

# FRC: Network Tables

## AdvantageKit Sources

### AdvantageKit/Timestamp Long

#### AdvantageKit/Drive

- └ Gyro
  - └ OdometryYawPositions Roatation2d[]
  - └ OdometryYawTimestamps double[]
  - └ YawPosition Roatation2d
- └ Module0
  - └ OdometryDrivePositionsRad
  - └ OdometryTimestamps double[]
  - └ OdometryTurnPositions Roatation2d[]
  - └ TurnAbsolutePosition Roatation2d
  - └ TurnPosition Roatation2d

#### AdvantageKit/DriverStation

- └ AllianceStation boolean
- └ AllianceStation int
- └ DSAttached boolean
- └ EmergencyStop boolean
- └ Enabled boolean
- └ EventName String
- └ FMSAttached String
- └ Joystick0
  - └ AxisTypes Joystick Axis Mapping
  - └ AxisValues Joystick Axis Type
  - └ ButtonValues Button State (Bitmask)
  - └ POVs D-Pad Actions (Angle)
  - └ Type Controller Type (Enum)
- └ Joystick1
- └ Joystick2
- └ Joystick3
- └ Joystick4
- └ Joystick5
- └ MatchNumber int
- └ MatchTime int
- └ MatchType int
- └ ReplayNumber int
- └ Test boolean

#### AdvantageKit/NetworkInputs

- └ SmartDashboard

### AdvantageKit/PowerDistribution

- └ ChannelCount int
- └ Faults int
- └ StickyFaults int
- └ Temperature float
- └ TotalCurrent float
- └ TotalEnergy float
- └ TotalPower float
- └ Voltage float

### AdvantageKit/RadioStatus

- └ Connected boolean
- └ Status JSON

### AdvantageKit/RealOutputs

- └ Alerts
- └ Console text
- └ LoggedRobot
  - └ FullCycleMS float
  - └ GCCounts int
  - └ GCTimeMS float
  - └ LogPeriodicMS float
  - └ UserCodeMS float
- └ Logger
  - └ AlertLogMS float
  - └ AutoLogMS float
  - └ ConduitCaptureMS float
  - └ ConduitSaveMS float
  - └ ConsoleMS float
  - └ DashboardInputsMS float
  - └ DriverStationMS float
  - └ EntryUpdateMS float
  - └ QueuedCycles int
  - └ RadioLogMS float
- └ Odometry
  - └ Robot Pose2d
- └ PathPlanner Alerts
- └ SwerveChassisSpeeds
  - └ Measured ChassisSpeeds
  - └ Setpoints ChassisSpeeds
- └ SwerveStates
  - └ Measured SwerveModuleState[]
  - └ SetpointsOptimized SwerveModuleState[]
  - └ Setpoints SwerveModuleState[]

### AdvantageKit/SystemStats

- └ 3v3Rail
  - └ Active boolean
  - └ CurrentFaults int
  - └ Current float
  - └ Voltage float
- └ 5vRail
  - └ Active boolean
  - └ CurrentFaults int
  - └ Current float
  - └ Voltage float
- └ 6vRail
  - └ Active boolean
  - └ CurrentFaults int
  - └ Current float
  - └ Voltage float
- └ BatteryCurrent float
- └ BatteryVoltage float
- └ BrownedOut boolean
- └ BrownoutVoltage float
- └ CANBus
  - └ OffCount int
  - └ ReceiveErrorCount int
  - └ TransmitErrorCount int
  - └ TxFullCount int
  - └ Utilization float
- └ Comments
- └ CommsDisableCount int
- └ CPUTempCelcius int
- └ EpochTimeMicros Long
- └ FPGAButton boolean
- └ FPGARevision int
- └ FPGAVersion int
- └ NTCLients
  - └ AdvantageScope@1
    - └ Connected boolean
    - └ IPAddress String 127.0.0.1
    - └ Port int
    - └ ProtocolVersion int
  - └ Elastic@2
    - └ Connected boolean
    - └ IPAddress String 127.0.0.1
    - └ Port int
    - └ ProtocolVersion int
- └ RSLState boolean
- └ SerialNumber String
- └ SystemActive boolean
- └ SystemTimeValid boolean
- └ TeamNumber int

**Note:** data types were manually entered and could differ from WPILib or AdvantageKit

## Dashboard & Misc Sources

### PathPlanner

- └ activePath Pose2d
- └ Alerts Alerts
- └ currentPose Pose2d
- └ targetPose Pose2d
- └ vel float

### Shuffleboard

- └ .metadata
- └ .recording

### SmartDashboard

- └ Alerts Alerts
- └ Auto Choices
  - └ active
  - └ default
  - └ options
    - └ 0 None
    - └ 1 Example Auto
    - └ 2 Drive Wheel Radius Characterization
    - └ 3 Drive Simple FF Characterization
    - └ 4 Drive SysId (Quasistatic Forward)
    - └ 4 Drive SysId (Quasistatic Reverse)
    - └ 7 Drive SysId (Dynamic Forward)
    - └ 7 Drive SysId (Dynamic Reverse)
- └ PathPlanner Alerts

### FMSInfo

- └ EventName String
- └ FMSControlData int
- └ GameSpecificMessage String
- └ IsRedAlliance boolean
- └ MatchNumber int
- └ MatchType enum
- └ ReplayNumber int
- └ StationNumber int

### LiveWindow

- └ .status
  - └ LW Enabled boolean