



Product No. 5

Invitation for Expression of Interest (Eoi) for Commercialization of ‘Automatic Headlamp Dimming Device’

1.0 Background

CSIR-Central Institute of Mining and Fuel Research (CSIR-CIMFR) has developed and patented an ‘Automatic Headlamp Dimming Device’ for vehicular use. Headlights of vehicles pose a great danger during night driving. The drivers of most vehicles use high, bright beam while driving at night. This causes a discomfort to the driver approaching from opposite direction. The developed system can be toggled between manual and automatic mode for efficient and hands free operation. In autonomous mode the smart system switches to low beam, when any kind of high beam glare from incoming vehicle is detected. The intelligent system designed and developed by CSIR-CIMFR, consists of highly sensitive light detecting sensors and an embedded microcontroller to efficiently drive the whole system. Block diagram of the device is illustrated in Fig. 1. Tentative technical specification and feature of the device are given below.

2.0 Technical Specification

- a) Embedded microcontroller 5V, 8 analog inputs ports, 14 digital input/ output ports: TX, RX, 6 PWM ports, 1 pairs of TTL level serial transceiver ports
- b) Light sensor- Signal output indicator light, operating voltage 3.3V-5V, able to detect ambient brightness and light intensity with adjustable sensitivity
- c) Working voltage: DC 3-5V
- d) Power relay- AC 250V 10A, AC 125V 12A, DC 28V 12A, DC 30V 10A

3.0 Feature of the Developed Device

- a) Toggle switch for automatic and manual operation
- b) Switches can be operated in automatic mode also
- c) In automatic mode the system switches to low beam
- d) The overall device is very small and operates with inbuilt battery of the vehicle.

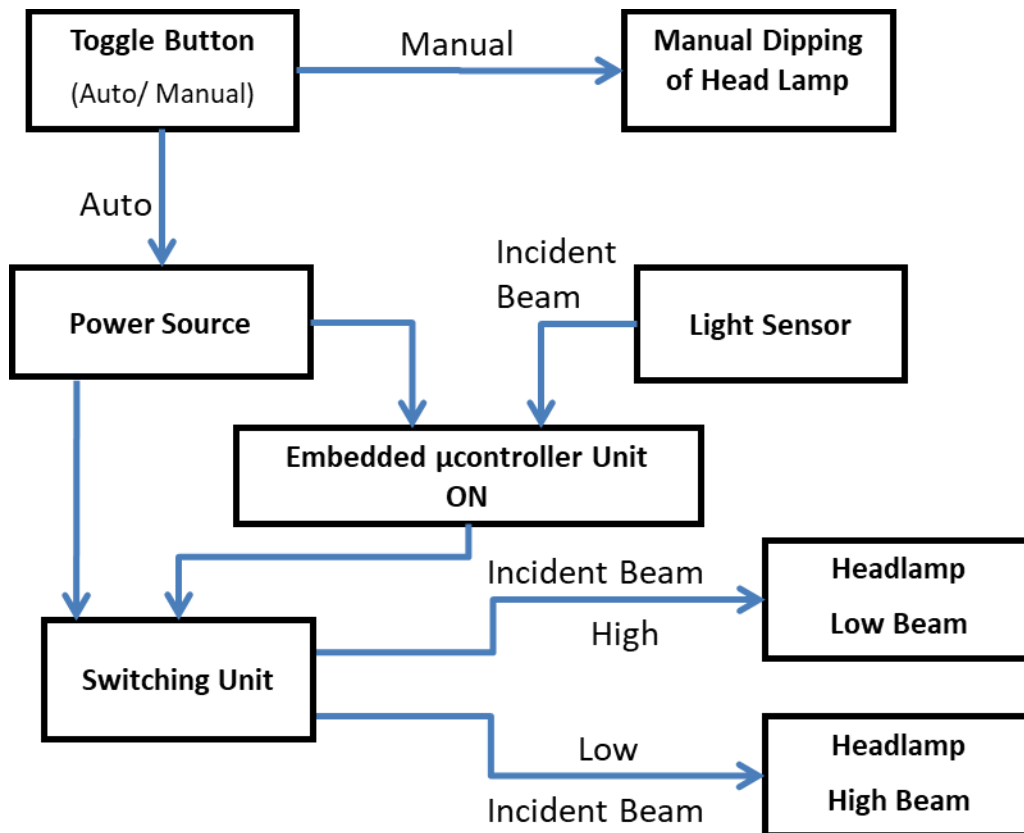


Fig. 1: Block diagram of the device

4.0 Requirement

CSIR-CIMFR requires an industry partner for manufacturing and commercialization of ‘**Automatic Headlamp Dimming Device**’. Therefore, Expression of Interest (EoI) is invited from the firms for fabrication of the device.

5.0 Eligibility Criteria

- (i) The firm should be engaged in manufacturing/selling electronics and instrumentation products.
- (ii) Turnover of the company should be minimum of Rs. 20.00 lakhs during the last financial year.

6.0 Terms and Conditions

- (i) The selected firm shall have to sign a licensing agreement which shall be finalized on mutually agreed terms and conditions based on the CSIR guidelines and shall be signed before the commencement of the project.



- (ii) A lump sum licensing fee needs to be paid by the selected party before signing the licensing agreement for commercialization of the system. Minimum lump sum premium shall be Rs. 5.00 lakh.
- (iii) Royalty rate to be paid by the selected firm based on percentage of selling price (excluding taxes) of the system during commercialization period. It should be minimum of 3%.
- (iv) Fabrication of first set of the device should be completed within 6 (six) months from the date of signing the agreement.
- (v) Licensing agreement would be valid for 5 years and which may be renewed based on mutual consent.
- (vi) The technically qualified firm offering maximum lump sum premium and royalty will be selected for licensing agreement.

7.0 Expression of Interest

The interested firm should submit their EoI in two bids (Technical and Financial Bids) separately with all necessary information and documents.

- (i) The bid prepared by the firm as well as all correspondence and documents relating to the bid exchanged by the technical partner shall be written in English language only. The bidder shall bear all costs of translation, if any, to the English language and all risks of the accuracy of such translation, for documents provided by the technical partner.
- (ii) The firm shall have to submit the documentary evidences to support the eligibility criteria mentioned from point 5.0 sl. (i) to (ii).
- (iii) The firm should also furnish the detailed documents of legal name & address, year of registration, PAN/TIN/GST details and financial standing (audited balanced sheet report & Income Tax).
- (iv) CSIR-CIMFR requires that the firm should observe the highest standard of ethics during execution of such contracts.
- (v) The last date & time for receipt of proposal is 31.05.2018 at 5:00 PM (IST).

8.0 Submission of EoI

The interested firms should submit their EoI to:

The Head, BDIL,
CSIR-Central Institute of Mining and Fuel Research,
Barwa Road, Dhanbad – 826015
Jharkhand, India