

PLANTRONICS

# SHS1890™

## PTT AMPLIFIER



### SHS1890 Push-to-talk Amplifier

**Features:**

- Allows the use of any H-series headset top in 6-wire controller and dispatch operations
- Push-to-talk switch with selectable locking or momentary operation
- PJ-7 (equivalent to WE-425) connector
- Choice of 3 different coil cord lengths
- CE compliant

**Cable options available:**

- SHS1890-10 10-foot coil cord
- SHS1890-15 15-foot coil cord
- SHS1890-25 25-foot coil cord

Plantronics also offers the SHS2310, which features 10 dB of receiver amplification.

### Product Specifications

**Complete Headset**

(including H31CD capsule, 15-foot cord, push-to-talk switch)

Net weight: 230 grams (8.1 oz.)

H31CD capsule only: 10 grams (.35 oz.)

Shipping weight: 490 grams (17.3 oz.)

**Operating and Storage Ranges**

Operating current range: 10 to 120 mA dc

Operating temperature: 0°C to 50°C (32°F to 122°F)

Storage temperature: -40°C to 66°C (-40° F to 151° F)

**Microphone/Amplifier**

Output level: -23.5 ± 5 dBV (37.6 to 119 mV RMS)

Frequency range: 300 to 3300 Hz

Distortion: < 5%, 300 to 3300 Hz

DC resistance: > 35 ohms

Impedance: 50 ohms

Polarity: Nonpolar

Terminal voltage: 2.3 Vdc @ 10 mA; 5.0 Vdc @ 100mA

Downward Expander Depth: 20 dB

**Receiver**

The SHS1890 allows the use of a wide variety of receiver styles. In addition to the characteristics listed in the table below, each receiver has the following features:

**Acoustic limiter:** Solid-state limiting device across the receiver transducer

**Frequency range:** 300 to 3300 Hz

**Distortion:** < 5%

Unless otherwise specified, all specifications are nominal, and assume a 50 ohm resistive load with a bias of 4.8 V dc through 226.5 ohms, and an input of 94 db SPL at 1000 Hz into an attached headset top. Specifications are subject to change.

### Receiver Characteristics of Tops Used with SHS1890 Push-to-talk Amplifier

| Plantronics Top                        | StarSet® III<br>H31CD                               | StarSet® III<br>H31/H31N                            | TriStar®<br>H81/H81N                                | SupraPlus®<br>Monaural<br>H251/H251N                | SupraPlus®<br>Binaural<br>H261/H261N                | Encore®<br>Monaural<br>H91/H91N                     | Encore®<br>Binaural<br>H101/H101N                   |
|--|---|---|---|---|---|---|---|
| 1kHz sensitivity<br>(dBPa/V, ±4 dB)    | 20.5  | 19.5  | 22.0  | 14.0  | 9.0   | wide band: 26.0<br>narrow band: 37.0                | wide band: 19.5<br>narrow band: 31.5                |
| Receiver Impedance<br>(ohms, at 1 kHz) | 600 ± 150   | 480 ± 50  | 450 ± 112.5   | 150 ± 37.5  | 300 ± 75  | wide band: 205 ± 30.8<br>narrow band: 250 ± 37.5    | wide band: 395 ± 59.3<br>narrow band: 440 ± 66      |
| Source Drive<br>Impedance (ohms)       | 600   | 10  | 10  | 10  | 10  | 10  | 10  |
| Measuring<br>Device                    | Brüel & Kjaer<br>4157 Ear<br>Simulator <sup>1</sup> | Brüel & Kjaer<br>4157 Ear<br>Simulator <sup>1</sup> | Brüel & Kjaer<br>4157 Ear<br>Simulator <sup>1</sup> | Brüel & Kjaer<br>4157 Ear<br>Simulator <sup>1</sup> | Brüel & Kjaer<br>4157 Ear<br>Simulator <sup>1</sup> | Brüel & Kjaer<br>4157 Ear<br>Simulator <sup>1</sup> | Brüel & Kjaer<br>4157 Ear<br>Simulator <sup>1</sup> |

Note 1: A proprietary Plantronics adapter is used with the specified Brüel & Kjaer measuring device.



For more information about the SHS1890 or other Plantronics products, please visit our Web site at [www.plantronics.com](http://www.plantronics.com).

TEL: 800-544-4660 (USA AND CANADA)  
831-458-7700 (OUTSIDE USA)