

AUTOMOBILE BEEPER CUM FLASHER

1. INTRODUCTION

Automobile beepers cum flashers are used in automobiles for giving clear audio visual alarm when the automobile takes a turn and in case of some automobiles when the brake is applied. Generally fitted at the rear end of the vehicles it gives both a "beep and a "flash" i.e both sound as well as light indication. A wide variety of such gadgets, operating on 6 or 9 volts DC battery are available in the market. IS 10256: 1982 is the standards for the proposed product.

2. RAW MATERIALS

The raw material required for 100 beeper cum flashers.

Particulars	value (Rs)
Integrated circuits	1,200
Transistors	300
Diodes	500
Resistors	720
Capacitors (All types)	800
Presets	150
Transformers	900
Piezo electric element	900
Enclosures	600
Printed circuit boards	400
Miniature lamps with holders	2,600
Wires and cables	205
Switches and connectors	4,200
Miscellaneous hardware	125
Packing materials	400
	14,000

3. MANUFACTURING PROCESS

The manufacturing process for beeper cum flasher involves following stages:

- i) Mounting and soldering of components on pre-designed Printed Circuit Boards (PCBs)
- ii) Testing of PCB
- iii) Final assembly and wiring
- iv) Inspection and final testing
- v) Packing

4. MANPOWER REQUIREMENT : 6

5. PROJECT COST

		(Rs.lakh)
A) Fixed capital		
Land and building		Rented
Machinery		0.26
Misc. fixed assets		0.25
Preliminary and pre-operative expenses		0.15
Sub Total		0.66
B) Working capital		
Raw material and packing material	1 month	0.33
Finished goods	1/2 month	0.23
Working expenses	1 month	0.10
Receivables	1 week	0.58
Sub Total		1.24
Total (A+B)		1.90

MEANS OF FINANCE

Bank finance	0.85
Margin money	0.39
Promoter's contribution	0.67
Term loan	0.38

6. COST OF PRODUCTION

	(Rs. lakh)
Raw material and packing material	3.92
Utilities	0.06
Wages and salaries	0.72
Rent	0.18
Other overheads	0.14
Selling expenses	0.17
Interest on term loan	0.06
Interest on bank finance for working capital	0.16
Depreciation	0.05
Total	5.46

7. PROFITABILITY

Annual sales realisation	7.00
Annual operating expenses	5.46
Annual profit (pre-tax)	1.54
Return on Investment	95%
Break-even point	30%

Market potential :

The market potential of this product depends mainly on the growth of automobile industry in the country. At present there are many units manufacturing beeper cum flashers in India. But only a few of them are manufacturing quality product. As the industry is highly unorganised in nature, no reliable data of production is available. This product has good replacement market also. With the growth in Indian economy, the production of vehicles such as cars, trucks, buses scooters etc is increasing, which in turn should create a

continuing demand for this product.

Annual Production capacity : 4000 nos

List of Plant, Machinery & equipment :

- 1 Digital Multimeters
- 2 DC Power supplies
- 3 Portable drilling machine
- 4 Assembly tools
- 5 Misc. Jigs and fixtures
- 6 Moulds for plastic enclosures
- 7 Assembly chairs and tables

