



Operations and Installation Manual

Vitalinq™ Communication System

Model 94A-07 MM



Vis-A-Vis, Inc.
(800) 319-6014
www.vitalinq.com
support@vitalinq.com

Symbols and Conventions



This icon identifies cautions: information that should be read before use to prevent damage to the Vitalinq™ system.

Trademark and Other Information

iPhone, iPod, iPod classic, iPod nano, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.

Vitalinq™ System Specifications

Input Ratings: 100-220V~
50-60Hz
1.6A MAX

Operating Temperature: 25°C (77°F)

Stereo Power Amplifier Specifications

Output: Speaker outputs

Speaker impedance: Only use with provided 8 ohm speakers

Maximum power output: 8W × 4 (with Vis-A-Vis provided 8 ohm speakers)

For Your Safety

1.  Read these instructions.
2.  Keep these instructions.
3.  Heed all warnings.
4.  Follow all instructions.
5.  Do not use this apparatus near water.
6.  Clean only with dry cloth.
7.  Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8.  Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9.  Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10.  Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11.  Only use attachments/accessories specified by the manufacturer.
12.  If a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13.  Unplug this apparatus during lightning storms or when unused for long periods of time.
14.  Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15.  To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
16.  Warning! Excessive sound pressure from earphones and headphones can cause hearing loss.

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Thank you for purchasing a Vitalinq Communication System. Please read this manual thoroughly before installing the system. Following the instructions in this manual will enable you to obtain optimum performance and help you realize all the benefits of your combination intercom and music system.

Please retain this manual for future reference.

We would love to hear from you and we are committed to helping you to solve any problems or answer any questions you may have.

If you need assistance with the installation or operation of your Vitalinq system, please contact customer support by calling 800-319-6014, emailing support@vitalinq.com or visiting our website at www.vitalinq.com. Please note, Vitalinq ends with a Q.

An electronic version of this manual can be obtained at our web site.

1. VITALINQ™ INTRODUCTION

The Vitalinq™ has been designed to meet the unique communication needs that arise during diagnostic and interventional procedures. It allows physicians to have a continuous two-way conversation with control room personnel throughout procedures. Being capable of picking up conversations in a normal tone of voice, the Vitalinq™ allows control room personnel to respond immediately to any requests and provide up-to-the-moment communication on the patient's condition.



The Vitalinq™ communication system includes speakers and microphones for the procedure room (LAB) and control room (TEK).

Personnel in the control room have the option of communicating through a headset or listening through an overhead speaker and speaking through a desk microphone. Personnel in the procedure room do not need to wear any type of device as their speech is picked up by a microphone attached to the video monitor (or monitor cluster) opposite the physician and they hear through an overhead speaker. There is no need for talk-listen switching, eliminating the risks posed by breaks in the conversation. Physicians and control room operators may converse without interruption.

Integrated into the console, but operationally separate from the communication system is a music system. Music can be played from any Bluetooth-enabled device such as a cell phone, or by connecting a cable to the line-out from a device with a standard 3.5 mm headphone plug, such as a satellite radio receiver.

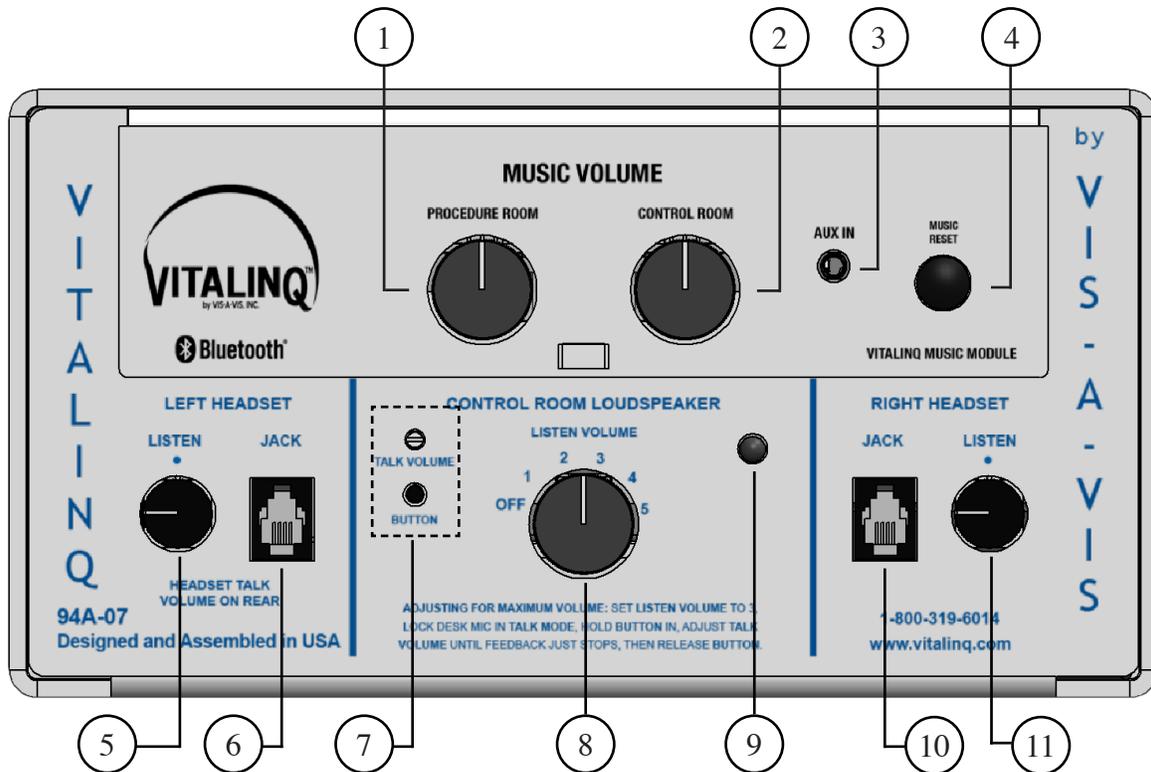
We strive to provide the most flexible system available. To learn more about Vitalinq's advanced capabilities, please contact us at 1-800-319-6014 or by email at info@vitalinq.com.

Advanced capabilities and options include:

- Wireless headset to replace the corded headset
- Wireless headsets for scrub or circulator nurses to provide discreet communication with the control room operator
- Remote connections for headsets and desk microphones
- Support for multiple headsets/desk microphones

Contact us for details.

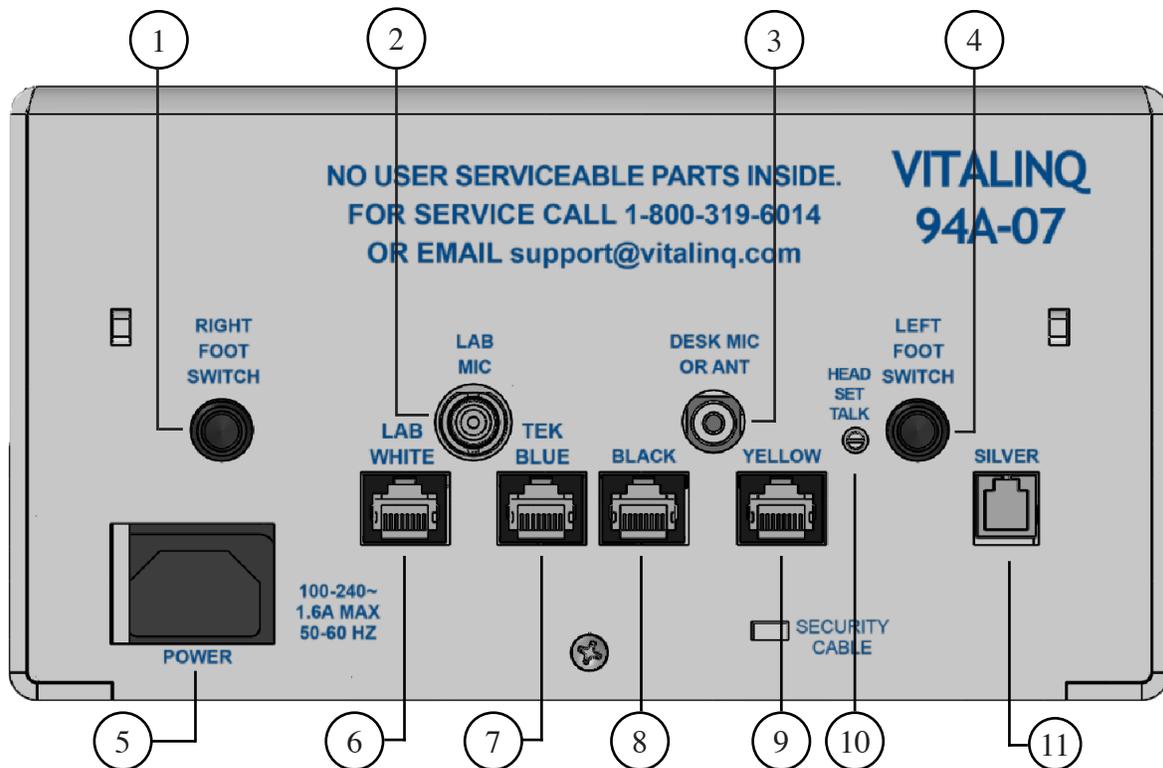
2. VITALINQ™ INTERFACE



Front of Console

For detailed information, see the pages in parentheses.

