2025 FRC Control System Educational Diagrams

A Visual Look at how a control system can be set up for an FRC Robot at a basic level, at a more comprehensive level using two different vendor architectures, and how a pneumatic system can be set up for an FRC Robot.

For more information regarding the control system in FRC robots please visit: **https://docs.wpilib.org**

Designed in Canada by Team 3161 and Stefen Acepcion.

Instructions for Printing

Each diagram is optimised as a 24 x 36 inch poster. Optimally print in that size, it may be printed in smaller or larger size provided its aspect ratio is similar.

Print in colour on a recommended 170 GSM or thicker paper.

Including this page when printing is not nessesary, this page serves as an instruction and attribution page only.

Acknowlegements

Thank you so much to FRC community for giving suggestions to help improve these diagrams, to the WPILib documentation team, and TheThriftyBot for giving their support in enabling these diagrams to be distributed.

Parts Inclusion

Parts that are specified as examples are either components that can be obtained from the KOP, FIRST Choice, mandated by the Game Rules, or is an example part that is widely used by FRC teams.

Design System

This diagram package uses a design system employed in Team 3161 Diagrams and Infographics

Read more on it here: https://team3161.ca/brand

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