This is a relatively simple project , it is a type robot walker , ie it walks on all fours like a bug, that's why they catalog as BEAM robot . This robot is based on a similar one designed by Canadian Jérôme Demers and has the following features :

 Follow the principle K.I.S.S. ( "Keep It Simple, Stupid" English May Be Simple , Stupid ) . This robot uses uses a simple control circuit , a single servomotor , and a single gear to create a four-legged walker .

 using a popular circuit is demuenstra , the timer circuit BEAM Bicore two nodes sends a control signal back and forth between nodes creating a movement back and forth in the engine and gears and both legs wire subject to the gears.

FIGURE 1: AS SEEN OUT ONCE THE ROBOT AND RUNNING

MATERIALS

This project requires materials that are not in the house except for the wire that is obtained from a clothes hanger . Everything else should be purchased at a specialty electronics store

PARTS LIST

 ( 1) Servo motor hobby shop

 ( 1) Plastic Gear 4cm

 ( 1) 30 cm wire clothes hanger or copper wire No 10

 ( 1) plastic tube 1 cm in diameter can be used plastic wire hanging clothes

 ( 1 ) Terminal Block

 ( 2) battery holder for two AAA batteries each

 ( 1) Piece of 1cm diameter tube

 ( 2) .22 uF capacitor monolithic

 ( 1) 100K to 10M ? resistor ( use one 3.2M )

 ( 1) 74HCT240 integrated circuit ( IC )

 ( 1) socket 20-pin DIP IC

CONSTRUCTION IN FREE FORMAT

We will use the circuit 74HCT240 intergado . This chip is an inverting octal buffer. I mean that is a chip with eight logic gates investing signals that reach them . Everything is reversed, then a low signal becomes a high signal and high signal becomes a low signal . By combining the three gates on one side and three on the other side ( soldering the chip pins or legs ) . the signal passing back and forth between the two nodes send high and low pulses (or "on" and "off" ) to our servo motor. The result is an oscillatory motion of the motor shaft to which transminte these gears and to the legs made ​​of thick wire .

In the picture you can see the circuit built on a breadboard .22 uF capacitors are used.

FIGURE 2: The circuit fully finished , not the motor terminals is.

FIGURE 3: free form completed and ready for use Circuit.

    HOW TO CONNECT THE HOLDER

FIGURE 4: How to connect the battery holder to provide all 6 volt .

BODY BUILDING ROBOT

The body is made from a servo motor having several gears. If necessary this is changed. Note that we use it in place a thick copper wire on the bottom.

A large gear halved half is fastened to the shaft of the servo motor and the other is on the wire grueso.Ambas miatdes hold the legs of wire used .

Note down as the gears are placed

The legs of wire hanging clothes

Below looks like the legs are attached to the gear . The gear is in turn attached to a plastic disk or other gear .

As the battery compartment should be located to the sides of the robot

At the bottom is the full circuit of the robot walker