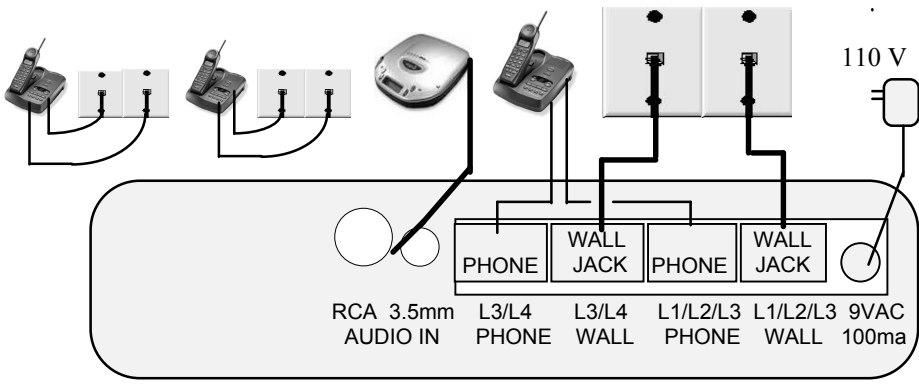| Problems	Possible Cause / Solution
6. MOH works but audio does not stop when call is picked up in <u>Default</u> setting	• Wire distance to adapter is too long, Centralize the location of device to be as close as possible to all the phones. • If you are rewiring "daisy chain" wiring works better than " star" or "home run" Independent wiring • Press FLASH button to stop the music.
7. Some Phones work , some do not	• All your phones need to be similar model for activation in Default setting or ALT2 setting. If you mix different phone models, Use the ALT1 setting or Voice Activation in P5.
8. Randomly Hold music starts to play by it self or does not activate	• The call needs to be on Hold min. 2 sec. before you may pick it up. • When you hang up, wait 2 seconds before selecting the same line. • Check for extra devices sharing that line like Message indicator, Answering machine, Alarm system, Modem etc. Use a "privacy module" between the line and that extra device to keep them off the line when line is being used by your phone. • Set your Alarm system and/or your DSL line to share FAX line. • <u>Excessive</u> <u>wiring</u>- Total wire length per line must be under 400 feet (Ex: if you have 9 wall jacks -no matter spare or a phone plugged in- each connected via a 50 foot wire to a common point then your total wire length is 9 x 50=450 feet) • Use FLASH button to deactivate music.
9. Audio shuts off or flickers	• Extensive audio volume. Lower the volume to proper level.
10. Hold Music activates in a conference call or when two phones pick up at same time	• If for any reason the hold music is activated inadvertently, it can always be deactivated by pressing the FLASH button in any setting. • Conference calls can be done a better way: Press FLASH, you will get a dial-tone now dial the phone number of the 2nd party then press FLASH to join the two calls together.

invotel

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Music-On-Hold Adapter Installation
AudioImage™ 4LPRO
Model # SX4400EZ Rev 22 T

• Plug the included AC adapter. (110V AC to 9V AC)
• Confirm that all 4 LED lights on this unit are **BLINKING**
• Connect "WALL" jacks to your "Wall" Jacks using the provided cords
• Observe that as you connect the wall jacks The Blinking lights turn OFF (it is OK on non existing lines for the lights to keep blinking)

• This device monitors up to 50 telephones through the lines. You may use a splitter (T adapter) at the Wall jack to connect both this device and a telephone. If you do not have a splitter use the "PHONE" jacks on this device to plug the telephone (use "L1/L2/L3 PHONE" and/or "L3/L4 PHONE " to plug your phone in). **Please note that just one phone is optionally connected to this device, other telephones remain connected to their own wall jacks.**

• Plug the Audio cable into your choice of "3.5mm" or "RCA" Audio IN jack on the AudioImage™ Music On Hold controller, Plug the other end of audio cable into the "Headphone" jack of your Audio source such as Digital player (600 ohm preferred or 8 ohm), Radio, CD Player, PC sound card speakers output etc. We recommend you to set the volume on your audio source to <u>mid level</u>.

