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DEPARTMENT OF THE ARMY TECHNICAL MANUAL

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ORGANIZATIONAL, DS, GS AND DEPOT  
MAINTENANCE MANUAL

HEWLETT-PACKARD NOISE  
FIGURE METER  
MODEL 342A AND NOISE  
SOURCE MODEL 349A

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HEADQUARTERS, DEPARTMENT OF THE ARMY  
SEPTEMBER 2, 1967

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**Technical Manual )**

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**HEADQUARTERS,  
DEPARTMENT OF THE ARMY  
Washington, D.C., 19 September 1967**

**ORGANIZATIONAL, DS, GS, AND DEPOT MAINTENANCE MANUAL  
HEWLETT-PACKARD NOISE FIGURE METER MODEL 382A  
AND NOISE SOURCE MODEL 349A**

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Model 342A

**SPECIFICATIONS****Noise Figure Range:**

5.2 db noise source 0 to 15 db, indication to infinity

15.2 db noise source 3 to 30 db, indication to infinity

**Accuracy: (excluding source accuracy)**

Noise Diode Scale: +1/2 db, 0 to 15

Gas Tube Scale: +1/2 db, 10 to 25

+1 db, 3 to 10  
and 25 to 30

**Input Frequency:**

30, 60, 70, 105 and 200 mc, selected by switch.

Other frequencies optional.

**Bandwidth:** 1 mc minimum

**Input:**

-60 to -10 dbm (noise source on). Corresponds to gain between noise source and 34; of:

5.2 db noise source approx. 50 to 100

15.2 db noise source approx. 40 to 90 db

**Input Impedance:** 50 ohms nominal

**AGC Output:**

Nominally 0 to 6v from rear binding posts

**Recorder Output:**

1 ma maximum into 2000 ohms maximum

**Power Input:**

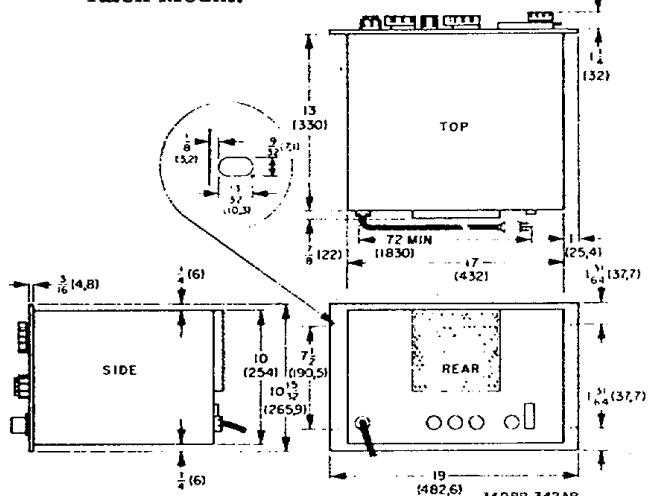
115/230v +10%, 50-60cps, 185 to 435 watts depending on noise source and line voltage

**Power Output:**

Will operate 343A, 345B, 347A or 349A noise sources

**Dimensions:**

**Cabinet Mount:**  
high, 14-1/2 in. deep

**Rack Mount:****Weight:**

**Cabinet Mount:** Net 40 lbs, shipping 51 lbs

**Rack Mount:** Net 34 lbs, shipping 49 lbs

**Accessories Furnished:**

340A-16A, 6 ft cable for connecting r 342A to 1 349A or to any . 347A noise source

