

GAME - Team UPDATE - 2012-02-17

Power Distribution 

[R44]

All active circuits shall be wired with appropriately sized wire:

Application	Minimum wire size
40A circuit	12 AWG (2.052mm)
30A circuit	14 AWG (1.628mm)
20A circuit	18 AWG
between the PD Board and the Analog and/or Solenoid Breakouts if a common power feed is used	(1.024mm)
between the PD Board and the Analog and/or Solenoid Breakouts if individual power feeds are used	
between the PD Board and the cRIO	20 AWG
between the PD Board and the wireless bridge	(0.8128mm)
between the PD board and 5A custom circuits	
pneumatic valves	24 AWG (0.5106mm)

The branch circuit may include intermediate elements such as COTS connectors, splices, COTS flexible/rolling/sliding contacts, and COTS slip rings, as long as the entire electrical pathway is via appropriately gauged conductors.

Wires that are originally attached to legal devices are part of the device and by default legal as supplied. Such wires are exempt from Rules [R44] and [R45] .