(please note some music titles are not royalty-free and you may want to use the royalty-free music titles to avoid annual licensing payments to ASCAP and BMI for playing those titles on-hold)

110 V

PHONE	WALL JACK	PHONE	WALL JACK

RCA 3.5mm   L3/L4   L3/L4   L1/L2/L3   L1/L2/L3   9VAC
AUDIO IN   PHONE   WALL   PHONE   WALL   100ma

INVOTEL AudioImage™ SX4400EZ

L1 ◯
AUDIO
TEST   **ALT1** | **ALT2**
        DEFAULT

L1 L2 L3 L4
◯◯◯◯
HOLD

Audio Test: select L1 on your phone and press the **L1 Audio Test** switch located in the front of SX4400EZ. Adjust the volume to mid level or check the audio cord to hear the audio.

L1   AUDIO
TEST   ◯

Note1: you can not perform audio test on lines 2,3 or 4

Note2: Do not set the volume too loud it may flicker or shut off the on-hold audio .

Note3: Do not use a Cell phone to setup or test the device. Use Fax, etc.

IMPORTANT NOTE: The audio may activate in the middle of a call due to factors like excessive wiring (see page 8 item 8), bad or old wiring , existing unstable lines, sparks, too many wall jacks , Noisy phone lines, Bad telephones, "Hot Lines" (see P6 special cases)

If that ever happens, press the **FLASH** button to stop the audio! and continue your conversation. The **FLASH** button is found on every telephone, it could be labeled as **CALL WAIT / FLASH** or **LINK** or **ON** button

Switch setting:
There is a 3 position switch in front of the unit that controls the activation method for the SX4400EZ you need to select the proper setting based on your type of phones:

Default: Use the Default setting when all phones are corded and are same model.
        (For example all phones are ATT 944)

ALT1: The ALT1 setting utilizes Flash then Hold activation method, this setting supports any phone and any mix of brands with instant activation time after you press the Flash then Hold

- Use ALT1 setting if your phones are Cordless type (including corded base station + portables)
- If you have mixed cordless type phones with corded type phones
- If you have corded type phones that are not all the same model for example ATT 944 and Panasonic are both used in your office
- If you have non compatible corded phones (for example ATT 962 or ATT 972 or Casio phones)

ALT2: Try this switch position when all phones are corded and are same model but Default switch position does not work properly.

    This switch position alternatively is used in voice activation mode (see page P5)

Please Read the Operation instructions for each setting carefully.

Warranty
This product is warranted against defects for a period of one (1) year from the date of original invoice. We will repair/replace the Product with no charge for parts or labor within this time. To obtain warranty service the Product needs to be returned fright prepaid by the customer with a copy of original invoice. This warranty does not apply if in the sole opinion of Innovative Telecommunication Technology, the product has been tampered with or damaged by lightning or any other acts of nature, misuse, neglect or unauthorized service.

EXCEPT AS SPECIFICALLY PROVIDED IN THIS AGREEMENT, THERE ARE NO OTHER WARRANTIES, EXPRESSED OR OTHERWISE,INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OR MERCHANTIBILITES OR FITNESS FOR A SPECIAL PURPOSE. IN NO EVENT SHALL INNOVATIVE TELECOMMUNICATION TECHNOLOGY (INVOTEL) BE LIABLE FOR LOSS OF PROFITS OR BENEFITS, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHERWISE ARRISING FROM ANY BREACH OF THIS WARRANTY OR OTHERWISE.

Trouble Shooting

Problems	Possible Cause / Solution
1. Adapter not working or stopped working	• Unplug the 9VAC plug from the back of the Invotel adapter and unplug the phone lines; Wait 60 seconds then plug them back in, make sure the AC adapter is plugged in securely.
2. Adapter does not activate or stopped activating	• Telephone was changed or Power Failure - do as above, then select L1, L2, L3, L4 making sure that dial tone is there. If Special setting was used, be sure to re-program it again if needed.
3. Red LED blinks ON and OFF on some lines	• Some phone Lines are removed from MOH adapter or do not exist. • Un-plug phone lines for 5 seconds and plug it back in . If Special setting was used, be sure to re-program it again if needed.
4. No Audio or Audio not Loud enough	• Select the line 1 on the phone and push the L1 Audio Test button located in the front of unit to hear the Audio, adjust the volume on your audio source if needed to hear it. Check the audio cord, Unplug -Plug back. • Use CD player "head phone" jack - not "line out"
5. Audio Test is OK but no audio when Hold is pressed in Default setting.	• If answering a call allow 1 Seconds before pressing Hold. • Make sure you have your "Local service" with the dominant phone company in your area (not 3rd party local service) • Is your location within city limits? are all your phone numbers DSL qualified? your location needs to be within 3 miles from the phone company central office to guarantee for Hold button activation. • Some telephones work better in Special setting via Hold(see page 6). • Try the unit in ALT2 setting.

