

LEGEND

SYMBOL

DESCRIPTION



CAPACITOR - ELECTROLYTIC

+ INDICATES POLARITY



CAPACITOR - RADIAL LEAD

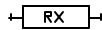
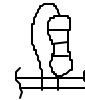


DIODE

+ INDICATES POLARITY
(BLACK STRIPE ON DIODE)



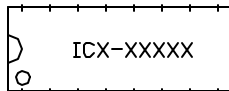
RESISTOR - MOUNTED LIKE THIS:



RESISTOR - MOUNTED LIKE THIS:



TRANSISTOR



INTEGRATED CIRCUIT

ASSEMBLY NOTES:

1. MOST OF THE IC'S ARE CMOS, WHICH MAKE THEM VERY EASILY DAMAGED WHEN HANDLED. IT IS RECOMMENDED TO USE IC SOCKETS WHEN ASSEMBLING THE BOARD, WHEN FINISHED SOLDERING ALL OF THE COMPONENTS, INSTALL THE IC'S IN THE SOCKET. ALSO, USE A GROUNDING STRAP WHEN HANDLING THE IC'S.
2. THE CIRCUIT BOARD WAS DESIGNED TO HAVE A SUB-MINI TOGGLE SWITCH (SPST) INSTALLED ON THE BOARD. SOLDER ONE END OF A WIRE FROM THE BOTTOM SIDE OF THE CIRCUIT BOARD (BAT (+V)) TO ONE TERMINAL ON THE SWITCH. NEXT, SOLDER ONE END OF ANOTHER WIRE FROM THE OTHER SWITCH TERMINAL TO THE CIRCUIT BOARD (+V FROM SWITCH). IF YOU DO NOT WANT THE POWER SWITCH ON THE BOARD, SIMPLY CONNECT THE POWER WIRE TO +V FROM SWITCH INSTEAD OF BAT (+V).
3. R12 IS THE POTENTIOMETER THAT ADJUSTS THE CAMERA SHUTTER TIME. MINIMUM IS 2 SECONDS. MAXIMUM IS 13 SECONDS. PLEASE NOTE THAT THE TIMES CAN VARY BY SEVERAL SECONDS, DEPENDING UPON THE QUALITY OF RESISTORS AND CAPACITORS USED.
4. R5 IS THE POTENTIOMETER THAT ADJUSTS THE SENSITIVITY OF THE PIR. SETTING THIS TO 0% (TOWARDS THE '1') GIVES APPROXIMATELY 15' RANGE. 100% (TOWARDS THE '3') GIVES GIVES AROUND 60' RANGE ON A COOL DAY.
5. THE DIP SWITCH IS USED TO ADJUST THE DELAY TIME BEFORE ANOTHER PICTURE IS ALLOWED TO BE TAKEN. THE DELAY TIMES WERE DESIGNED USING ONLY 1 SWITCH ON AT A TIME. SW1 ON IS THE LOWEST TIME SETTING AND SW4 ON IS THE LONGEST TIME SETTING. THE FORMULA TO CALCULATE THE DELAY TIME IS $C * R$ (EX $1000\text{MF} * 27\text{KOHMS} = .01 * 27000 = 27$ SECONDS. YOU CAN EXPERIMENT WITH THE DELAY TIMES BY TURNING ON MULTIPLE SWITCHES AT A TIME. DO NOT LEAVE ALL OF THE SWITCHES OFF! THE CIRCUIT WILL NOT WORK CORRECTLY!
6. THE DRAWING IS MARKED WITH A + NEAR THE DESIGNATED HOLE FOR COMPONENTS THAT ARE POLARITY SENSITIVE. FOR EXAMPLE, THE ELECTROLYTIC CAPACITORS AND LED.
7. THE LINE INSIDE OF THE DIODE REPRESENTS THE CATHODE (BLACK STRIPE ON COMPONENT) END OF THE DIODE.

FIELDPIX
Game Camera Systems

SIZE	FSCM NO.	DWG NO. CB-1 ASSEMBLY NOTES	REV 1
SCALE NONE		SHEET	