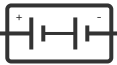


Electrical Symbols Chart

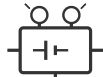
480+ IEC/ANSI electrical and electronic schematic symbols with names. Free from circuitdiagrammaker.app/symbols/chart — click any symbol online for its meaning, standards, and example circuits.

DIY & Residential symbols

 240V Outlet	 AFCI Breaker	 AFCI/GFCI Combo Breaker	 Alarm Panel
 Armored Cable (MC/BX)	 Attic Fan	 Baseboard Heater	 Bathroom Exhaust Fan
 Battery Bank	 CCTV Camera	 CO Detector	 Ceiling Fan
 Ceiling Fan with Light	 Circuit Breaker	 Conduit Run	 Dimmer Switch
 Disconnect	 Doorbell / Chime	 Doorbell Button	 Doorbell Camera
 Double-Pole Breaker	 Dual Run Capacitor	 Duplex Outlet	 EV Charger Outlet (NEMA 14-50)



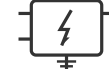
Electric Cooker / Range



Emergency Light



Exit Sign



Fence Energizer



Fluorescent Fixture



GFCI Breaker



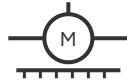
GFCI Outlet



Garage Door Opener



Garbage Disposal



Gate Motor



Generator



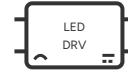
Ground



Hot Tub Disconnect



Junction Box



LED Driver



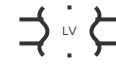
LED Strip



Landscape Light (Low Voltage)



Light Fixture



Low Voltage Transformer



Main Panel



Meter Base



Motion Sensor



Occupancy Sensor



Outdoor Lamp Post



Outlet



Path Light



Photocell / Dusk Sensor



Pool Pump



Prepaid Meter



Pull Box



Range / Dryer Outlet



Range Hood



Recessed Can Light (6-inch)



Recessed Light



Romex Cable



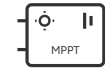
Service Entrance



Smart Switch (WiFi)



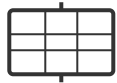
Smoke Detector



Solar Charge Controller



Solar Inverter



Solar Panel



Subpanel



Switch (3-Way)



Switch (SPST)



Tandem / Twin Breaker



Thermostat



Timer Switch



Track Light



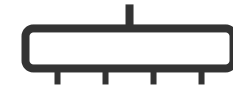
Track Lighting Head



Transfer Switch



USB Outlet



Under-Cabinet Light



Weatherproof Box



Weatherproof Outlet



Whole House Surge Protector



Whole-House Fan



Wire Nut



Wire Raceway / Molding



Wire Splice



Zone Valve

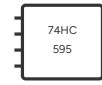
Hobbyist & Electronics symbols



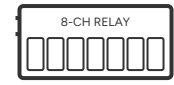
4x4 Matrix Keypad



555 Timer IC



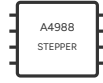
74HC595 Shift Register



8-Channel Relay Board



8x8 LED Matrix



A4988 Stepper Driver



ACS712 Current Sensor Module



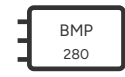
ADS1115 ADC Module



ATmega328 (DIP)



Arduino Uno



BMP280 Pressure Sensor



Battery



Bluetooth Module (HC-05)



Boost Converter Module



Breadboard Power Rail



Buck Converter Module



CAN Bus Transceiver



CD4051 Analog MUX



Capacitive Touch Sensor



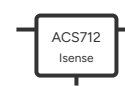
Capacitor



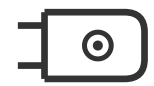
Cell (Single)



Crystal Oscillator



Current Sensor (ACS712)



DC Barrel Jack



DC Motor



DHT11 Temperature/Humidity



DIP Switch



DPDT Switch



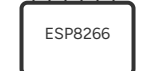
DS18B20 Temperature Sensor



Diode



ESP32



ESP8266 Module



Electric Bell



Electrolytic Capacitor



Ferrite Bead



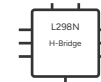
Fingerprint Sensor



Fuse



Galvanometer



H-Bridge IC (L298N)