Adjusting Voice Activation/ De-activation Level:

In **ALT2** voice activation operation you may adjust the sensitivity level for voice activation/ voice deactivation for each line, this done as follows:

To gain more sensitivity: select L1, you get dial tone, wait about 8 seconds till you hear a BEEP now press (∗) then press (FLASH) , hang up and try the call again and repeat again to get more sensitivity if needed.
Repeat for L2, L3 or L4 if desired.

To reduce the sensitivity level : select L1, you get dial tone, wait about 12 seconds till you hear a double BEEP now press (∗) then press (FLASH) , hang up and repeat again if needed.
Repeat for L2, L3 or L4 if desired

Special cases:

If audio activates suddenly in Default switch setting , your lines may be
 "too Hot" Try ALT2 setting; if problem persists,   try this one time programming:
Confirm switch is in Default , select L1, while dial tone is being heard, wait about 8 seconds till you hear a BEEP now press (∗) then (FLASH)   You will get confirmation via continues BEEPS and blinking audio. Hang up and repeat for L2, L3 or L4 if needed.   Keep the switch in Default.

If audio does not activate at all in Default setting even though you have compatible phones your lines may be "too weak" try this one time programming:

Confirm switch is in Default , select L1, while dial tone is being heard, wait about 12 seconds till you hear a double BEEP now press (∗) then (FLASH)   You will get confirmation via continues BEEPS and blinking audio. Hang up and repeat for L2, L3 or L4 if needed. Keep the switch in Default.

This device can be programmed to activate compatible corded phones via just Hold button and cordless phones via "Flash then Hold" for example: say you have ATT 955 corded phones and Uniden cordless phones, try this:

Set switch to Default , select L1, wait about 12 seconds till you hear a double BEEP now press (∗) then (FLASH)   You will get confirmation via continues BEEPS and blinking audio. Hang up and repeat for L2, L3 or L4 if applicable; Now set switch to ALT1

In each one of above cases the device stays in that special setting there after. Unless you get a long power outage or you remove the phone lines from the device.

To remove special settings: UN-plug the 9VAC power for a minute or remove the corresponding wires from Wall Jacks for 10 seconds

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Operation in Default setting:

ALT1 **Default** ALT2

Hang up and set switch to Middle position

To place a call on Music-On-Hold, simply press the (HOLD) button on your telephone, the Music will be heard on the line and the red HOLD Light indicator for that line turns ON **,** to return to the call just re-select that line.
Be sure to allow 2 seconds before putting a call on HOLD.

Deactivating hold music manually If for any reason the hold music is activated inadvertently, it can be deactivated by pressing the   (FLASH) button

The following are examples of phones that work in ALT1 or ALT2 settings: Casio, American Venture, ATT 962, ATT 972, Panasonic KX-TG 2000B, KX-TG4000B, KXTG2000, KX-TG2720, KX-TG2730, KX-TG2740, KXTG4000, KX-TGA200, KXTGA400, KX-TGA420, SBC 410

List of compatible corded phones supported via Default setting:

Please note: This is a partial list, there are other factors relevant to activation via Hold button in Default setting-see-the trouble shooting section or special setting, If your phone is not on this list , although you can try the default setting, use the ALT1 setting. ALT1 works on all phones.

AT&T: 21070, 262, 272, 412, 422, 4952, 612, 622, 712, 722, 732, 742, 752, 812, 822, 830, 832, 842, 843, 853, 854, 874, 902, 912,922, 944, 952, 953, 954, 955, 964, 974,984 SIGNATURE, FT483, 945
Brother Quatro: 412
Bell: 223, 232, 259, 261, 268, 367, 470, 52905, Sonecor 412, 412CID, 4900, BE5200, BE5300, Techline 420
GE: 187, 2-9315-A, 2-9318, 2-9435-A -B -C, 2-9436-A, 2-9438-A, 2-9450-A -B -C -D -E -F, 2-9439-A to -EGL, 2-9451A, 2-9481, 2-9487GE2-A, 2-9488, 2-9638-A, 2-9975, 2-9488GE2-A   **RCA** 25403 RCA
IBM: 412, 412CID, 4900
Northern Telecom: Unity
Phonemate: PMG-4600
Panasonic: KX-T3110 3120 3122 3135 3145 3155 3160 3165 3170 3175 3280 3980-H 3980-R7 3981, KX-TC930, KX-TS20, KX-TS21, KX-TS25, KX-TS27, KX-TS208, VA-8400
Radio Shack: 206, 208, 209, 210, 212, 411, 412, 612, 43-373D, 43-430, 43-642, ET-180, 43-470, ET-184, ET-192, ET-193, 43-622, 43-469 , 1710, 1753
Sony: IT-M804
SBC: 2105, 4000
Southwestern Bell: FT325, FT360, FT365BL FT383, FT412, FT483, FT484
Sprint/Radio Shack: SP-702 / 43-5702, SP-705
TT Systems: 4012, 412, 412CID, 4900, 4300, 5100, 5200, 5300, 7993
Vtech: 4121

