





Trouble Shooting with LEDS

The following can be used to trouble-shoot errors with the robot using our LED strip.

Statuses



-  Good - Ready to start the match
-  Warning - There may be an issue with system functionality, please resolve.
-  Error - The system will not be able to perform. Fix before a match.
-  Unknown - This is yet to be coded. Let a coder know.

Troubleshooting



The following is a list of what might be causing warning and errors for the given subsystem and LED number.

While lights don't give the specific issue, the issue can be found via-log files. If not quickly identifiable, find a coder.




1. Drive

-  Gyro Disconnected
 - Assure the gyroscope is plugged in and receiving power.
-  Module Disconnected
 - Assure each module is powered and plugged in.
 - If issue is not immediately apparent, check AdvantageScope (see coder) to get the CAN ID.



2. Vision

-  Camera Disconnected
 - Assure each camera is powered and connected via ethernet. If the issue is not immediately apparent, find a coder for troubleshooting.
-  Cameras have not seen April Tag
 - Face the robot towards an April Tag to get a valid reading.


3. Turret

-  Motor Disconnected
 - Make sure the motor CAN is connected and encoder is plugged in.
-  Not Homed
 - Put the turret in a homed position.
-  HAL Sensor hasn't changed
 - Change the state of the HAL sensor (triggered to untriggered or untriggered to triggered).
 - Do this by moving the turret.


4. Kicker

-  Motor Disconnected
 - Make sure the motor CAN is connected and encoder is plugged in.
-  IR Sensor unchanged
 - Trigger and un-trigger the IR sensor.


5. Shooter

-  Motor Disconnected
- Make sure the motor CAN is connected and encoder is plugged in.


6. Climber

-  Motor Disconnected
 - Make sure the motor CAN is connected and encoder is plugged in.



7. Hood

-  Motor Disconnected
 - Make sure the motor CAN is connected and encoder is plugged in.



8. Hopper

-  Motor Disconnected
 - Make sure the motor CAN is connected and encoder is plugged in.



9. Intake

-  Motor Disconnected
 - Make sure the motor CAN is connected and encoder is plugged in.
-  Solenoid Disconnected
 - Make sure the motor CAN is connected and encoder is plugged in.

10. USB

-  USB Disconnected
 - Unplug and replug in the USB stick. Wait 2 seconds.
-  USB Nearing full
 - The USB is almost out of storage. Replace with another stick.

11. Battery

-  Battery is under 12.5 Volts
-  Battery is under 12.0 Volts
 - Replace battery