HC-SR501 PIR Module



Hall Effect Sensor



Header Pins (Female)



Header Pins (Male)



IR Receiver



IR Remote Control



IR Transmitter LED



Inductor / Coil



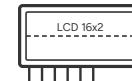
JST Connector (2-pin)



JST Connector (4-pin)



Joystick Module



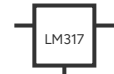
LCD 16x2 Module



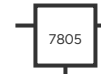
LED



LM2596 Power Module



LM317 (Adjustable Regulator)



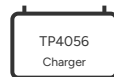
LM7805 (5V Regulator)



Lamp / Light Bulb



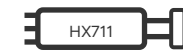
LiPo Battery



LiPo Charger Module (TP4056)



LoRa Module



Load Cell (HX711)



Logic Level Shifter



MAX7219 LED Driver



MCP23017 GPIO Expander



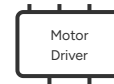
MPU6050 IMU Module



MQ-2 Gas Sensor



Microphone



Motor Driver Module



N-Channel MOSFET



NPN Transistor (BJT)



NeoPixel LED Ring



Neon Lamp



OLED Display Module



Op-Amp (DIP)



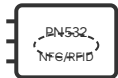
Optocoupler Module



P-Channel MOSFET



PIR Motion Sensor



PN532 NFC Module



PNP Transistor (BJT)



Photodiode



Photoresistor (LDR)



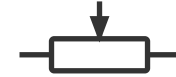
Phototransistor



Piezo Buzzer



Portable Power Bank



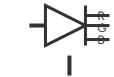
Potentiometer



Push Button



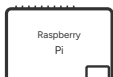
RFID RC522 Module



RGB LED (4-pin)



RTC DS3231 Module



Raspberry Pi



Reed Switch



Relay Module



Relay SPDT



Resistor



Rotary Encoder



Rotary Encoder Module



Rotary Switch



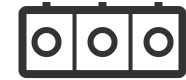
SD Card Module



Schottky Diode



Screw Terminal (2-pos)



Screw Terminal (3-pos)



Servo Motor



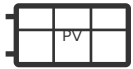
Seven-Segment Display



Shift Register (8-bit)



Slide Switch



Solar Cell (Small)



Solenoid Coil



Speaker



Stepper Motor



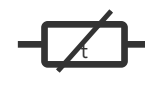
Supercapacitor



TCS3200 Color Sensor



TFT LCD Display



Thermistor (NTC)



Trimpot / Trimmer



USB Connector



Ultrasonic Sensor



Variable Resistor



Varistor (MOV)



Voltage Divider Module



Voltage Regulator



WS2812 Addressable LED



Wemos D1 Mini



Zener Diode



nRF24L01 RF Module

Industrial symbols



3-Phase Motor



3-Phase Plug (CEE / Industrial)



3-Phase Supply



3-Pole Contactor



3.5mm TRS
3.5mm Audio Jack (TRS)



4-Pole Contactor



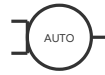
Alternator



Ammeter



Automotive Relay (5-pin)



Autotransformer



BLDC / Brushless DC Motor



Battery Charger



BUS TIE
Bus Tie Switch



Buzzer / Audible Alarm



Cable Entry / Gland



Cable Lug / Crimp Terminal



Cable Tray



Capacitor Bank



Changeover Contact (SPDT)



Check Valve



Circuit Breaker (MCB)



Compressor



Contactor Coil



Contactor NC Contact



Contactor NO Contact



Current Limiting Reactor



Current Transformer (CT)



DIN Rail



DIN Rail End Stop



Disconnect Switch / Isolator



Distributed I/O Module



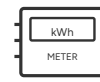
Door Interlock Switch



Earth Leakage Relay



Emergency Stop



Energy Meter (kWh)



Fire Alarm Panel



Float Switch



Flow Control Valve



Flow Switch



Fluorescent / HID Ballast



Foot Switch



Fuse



Fuse Terminal Block



Ground / Earth



Grounding Switch



Guitar Output Jack (TS)