- ① **Procedure Room Music Volume (6)**
Used to adjust the music volume inside the procedure room.
- ② **Control Room Music Volume (6)**
Used to adjust the music volume inside the control room.
- ③ **AUX-In (7)**
3.5mm auxiliary input jack used to connect music devices using a cable with a standard headphone plug at each end.
- ④ **Blue LED (6)**
Indicates the status of the Bluetooth module; paired, streaming, and not paired. Can be used to restart the Bluetooth module.
- ⑤ **Left Headset Listen Volume (5)**
Adjusts the listen (earpiece) volume of the intercom headset that is plugged into the location.
- ⑥ **Left Headset Jack (5)**
Used to connect a headset to the intercom system.
- ⑦ **Talk Volume and Button (5)**
Used together to optimize the volume levels of the intercom overhead speakers. Typically only necessary to adjust during initial setup.
- ⑧ **Control Room Loudspeaker Volume (5)**
Controls the volume of the overhead speaker in the control room. Can be set to off.
- ⑨ **Red power LED**
Indicates the Vitalinq console is powered on.
- ⑩ **Right Headset Jack (5)**
Used to connect a headset to the intercom system.
- ⑪ **Right Headset Listen Volume (5)**
Adjusts the listen (earpiece) volume of the intercom headset that is plugged into the location.



Rear of Console

- | | |
|---|--|
| <p>① Right Foot Switch (14)
See Section 6 of manual.</p> <p>② Lab Mic BNC Connector (12)
Used to connect the Lab / Procedure room microphone to the console.</p> <p>③ Desk Mic Jack (5, 9)
1/4" phone jack used for connecting the desktop microphone.</p> <p>④ Left Foot Switch (14)
See Section 6 of manual.</p> <p>⑤ Power Connection (4)
Used for plugging the console into the AC power source.</p> <p>⑥ LAB White Jack (11, 14)
RJ45 jack used to connect the white Ethernet cable going to the procedure room speakers.</p> <p>⑦ TEK Blue Jack (11, 14)
RJ45 jack used to connect the blue Ethernet cable going to the control room speakers.</p> | <p>⑧ Black Jack (14, 16)
RJ45 jack used to connect an optional Mini-Console (remote Console).</p> <p>⑨ Yellow Jack (14, 17)
RJ45 jack used to connect optional wireless headsets.</p> <p>⑩ Headset Talk Volume (4)
Used to adjust the sensitivity of the headsets plugged into the left and right headset jacks.</p> <p>⑪ Silver Jack (14, 15)
RJ11 jack used to connect an optional wireless headset.</p> |
|---|--|

3 OPERATING THE VITALINQ™ SYSTEM

3.1 Description of the VITALINQ™ system

Refer to Section 6 “INSTALLATION” for installation instructions.

The Vitalinq™ is very easy to use and versatile. The standard system is composed of a pair of music speakers and a communication speaker in both the procedure and control rooms. The speakers are mounted overhead in the ceiling. The procedure room also has a microphone mounted to the monitor (or monitor array) opposite the physician. The control room is where the console is located and is where all devices are ultimately connected. Also in the control room and plugged into the console, are a desk microphone and a headset. One desk microphone and one headset are included with each system.

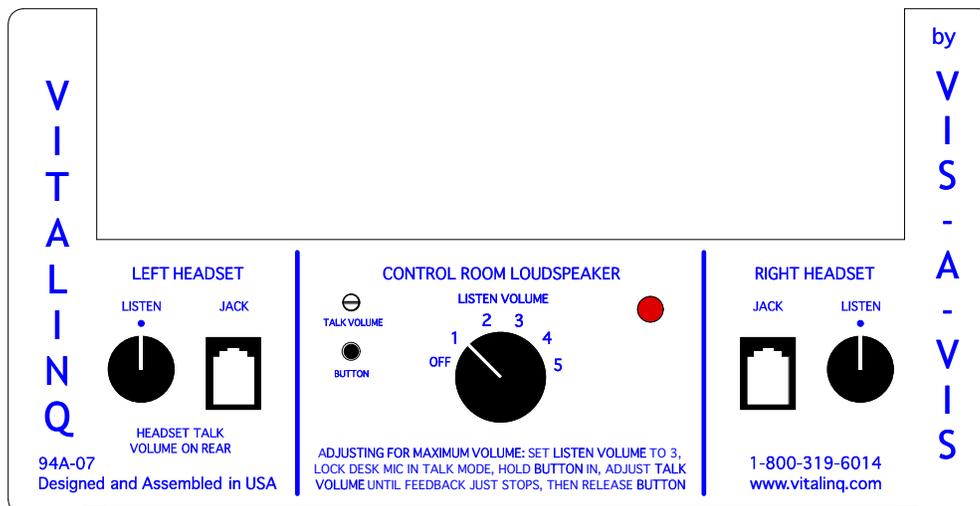
On the front of the console are controls for the music system and controls for talking and listening to the procedure room. At the rear of the console are several jacks and a thumbnail adjustable control for the headset talk volume. Words in BLUE throughout this document refer to labels on the console.

The LISTEN control and HEADSET jack on each side of the front of the console work together. There is an in-line mute switch provided with each headset to mute the headset microphone when desired. If preferred, a foot switch can be used instead of the in-line mute switch. Contact Customer Support if you would prefer to use a foot switch.

The volume of the headset earpiece is adjusted using the LISTEN volume control located adjacent to the HEADSET jack. The volume for the procedure room communication speaker (used to transmit speech from the control room) is controlled by the HEADSET TALK VOLUME switch located on the rear of the console.

The CONTROL ROOM LOUDSPEAKER region at the center on the front of the console is for control of the desk microphone and ceiling speaker volume levels. In this section is an overhead LISTEN VOLUME control for controlling the volume of the control room communication speaker. The BUTTON and TALK VOLUME in this area are only used during setup.

Before continuing, Make sure the power cord is connected to the POWER connector on the rear of the console and plugged into a 120 volt AC outlet. The LED on the front of console will illuminate as soon as power is available.



3.2 Headset settings and operation

Place the **LISTEN VOLUME** control into the **OFF position**. (This turns off the overhead speaker in the control room.)

Plug the corded headset with mute switch and coil cord into either the left or right headset jack. Turn the headset **LISTEN** control for the jack you selected to the middle of its rotation. Put the headset on. The headband slides in and out of the ear-cup. The headset microphone tube telescopes. Adjust the headset for comfort and move the microphone tube tip so that it is near the corner of your mouth. Listen to someone in the procedure room.

You will hear the people in the procedure room whether the in-line mute switch is in the mute position or not. Adjust the headset **LISTEN** volume for a comfortable level by means of the volume control labeled **LISTEN**. The left headset **LISTEN** volume control is for a headset plugged into the left jack and the right one controls the right jack. The white slotted shaft on the rear of the console by the left foot switch jack labeled **HEADSET TALK** controls the talk volume for both the left and right headsets.

3.3 Adjusting desk microphone and speaker sensitivity

The following steps are not required if only a headset is to be used and the desk microphone and overhead communication speaker are not being used. This is often the case in shared control rooms.



Verify the desk microphone cable is connected to the BNC jack on the rear of the console labeled **LAB MIC**.

