Must-Knows

FRC Electrical Must-Knows:

COMMON TERMS	
TERM	DEFINITION
CAN	"CONTROL AREA NETWORK" A COMMUNICATION PROTOCOL USED BY DEVICES FOR BIDIRECTIONAL COMMUNICATION ON A CHAIN. COMMONLY FOUND AS A 22AWG GREEN AND YELLOW TWISTED PAIR. MUST BE TERMINATED USING 1200 RESISTOR BETWEEN HIGH AND LOW (YELLOW AND GREEN RESPECTIVELY)
PDH	"POWER DISTRIBUTION HUB" WHICH CONNECTS DIRECTLY TO BREAKER AND BATTERY AND DISTRIBUTES POWER. BREAKERS AND FUSES FOR OVERCURRENT PROTECTION. CONNECTS TO CAN FOR DIAGNOSTIC INFORMATION
ROBORIO	MAIN ROBOT COMPUTER
RSL	"ROBOT SIGNAL LIGHT" USED TO INDICATE STATUS OF ROBOT
VRM	VOLTAGE REGULATOR MODULE" USED TO SUPPLY SENSORS AND DEVICES WITH REGULATED 12V OR 5V POWER RATHER THAN RAW BATTERY VOLTAGE
PWM	"PULSE-WIDTH MODULATION" SIMPLE UNIDIRECTIONAL SIGNALING USED TO TRANSMIT A VALUE BETWEEN 0-100%

AWG	"AMERICAN WIRE GAUGE" AMERICAN STANDARD FOR WIRE DIAMETER. PRONOUNCED GAUGE. SMALLER NUMBER MEANS LARGER DIAMETER, DOUBLING WIRE DECREASES AWG BY 3
FUSE	OVERCURRENT PROTECTION DEVICE WITH COLORFUL PLASTIC HOUSING. PERMANANTLY DAMAGED WHEN TRIPPED
BREAKER	OVERCURRENT PROTECTION DEVICE WITH COLORFUL METAL HOUsING. AUTOMATiCALLY RESETS AFTER COOLING WHEN TRIPPED, TRIP INDICATED BY BLINKING LIGHT ON PDH
FALCON 500	BRUSHLESS MOTOR WITH BUILT IN MOTOR CONTROLLER. CONTROLLED OVER CAN
KRAKEN X60	NEWER BRUSHLESS MOTOR WITH BUILT IN MOTOR CONTROLLER. CONTROLLED OVER CAN, REPLACABLE LEADS
SPARK MAX	STANDALONE MOTOR CONTROLLER, COMPATIBLE WITH WIDE RANGE OF BRUSHED AND BRUSHLESS MOTORS

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