

## CMCE

General Installation Guide



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### CMCE

#### **DEVICE**

The CMCE line of lightning suppressors are classified as a 'Variable Electric Field Balancer' and are considered to be non-conventional lightning protection devices.

#### **PLACEMENT**

One single CMCE-120 will provide a circular-shaped coverage area with a radius of 120M from the center of the device. The CMCE-55 provides a 55 meter coverage the CMCE-25 provides a 25 meter coverage.

#### INSTALLATION

A typical installation requires a support mast consisting of a 1.5" Galvanized Steel pipe of 6'. The CMCE must be the highest point on any given structure, ideally 6' above the highest point. If there are FAA or other height restrictions, please contact Capitol Electronics to approve a lesser height.

The mast can be supported by attaching it to a structure, such as a wall or existing pole. In some cases when center roof installations are required, a tripod or roof bracket can be used.

#### GROUNDING

The CMCE should be grounded using a 1/0 braided copper wire (bare or jacketed). Higher-grade wire should be used in lightning-heavy areas or structures exceeding 75'. The ground wire should take the most direct and downward path to the ground as possible. Once to ground, the ground wire should extend to grounding system that is either existing (bus bar, panel, ground loop, etc.) or one that is created. If creating a grounding system, you can create an inline or Delta system. The number of overall rods required will depend on the geographical location, soil quality, moisture level, and other factors. The overall resistance of the completed ground system should be less than 5 Ohms.