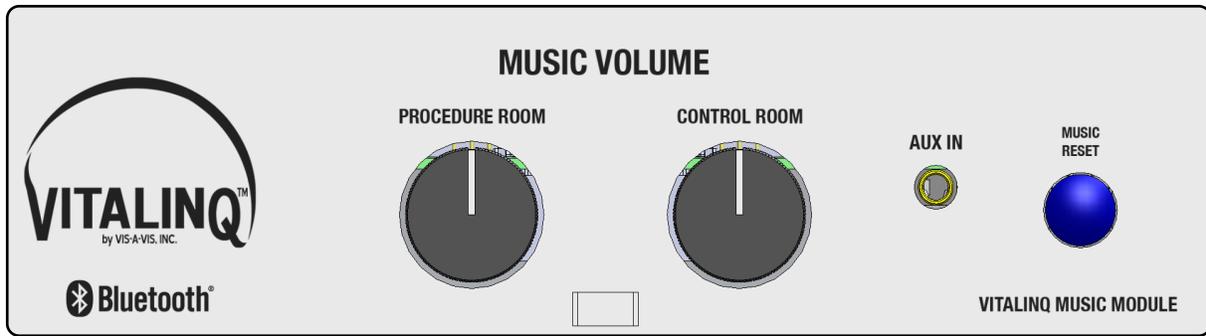
Temporarily unplug the headset. The **CONTROL ROOM LOUDSPEAKER** controls are at the lower front of the console between the **HEADSET** jacks. Turn the **LISTEN VOLUME** switch to 3 and listen to the procedure room. You should be able to hear background noise. Press the **PUSH-TO-LOCK** switch on the microphone to lock the microphone on. Turn the **TALK VOLUME** control clockwise while pressing the **BUTTON** located below it until you just barely hear feedback (a squeal). Release the **BUTTON**. The **TALK** volume level is now set. As you switch the **LISTEN VOLUME** louder or softer, the volume level in the lab varies by an inverse amount to the volume in the control room in order to prevent feedback. When finished, unlock the microphone by pressing the **PUSH-TO-LOCK** switch. You can now, plug the headset back into the console.

Adjust the **LISTEN VOLUME** control (large knob in center) to a comfortable level for people in the control room. The desk microphone has two switches; a **PUSH-TO-TALK** and a **PUSH-TO-LOCK** switch.

To use the **PUSH-TO-TALK** switch (blue), press and **hold** the switch while speaking. The microphone will transmit while the switch is held down. Release the switch when you are finished speaking.

Use the **PUSH-TO-LOCK** switch (red) to lock the microphone on. The microphone will remain on (keyed) until the switch is pressed again.

If you hear a hum or squeal, the **TALK VOLUME** control may be turned too far clockwise; turn it down using your thumbnail or small screwdriver, as described in above. There are also instructions printed on the front of the console for making this adjustment.



4.1 Connecting a music source

1. On the device you plan to use for playing music, open the Bluetooth menu.
2. Verify that Bluetooth is turned on.
3. Typically, there are two sections displayed. One that shows devices you have previously paired with and another area that shows devices that are available to pair with. Look for a device named BT5.0 and select it. You should now be paired with the Vitalinq Music Module via Bluetooth.
4. You can now enjoy listening to music from your favorite streaming service or from your personal music library.

NOTE: The module will always look to automatically pair with last paired device if it's available and in range. If no previous device is available, it will look to pair with a different device.

4.2 Adjusting the volume

1. Turn the Procedure Room and Control Room volume controls on the Vitalinq Music Module halfway up (12 o'clock position).
2. Set the volume on your music device all the way down.
3. Begin streaming music.
4. Now slowly adjust the volume on your music source to an appropriate level.

From this point, use the volume controls on the Vitalinq Music Module for fine adjustments in each room.

4.3 Blue LED light

The blue LED light on the Vitalinq Music Module provides feedback on Bluetooth pairing.

- Steady light — a device is paired
- Flashing Slow — a device is streaming
- Flashing Fast — nothing is paired

4.4 Disconnecting a device

Only one device can be paired at any given time to the Vitalinq Music Module. To pair a new device, the currently connected device will either need to be disconnected manually or it will need to go out of range. Therefore, it is recommended that a device be disconnected when it is no longer being used for streaming music.

To disconnect a device, go to the Bluetooth settings menu, select BT5.0 and select disconnect. On an iPhone, this feature is available by selecting the “I” (information) icon next to the paired device and then selecting “Disconnect”.

4.5 Receiving or making a cellular phone call

If you are using a cellular phone to stream music, and it is used to either make or receive a call, the music will temporarily stop playing. It WILL NOT signal or communicate through the speakers. Music will resume when call has ended.

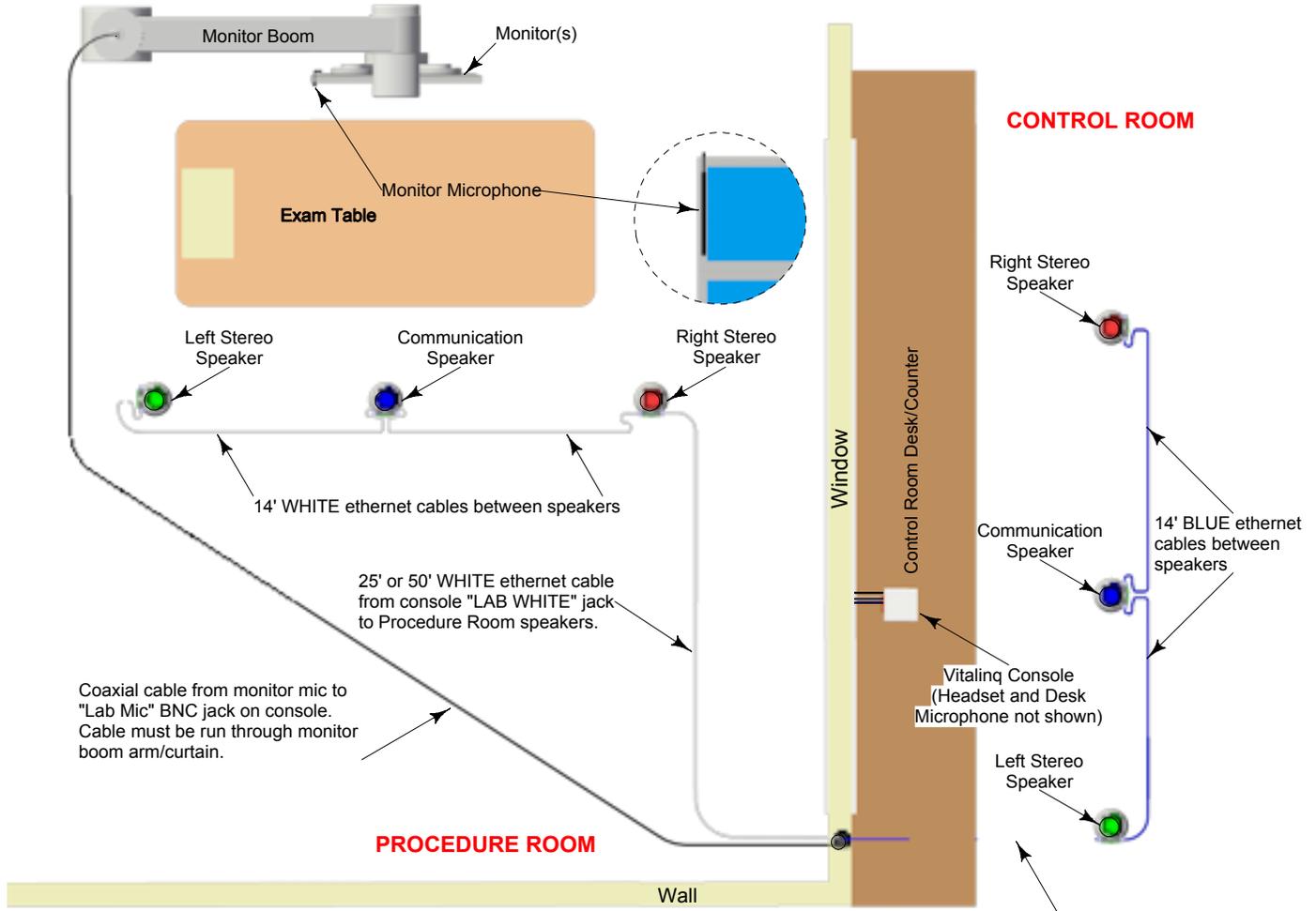
4.6 Connecting to the AUX-In

Use a high quality 3.5mm cable to connect to the Vitalinq Music Module via the AUX IN jack on the front of the console.

If a device is plugged into the 3.5mm jack, any device using the Bluetooth feature will automatically be disconnected regardless of the status of the LED light.

5 INSTALLATION

5.1 Typical physical layout



Notes:

- 1) All speakers are color coded and labeled with their position.
- 2) Speakers connect together in series (daisy chain) using supplied color coded ethernet cables. White for procedure room and blue for control room. Color coding of cables enables easy troubleshooting. Order of connection not critical. If conduit is used it should be 1". Junction boxes are not necessary at conduit ends.
- 3) Ethernet cables provided are CAT5. CAT6 can be used.
- 4) Monitor microphone (MM) mounts to face of monitor with the long axis oriented in the vertical position.
- 5) Monitor Microphone is connected directly to console BNC jack labeled "Lab Mic" using supplied coaxial cable. When cable is installed, ensure sufficient length is available at monitor to reach BNC jack on Monitor Microphone.
Other connection options are possible. See **"Monitor Microphone Cable Connection"** section of installation Manual for details.
- 6) Console plugs into standard 110VAC, 60Hz outlet (US).



