ProHold

Models PRO4, PRO8, PRO12, and PRO16

User's Guide

FCC Notice

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Table of Contents

Introduction

The Bogen ProHold Series of Music-On-Hold (MOH) Digital Announcers are designed to play a digitally recorded announcement over the MOH bus of most telephone systems. Four models are available. The PRO4 has a recording time of 4 minutes. The PRO8 has a recording time of 8 minutes. The PRO12 has a recording time of 12 minutes. The PRO16 has a recording time of 16 minutes.

To operate the unit, a cassette tape is placed in the tape compartment. The unit automatically plays (previews) a portion of the audio program over its monitor speaker, and then pauses so that you can change tapes if desired. If you leave the cassette in the compartment, the message is downloaded into digital memory. The stored message then plays continuously (it can also be set for single-play operation). Solid-state operation results in less wear of the tape and tape drive mechanism, increasing reliability and performance.

Each unit features:
- **Automatic downloading, with preview function, from a standard cassette tape**
- **Automatic reload after power outage**
- **High reliability - no tape wear or maintenance problems**
- **Choice of 600-ohm or 1-watt (8-ohm) output**
- **Built-in monitor speaker with on/off switch**
- **Volume control (for monitor speaker and outputs)**
- **One time play capability (external contact trigger)**
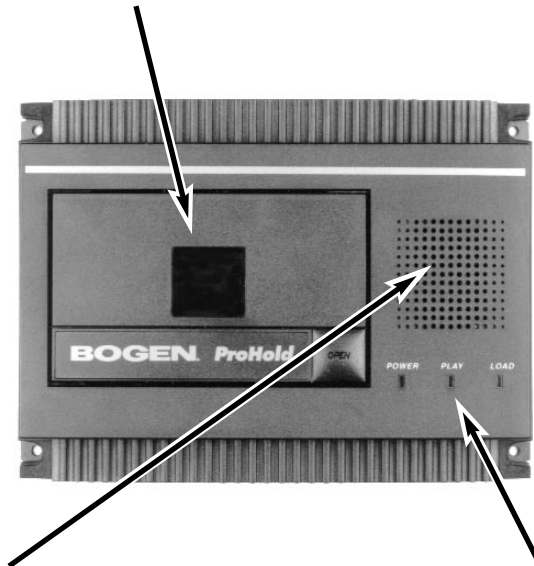- **Status (LED) indicators**

To change a message, simply insert a new cassette. The new message is previewed and then automatically downloaded. Once a message has been loaded, the cassette rewinds and remains in the tape compartment. Then, if the power goes out, or if you turn your system off, the message is automatically reloaded once power is restored.

The unit provides 600-ohm and 1-watt output jacks for connection to the MOH bus of a telephone system, external speaker, or public address system. The unit mounts easily on a wall and comes complete with wall-mounting hardware, an audio patch cord, EXT trigger cord, and 12V AC power supply which can be plugged into a 120V AC outlet.

Front Panel Features

Cassette Tape Compartment

High-quality cassette tape drive mechanism accepts a standard cassette tape. Compartment door has self-adjusting feet to assure proper positioning of the cassette. The cassette tape size should not exceed 60 minutes.
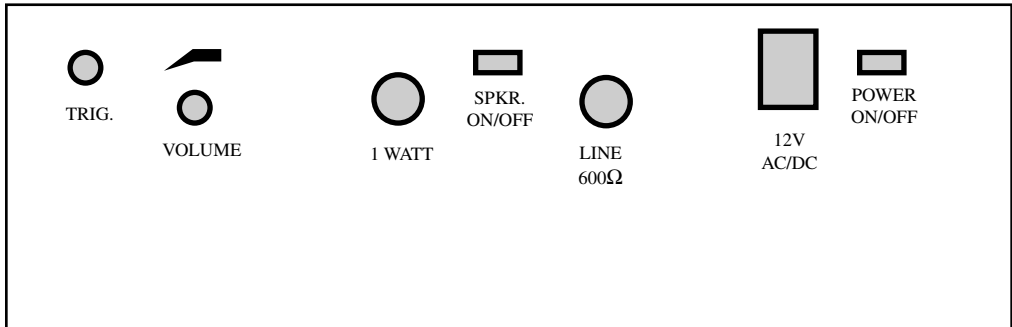
Monitor Speaker

Lets you monitor the tape during the preview and downloading process, and when the unit is operating. A speaker on/off switch is included on the connector panel.