**Accessories Available:**

343A VHF Noise Source, 10 to 600 mc

345B IF Noise Source, 30 to 60 mc

347A Waveguide Noise Source for S, G, J, H, X and P bands

349A UHF Noise Source, 400 to 4000 mc,  
Type N connectors

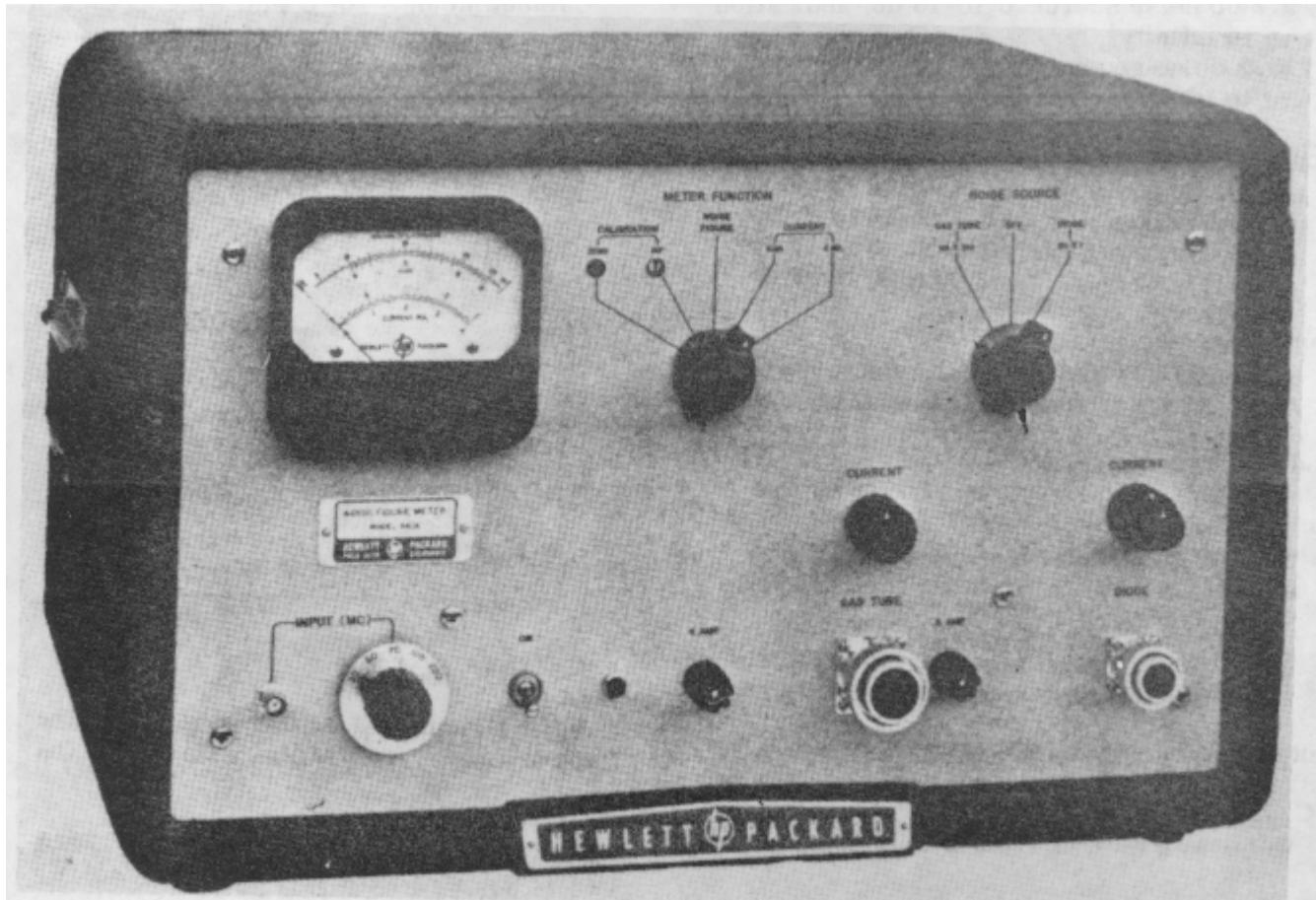


Figure 1-1. Model 342A Noise Figure Meter

## SECTION I GENERAL INFORMATION

### **1-A.1. Scope**

a. This manual includes installation and operation instructions and covers operator's, organizational, direct support (DS), general support (GS), and depot maintenance. It describes Hewlett-Packard (Federal supply code 28480) Noise Figure Meter 342A and Noise Source Model 349A.

b. A basic issue items list for this equipment is not included as part of this manual.

### **1-A.2. Index of Publications.**

Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

### **1-A.3. Forms and Records**

a. Reports of Maintenance and Unsatisfactory Equipment. Use equipment forms and records in accordance with instructions given in TM 38-750.

b. Report of Packaging and Handling Deficiencies. Fill out and forward DD Form 6 (Report of Packaging and Handling Deficiencies) as prescribed in AR 700-58 (Army), NAVSUP Publication 378 (Navy), AFR 71-4 (Air Force), and MCO P4610-5 (Marine Corps).

c. Discrepancy in Shipment Report (DISREP) (SF361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF361) as prescribed in AR 55-38 (Army), NAVSUP Pub 459 (Navy), AFM 75-34 (Air Force), and MCO P4610.19 (Marine Corps).