Typical connection of ethernet cables to speaker



Connection of ethernet, coaxial and power cables to console



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5.2 Planning the Vitalinq™ installation

The Vitalinq™ has been designed for ease of installation. Please feel free to contact Vis-A-Vis customer support at 800-319-6014 at anytime for assistance with an installation.

There are microphones and speakers for the procedure room and for the control room. The control room utilizes a desk microphone or a headset (both are provided). The procedure room microphone is what we refer to as the monitor microphone and is attached to the face of the monitor (or one of the monitors in an array) opposite the physician. All cables are pre-terminated and may be run free or in conduit, subject to local regulations.

Referring to the layout on the previous page, and the instructions in 5.3 and 5.4, select locations for the speakers and monitor microphone. Always check for adequate space in the ceiling above the locations selected for the speakers. **Follow any applicable local regulations regarding securing the speakers.**

The monitor microphone is directional and must be mounted with its long axis vertical.

5.2.1 Procedure room (LAB)

In the procedure room, the monitor microphone should be located on the video monitor directly across from where the physician would typically stand and attached to the face of the monitor in the bezel area with it's long axis oriented vertically. See "5.4.2 Monitor microphone placement". For the physician to hear best, the communication speaker should be near the physician but more than six feet away from the monitor microphone and the door to the control room. The music speakers should be placed about four feet on either side of the physician, usually at the ends of the table. **Follow local regulations regarding securing these devices.**

5.2.2 Control room (TEK)

In the control room, the operator's desk microphone should be placed in a position convenient for the operator. For best operation, the communication speaker should be located in the ceiling more than six feet away from the desk microphone and the door to the procedure room. The music speakers should be placed in the ceiling, three or four feet on either side of the operator. If provided, the optional auxiliary wireless headset should be located near the console. **Follow local regulations regarding securing these devices.**

5.2.3 Control room console

The cables from the speakers and monitor microphone need to connect to the rear of the desk console. See typical layout on following page. If you are installing before the walls are sheet-rocked, use a junction box near the console and one in the ceiling. Connect them with a 1" conduit if required. Cables can be pulled through by staggering the connectors. **Follow local regulations regarding securing these devices.**

The communication system has volume controls for headset and overhead devices. Headset jacks are on the front of the console and foot switch / desk microphone jacks are on the rear.

5.3 Installing Vitalinq™ speakers

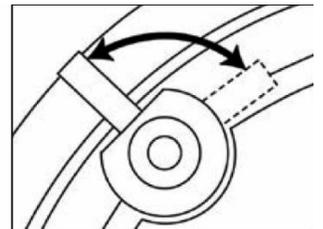
5.3.1 Installing speakers in ceiling

There are two modular, gray eight conductor jacks on the communication speaker and music speakers. The Ethernet cables can be connected to the speakers in any convenient sequence. The speakers mount in the ceiling.

1. Determine placement of all speakers. In the procedure room, a communications speaker should be located in the general area near the physician and more than six feet away from the monitor microphone and the door to the control room (ideally above and just behind the physician). A right music speaker should be located at the table end that would be to the right of the physician, and a left music speaker at the table end that would be to the left of the physician (generally speaking, about four feet to either side of the physician.)
2. In the control room, the communication speaker should be more than six feet away from the desk microphone and the door to the procedure room. Music speakers should be located left and right of where the operator is typically seated.
3. Remove the ceiling tiles (if present) in the locations you have determined for the ceiling devices.
4. In the speaker box, the communication speakers are packed individually and are marked COMM. The two (2) pairs of music speakers are packed individually, two left and two right and are marked MUSIC. A speaker support plate is provided for each speaker.

 *** Be careful when handling the support plate as the edges can be sharp!!**

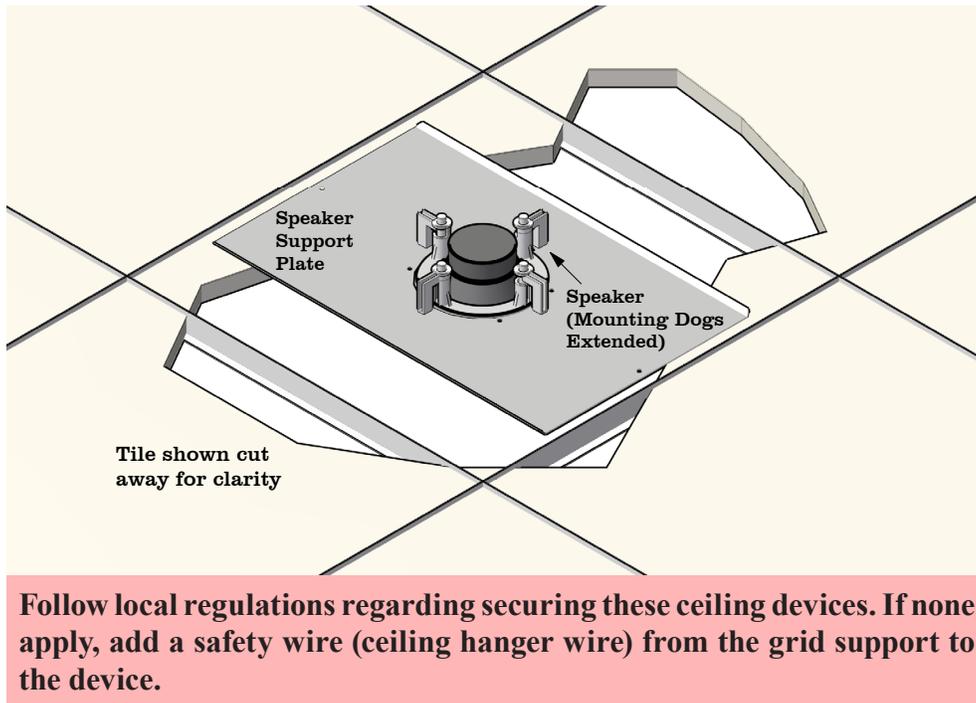
5. Take the ceiling tiles (if present) you removed in step 2 and draw a straight line on the backside from corner to corner. Place the support plate over the lines you drew on the tile and line up the template with the lines to center the template. The plate must not extend past the edges of the tile. Mark the circle and cut it out with a knife or drywall saw. The hole should be 6-5/8" diameter. Remove the grille of the speaker by rotating the securing legs on the back of the speaker and gently pushing them down towards the speaker grille. Replace the legs after grille removal to their original position. Put the speaker in the hole from the front side of the tile. Position the support plate over the speaker on the rear of the tile. Rotate out the legs on the back and screw down the four Phillips head screws on the front to pull the legs against the support plate. **Be careful not to over tighten the screws.** If needed after installation, the grill may be removed with a bent paperclip.



6. Install all speakers into selected locations.

All speakers have dual GRAY jacks, and there is no particular sequence for interconnection. This allows for much flexibility in cable routing. Connect all of the devices in the procedure room (LAB), including COMM speaker and the two MUSIC speakers (left and right) with short white cables. The procedure room device nearest the console is connected to the console at the **LAB WHITE** jack with a long white cable. Spare cables and connectors are provided. In the control room, connect COMM and the two MUSIC speakers (left and right) with short blue cables. Connect the control room speaker nearest the console to jack on the console labeled **TEK BLUE**, with a blue cable.

Using the provided color coded cables as instructed (white for procedure room and blue for control room) will aid in the event that Vis-A-Vis customer support needs to be contacted to assist with troubleshooting.



5.4 Monitor Microphone Installation

5.4.1 Monitor microphone description

The monitor microphone is the microphone (mic) used in the procedure room to pick-up and transmit the physicians speech back to the control room operator.

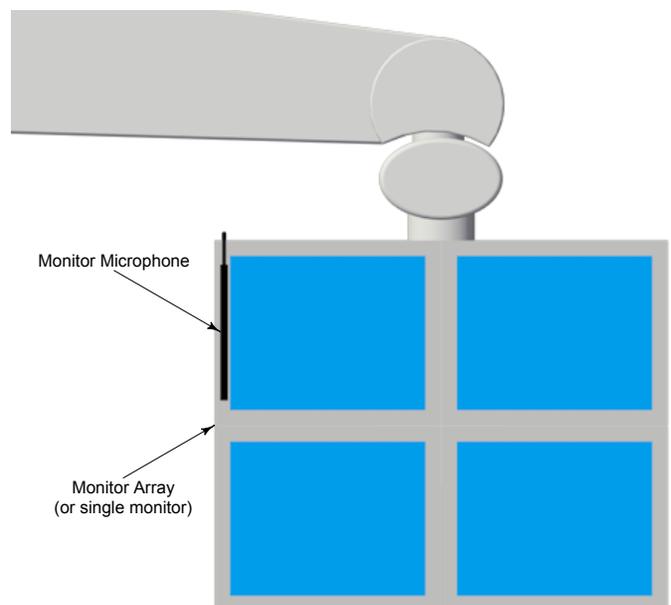
The monitor mic is a 10 inch long black aluminum tube with a 1/2" square cross section and a female BNC connector. One side of the microphone has two strips of Dual-Lock™ (Velcro) which is used to adhere the mic to the bezel of the monitor or monitor array across from the physician. See illustrations on following pages.

