



iProMOH-SU

Installation and User Manual



Copyrights

This manual and the software accompanying it are copyrighted © 2015 by Interalia Inc. ®

iProMOH-SU Installation and User Manual

46-UM-512-003-01-EN-85

All rights reserved. No part of this book, including interior design, cover design, and icons, may be reproduced or transmitted in any form, by any means (electronic, photocopying, recording, or otherwise) without the prior written permission of Interalia Inc.

Interalia Inc. Marketing Department
6815 8th Street N.E, Suite N275
Calgary, Alberta, Canada T2E 7H7
Phone: (800) 661-9406 or (403) 288-2706

Interalia and the publisher have used their best efforts in preparing this book as accurately and completely as possible, however we do not make any guarantees or warranties regarding its content.

Trademarks

Interalia is a registered trademark of Interalia Inc.
iProMOH is a registered trademark of Interalia Inc.

All other product names and services identified throughout this book are used in an editorial fashion only, and for the benefit of such companies. No such use, or the use of any trade name, is intended to convey endorsement or other affiliation with the book.

Canada	United States	Europe
6815 - 8th Street NE.	701-24th Ave. SE.	Kerkenbos 10-123
Calgary, Alberta	Minneapolis, Minnesota	6546 BJ Nijmegen
Canada T2E 7H7	U.S.A. 55414	The Netherlands
Tel: 403 288 2706	Tel: 403 288 2706	Tel: +31 858 882046
Toll Free 800 661 9406		
info@interalia.com	info@interalia.com	info@interalia.com

- 1 Table of Contents
- 2 *iProMOH-SU Playback Device* 4
 - 2.1 Included in the Package 4
 - 2.2 Installation..... 4
 - 2.3 Status LED Table 6
 - 2.4 Diagnostics 7
- 3 *Creating Content for the Device*..... 7
- 4 *Loading Your Content onto the iProMOH-SU*..... 7
- 5 *Upgrading Firmware*..... 8
- 6 *Setting the iProMOH-SU Time* 8
- 7 *Technical Specifications* 10

2 iProMOH-SU Playback Device

2.1 Included in the Package

- 2x RCA to RCA cables
- 1x wall mounting kit (2 x #6 x ¾ inch Philips pan head screw 2 x plastic drywall anchors)
- 1x AC to DC power adapter
- 2x RCA to 3.5mm audio adapters
- 4x Adhesive rubber bumper feet
- 1x RCA to 2 screw terminal connector
- 1x Ethernet cable

2.2 Installation

Install the iProMOH-SU on a wall or place it on a flat surface near the PBX or overhead PA system.

To mount the iProMOH-SU on a vertical surface. If there is a plywood panel you may simply use the enclosed screws and using the template shown here place the screws 97 mm (3.8 inches) apart leaving about a 3.2 mm (1/8 inch) gap between the base of the screw head and the plywood.

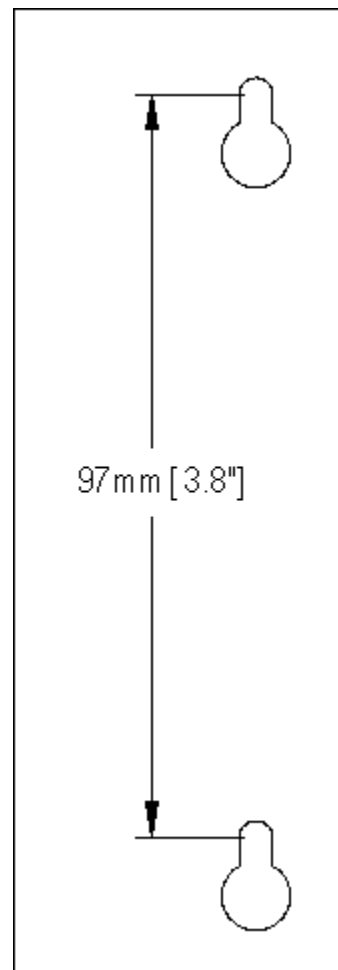
Line up the keyholes in the base of the iProMOH-SU with the screw heads and pull down lightly until the unit locks into place.