Guitar Pickup



HMI Touchscreen Panel



Harmonic Filter



Heating Cable / Heat Trace



Heating Element



Horn / Siren



Hydraulic Cylinder



Hydraulic Motor



Hydraulic Pump



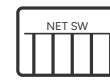
Hydraulic Reservoir



Ignition Coil



Ignition Switch (Multi-Position)



Industrial Network Switch



Inverter (DC-AC)



Isolation Transformer



Key Switch



Knife Disconnect Switch



Lightning Arrester



Lightning Rod / Air Terminal



Limit Switch NC



Limit Switch NO



Line Reactor



MCCB (Molded Case CB)



Magneto (Engine Generator)



Manual Pull Station



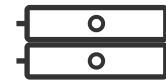
Motor Protection CB



Motor Protection Relay



Motor Starter (DOL)



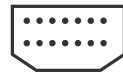
Multi-Level Terminal Block



NEMA L14-30 (4-prong twist-lock)



Neutral Rail



OBD-II Connector (16-pin)



Overload Contact NC



Overload Contact NO



PLC CPU



PLC Input Module



PLC Output Module



PROFINET Connector



Panel Fan



Panel Thermostat



Phase Sequence Relay



Photoelectric Sensor



Pilot Light / Indicator



Plug Connector Female



Plug Connector Male



Pneumatic 3/2 Valve



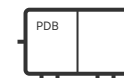
Pneumatic 5/2 Valve



Pneumatic Cylinder (Double Acting)



Pneumatic Cylinder (Single Acting)



Power Distribution Block



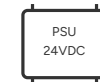
Power Factor Controller



Power Meter



Power Rail



Power Supply 24V DC



Pressure Regulator



Pressure Switch



Proximity Sensor (Capacitive)



Proximity Sensor (Inductive)



Pump (Motor-driven)



Push Button NC



Push Button NO



RCA / Phono Connector



RCD / RCCB



RJ45 / Ethernet Connector



RTD Temperature Sensor



Relay Coil



Relay NC Contact



Relay NO Contact



Relief Valve



Reversing Valve



Safety Interlock Switch



Safety Light Curtain



Safety PLC



Safety Relay Module



Selector Switch 2-Position



Selector Switch 3-Position



Single-Phase Motor



Soft Starter



Soft Starter (3-Phase)



Solenoid Valve



Spark Plug



Split-Core CT



Stack Light



Star-Delta Starter



Starter Motor



Stepper Motor (4-wire bipolar)



Surge Arrester (SPD)



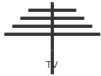
Surge Protector



Switch (4-Way)



Switch (DPST — 4-pin Rocker)



TV Antenna (Yagi)



Temperature Switch



Terminal Block



Thermal Overload Relay



TC
Thermocouple



Time Delay Relay (Off-Delay)



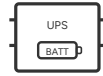
Time Delay Relay (On-Delay)



4-PIN FLAT
Trailer Connector (4-pin Flat)



7-PIN
Trailer Connector (7-pin)



UPS Block



Undervoltage Relay



VFD / Variable Frequency Drive



Variable Transformer (Variac)



Voltage Transformer (PT)



Voltmeter



GEYSER
Water Heater / Geyser



Water Level Probe (3 electrodes)



Wire Crossing (No Connection)



Wire Duct / Trunking



Wire Junction / Node



Wire Label / Marker



X-RAY
X-Ray Tube



XLR 3-PIN
XLR Connector (3-pin Audio)



XNX / 4-20mA Gas Transmitter

Professional symbols



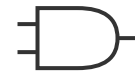
4-Bit Counter



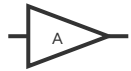
7-Segment Decoder



ADC Block



AND Gate



Amplifier Block



Antenna



Astable Multivibrator



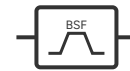
BCD Counter



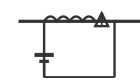
Balun



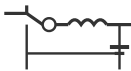
Bandpass Filter Block



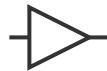
Bandstop Filter Block



Boost Converter (Topology)



