A counter that can change its state in either direction, under control of an up-down

selector input, is known as an up-down counter. The circuit given here can count

numbers from 0 to 99 in up and down modes depending upon the state of the selector. It

can be used to count the number of persons entering a hall in the up mode at entrance

gate. In the down mode, it can count the number of persons leaving the hall by

decrementing the count at exit gate. It can also be used at gates of parking areas and other

public places.

This circuit divided in three parts: sensor, controller and counter display. The

sensor would observe an interruption and provide an input to the controller which would

run the counter in up/down mode depending upon the selector setting. The same count is

displayed on a set of 7-segment displays through the controller.

This project makes use of AT89c51 Microcontroller to accept inputs from

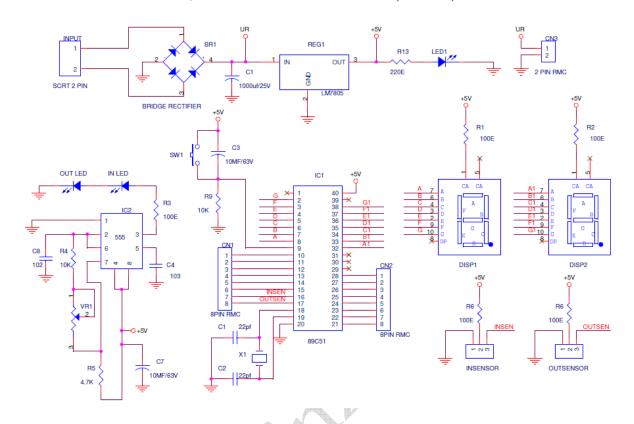
Up/Down sensors (TSOP1738) and Increment / Decrement Count Respectively. The

whole circuit requires +5V regulated power supply which is served by Power supply unit,

comprises of Bridge Rectifier, filter, Regulator (7805).

Code: HB15

UP/DOWN OBJECT COUNTER (HB 15)



Size: 20* 7 Cm



***** Caution Apply 12 AC via 12-0 V Step down transformer or battery