If you are mounting onto drywall drill two 2.4 mm (3/32 inch) holes 97 mm (3.8 inches) apart and then drive the plastic drywall anchors flush with the drywall.

Insert the screws into the drywall anchors and leave a 3.175 mm (1/8 inch) gap between the screw head and the drywall.

Line up the keyholes in the base of the iProMOH-SU with the screw heads and pull down lightly until the unit locks into place.

If you wish to place this on a desk or shelf affix the 4 rubber feet to the base of the iProMOH-SU.





From left to right, the faceplate elements are:

- **Power Input:** Connect ONLY the adapter supplied with the iProMOH-SU to this input.
- **Network Jack:** Used to set the iProMOH-SU internal clock via internet time
NOTE: The iProMOH-SU must have its internal clock set for State Date and Scheduled Messages to operate correctly.
- **Channel 1 Output:** Use either the 8 Ω or 600 Ω to connect to your system depending on its requirements.
- **Channel 2 Output:** Second 600 Ω output plays different music/messages from channel 1.
- **Music In:** Connect to the “Line-out” of a background licensed music source (e.g. The Background Music Company, Play Network).
- **USB Connector:** Utilized for loading content and firmware updates.
- **Volume Control:** Adjusts the output level of channel 1 and 2. CH1 & CH2 increment their respective channel volume from 1 to 10 then back to 1 in a circular manner.
- **Status LED:** Shows the state of the iProMOH-SU based on the color displayed. See the "**Status LED Table**" on the following page for details about the flashing patterns and their meaning.

Connect the wall adaptor power cord to the iProMOH-SU, and plug into the wall outlet. After a short time, the status LED will begin flash green, and the default royalty free music will play from the audio output jacks.

2.3 Status LED Table

Normal Operation	
Flashes Green on 1 second intervals.	System OK
Solid Amber.	System booting
Flashes Amber on 1 second intervals.	Media stale date reached
Time Synchronization Operation	
Alternates between Red and Green on ½ second intervals.	Clock time invalid
Alternates between Red and Green on 1 second intervals.	Time update in progress
Solid Red	Time update failed
Media Update Operation	
Alternates between Red on ½ second intervals and Green on 1 second intervals.	Media has already been updated with this file.
Alternated between Amber and Green on 1 second intervals.	Searching USB stick / validating update file
Flashes Red on 1 second intervals.	Configuration file load/save failure, update file corrupt
Alternated between Amber and Red on 1 second intervals.	Media update in progress
Flashes Red on ½ second intervals.	Update file not found for this iProMOH
Solid Green	Media update success
Firmware Update Operation	
Alternated between Amber and Red on 1 second intervals.	Firmware update in progress.
Alternated between Amber and Green on 1 second intervals.	Searching USB stick / validating update file
Solid Red	Firmware update failed
Flashes Green on ½ second intervals.	Update not needed.
Flashes Amber on ½ second intervals.	Update successful

2.4 Diagnostics

To aid in diagnostics, the iProMOH-SU will write a “diagnostics.txt” file the USB stick once it is inserted. The file can be opened in any text editor, and lists the current settings and configuration of the device.

3 Creating Content for the Device

To create content for the iProMOH-SU, download the Simple Audio Mixer application from:

<http://www.interalia.com/downloads/SimpleAudioMixerInstall.zip>

The operation manual for Simple Audio Mixer can be found in the “Manual” section of the iProMOH-SU page:

<http://interalia.com/ipromoh-su.php>

4 Loading Your Content onto the iProMOH-SU

IMPORTANT!

- A Simple Audio Mixer file with a "Service Provider Key" of all zeros and the "Device ID" of all zeros (unlocked, playback on all devices), **MUST NOT** be present on a USB stick that contains other content files.
- The USB stick **MUST NOT** contain multiple Simple Audio Mixer files for the same Device ID.

