

Each CONTROL PANEL has two (2) requirements in order to ENERGIZE the SHIELD GENERATOR, see [CONTROL PANEL Scoring](#) for complete details on game play.

- ROTATION CONTROL: Rotate CONTROL PANEL at least three (3) (but no more than five (5)) complete revolutions in the same direction. If the CONTROL PANEL is rotated more than five (5) complete revolutions, the count resets to zero (0). The TRENCH light turns on once Stage 2 CAPACITY is reached (i.e. the CONTROL PANEL is ready for ROTATION CONTROL).

A CONTROL PANEL spun faster than 60 revolutions per minute may cause FIELD damage. For more details see [MATCH Replays](#).

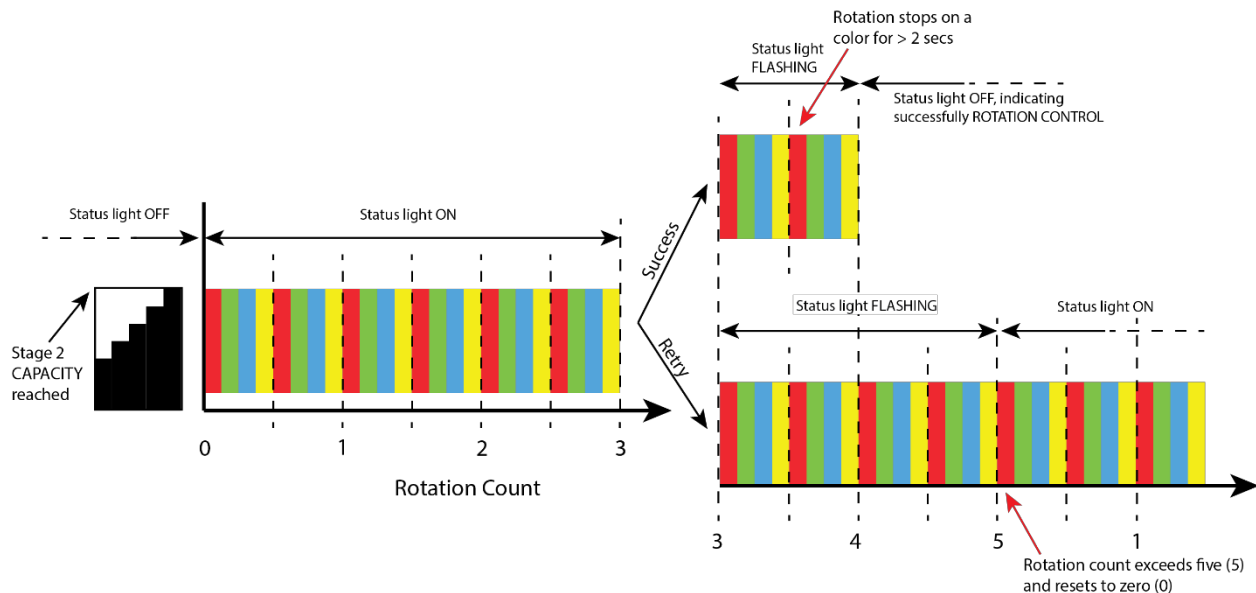


Figure 3-24 CONTROL PANEL ROTATION CONTROL example

- POSITION CONTROL: Rotate CONTROL PANEL so a specified color aligns with the sensor for at least five (5) seconds. Once either ALLIANCE reaches Stage 3 CAPACITY, FMS relays a specified color (randomly selected by FMS and one (1) of the three (3) colors not currently read by the ALLIANCE’S TRENCH color sensor) to all OPERATOR CONSOLES simultaneously. The specified color may not be the same for both ALLIANCES. See Table 3-4 for details on how the TRENCH light is used during POSTION CONTROL.

Specific details on the format of the data can be found on the [2020 FRC Control System website](#).

In the unlikely event that the sensor isn’t currently reporting one (1) of the four (4) colors when Stage 3 reaches CAPACITY (e.g. the sensor is positioned where two (2) color wedges meet), FMS will randomly select the specified color from one (1) of the four (4) colors.