5.4.2 Monitor microphone placement

The monitor mic has a pick-up pattern of approximately 180° in the horizontal plane and about 20° in the vertical plane and therefore the mic **must be oriented with its long axis vertical**. See image below.

1. Determine the best location for adhering the mic in a vertical orientation along the bezel of the monitor (edge of face of monitor) across from the physician.
2. Clean the bezel area of the monitor and remove the adhesive backings from the Dual-Lock™ and attach firmly to the selected area of the monitor. Apply light pressure to the mic for approximately 30 seconds.

Array of four monitors shown with mic positioned along left bezel of upper left monitor. Similar positioning if single monitor.

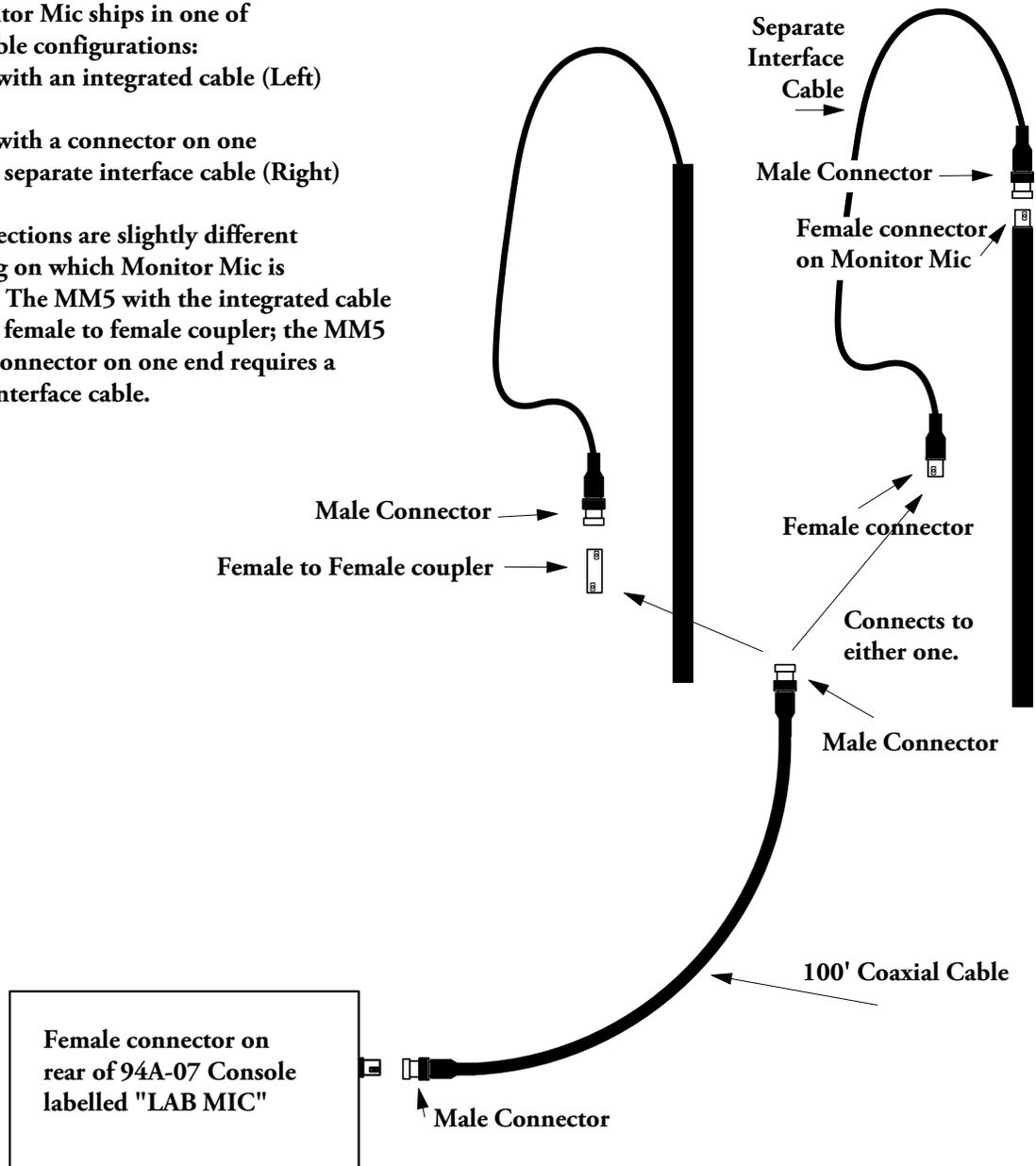


5.4.3 Monitor microphone cable connection

The monitor microphone is connected to the console using a coaxial cable that is supplied with the system. This cable, which has male BNC connectors on either end, is routed through the monitor boom/ drape so that one end is available at the monitor across from the doctor in the procedure room and the other end is available where the console is located in the control room. When installing the coaxial cable, be sure to allow ample cable at the monitor microphone end to allow attachment to the male BNC connector located on the monitor microphone. A female-female BNC coupler is provided to connect the cable to the monitor microphone.

The Monitor Mic ships in one of two possible configurations:
13" long with an integrated cable (Left)
or
12" long with a connector on one end and a separate interface cable (Right)

The connections are slightly different depending on which Monitor Mic is supplied. The MM5 with the integrated cable requires a female to female coupler; the MM5 with the connector on one end requires a separate interface cable.



5.5 Installing the Vitalinq™ console

5.5.1 Front of Console

Plug the headset into a headset jack on the front of the console closest to the operator's normal working location. If you will also be using a desk microphone, **make sure that it is NOT plugged in on the same side as the headset**. See next section.



Note:

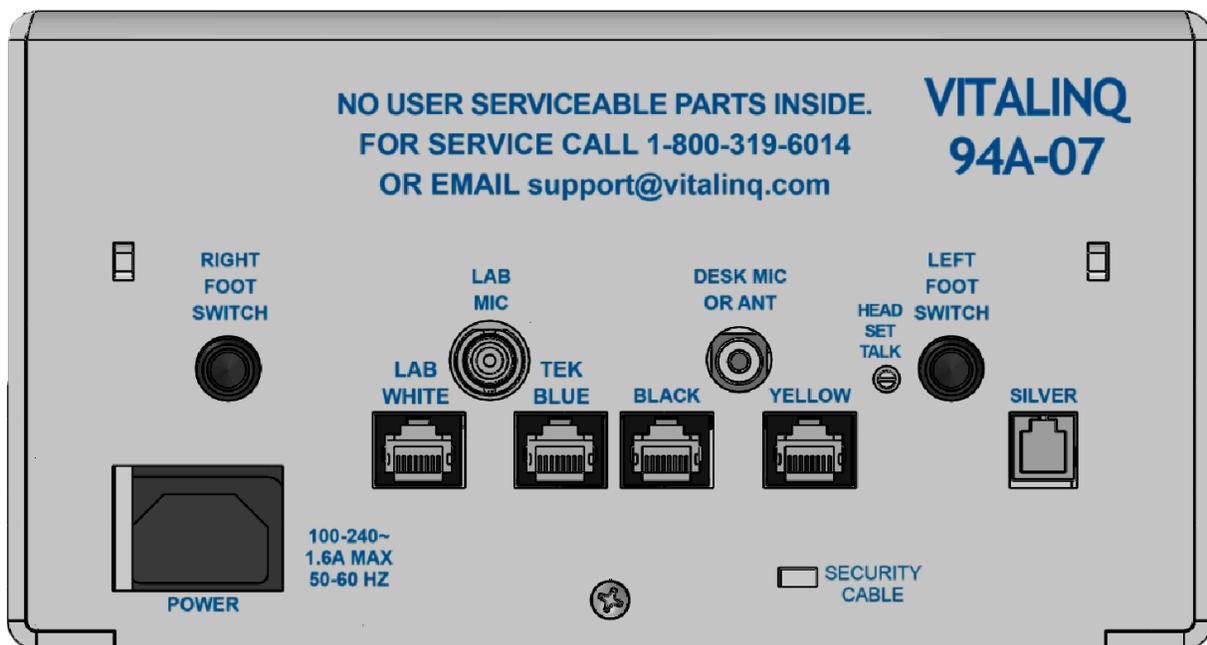
*The Console is usually placed on the control room counter top near the operator. If this is not possible, it may be placed in another location convenient for operation of music controls and if necessary, an optional remote console (MC-11 Mini Console) can be purchased for the headset (and foot switch if one is used) so they can be located within reach of the control room operator or even in another room. See section titled **OPTIONAL EQUIPMENT** at the end of this document.*

Contact Vis-A-Vis at 800-319-6014 or email support@vitalinq.com to learn more about this option.

