    v. UDP 1140: ROBOT-to-Dashboard status data, uni-directional
    vi. UDP/TCP 1180-1190: Camera data from the roboRIO to the Driver Station when the camera is connected the roboRIO via USB, bi-directional.
    vii. TCP/UDP 1250: CTRE Diagnostics Server, bi-directional
    viii. TCP 1735: SmartDashboard, bi-directional
    ix. UDP/TCP 5800-5810: Team Use, bi-directional

Teams may use these ports as they wish if they do not employ them as outlined above (i.e. TCP 1180 can be used to pass data back and forth between the ROBOT and the DS if the team chooses not to use the camera on USB).

  B. Bandwidth: no more than 4 Mbits/second.

> Note that the 4 Mbit limit will be strictly enforced by the Wireless Bridge.
>
> The FMS Whitepaper has more details on how to check and optimize bandwidth usage.
>
> While *FIRST* makes every effort to provide a wireless environment that allows teams access to a full 4 Mbits/second data rate (with about 100 Kbit used for ROBOT control and status), at some events wireless conditions may not accommodate this.

R61.   The roboRIO, DRIVER Station software, and Wireless Bridge must be configured to correspond to the correct team number, per the procedures defined in Getting Started with the 2020 Control System.

R62.   All signals must originate from the OPERATOR CONSOLE and be transmitted to the ROBOT via the ARENA Ethernet network.

R63.   No form of wireless communication shall be used to communicate to, from, or within the ROBOT, except those required per R58, R62, and tags used for location detection systems if provided by the event.

> Devices that employ signals in the visual spectrum (e.g. cameras) and non-RF sensors that don't receive human-originated commands (e.g. "beam break" sensors or IR sensors on the ROBOT used to detect FIELD elements) are not wireless communication devices and thus R63 doesn't apply.

R64.   The Wireless Bridge must be mounted on the ROBOT such that the diagnostic lights are visible to ARENA personnel.

> Teams are encouraged to mount the wireless bridge away from noise generating devices such as motors, PCM(s), and VRM(s).

R65.   ROBOTS must use at least one (1), but no more than two (2), diagnostic ROBOT Signal Lights (RSL) (P/N: 855PB-B12ME522).

Any RSL must be:

  A. mounted on the ROBOT such that it is easily visible while standing 3 ft. (~ 100 cm) in front of the ROBOT,
  B. connected to the "RSL" supply terminals on the roboRIO,
  C. wired for solid light operation, by placing a jumper between the "La" and "Lb" terminals on the light per Figure 9-13.

> Please see How to Wire an FRC Robot for connection details.