



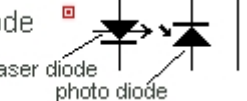
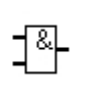




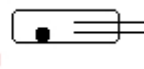




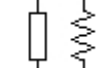

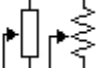





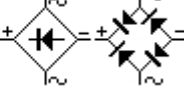







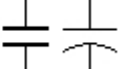

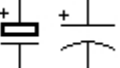
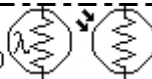



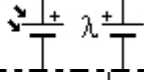


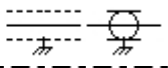






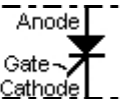












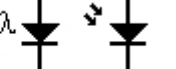

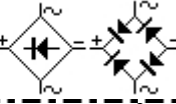




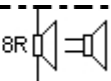

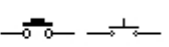



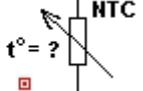

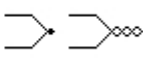


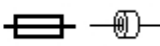


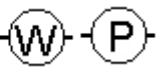


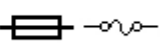
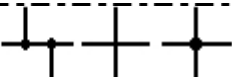
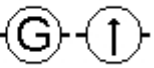
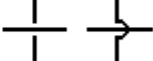
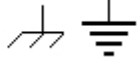











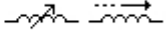




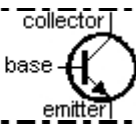
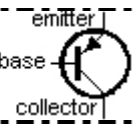








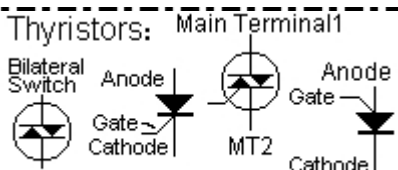



رموز العناصر الكهربائية والإلكترونية

	Lamp - Neon 	Ammeter (amp meter) 
	LASCER (Light Activated Silicon Controlled Rectifier) 	AND Gate 
	LASER diode 	AND Gate 
	LDR (Light Dependent Resistor) 	Antenna balanced 
	Light Emitting Diode (LED) 	Antenna Loop, Shielded 
	Mercury Switch 	Antenna Loop, Unshielded 
	Micro-amp meter (micro-ammeter) 	Antenna unbalanced 
	Microphone (see Electret Mic) 	Attenuator, fixed (see Resistor) 
	Milliamp meter (milli-ammeter) 	Attenuator, variable (see Resistor) 
	Motor 	Battery 
	NAND Gate 	Bilateral Switch (DIAC) 
	NAND Gate 	Bridge Rectifier (Diode Bridge) 
	NOR Gate 	BUFFER (Amplifier Gate) 
	NOR Gate 	BUFFER (Amplifier Gate) 
NOT	NOT Gate Inverter 	Capacitor feedthrough 
NOT	NOT Gate Inverter 	Capacitor non-polarised 
	Operational Amplifier (Op Amp) 	Capacitor polarised (see electrolytic) 
	Photo Cell (photo sensitive resistor) 	Capacitor Variable 
	Photo Transistor 	Cavity Resonator 
	Photovoltaic Cell (Solar Cell) 	Cell 
	Piezo Tweeter (Piezo Speaker) 	Coaxial Cable 
	Positive Voltage Connection 	Crystal Microphone (Piezoelectric) 

	Potentiometer (variable resistor) 		Crystal Piezoelectric 
	Rectifier Semiconductor 		Darlington Transistor 
	Rectifier Silicon Controlled (SCR) 		Delay Line 
	Relay - spst 		DIAC (Bilateral Switch) 
	Relay - spdt 		Diode 
	Relay - dpst 		Diode - Gunn 
	Relay - dpdt 		Diode - Light Emitting (LED) 
	RFC Radio Frequency Choke 		Diode Photo Sensitive 
	Saturable Reactor 		Diode Photovoltaic 
	Schmitt Trigger (Inverter Gate) 		Diode Bridge (Bridge Rectifier) 
	Schottky Diode 		Diode - Pin 
	Signal Generator 		Diode - Varactor 
	Speaker 		Diode - Zener 
	Switch - push (Push Button) 		Electret Microphone (Condenser mic) 
	Switch - Rotary 		Electrolytic (Polarised Capacitor) 
NTC	Thermal Probe NTC: as temp rises, resistance decreases 	OR	Exclusive-OR Gate (XOR Gate) 
	Thermocouple 	OR	Exclusive-OR Gate (XOR Gate) 
	Voltage Regulator (7805 etc) 		Ferrite Bead 
	Voltmeter 		Field Effect Transistor (FET) n-channel 
	Wattmeter 		Field Effect Transistor (FET) p-channel 
	Wires 		Fuse 
	Wires Connected 		Galvanometer 
	Wires Not Connected 		Ground Chassis 

	Tunnel Diode			Ground Earth	
	Inverter (NOT Gate)			Headphone	
	INVERTER (NOT Gate)			Inductor Air Core	
	Jack Co-axial			Inductor Iron Core or ferrite core	
	Jack Phone (Phone Jack)			Inductor Tapped	
	Jack Phone (Switched)			Inductor Variable	
	Jack Phone (3 conductor)			Integrated Circuit	
	Transformer Air Core			Transformer Iron Core	
	Transistor Bipolar - NPN			Transistor Bipolar - PNP	
	Transistor n-channel Field Effect			Transistor p-channel Field Effect	
	Transistor Metal Oxide Single Gate			Transistor Metal Oxide Dual Gate	
	Transistor Photosensitive			Transistor Schottky - NPN	
	XOR Gate (exclusive OR)			XOR Gate (exclusive OR)	
	Thyristors: Bilateral Switch			Transistor Unijunction - UJT	

انتهى الجزء الأول بعون الله وتوفيقه

With my best wishes
Mit meinem besten Wünschen