5.5.2 Rear of console

- If using a desk microphone, plug it into either the jack marked **DESK MIC OR ANT**.
- Plug the white procedure room Ethernet cable into the jack marked **LAB WHITE**.
- Plug the blue control room Ethernet cable into the jack marked **TEK BLUE**.
- If using an optional headset foot switch instead of the supplied in-line mute switch, plug it into the foot switch jack on the **SAME** side that you plugged in the headset. For instance, if using the **LEFT HEADSET JACK**, plug the foot switch into the jack labeled **LEFT FOOT SWITCH**.
- Connect the male BNC connector on the coaxial cable from the monitor microphone to the BNC connector on the console labeled **LAB MIC**.
- The jacks marked **BLACK**, **YELLOW** and **SILVER** are used for optional equipment. Instructions for using these jacks are included with the equipment. See **OPTIONAL EQUIPMENT** section at the end of this document.
- The **DESK MIC** jack is **ONLY** for the connection of Desk Mics. External antennas are no longer supported.
- Plug the three conductor power cable into the **POWER** jack. Don't plug it in to an AC power outlet yet.

Proceed to Section 3: “Operating the VITALINQ™ system”



6 OPTIONAL EQUIPMENT

6.1 Wireless Headsets

Introduction

The 94A-07 uses two separate communication paths. The first is a “public path”. This path transmits the control room technician’s voice over the ceiling speaker in the procedure room. From the control room, this path uses either a headset plugged into one of the two front **HEADSET** jacks on the Vitalinq console or a desk microphone. We refer to it as the “public path” since anyone inside the procedure room will hear the control room technician when he or she speaks. This configuration is typically used in catheterization labs.



Wireless headset (typical)

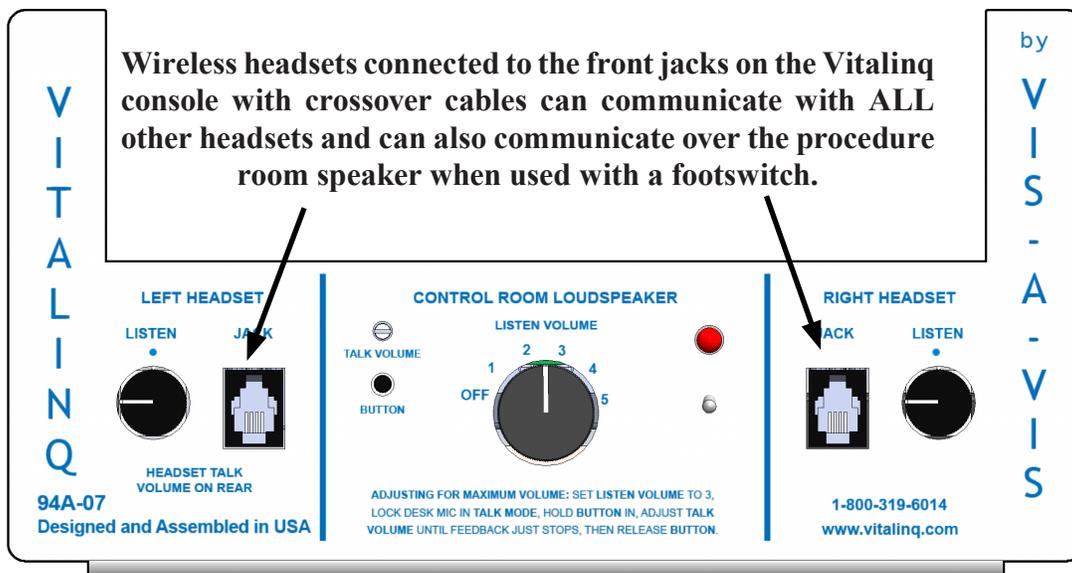
The second is a “private path”. This communication path is between all headsets, wired or wireless, that are connected to the Vitalinq 94A console, and Mini Console, if one is being used. This configuration is often used for interventional procedures or in hybrid environments. We refer to it as private because only the people wearing headsets are involved in the conversation.

Wireless headsets connected to the two **HEADSET** jacks on the front of the console communicate with ALL other headsets (“private path”) but can ALSO communicate with the procedure room over the ceiling speaker (“public path”).

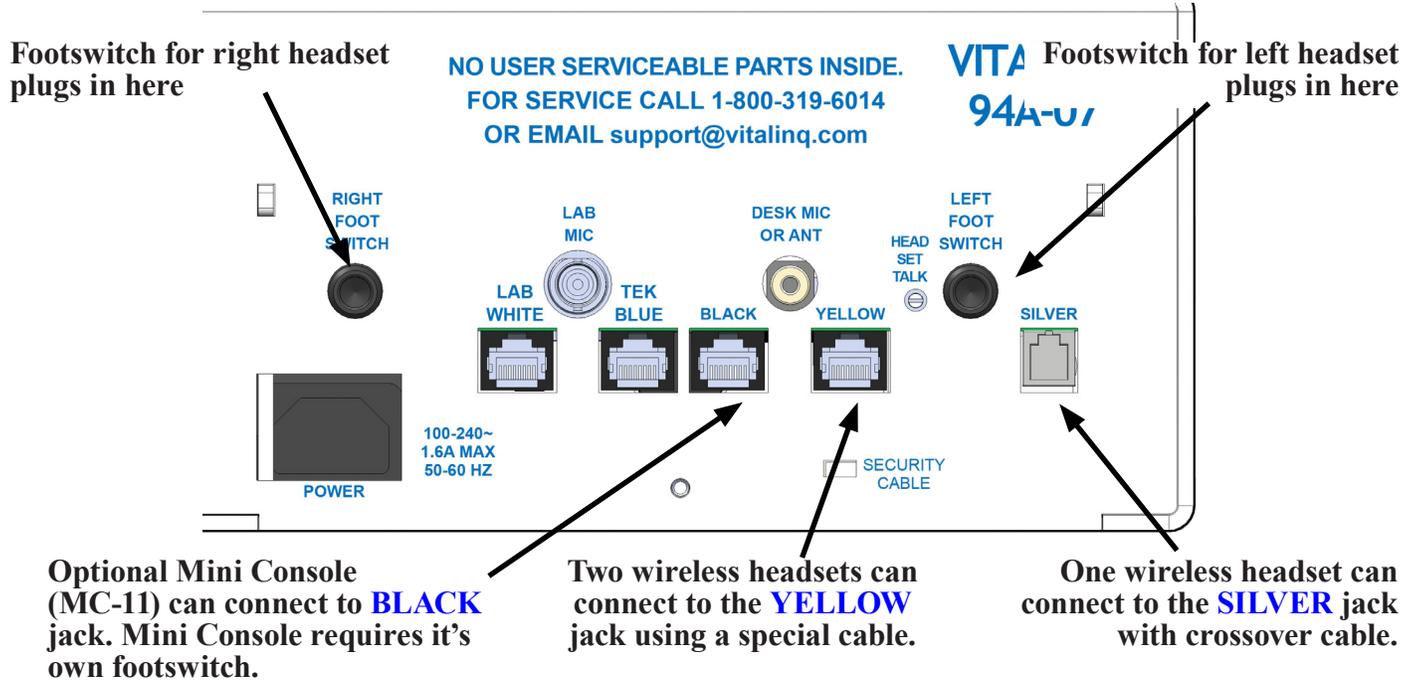
Wireless headsets connected to the **YELLOW** and **SILVER** jacks on the rear of console can communicate with ALL other headsets but they CANNOT communicate with procedure room speaker and Monitor Mic. Thus, they are on the “private path” only.

To allow the wireless headsets connected to the front **HEADSET** to communicate discretely with just the rear wireless headsets, a foot switch must be used with each. This prevents the front headset from being heard over the procedure room speaker unless its associated footswitch is pressed. If you want to mute a wireless headset from all communications, use the “mute” function on the headset earpiece.

