

Operational Description

The MR715F is to be used as a device that improves MediaFLO signal coverage in a small indoor space. The MR715D boosts the signal direction in only one direction for this application.

An RF signal picked up by an external antenna is provided to the input connector of the MR715F. A front end filter is used to limit the signals presented to the first gain stage of the device. This RF signal is converted to an IF signal that will be filtered by a high rejection SAW filter. After the signal is filter, it is converted back to RF and amplified to the desired level. Included in the device are circuits that provide automatic limiting functions to prevent the output power from exceeding the defined limit of the unit.

The operational frequency that the device supports is fixed and the user only needs to set the gain of the device. The gain of the device may be set to a fixed level ranging from 50 dB to 70 dB in 3 dB steps or the user may select autosetup. In autosetup mode the device automatically sets the gain to maximum output power without exceeding the defined output power limit.