

## ELECTRONIC FLASH GUNS

### 1. INTRODUCTION

Photography is occupying an important place in modern world. Both professionals and amateurs use different type of cameras. Photo industry is well established. Electronic flash guns are used along with cameras to take photos. It is used as an ancillary for getting good and clear pictures even in dark and poorly illuminated areas. Provision to attach flash guns and controls to operate the flash guns are provided on the cameras.

### 2. RAW MATERIALS

High voltage capacitors, flash tubes, ferrite pot cores, power transistors, diodes, neon lamps, capacitors, resistors, reflectors, rectifiers, printed circuit board, battery charger etc.

### 3. MANUFACTURING PROCESS

The components are mounted on the printed circuit board. For this purpose suitable jigs and fixtures are then soldered using soldering iron, solder bath or wave soldering depending upon the volume of work. The sub assembly is inserted in to the moulded case and fixed along with the reflector and flash tube. Once again it is tested for its performance.

### 4. MANPOWER REQUIREMENT : 7

### 5. PROJECT COST

|  |                 |
|--|-----------------|
| <b>A. Fixed Capital</b>                | Rs              |
| Land & Building                        | Rented          |
| Plant & Machinery                      | 1,00,000        |
|  | <b>1,00,000</b> |
| <b>B. Working Capital ( per month)</b> |                 |

|                        |                 |
|------------------------|-----------------|
| Raw Material & Packing | 30,000          |
| Utilities              | 2,000           |
| Salary & wages         | 15,000          |
| Other expenses         | 3,000           |
|                        | <b>50,000</b>   |
| <b>Total (A+B)</b>     | <b>1,50,000</b> |

#### 6. COST OF PRODUCTION / ANNUM

|                                  |                 |
|----------------------------------|-----------------|
|                                  | <b>(Rs.)</b>    |
| Raw materials etc. ( per annum ) | 6,00,000        |
| Depreciation on machinery        | 10,000          |
| Interest on investment           | 30,000          |
|                                  | <b>6,40,000</b> |

#### 7. PROFITABILITY

|  |          |
|--|----------|
| Sales turnover                             | 8,00,000 |
| Operating expenses                         | 6,40,000 |
| Annual profit                              | 1,60,000 |
| Percentage of profit on investment / sales | 64%      |

#### Market potential :

The Photo industry is well established in Kerala. Cameras are being manufactured by large units with all provisions to fix flash guns. The know how to manufacture electronic flash gun is available indigenously. As there are only limited number of manufacturers, the flash guns are of short supply and a good demand exists for quality oriented items. This can be marketed directly in cities and urban areas. Also it can be marketed through the photographic studios/photo goods agents by giving them certain margin of profit or commission.

**Annual Production capacity : 8,00,000**

**List of Plant, Machinery & equipment :**

1. Oscilloscope
2. V T V M
3. H T Probe
4. Recorder
5. Flourescent spectrometer
6. Multimeter
7. Power supply units
8. Drilling machine 1/2 " cap
9. Soldering irons & Heat sinks
10. Hand tools