

# Upgrading a CATV Amplifier from a Line-Powered Source to a 115 V AC-Powered Source Installation Instructions

## Overview

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### Audience

These installation instructions are intended for all cable system operators or installers who want to upgrade their existing CATV Amplifier from a line-powered line extender to a 115 V AC-powered line extender. This document will reference a GMLE as an example. The Kit will support all CATV Amplifiers that draw less than 5A.

### Introduction

A CATV Amplifier can be upgraded from a line-powered input source to a 115 V AC-powered source by installing a QuantumPower MDU Power Pack upgrade kit, part number QP-MDU-KIT.

### Power Pack Upgrade Kit Contents

Part	Description
Wall Mount Bracket	Used to mount the GM SA or LE to an indoor wall.
AC Transformer Module	A transformer with RF immunity filter down and mounting bracket converts 115VAC to ~ 56VAC
Power Inserter (2GHz)	Standard, MDU-style CATV power inserter (5A max. rating)
Coax Cable w/ F-Conn	Two pieces of 3-foot, F to F (male) coax cable
Grounding Wire	One 6 foot 16-gauge solid wire. One end has 3 inches of stripped wire. The other end has a U-shaped wire crimp attached.

### Tools Required

Before you begin, make sure you have the following tools.

- Torque wrench with 1/2-inch socket
- Phillips-head torque screwdriver

## Installing the Upgrade Kit, Continued

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### Preparing for Installation

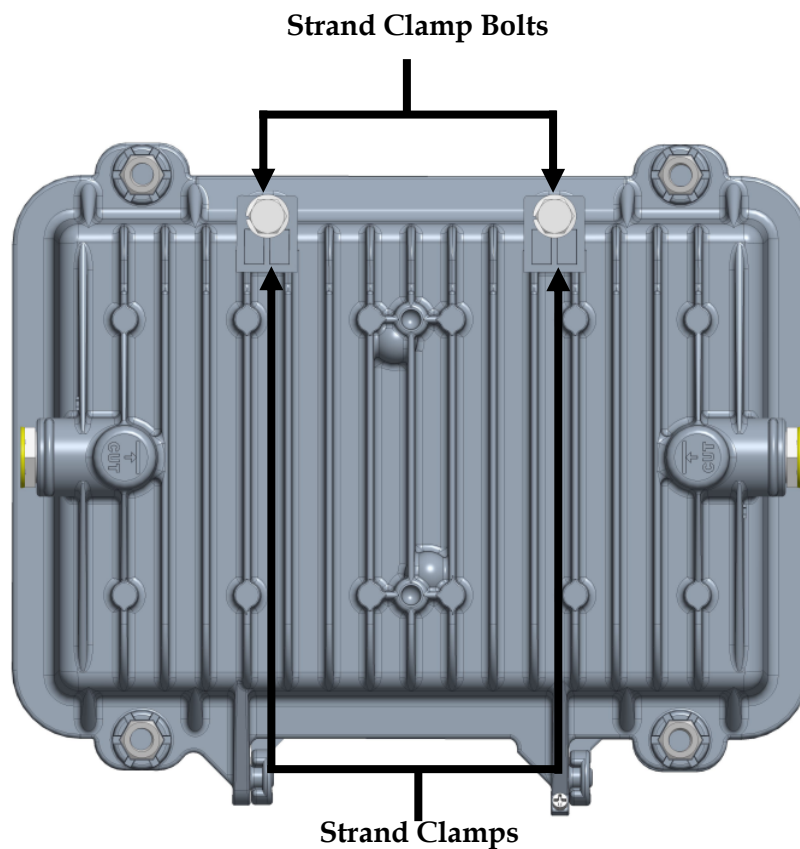
Follow the steps below to prepare the GainMaker Line Extender for 115 V AC power.

### Connect RF Cables

Use one of the included RF cables to connect the AC Transformer Module output to the AC input of the power inserter. Use the second RF cable to connect the AC/RF output of the power inserter to the RF input of the QB Line Extender.