To update the iProMOH-SU media:

- 1) Power on the iProMOH-SU, wait for it to boot.
- 2) Copy the Simple Audio Mixer media file to the root folder of a USB flash drive. Multiple Device ID files can be present on the drive, as long as they meet the criteria stated above.
- 3) Insert the USB stick into the USB port of the iProMOH-SU. Once the stick is detected, playback will stop, while the update occurs. Consult the "**Status LED Table**" for expected LED patterns during this process.
- 4) If successful, the status LED will flash green, and playback will resume.

5 Upgrading Firmware

The latest firmware for the iProMOH-SU can be obtained from Firmware/Software section on the Interalia site:

<http://interalia.com/ipromoh-su.php>

To update the iProMOH-SU firmware:

1. Power on the iProMOH-SU.
2. Copy the firmware file to the root folder of a USB flash drive. There **MUST NOT** be more than one firmware file in the root directory of that drive.
3. Insert the USB flash drive into the iProMOH-SU to start the update. Consult the "**Status LED Table**" for expected LED patterns during this process.
4. Once the upgrade is completed, the iProMOH-SU will reboot, and start playback.

NOTE: To eliminate confusion of the upgrade process status, it is recommended that no Simple Audio Mixer media files are on the USB stick at the same time.

6 Setting the iProMOH-SU Time

The iProMOH-SU utilizes an internet NTP time server to synchronize its internal clock. If the time is not synchronized, stale date and scheduled messages may not occur at the proper date/time.

NOTE: This is only required if the content loaded into the iProMOH-SU utilizes stale date and/or scheduled messages. Normal playback does not require the time to be synchronized.

NOTE: The iProMOH-SU will retain the clock setting for approximately one week without being powered on. After this period, the clock will need to be reset. It is recommended that the clock is set at the installation site.

To synchronize the time:

1. Connect the Ethernet cable from the iProMOH-SU to a network jack which has access to the internet.
2. Power on the iProMOH-SU.
3. Once the iProMOH-SU has booted (status LED flashing green), press and hold both volume buttons for two (2) seconds.
4. The status LED will change to an alternating sequence of 1 second red / 1 second green.
5. After approximately thirty (30) seconds, the status light will return to flashing green if the time synchronization was successful.
6. If the synchronization was not successful, the status light will turn to solid red.

NOTE: *If the process fails after several minutes, this is an indication of a firewall/network issue. NTP time requires the firewall to pass UDP packets on port 123, and requires a DHCP server to assign an IP address to the iProMOH-SU.*

NOTE: *If the iProMOH-SU clock is outside acceptable limits, it will power on with a ½ second red / ½ second green alternating sequence. Until the time is synchronized, only the stale date tone will play. This will only occur if the media loaded into the iProMOH-SU is dependent on time (i.e.: stale date and/or scheduled messages)*

7 Technical Specifications

Audio Play Time:

- 18 hours 29 minutes, stored in non-volatile flash memory (no back-up battery required)

Audio Formats:

- Audio storage format: .OGG
- Decoded audio sampling frequency: 22.1 KHz
- Supports the following file formats,
 - AIFF (*.aiff)
 - FLAC (*.flac)
 - PCM (*.pcm)
 - MPEG4 (*.mp4, *.mpeg4)
 - MP3 (*.mp3)
 - WAV (*.wav)
 - WMA (*.wma)
 - OGG (*.ogg)

Audio Inputs:

- One input for cross fading with background licensed music source (e.g. The Background Music Company, Play Network)

Audio Outputs:

- Two channels for output. First channel 600 Ohm (+5 dBm) or 8 Ohm (1W, RMS) and second channel 600 Ohm (+5 dBm)
- 48 VDC tolerant for direct connection to a FXO port (no additional line protection hardware required)

Play Options:

- Music only
- Messages only
- Studio quality mixed music and messages
- Messages cross-faded with external licensed music services

Power Supply:

- AC to DC adapter with multi-region connectivity
- Input: 100-240 VAC 50/60 Hz, 0.3 A Output: 9-12 VDC @ 600 mA

Dimensions:

- 44mm H x 190mm W x 127mm D (1.75" H x 7.5" W x 5" D)

Weight:

- 344 grams (0.76 lbs.)

Specifications are approximate and subject to change without notice.