LED Indicators

For POWER, PLAY, & LOAD. The PLAY indicator illuminates only while the digitally stored message is playing. It goes out when downloading and between playbacks during single-play operation.

Controls and Connectors

TRIG	External trigger jack for single-play operation. Accepts a mono or stereo mini-plug (you can monitor system operation when a stereo mini-plug is used).
VOLUME	Controls output level of the monitor speaker and the 1 WATT and LINE 600 Ω output jacks.
1 WATT	RCA jack provides 1-watt @ 8 ohms.
SPEAKER	Turns monitor speaker on or off.
LINE 600Ω	600-ohm output to the MOH input on a telephone system or to the amplifier of a loudspeaker system.
12V AC/DC	Jack accepts 12V AC or DC power to the unit. The power supply included provides 12V AC @ 800mA from a 120V AC source.
POWER	Turns power on. The memory is erased when the switch is turned off.

Installation

Unpacking & Inspection

The ProHold unit was carefully checked at the factory. Inspect the carton and unit for signs of damage. If damage is found, notify the dealer from whom the unit was purchased. If the unit was shipped to you, file a claim with the transportation carrier.

Installation Precautions

Observe the following installation precautions:

- **Do not install the unit in damp areas, or in areas where it is likely to be exposed to rain or moisture.**
- **Do not install the unit in areas where the ambient temperature is likely to go below 40° F or exceed 90° F.**
- **Use suitable fasteners on hollow walls or other similar thin materials. Plastic screw anchors are included.**

Connecting a Power Supply

Connect the output plug from the power supply to the 12V AC/DC jack on the top panel of the ProHold. Plug the power supply into any 120V AC outlet.

Connecting to the Telephone System

Use the audio patch cord terminated with an RCA plug (included) to connect the LINE 600 Ω output or 1 WATT output to the telephone system's music-on-hold (MOH) input. (The outputs can also be used to feed the input of a loudspeaker system's amplifier.)

Connecting an External Speaker

The 1 WATT output RCA jack can be used to drive an external speaker. The output provides 1 watt into 8 ohms.

Operation

Use the following procedure to load a prerecorded cassette tape.

1. Place the POWER switch in the ON position. The red POWER indicator will illuminate.

2. Be sure the SPEAKER switch is in the ON position (if desired), and set the VOLUME control between its minimum and maximum positions.

3. Open the tape compartment door and insert a prerecorded cassette tape. Close the tape compartment door.

4. Note that the ProHold will initiate a self-diagnostic test each time it is powered up (either with the power switch or when recovering from a power outage condition). The test lasts approximately 13 seconds. During the test, the PLAY and RECORD LEDs will blink according to the following sequence: PRO4 — 0 blinks; PRO8 — 2 blinks; PRO12 — 3 blinks; and PRO16 — 4 blinks.

The unit will rewind the cassette tape (if necessary) and then begin to play. It will play (preview) approximately 5 seconds of the audio message and then stop (the LOAD and PLAY indicators do not illuminate during the preview). The tape heads then retract for approximately 5 seconds following the preview, allowing you to remove the cassette, if desired. If you do not remove the cassette, it will rewind and the message will be downloaded into digital memory (the LOAD indicator illuminates when downloading starts).
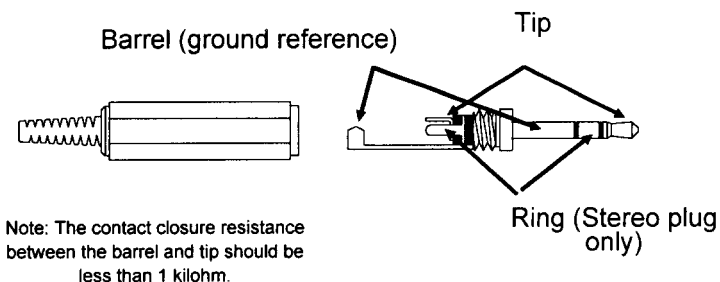
The downloading process starts when audio signal is sensed, ensuring that memory capacity will not be consumed during tape leader travel or for a delay of the audio recording.