### Installing the Wall Mount Bracket to the QB Line Extender housing

1. Remove the strand clamp bolts from the strand clamps and set the bolts and strand clamps aside.

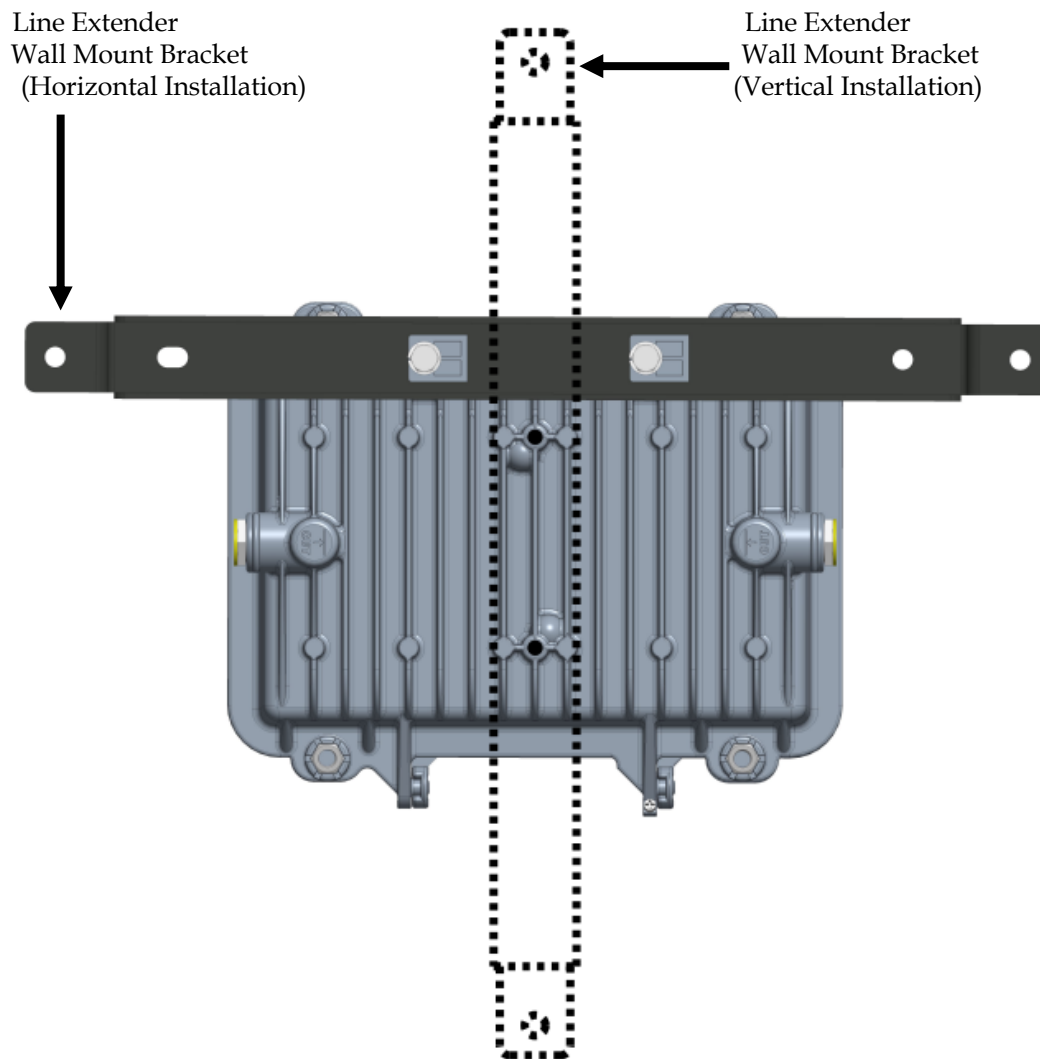


## Installing the Upgrade Kit, Continued

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2. Attach the line extender wall mount bracket to the back of the housing.

**Note:** The bracket can be mounted either horizontally or vertically. See illustration below.



3. Secure the bracket to the housing by using the bolts removed in step 1. Use the strand clamps as spacers. Torque the bolts from 5-ft-lb to 8-ft lb (6.8 Nm to 10.8 Nm). See illustration above.