> Tip: If you have audio flicker problem , Reduce the Volume on your audio source

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Operation in ALT1 setting:

Hang up and set switch to left position

ALT1   Default   ALT2
[■   ]

To activate: press (FLASH) then (HOLD)

To deactivate just re-select that line and press (FLASH)

Voice Deactivation: if the call has been on Hold at least a few seconds, it can also be deactivated by just **speaking** over the Music for example say : "Hi I am Back" , Note: if hold music is too loud you may need to speak louder in order to voice deactivate.

If for some reason you are not able to Voice -deactivate you may adjust the sensitivity level to make it more responsive as follows:

Adjusting Voice De-activation Level:

To gain more sensitivity: select L1, you get dial tone, wait about 8 seconds till you hear a BEEP now press (∗) then press (FLASH) , hang up and try the voice deactivation again. You may repeat above for more sensitivity again if needed. Repeat for lines L2, L3 or L4 if desired.

To reduce the sensitivity level: select L1, you get dial tone, wait about 12 seconds till you hear a double BEEP now press (∗) then press (FLASH) , hang up and repeat again if needed.
Repeat for L2, L3 or L4 if desired

Want to use just one button ?   Press (FLASH) to activate MOH and when ready to go back to caller just speak over the audio!.   Note: this does not hold the line. So the other party can still hear you .

In **ALT1 setting** the Flash button is used to activate the audio so what if you have:

Call waiting , 3 way calling, Centrex Call Transfer

Use (FLASH) (FLASH) to access an out side line or to answer a call waiting call etc.

Example 1 (ALT1 setting) to take a call waiting call press (FLASH) (FLASH)

Example 2 (ALT1 setting) to make a 3 way or conference call press (FLASH) (FLASH) you will get a dial-tone now dial the desired phone number then press (FLASH) (FLASH) to join the two calls together.

NOTE: If you have "Call Waiting" service, only the current call may be placed on Music-On-Hold, the other call is held in the phone company central office in silence not in your office.

Operation in ALT2 setting:

Hang up and set switch to right position

ALT1   Default   **ALT2**
[■]

To place a call on Music-On-Hold, simply press the (HOLD) button on your telephone, the Music will be heard on the line and the red HOLD Light indicator for that line turns ON **,** to return to the call just re-select that line.

Operation via "Voice activation"

The ALT2 switch position can be used for "voice activation" method if a one time programming is done, this mode of operation supports any mix of phones or brands by just using the Hold button with slightly longer activation time (about 6 to 9 seconds after hold is pressed)

One time programming: Set switch to Default , select L1, wait about 12 seconds till you hear a double BEEP now press (∗) then (FLASH).
You will get confirmation via continues BEEPS and blinking audio. Hang up and repeat for L2, L3 or L4 if applicable; Now set switch back to ALT2

In **"Voice activation**" mode, the device needs to hear you well therefore speak as close as possible to the microphone, If you are on a speakerphone or using a headset speak clearly and louder into the microphone.

To **activate**: after you receive or make a call, you need to speak and say something before pressing the (HOLD) button. Audio activates less than 10 seconds later, the corresponding L1 … L4 light on this device will then turn ON.

To **deactivate** hold music Just re-select that line and **Speak Over** the audio, for example say : *"Hi I am Back"* , the moment the device hears it will stop the hold-music.

Note: if hold music is too loud you may need to speak louder in order to voice deactivate so do not make your Hold music too loud.   You may also deactivate the hold-music audio by pressing the (FLASH) button.

NOTE1: If you hear a **BEEP BEEP,** say something to prevent further Hold music activation

NOTE2: If for any reason the hold music is playing, do not panic, simply speak over the audio to stop it or press FLASH to stop it.

If for some reason you are not able to Voice activate or voice -deactivate you may adjust the sensitivity level to make it more responsive as follows: