

KY-58 (Vinson)

The KY-57/58 is a member of the VINSON family. The VINSON family consists of wideband secure voice (WBSV) units developed by the National Security Agency to provide line of sight half-duplex voice and data encryption at 16 Kbps. The KY-57/58 provides security for AM/FM, VHF, UHF, half-duplex PTT combat net radios and tactical wireline systems when used with the HYX-57. Also used by non-tactical users for high-level communications in the local wideband telephone networks and wideband satellite terminals. The KY-57 is the manpack/vehicular model and the KY-58 is the airborne/shipborne version. The KY-57/58 is certified to pass data up to TOP SECRET and accepts key from the family of Common Fill Devices and also incorporates remote keying. KY-57/58 production was completed in 1993. No further production is planned.

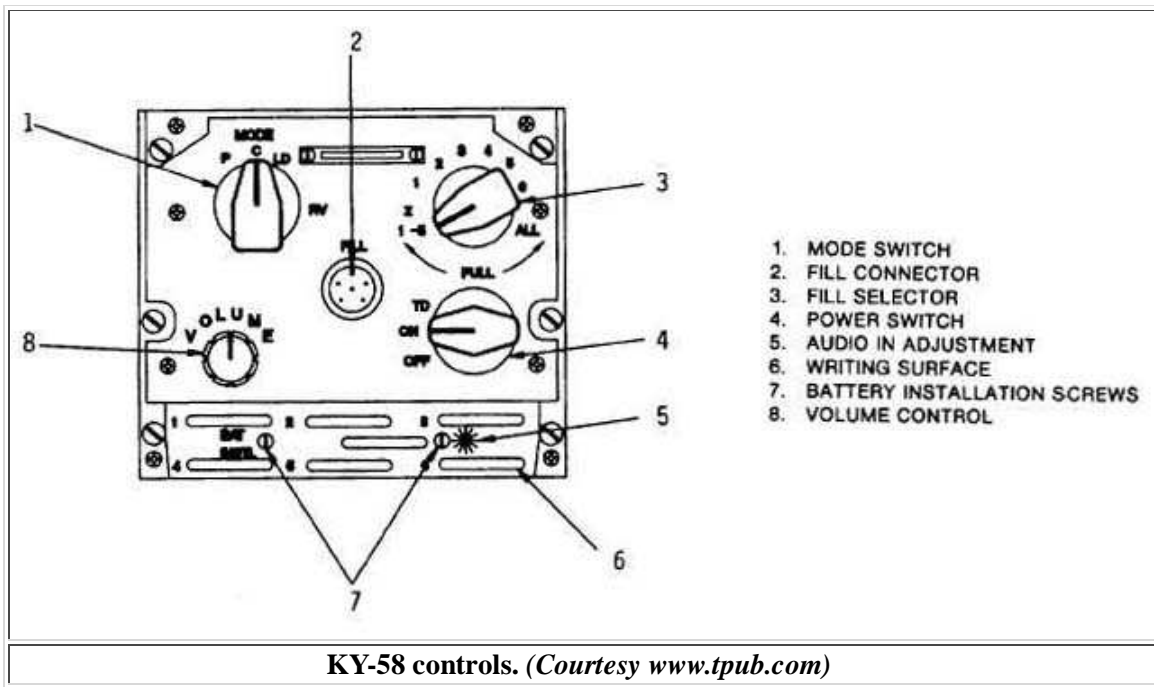


KY-58 photo by Tim Tyler

Tim Tyler comments. "The photo above depicts the KY-58 unit inside a USCG HH-65C 'Dolphin' helicopter taken in September 2008. It is currently configured just for use on their 225-400MHz aircraft band radio. Supposedly, they're in the process of upgrading the HH-65 helos into an MH-65 (Special Ops capable) configuration which will have APCO P-25 compliant radios (with AES crypto, for talking to other DHS agencies) as well as ANDVT / KY-100 type crypto for communicating with the military-side of USCG ops".



The photo above depicts a KY-58 RCU installation in an A-10 attack aircraft. A remote control unit (RCU) was mounted in the cockpit thus allowing the pilot to remotely switch and control the KY-58 which was located in another part of the aircraft. (Photo courtesy of www.shreve.net/~blade/comm.html)



KY-58 controls. (Courtesy www.tpub.com)





KY-58 internal view. (Photo via E-bay)



KY-58 rear view. (Photo via E-bay)

CHARACTERISTICS:

Physical Characteristics

Height: 5 in.

Width: 5 in.

Depth: 4.2 in.

Weight: 4.9 lbs.

Data Rate: 16Kbps

Power: Battery: BA-1590 (Mercury), BA-5590 (Lithium Organic), BA-3590 (Alkaline), or BA-590(Nickel Cadmium).

Power Input and Consumption: 28 VDC; 9 Watts typical. Max 10.25 Watts.

MTBF: 6,463 hours at 25°C air inhabited and 3,272 hours at 71°C air inhabited. 7,158 hours at 25°C Naval, Sheltered and 3,399 hours at 71°C Naval Sheltered.

SUPPORTED BY: In-Service-Engineering-Agent (ISEA), St. Julian's Creek.

DEVICE DOCUMENTATION

CSESD-14G, July 1984. "Communications Security Equipment System Document for TSEC/KY-57/58". Confidential Document.

CSESD-31A, Dec. 1987. "Communications Security Equipment System Document for HYX-58/TSEC.

Credits and References:

- 1) Tim Tyler <nightwatch01(at)comcast.net>
- 2) http://www.tpub.com/content/aviationandaccessories/TM-55-1510-220-10/css/TM-55-1510-220-10_126.htm

[Back To Menu Page](#)