

INCH-POUND

MIL-DTL-83511/1A  
w/AMENDMENT 1  
19 September 2012  
SUPERSEDING  
MIL-DTL-83511/1A  
11 March 2004

DETAIL SPECIFICATION SHEET

HEADSET, ELECTRICAL  
H-251A/U

This specification is approved for use by all Departments  
and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and  
MIL-DTL-83511.

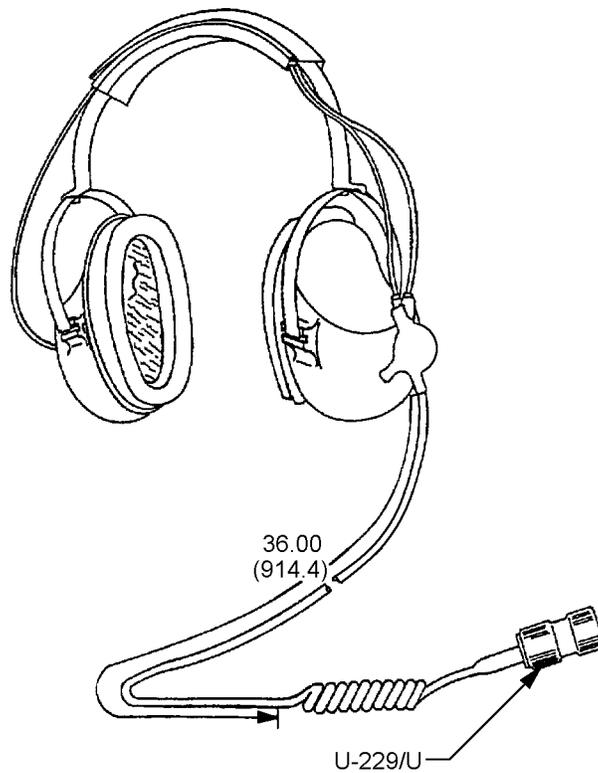
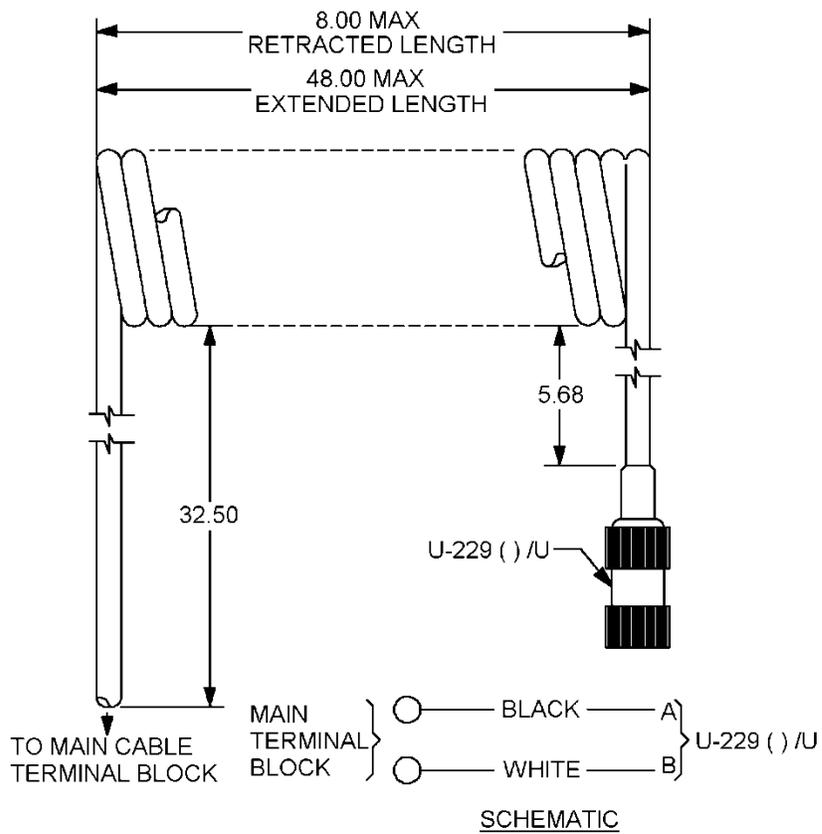


FIGURE 1. Headset-electrical, H-251A/U.

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Inches	mm
5.68	144.3
8.00	203.2
32.50	825.5
48.00	1219.2

FIGURE 2. H-251A/U cord.

