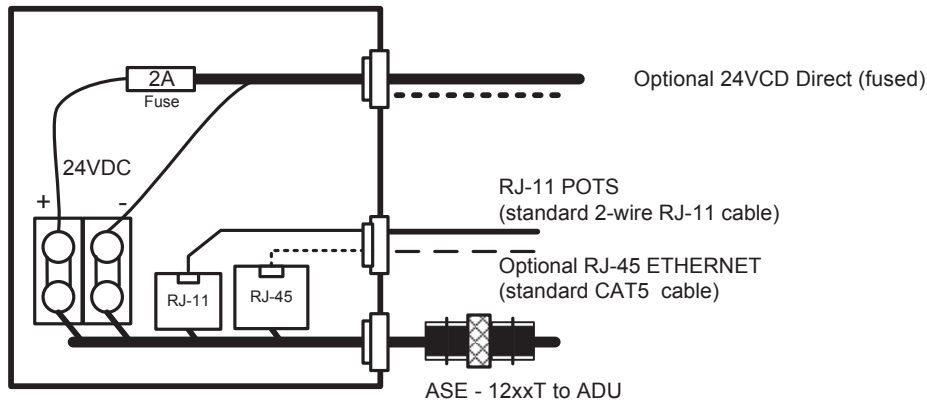
The junction box provides the termination point for the ADU cable. Terminated inside the junction box is POTS (2-wire RJ-11), ethernet (CAT5), and power (24VDC)

Optionally, a 24VDC AC/DC converter can be located in the junction box.

OPTION 1: Hook-up from AC



OPTION 2: Hook-up from DC (UPS)



POTS CABINET

The POTS Cabinet connects to the POTS (2-wire RJ-11 port) in the Junction Box.

The POTS Cabinet ships with 50ft (15M) of 2-wire pre-connected to the POTS Cabinet. This 2-wire is terminated with an RJ-11 header and plugs directly into the RJ-11 port in the Junction Box.

