



# 2015/16 FTC Control System Android Device Specifications

## Minimum Specifications:

1. Qualcomm Snapdragon CPU
2. Android Kit Kat 4.4 (Lollipop is not yet supported, Jelly Bean is OK, but Kit Kat has better support for WiFi Direct).
3. USB Micro On-the-Go (OTG) port (device needs to act as a USB host and client).
4. Support for WiFi Direct.
5. 802.11 b/g/n at a minimum (supports 2.4GHz band), 802.11a/b/g/n/ac is also allowed (supports 2.4GHz and 5GHz bands).
6. Support for PC Xbox-compatible gamepad including Logitech F310.
7. Minimum 1GB RAM, 2GB preferable.

The following Android Devices have been tested by *FIRST* and are approved for use at Events outside the United States. The only certified Device for Events in the United States is the ZTE Speed phone.

| <b>Manufacturer</b> | <b>Model (Phone unless noted)</b> | <b>Notes</b>  |
|---------------------|-----------------------------------|---|
| ZTE                 | Speed from Boost Mobile           | Sold in US Only, same phone in the Kit of Parts.                        |
| Samsung             | Galaxy Note 4                     | Kit Kat only, Lollipop version is not yet supported.                    |
| Samsung             | Galaxy S5                         | Kit Kat only, Lollipop version is not yet supported.                    |
| LG / Google         | Nexus 5                           | Kit Kat only, Lollipop version is not yet supported. Out of production. |
| Asus / Google       | Nexus 7 Tablet                    | Out of production   |
| Motorola            | Moto G (2 <sup>nd</sup> Gen)      | Kit Kat only, Lollipop version is not yet supported.                    |

This table current as of 06-May-2015. Updates will be posted as additional phones and tablets are tested.

Note that not every Android device will support WiFi Direct channel changing. WiFi Direct Channel changing requires special permissions to be able to modify a wireless configuration file on the phone. The ZTE Speed has a special app from ZTE that allows for channel changing. Other phones might not allow WiFi Direct Channel changing. If a phone does not allow WiFi Direct channel changing, then the team that is using the device will be stuck using their device's default WiFi Direct channel at an event. It is helpful to have the ability to change the channel in case there is wireless interference on a certain channel.