GE218

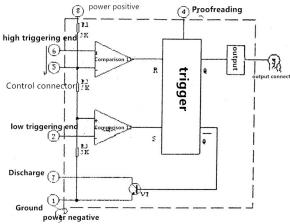


Description:

Manifold this circuit uses NE555 time base circuit, the internal comparator, RS flip-flop, the discharge tube and other components, as shown in Figure 6 feet R terminal and the positive phase input terminal 7 is linked to the discharge end of the foot RS flip do the preparation. 2 feet S inverting input terminal, 3 feet is output. When the initial state of RS flip-flop of Q -ended output low discharge cut-off does not discharge, 3 feet high output. At this point W2, R13, C5 constitute positive stationary delay circuit, power supply by W2, R13 for C5 charge (adjustment W2 can be adjusted C5 reaches the trigger level of the time) when the C5 terminal voltage reaches 2/3VCC when, R -side comparison flip the output high. At this point S is essentially the same level so that the end result RS flip-flop triggered flip to another steady state, Q -ended output high, discharge conduction C5 instantaneous voltage is pulled low. Because when you are steady MT2 for the high end of C1 is fully charged, 2 feet has been at a high level, when the RS flip after the trigger to fire into another steady MT2 goes low, then C1 through W1, R6, R14is discharged to ground, adjusting the W1 can adjust the discharge time, when

the CI voltage side down to 1/3VCC when the S terminal of the comparator flip causes RS flip-flop to get to the steady state, followed by cycle, were adjusted W2, WI can be controlled positive and negative steady-state circuit delay length. 3 feet is positive, negative steady-state output of the positive and negative outputs steady positive and negative levels. This level is applied to the capacitor C2 on to C2 charging the output level stable, the level of the control signal is behind the drive circuit. The control signal by R5 added to 9013 base, 9013 is NPN tube, base positive level 9013 of C, E very turned on and the 9012 cut-off, that is a positive steady 9013 conduction, 9013 pulled collector is low, then through R7 added VT3-VT2 base VT3 conduction,

thereby VT5 , VT7 conduction current through the MT2 , after flowing through the motor MT1 . Motor is transferred robot walk forward, voice, eyes flashing. W2 control motor forward in time. When the 555 is in the



negative output steady low through R4 added VT2 on, VT2, VT4, VT6, VT8 conduction. Current throughly 11 after howing through the motor MT2. Back robot motor reversal, because of the sound, flashing lights circuit powered through a diode, is there voltage turn off when the reverse diode, sound, no flashing lights circuit voltage to stop working.

Assembly Instructions:

- 1. When to get this kit, the request control "parts list" one by one the number of counted again, and with multimeter to measure the individual components, especially the ceramic capacitors, it is best to use a digital multimeter to measure the capacitance profile, if there is no digital form, Only a little early to estimate with a multimeter to measure it, be aware of.
- 2. When welding to weld small components, press, and then welding large components, and finally the principle of operation and then welded manifold, as close to the floor element "condemnation" shall be inserted the wrong element, due to the manifold NE555 is the use of double 8 Foot-line structure, its feet relatively dense arrangement, when the soldering iron tip for fast welding head, if a welding unsuccessful, should be such as to cool down before the next soldering to avoid scorch Manifold, after welding check should be repeated false, false, wrong welding, whether the drag caused by a short circuit fault tin, just click the above requirements welding assembly, a power can work properly.
- 3. The functional circuit board assembly after the completion of part welded motor, the power part of the lead. Open the robot inside the back cover of the next line of welding electrical wiring with our welding on the motor, while the

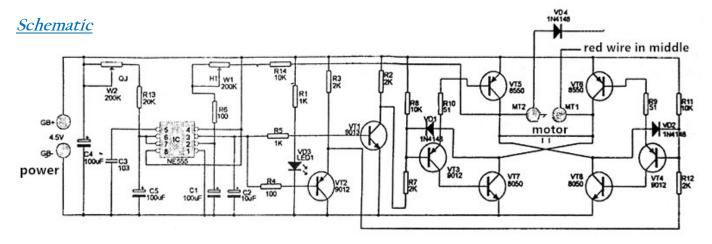


red part of the series with a welding head under 1N4148 diode. Then welding power lines: a welding negative battery pole piece, and the other end is welded, welding power supply and motor wiring switch after a good lead from the back of the hole. After loading lever on top and shook his head, the back cover can be. (Note To ensure the active part of the space inside so as not to get stuck). The electrical wire soldered to the circuit board functional MTI and MT2 on the pad (note that the red welding MT2, green wire bonding MTI on the back so as not

functional MT1 and MT2 on the pad (note that the red welding MT2, green wire bonding MT1 on the back so as not to sound, flash). Power cord Red welded GB + on the pad, the green line welding in GB- on the pad. After welding installed three five batteries, circuit board mounted on the outside of the battery, with the demolition of the battery cover screws, a walking robot can move freely assemble a success. Adjusting W2, W1 can be adjusted forward and backward in time.

Component List:

Number	Name	Model Specifications	Bit No.	Number
1	Transistor	9013	VT1	l only
2	Transistor	9012	VT2, VT3, VT4	3 only
3	Transistor	8550	VT5, VT6	2 only
4	Transistor	8050	VT7, VT8	2 only
5	Manifold	NE555	IC	1 only
6	Diodes	1N4148	VD1, VD2, VD4	3 only
7	Light-emitting diodes	LED φ3	VD3	1 only
8	Resistance	1K	R1, R5	2 only
9	Resistance	2K	R2, R3, R7, R12	4 only
10	Resistance	100	R4, R6	2 only
11	Resistance	10K	R8, R11, R14	3 only
12	Resistance	51	R9, R10	2 only
13	Resistance	20K	R13	1 only
14	Adjustable power	200K	W1, W2	2 only
15	Allow	100µ F	C1, C4, C5	3 only
16	Allow	10µ F	C2	l only
17	Ceramic capacitors	103	C3	l only
18	Circuit board			l only



PCB Plans:

