



2018 Lessons – The CSA View

Sharon Brackett

sharon@brackett.com

Mentor #2537 2008-2014

Control Systems Advisor 2015-Present

This presentation is available for download here:

www.TiresiasTech.com/images/LessonsFrom2018.pdf



Learn Windows Networking

- ipconfig - how your network is configured
- ping – can you see the device
- You have to be tethered in the pit
 - Use Ethernet, not USB!
 - Set static IP addresses
 - Bring a long-ish cable, or two
 - Configure all that before you get to the venue
- If you are going to use WiFi back at the shop, buy a router
- Have a long USB too in case your Rio is hosed!





Crimping

- Learn how to properly crimp cables
 - <https://www.youtube.com/watch?v=Svja8zEcKNQ>
 - <https://learn.sparkfun.com/tutorials/working-with-wire/how-to-crimp-an-electrical-connector>
- Buy the right tools (ratcheting crimper)
 - <https://www.youtube.com/watch?v=xgReOtQhdo8>
- Consider crimping those small WAGO pins
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Electronics Mounting

- Mount your electronics so they are accessible
 - But have covers!
- Mount your electronics so they can be swapped out quickly – 3D printing is your friend!
- 3D Print some covers to keep debris out of your RIO
 - www.thingiverse.com
- Buy spares – spare parts does not have everything





Battery Management

- Buy a Battery Beak
 - It is the only good way to test a battery
- Number your batteries
- Use new batteries each season
- Keep a battery log
 - Charge start and stop time
 - Beak values before and after charge
 - Rotate batteries during competition
 - Never die on the field again from a bad battery



Pre/Post Match Checklist

PRE

- Fresh Battery
- Mechanisms/presets adjusted/reset
- Drive system components (chains, gears)
- Check for loose items (nuts, wires, tools)
- Remove any protective covers if present
- Bumper color/install!

POST

- Get a damage report from the Drive team!!!
 - Do this before your drive/strategy folks do a debrief. You may need the time to start fixing things!
- Decide priorities for repair/tweaks
 - Note time to next match!
- Make repairs/adjustments
- Pull/swap battery
- Pull/swap bumpers (if appropriate)
- Run the pre-match checklist



Questions