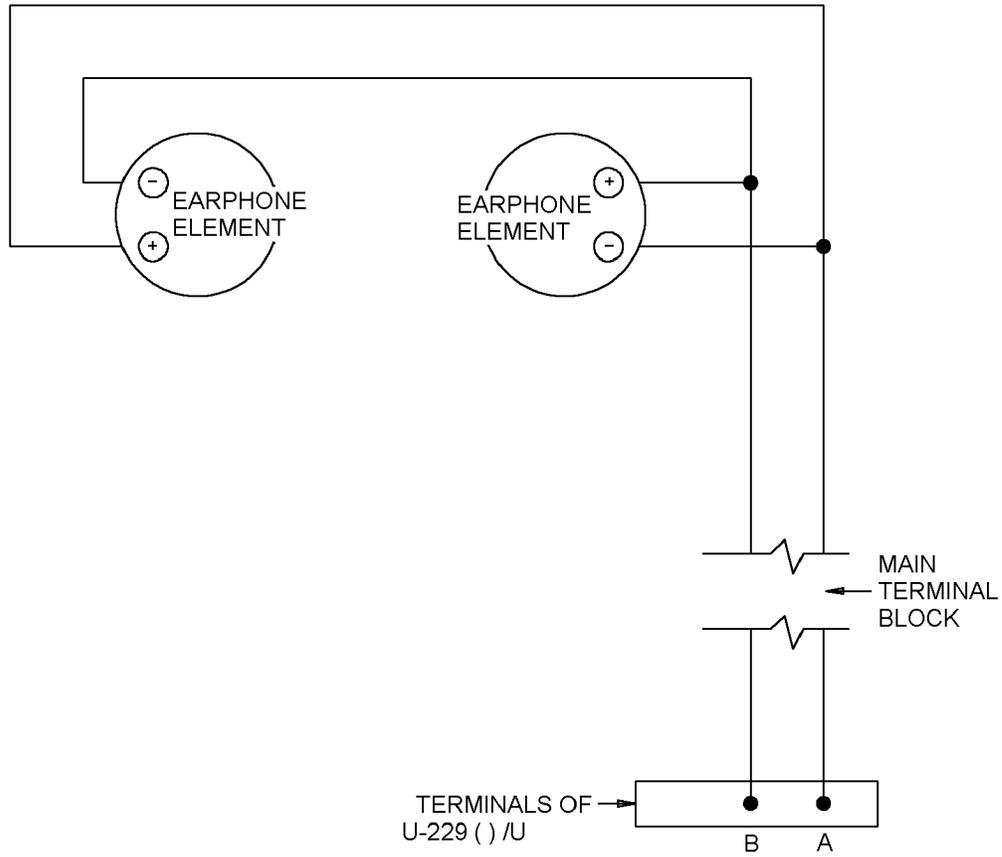


FIGURE 3. Headset-electrical, H-251A/U, wiring diagram.

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REQUIREMENTS:

Interface: Figure 1 is for illustration purposes only and all referenced drawings and specifications cover design.

Weight: 12 ounces maximum.

Earphone: Two required, 1,000 (one thousand) ohms each, in accordance with MIL-PRF-25670/5, Part or Identifying Number (PIN) M25670/5-01.

Frequency response: Output shall be 104 to 110 dB between 100 to 3,500 Hz.

Frequency response range: 100 to 3,500 Hz.

Sensitivity: 107  $\pm$ 3 dB related to 20 micropascals ( $\mu$ PA) at 1 kHz.

Distortion: 5 percent maximum within the frequency response range.

Impedance: 1,000  $\pm$ 100 ohms at 1,000 Hz with 1.0 volt applied across the terminals.

Endurance:  $\pm$ 3 dB maximum deviation from initial F/R after 8 hours with 500 milliwatt input power (22.4 volts) at 1,000 (one thousand) Hz.

Random drop: Earphone frequency response is also required after the test.

Insulation resistance: The insulation between any insulated metallic part of the earphone and the terminals shall withstand the specified test without breakdown or decrease in insulation resistance below 1 megohms.

Cord: The cord shall be in accordance with MIL-DTL-55668 or equal, 2 (two) conductor. The individual insulated conductors shall be colored (1. Black and 2. White). The lengths shall be 32.50 inches (825.5 mm) straight cord including mold to accept clothing clip 48.00 inches (1219.2 mm) of extended length of retractile cord (approximately 8.00 inches (203.2 mm) of retracted cable) to end of coil (see figure 2). From this point 6.00 inches (152.4 mm) straight cable to entrance into connector U-229/U, a 2-inch (50.8 mm) strain relief feature shall be provided at all main cable junctions. Termination of this headset cable is a U-229/U connector.

Dimensions: Dimensions are in inches. Tolerance is  $\pm$ .010 inch, unless otherwise specified.

Schematic: Wiring shall be in accordance with figure 3.

Clothing clip: Alligator type for cord mold attachment, to be positioned approximately half way between the ear piece and the beginning of the coiled wire, M22442/8-1 (see MIL-DTL-22442/8), or Roanwell Corp. P/N 20190 or equal (see MIL-DTL-83511).

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This headset is functionally interchangeable and replaces headset type H-251/U.

Qualification. The activity responsible for qualification of products delivered in accordance with this specification sheet is Defense Supply Center Columbus (DSCC-VQP), 3990 East Broad Street, Columbus, Ohio 43218-3990 [vqp.do@dla.mil](mailto:vqp.do@dla.mil), or [vqp.go@dla.mil](mailto:vqp.go@dla.mil). Information pertaining to qualification of products may be obtained from that activity. Qualification of product on the basis of similarity may be considered at the discretion of the qualifying activity on a case by case basis.

Amendment notations. The margins of this specification sheet are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content, irrespective of the marginal notations.

Referenced documents. In addition to MIL-DTL-83511, this document references the following:

MIL-DTL-22442/8  
MIL-PRF-25670/5  
MIL-DTL-55668

CONCLUDING MATERIAL

Custodians:  
Army - CR  
Navy - EC  
Air Force - 85  
DLA - CC

Preparing activity:  
DLA - CC

(Project 5965-2012-016)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.