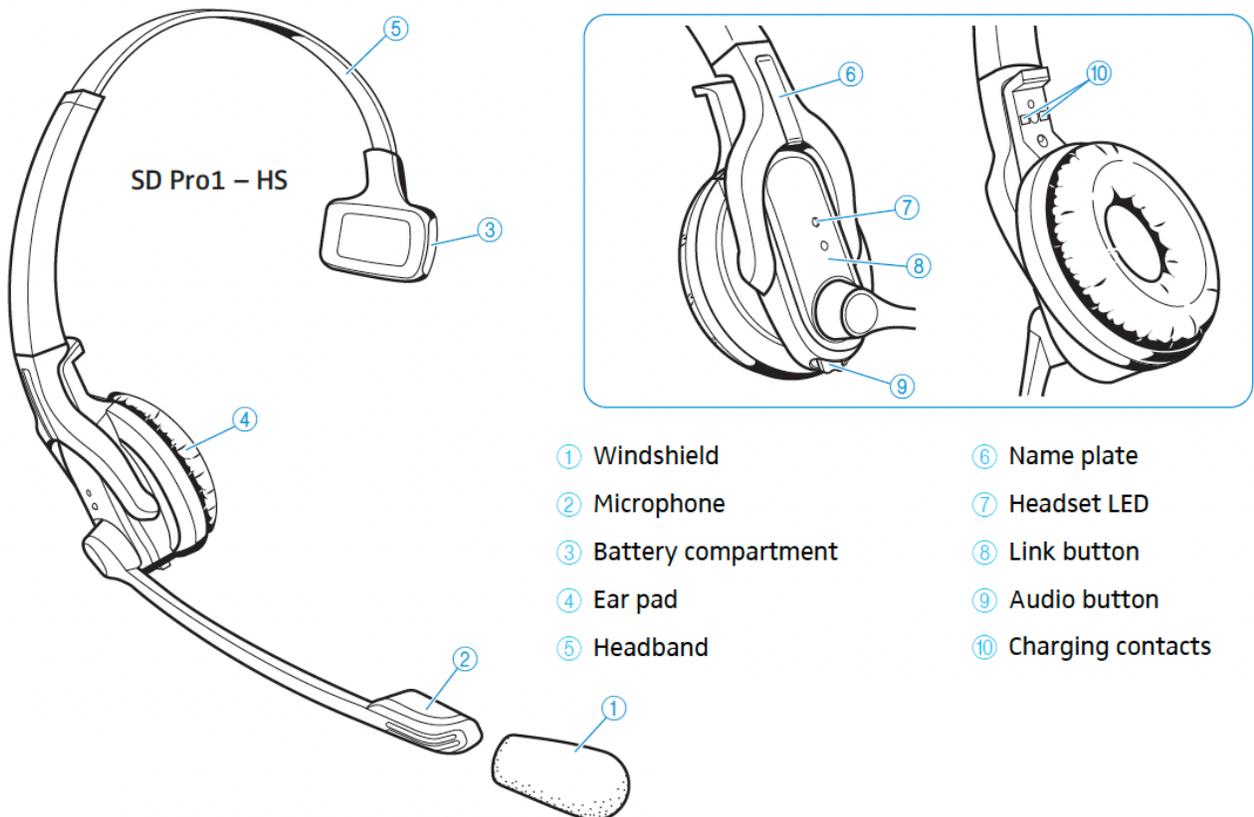
Front HEADSET jacks on Vitalinq 94A Console



Rear HEADSET and FOOTSWITCH jacks on 94A Console



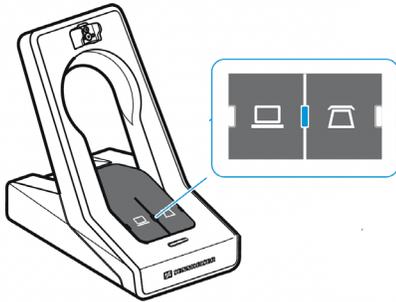
Overview of the Sennheiser SD Pro 1 Headset



6.1.1 Option 1 - Using a Wireless Headset with the front Headset Jack(s)

We use Sennheiser wireless headsets with our Vitalinq systems. One of these wireless headsets can be plugged into either of the two jacks labeled **HEADSET** on the front of the console instead of using a corded headset at these locations.

1. Locate the “crossover



PC mode and phone mode buttons

NOTE: If at anytime you are unable to establish a link between a headset and its assigned base station, verify the base station is in PHONE MODE. When in PHONE MODE, the PHONE MODE button  will be backlit in white. If not, the PC BUTTON will be backlit. If necessary, press the PHONE BUTTON to select that mode.

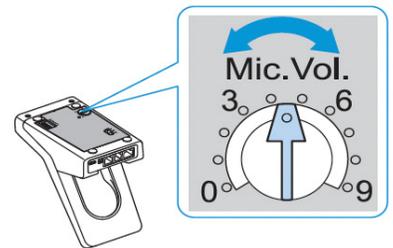


Switching to PHONE MODE

cable” (P/N: CBL-CRS). This cable is made by Vis-A-Vis (not Sennheiser) and will be included with your wireless headset(s) when purchased from Vis-A-Vis. This crossover cable is the only cable that will work with the Vitalinq 94A front **HEADSET** and rear **SILVER** jacks. This cable has an RJ45 (ethernet) connector on one end and an RJ9 connector on the other end.

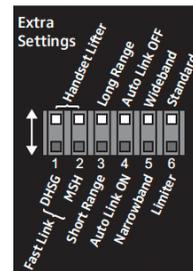
2. Plug the end of the cable with the RJ9 connector into one of the two jacks labeled **HEADSET** on the front of the console. Plug the other end of the cable with the RJ45 connector into the jack labeled **PHONE** on the rear of the Sennheiser wireless headset base station.

3. Adjust the sensitivity of the headset microphone to 6 using the microphone volume control on the bottom of the headset base station. This can be fine tuned later as needed.

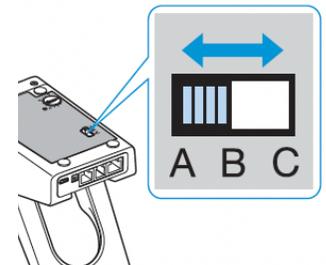


Volume control on base station

4. For optimum performance, please make sure that dip switches #3 and #4 on the base station are in the “down” position, which sets them to “Short Range” and “Auto Link ON”, respectively. Also, make sure all headset base station ABC switches are in the “A” position.



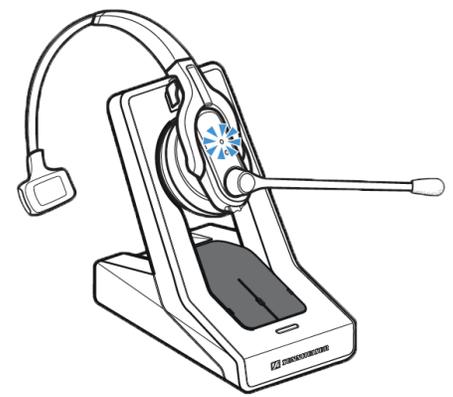
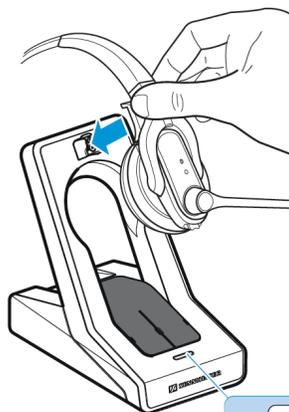
Base station DIP switches



Set ABC switch to “A”

5. Connect the power supply to the Sennheiser base station(s). The base station should power on.

6. Place the wireless headset(s) on their base station(s) and allow them to charge for at least 20 minutes.



Headset charging

7. Once charged, follow the instructions in section 6.1.2.

Reminder...in a “public path” installation where there are no rear connected wireless headsets, and there is an existing foot switch that has been used with a corded headset, it is no longer necessary and should be disconnected when using a wireless headset plugged into a **HEADSET** jack. **If the system uses both “Public path” and “Private path” communication, A FOOTSWITCH MUST BE CONNECTED.** To mute the wireless headset microphone from the “private path,” use the mute feature on the headset. See instructions in section 6.1.2. To talk to the “public path” press the associated footswitch.

Your wireless headsets should now be functioning and capable of two way communication with each other and with any headset which is plugged into a **HEADSET** jack on the front of the Vitalinq console (and optional Mini Console).

If using more than one wireless headset, each headset earpiece and base station must be labeled so that the headset is returned to the base station it was removed from. If a headset is returned to a base station that is assigned to another headset, it will knock that headset offline and establish a link to the “new” base station. Colored labels or numbering can be used. Vis-A-Vis typically provides colored labels when providing more than one headset with a 94A system.