Downloading will stop (and the LOAD indicator will go out) when 5 seconds of silence has elapsed following the recording, or when memory capacity is exceeded, or when the cassette tape reaches the end of its travel. After the message has been downloaded, the cassette automatically rewinds, and should be stored in the tape compartment for reloading after power outages.

Following the downloading process, the message will play continuously (the PLAY LED will illuminate). Use the VOLUME control on the top panel to adjust the level at the LINE 600 Ω output and 1 WATT output. Use the SPEAKER switch to turn off the monitor speaker (do not use VOLUME control).

External Trigger Operation

The ProHold can be set for single-play operation, activated by an external trigger. (Note: The PLAY LED on the front panel illuminates only during digital playback.) The TRIG mini-jack on the top panel accepts a mono or stereo mini-plug, as shown in the illustration below.

Barrel (ground reference)   Tip

Note: The contact closure resistance between the barrel and tip should be less than 1 kilohm.

Ring (Stereo plug only)

When the plug is inserted, the unit automatically switches to single-play mode (if the trigger is inserted during the playback, the message will play through to the end and then stop). The external trigger offers two modes of operation. If the contacts are closed and then opened within 5 (five) seconds, the message will play completely and then stop (any further contact closure action at the trigger is ignored until the playback is complete). If the contacts are closed for more than five seconds, playback will stop when the contacts are opened and the unit will return to its idle state.

If a stereo mini-plug is used, the middle ring and barrel provides 0V DC or 5V DC level which can be used to indicate unit status: The 0V DC level indicates digital playback operation; 5V DC indicates the unit has stopped playing the message. (Note: the signal is for monitoring purposes only and can not be used to directly operate external equipment.)

Troubleshooting

Power LED does not light

Turn POWER switch ON.

Check power supply connection.

Tape plays too fast

The tape is not threading properly. Remove the cassette and tighten up any slack in the cassette.

Output sounds distorted over telephone

Reduce volume or change type of output used.

Cannot remove cassette because head is engaged

Turn power off and then on. Wait for head to retract then remove the cassette.

Care and Maintenance

The impact-resistant housing and quality construction of the PROHOLD virtually eliminates the need for service or maintenance.

If the tape drive mechanism receives extensive wear, the tape head, capstan, and pinch roller can be cleaned with isopropyl alcohol using a cotton-tipped applicator.

There are no user-serviceable components within the unit or the power supply. Refer all servicing to qualified personnel.

Specifications

Sampling Frequency:	64 Kilobits/sec. (KBPS)
Memory Capacity:	PRO4 - 4 min.; PRO8 - 8 min.; PRO12 - 12 min.; PRO16 - 16 min.
Power Required:	12V AC/DC. Power supply included with the unit provides 12V AC @ 800mA from a 120V AC source
External Speaker Power:	1 watt into 8 ohms
Input:	High-quality cassette-tape mechanism. Fully automatic operation
Output:	LINE 600 Ω/transformer-balanced via RCA phono jack; 1 watt into 8-ohms via RCA jack (can be used to power an external speaker)
Controls:	POWER ON/OFF; SPEAKER ON/OFF; VOLUME control (for monitor speaker, 1 WATT and LINE 600Ω output jacks); TRIG(ger) jack for single play operation
Indicators:	LEDs for POWER, PLAY and LOAD
Mounting:	Desktop or wall, template and hardware included
Dimensions:	7" x 10" x 3-^{1}/$_2$"
Shipping Weight:	5 lbs.
Tape Cassette:	Normal Bias (120μS) recommended, C-60 size or smaller