

# RANGE ™ SYSTEMS

Model: YAGI Antenna  
Operation Manual

5121 Winnetka Avenue  
New Hope, MN 55428

Tech Support:  
Toll Free: 888.999.1217  
Main Office: 763.533.9200  
[service@range-systems.com](mailto:service@range-systems.com)



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## YAGI Antenna Parameters

The YAGI Antenna is used primarily to cut through the clutter from other radio signals in a particular range environment. 5G cell networks are particularly troublesome as they bombard the area near towers with radio signals.

Not all ranges require the YAGI antenna, however since 5G is becoming very prevalent it is becoming prudent to simply add this to your range equipment list when using wireless controllers. NOTE: In a normal open environment, our radio controllers are dependable up to 600 meters (standard 900 MHz radios)

The YAGI system is either a plug in (120VAC) or solar powered unit. The antenna itself should be aimed at the center of the target line in a horizontal configuration to push the signals across the targets receiving antenna's. (see picture below)

The idea is to think of the antenna signal as a leaf rake pattern coming off the end of the small arm portion of the YAGI, radiating off flat which is why it is important to configure the YAGI in a horizontal position rather than vertical. It is therefore preferred that it is mounted roughly in the center of the range aiming down to the target line to "even out" the signal pattern across all target antennas. (PRO-TURN 360's with individual antennas) In a conventional range using a single receiver (UTC40 or UTC15) the antenna can be aimed more directly at the wireless receiver.

In the case of multiple ranges in close proximity, you will have to be sure firstly that each range has it's own dedicated radio (hopping) channel set in both the targets and the transmitter (PTX or Bluetooth tablet pack). Each individual range will have its own YAGI set-up as each YAGI box has a radio inside that must also match the individual range (hopping) channel. This configuration assures there is no crossover from range to range.