

## **A DESCRIPTION OF A CIRCUIT OPERATION**

### **TRANSMITTER**

1. SW2 is a Power Switch and also a Mode select Switch. This switch has 3 functions according to the location of the switch lever. When the switch lever is in the middle, a transmitter is deactivated. And when the switch lever is upward or downward, the transmitter is activated. When the switch lever is upward (Mode 1), it causes pager and shock. And when the switch lever is downward (Mode 2), it causes shock.
2. D2 is a power indicator.
3. U2 is 5V Regulator IC.
4. SW1 is a Shock Level Switch of 5 levels.
5. U1 is a microprocessor for transmission. It receives the information about the mode from the mode select switch and outputs the signal corresponding to it from data line. When it outputs the information, it also outputs the information of Shock Level according to SW1.
6. D1 is a LED sensing broken fence wires. If fence wires are properly connected, the LED comes on and if fence wires are broken, it goes off.
7. Q1 and Q2 are TR for data amplification and output.
8. S1, S2, S3, F1 and F2 are the circuits protecting a transmitter from lightning strike.
9. U3 and P1 select a jumper according to the length of fence wire connected to P2. When 1Pin and 6Pin of P1 are connected and it is set at 2000feet, the length of fence wire is available by 2000feet.
10. VR1 controls the range from the fence wire to the operating receiver.
11. Jack1 is for AC ADAPTOR.