

HBL Defence Electronics

Our Vision

“To **organize India's engineering talent** into a globally competitive business, whether in manufacturing or in services. We want to become a learning organization to export technology from India. Our choice is for businesses with technological barriers and / or engineering intensity”

About HBL.

With a turnover of Rs. 250 Crore (US\$ 55 Million) plus and skilled technical force of around 500 engineers, HBL is one of the world's largest suppliers of various types of standby power systems for manifold applications in Aviation, Defence, Railways, Communication and Industry.

The **Defence Electronic Division** of HBL is an ambitious diversification plan established 12 years ago to cater to the stringent requirements of the defence sectors. With good infrastructure, technically qualified personnel, and in-house test facilities built to meet challenging requirements of defence sector in the area of design, development, testing and production of various subsystems and systems we have completed many prestigious products like Built-in Units for project TARANG for airborne applications, Modernization of digital signaling processing for moving target detector, Railway Signaling Equipment, online ticketing equipment etc.. We are taking care of growing needs of Defence Research Labs, ISRO, SAC, SHAR, Indian railways etc.

We are an ISO 9001 certified company and our R&D unit is recognized by DSIR (Dept. of scientific and Industrial Research), Ministry of Science and technology.

DED has participated in many R&D activities from ARDE, Pune and has executed/is executing number of development contracts like ET fuze & CVT fuze for PINAKA System, Universal Variable time fuze, APM timers etc.

Our Customers

- ❖ Ordnance Factories, Ministry of Defence, Ministry of Home Affairs, Government of India.
- ❖ DRDO laboratories, ISRO, Department of Space, Government of India.

HBL - INDIGENOUS SOURCE FOR FUZES

PROXIMITY FUZES FOR ARTILLERY.

Salient features:

1. Radio frequency based proximity detection.
2. Reserve battery as energy source.
3. Setback and spin for activation as safety measure.
4. Backup using Impact.
5. ECCM: RF active only for last 5 seconds of flight.
6. Micro processor controlled programmable HoB, time of flight.



PROXIMITY FUZES FOR ROCKETS

Salient features:

1. Radio frequency based proximity detection.
2. Primary Battery as energy source.
3. Permanent 'G' and Floating 'G' switch as safety measure.
4. Backup using Impact.
5. ECCM: RF active only for last 5 seconds of flight.
6. Micro processor controlled programmable HoB, time of flight.



ELECTRONIC TIME FUZES FOR ARTILLERY.

Salient features:

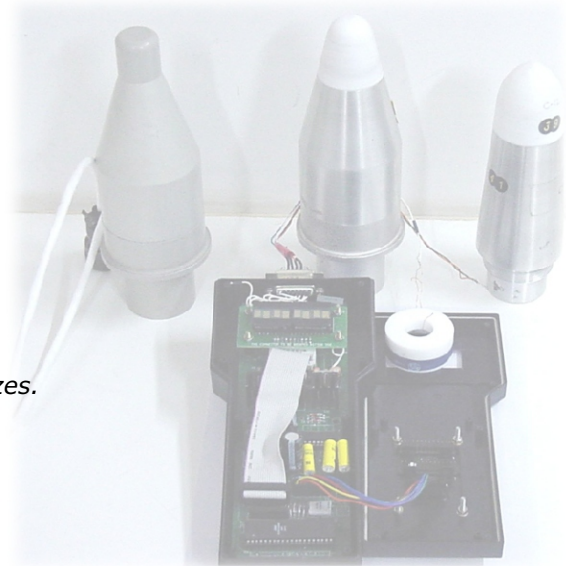
1. Micro processor controlled programmable time of burst.
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ELECTRONIC TIME FUZES FOR ROCKETS

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1. Micro processor controlled programmable time of burst.
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NOTE: HBL has developed *INDUCTIVE FUZE SETTER* for all above fuzes.



All Products meet

- | | |
|------------------|-----------------|
| 1. MIL-STD-1316D | 2. MIL-STD-331A |
| 3. MIL-STD-333B | 4. STANG 4187 |

ELECTRONIC TIME DELAY (4/7 second) MECHANISM FOR GRENADES 36M

Salient Features:

1. Purely micro controller electronic Version.
2. Replaces the existing Pyro system in 1: 1 style.
3. Factory settable through software.
4. No premature.
5. After delay, Unifoil fuze head (squib) initiates the explosive chain.
6. Shelf life guaranteed for more than 8 years.
7. Power source kept outside the potted circuit is an additional safety.
8. 100% delay verification for every circuit.
9. Self-neutralization after 10 seconds.



ELECTRONIC TIME DELAY MECHANISM FOR GRENADES 36M: The electronic time delay unit can be used for 7sec delay by removing the switch, otherwise for 4 sec delay.

MULTI MODE GRENADES

Safety features:

1. Primary mode : Impact, backup: 4/7 sec delays
2. 4/7 sec delay selection by switch
3. Factory settable delay as per customer requirement.
4. Self-neutralization of trigger command after additional 10 seconds.
5. Shelf life >8 years



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