

# Hy-gain-6104

## Range Extender for 43 foot Verticals

### Introduction

Forty-three foot vertical antennas have become very popular in recent years. However, on 160 and 80 meters, these antennas have a very high reactance and high voltage at the antenna feedpoint. Tuning with an autotuner results in maximum efficiency on 40-10 Meters, but conditions at 160 and 80 meters present a major challenge for most autotuners. To overcome this, the Hy-gain-6104 adds extra inductance at the feed point to increase the tuning range of the autotuner.

### What's in the box

The matching box containing the air wound inductor.

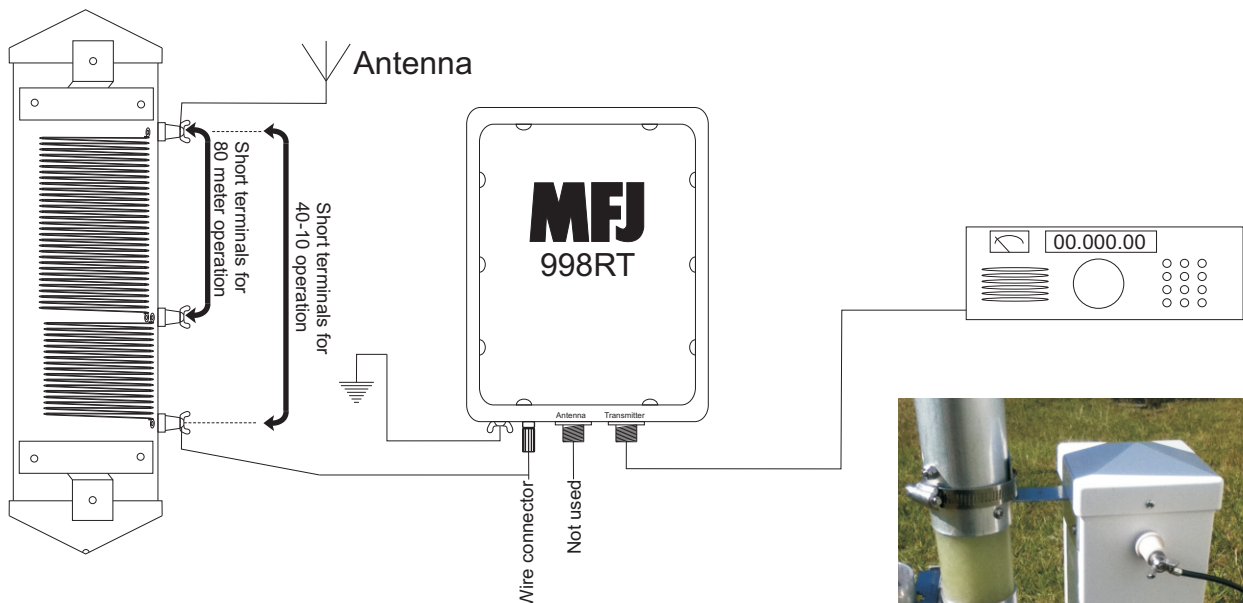
A shorting stub to bypass the inductor for 80 and 40-10 meter operation.

Two hose clamps used to connect the matching box to the antenna.

### How to connect the box

You may mount your matching box to the antenna or another location close to the antenna as long as the the inductor inside the box will be in series with the feed point of the antenna. The diagram below shows how the box should be place in the antenna system.

The mounting tabs on the matching box are insulated from the loading coil and may be connected directly to the antenna or some other mounting location. Use the hose clamps to attach the box directly to the antenna



### Operation

When 40-10 meter operation is desired, Install the shorting jumper between the top and bottom terminals on the matching box. For 160 meter operation, remove the jumper completely. Unit in pic set for 80 meters.

