

MK-84 MOD 1 SUS

Air to Submarine Communications Device

The SUS MK-84 Mod 1 underwater sound signal device is an expendable electro-acoustic device which provides one-way acoustic communications with submarines. It can also be used to simulate the drop of an ASW weapon during a tactical exercise. It may be dropped or deployed from fixed-wing aircraft or helicopters as well as by over-the-side ship-launched methods.

The SUS MK-84 Mod 1 is able to transmit any one of five pre-selected coded acoustic signals, each of which may convey a predetermined message to the submarine. Four of these signals consist of a continuous tone that alternates in frequency in accordance with a timing sequence defined in the coded table (see specification). The fifth code is a continuous tone at a single frequency. Third harmonics of the fundamental frequencies are also generated at levels slightly less than those of the fundamentals. A five position switch on the side of the unit accomplishes the settings.

The MK-84 is designed to provide a source level of 160 dB/uPa within 2 seconds of water entry throughout the life of the unit.

- Electronic SUS
 - *No Explosives*
- Activation Following Water Entry
 - *2 Seconds (max)*
- Life
 - *70 Seconds*
- Multiple Tone Selections (Codes)
 - *Five*
- Under Water Decent Rate
 - *15 ft per Second*



SPECIFICATIONS

NSN 1360-01-037-0588

PHYSICAL CHARACTERISTICS

Weight.....2.7 kg (5.9 lbs)

Size 38 cm (15 in) long x 7.6 cm (3 in) diameter

PERFORMANCE DATA

Sonar Source Level..... 160 dB

Sonar Operating Frequencies..... 3.3, 3.5 KHz
(plus third harmonics)

Underwater Descent Rate 4.5 m / sec. (15 ft / sec)

Operating Life.....70 Seconds

Launch Altitude0 to 3000 meters (0 to 10000 ft)

Launch Speed 0 to 300 KIAS

Shelf Life 10 years in sealed container

Code selections(Long 1.5 sec, Short 0.5 sec)

| Code | F1 (3.3 kHz) | F2 (3.5 kHz) |
|------|--------------|--------------|
| 1 | Long | Long |
| 2 | Short | Long |
| 3 | Short | Short |
| 4 | Long | Short |
| 5 | Off | Continuous |