## For Information

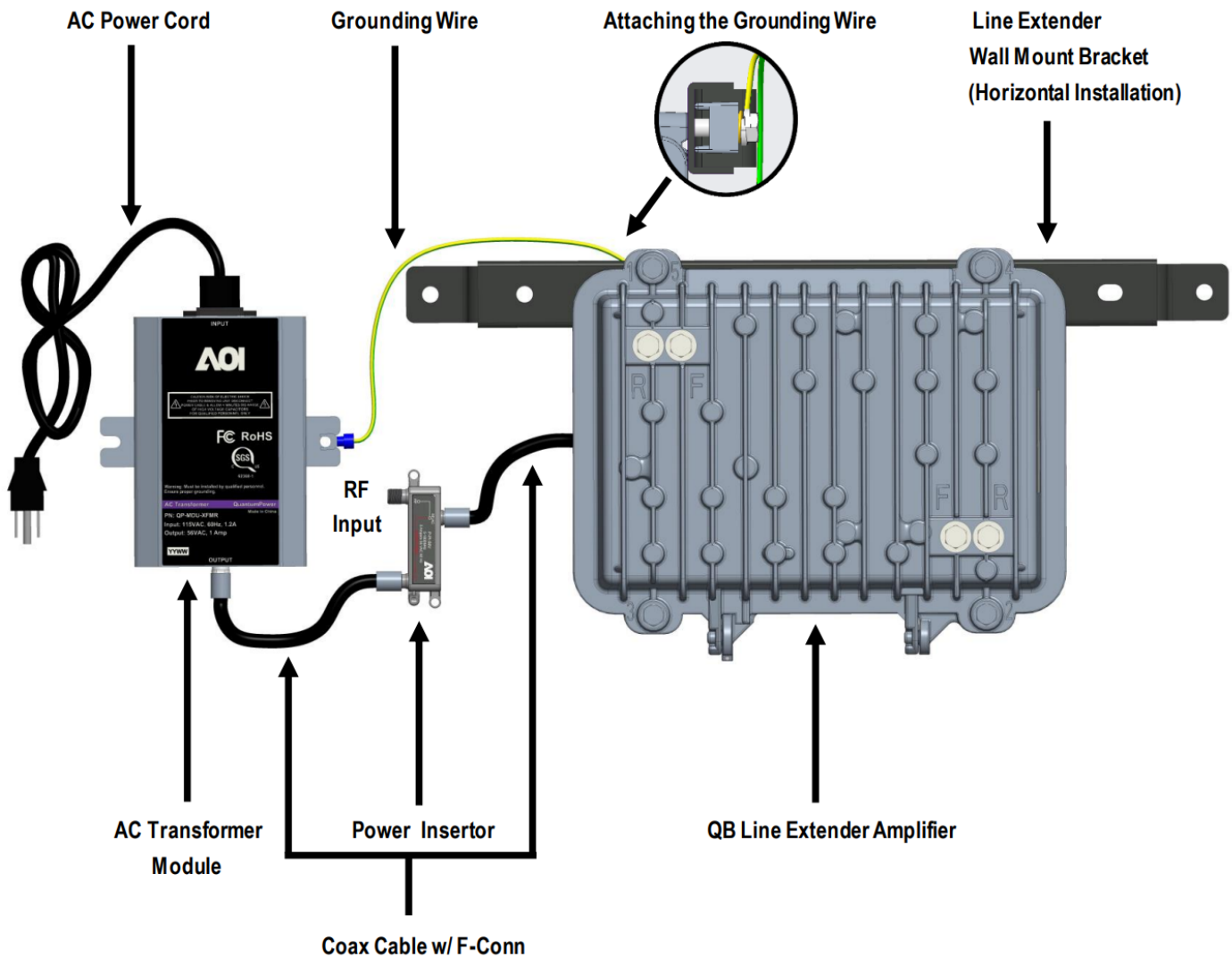
### Connect the Safety Grounding Wire

Attach the end of the wire with the connector to the grounding nut on the side of the transformer. The other end of the grounding wire should have approximately 2 inches of exposed shield. Loosen one of the strand clamp bolts, wrap the exposed copper wire securely around the bolt, and then tighten it.

### Preparing the Line Extender for Mounting

Follow these steps to mount the line extender housing to the wall.

1. Mount the power supply bracket to the wall.
2. Mount the CATV Amplifier to the wall.
3. Plug one end of the AC power cord into the power supply and the other into the wall socket.



## Installing the Upgrade Kit, Continued

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