Buck Converter (Topology)



Buffer



CCCS (Dependent Current Source)



CCVS (Dependent Voltage Source)



Center-Tap Transformer



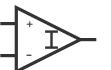
Charge Pump



Clamper Circuit



Colpitts Oscillator



Comparator



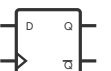
Crystal Oscillator Module



Current Mirror



Current Source



D Flip-Flop



DAC Block



DIAC



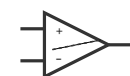
Darlington Pair



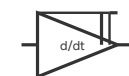
DEC 3:8



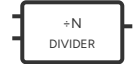
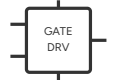
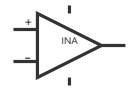
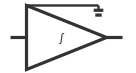
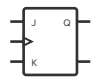
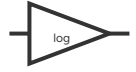
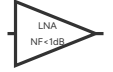
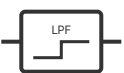
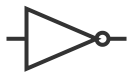
DEMUX



d/dt



d/dt

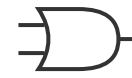
Decoder (3:8)	Demultiplexer (DEMUX)	Differential Amplifier	Differentiator
 Digital Comparator	 Directional Coupler	 Emitter Follower	 Encoder (Priority)
 Envelope Detector	 FPGA Block	 FSK Modulator	 Flyback Converter
 Frequency Divider	 Full-Wave Rectifier	 Gate Driver	 Gilbert Cell Mixer
 Ground (Chassis)	 Ground (Signal)	 H-Bridge	 Half-Wave Rectifier
 Highpass Filter Block	 IGBT	 Instrumentation Amplifier	 Integrator
 JK Flip-Flop	 Linear Regulator Block	 Log Amplifier	 Low Noise Amplifier
 Lowpass Filter Block	 Monostable Multivibrator	 Multiplexer (MUX)	 Multiplexer 4:1
 N-Channel JFET	 NAND Gate	 NOR Gate	 NOT Gate / Inverter



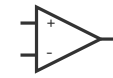
NPN Transistor



Noise Source



OR Gate



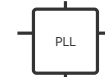
Op-Amp



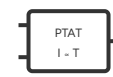
Optocoupler



P-Channel JFET



PLL Block



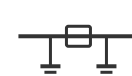
PTAT Current Source



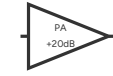
Peak Detector



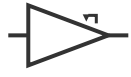
Phase Detector



Pi Attenuator



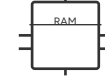
Power Amplifier Block



Precision Rectifier



Precision Voltage Reference



RAM Block



RF Attenuator



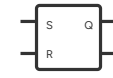
RF Log Detector



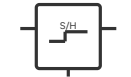
RF Mixer



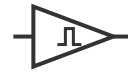
SAR ADC



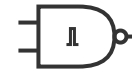
SR Latch



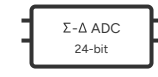
Sample and Hold



Schmitt Trigger



Schmitt Trigger NAND



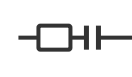
Sigma-Delta ADC



Signal Generator



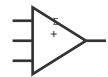
Signal Limiter



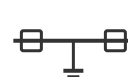
Snubber Network



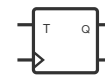
Squelch Circuit



Summing Amplifier



T Attenuator



T Flip-Flop



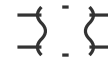
TRIAC



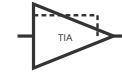
Test Point



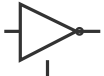
Thyristor / SCR



Transformer



Transimpedance Amplifier



Tri-State Buffer



VCCS (Dependent Current Source)



VCO Block



VCVS (Dependent Voltage Source)



VGA DAC Block



Varactor Diode



Voltage Divider



Voltage Doubler



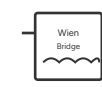
Voltage Source (AC)



Voltage Source (DC)



Wheatstone Bridge



Wien Bridge Oscillator



XNOR Gate



XOR Gate



Zero-Crossing Detector