Application NOTE

HP 436A, 437B, AND 438A POWER METER EMULATION

OVERVIEW

Over the years, the HP 436A, 437B, and 438A meters have been installed in commercial and military ATE programs around the world. However, the meters grew old, and in 1998 Hewlett-Packard stop producing them.

The Giga-tronics 8540C Power Meters provide HP 436A, 437B and 438A GPIB emulation, plus faster measurement speed and wider single-sensor dynamic range, making them ideal replacement meters for the HP 436A, 437B or 438A in existing ATE applications.

EMULATION SETUP PROCEDURE

Before running the ATE program, push the **MENU** button.

```
CONFIG MENU
          ↑ more ↓
```

1. Push ⬍ (up/down) buttons to show **CONFIG MENU**, then push the **ENTER** button.
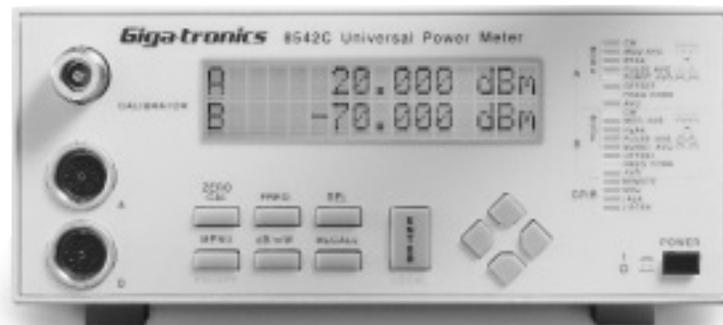
```
GPIB
          ↑ more ↓
```

2. Push ⬍ (up/down) buttons to show **GPIB**, then push the **ENTER** button.

```
MODE    —    ADDRESS
 436A   —         13
```

3. Push ⬍ (up/down) buttons to choose the **436A**, **437B** or **438A** mode, then push the **ENTER** button.

```
MODE    —    ADDRESS
 437B   —         13
```

```
MODE    —    ADDRESS
 438A   —         13
```


IMPROVED PERFORMANCE

The Giga-tronics 8540C also provides improved performance versus the older HP 436A, 437B, and 438A power meters. A simple GPIB test of a 1 GHz, 0 dBm CW signal for 200 readings showed 10 times improvement in GPIB test speeds with the 8540C using the HP emulation mode. And Giga-tronics power peters provide even faster testing because one sensor covers RF power transitions from -70 to +20 dBm.

Giga-tronics