6.1.2 Wireless Headset Operation

If you place the headset into the base station, the headset automatically switches to standby mode. In standby mode the power consumption is very low. The LED on the side of the headset earpiece lights up blue and the rechargeable battery is being charged.

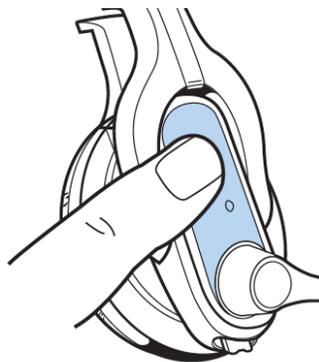
Wireless linking of a headset and base station

Automatically

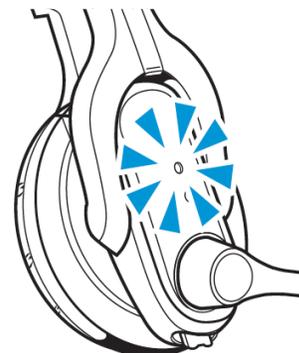
If the link DIP switch on the bottom of the base station is set to AUTO LINK ON (recommended), the headset will automatically link when it is removed from the base station. When linked, a blue LED light



Auto Link ON



Manually linking



LED light on headset

on the side of the headset will flash slowly and the blue LED on the base station will be continuously on.

Manually

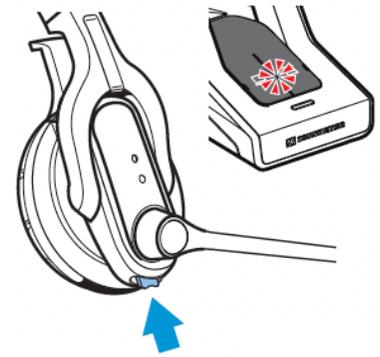
Press the LINK button on the side of the headset. When link is established, a blue LED light on the side of the headset will flash slowly and the blue LED on the base station will be continuously on.

To disconnect a wireless link between headset and base station, press the LINK button on the headset.

Muting a headset

To mute the headset, press the AUDIO button on the bottom of the headset in. The microphone is muted and the LINK LED on the base station flashes red. Two tones will be heard in the earpiece.

To cancel muting, press the Audio button once more. The muting is cancelled and the LINK LED on the base station lights up blue. Two tones will be heard in the earpiece.

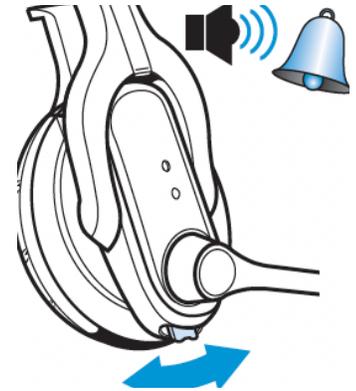


Muting headset

Headset listen volume adjustment

The front HEADSET jacks have a coarse listen volume control on the console next to the jack. When using wireless headsets, this knob should be placed in the 12 o'clock position initially.

Use the audio button as shown in the diagram to make fine adjustments to the earpiece volume. When the minimum or maximum volume is reached, you will hear a double beep in the headset.



Adjusting headset volume

Please refer to the Sennheiser instruction manual for a full description of your wireless headset's features.

6.1.3 Option 2 – The YELLOW and SILVER Jacks (Rear Headset Jacks) Private Path ONLY

Yellow Jack

Using a special Vitalinq adaptor cable (P/N: CBL-YJ), up to two wireless headsets can be connected to the **YELLOW** jack on the rear of the Vitalinq 94A-07 console. Two-way communication is then possible between the wireless headset(s) plugged into the **YELLOW** jack and any headset (corded or wireless) plugged into one of the two **HEADSET** jacks located on the front of the Vitalinq console or, if used, the **SILVER** jack. Note that headsets plugged into the **YELLOW** jack do not provide two-way communication with the procedure room.

Headsets connected to the **YELLOW and **SILVER** jacks DO NOT broadcast over the procedure room speaker. They can only communicate with each other and any headsets connected to the front **HEADSET** jacks.**

- Locate the “Sennheiser Yellow Jack Cable” (P/N: CBL-YJ). This cable, made by Vis-A-Vis, will be included with your wireless headset when purchased from Vis-A-Vis. It is not a Sennheiser cable. It has an ethernet (RJ45) connector on one end with two cables leading from it to a pair of ethernet connectors.
- Plug the ethernet connector with the two cables attached to it into the jack on the rear of the Vitalinq console labeled **YELLOW**.
- Plug one of the two ethernet connectors into the jack labeled “**PHONE**” on the rear of one of the Sennheiser wireless headset base station. Repeat for the other Sennheiser base station. Both base stations are now plugged into the **YELLOW** jack on the Vitalinq console via the “Sennheiser Yellow Jack Cable”.
- Follow steps 4 through 8 under “Option 1” of these instructions to complete the setup.

Silver Jack

The **SILVER** jack provides for a fifth wireless headset to connect to the console. Connections for using this jack are the same as the front **HEADSET** jacks discussed in Option 1.

6.2 Vitalinq MC-11 Mini Console

6.2.1 Overview

The Vitalinq MC-11 (Mini Console) is an optional accessory device designed to be used with the Vitalinq 94A-07 Intercom and Music system. The Mini Console is very compact, measuring only 5 5/8" wide by 1 5/8" high by 4" deep. Its purpose is to reproduce the intercom functionality of the 94A-07 at another physical location. Control of the music system remains at the 94A-07 console. A single black Ethernet cable is used to connect the Mini Console to the 94A-07 console. This cable also provides power to the Mini Console.

The following are examples of situations where the Mini Console would be useful.

Example 1 - A crowded desk

The desk/counter at control room technician's workstation is crowded making it difficult to find room for the 94A-07 console. In this case, the 94A-07 console could be located where more space is available, possibly at the end of the workstation or on a shelf, and the smaller Mini Console could be placed in front of the technician or even beneath the counter at the technician's location.

Example 2 - Secondary location

There is the need for a secondary location in the control room for personnel to have two-way communication with the procedure room and this location is too far from the 94A-07 console for it to be practical to connect a second headset to the 94A-07 console directly. This might be across the room or in a separate room or office. In this case, the Mini Console would duplicate the 94A-07 console's intercom functionality. An additional headset and foot switch and/or desk microphone will be needed. If located in a separate room from the 94A-07 console, and a desk microphone is to be used with the Mini Console, an additional communication speaker will also need to be installed in the room with the Mini Console. An additional communication speaker is not necessary if a headset is used. Please contact Vis-A-Vis at 800-319-6014 or by email at support@vitalinq.com to discuss your specific requirements.

6.2.2 Installation

1. Determine where the Mini Console will be located. Possibilities include but are not limited to on top or underneath a desk surface (see images below). If it is to be located under a countertop, it can be secured using two 2 1/4 inch #8 wood screws through pre-existing holes in the sheet metal enclosure. Before installation, make sure this screw length is not too long. If too long, it may penetrate through the countertop and damage the finish.
2. Run an Ethernet cable between the jack labeled **BLACK** on the rear of the 94A-07 console and the jack labeled **BLACK** on the rear of the Mini Console. This is the only cable that needs to be run between the two consoles. In addition to communication, this cable provides power from the 94A-07 console to the Mini Console. A 100' cable is provided.
3. Connect the Headset or Desk Microphone

If using a headset:

Connect the headset to the jack labeled **HEADSET** on the front of the Mini Console.

If using a desk microphone:

Plug the desk microphone cable into the jack labeled MIC-B on the rear of the Mini Console. Note that if using a desk microphone in a room other than the control room where the 94A-07 console and its speakers are located, you will need to install an additional communication speaker. This speaker will daisy chain off the control room communication speaker. Contact Vis-A-Vis at 800-319-6014 or by email at support@vitalinq.com to discuss your specific requirements.

Miscellaneous

- Although there is a built-in microphone on the Mini Console (labeled MIC-A), in most environments, using a headset or desk microphone will provide better sound.
- The jack labeled AUX on the front of the Mini Console is used for testing by the manufacturer.
- The RCA jack labeled AUX on the rear of the Mini Console can be used for a heart rate monitor.
- The jack labeled BLACK OUT on the rear of the Mini Console can be used to attach an additional Mini Console. Up to four Mini Consoles can be run in series.
- If you are interested in connecting a heart rate monitor or running Mini Consoles in series, contact Vis-A-Vis at 800-319-6014 or by email at support@vitalinq.com to discuss your specific requirements.

6.2.3 Operation

Wired Headset

- Adjust the talk volume for the headset using the small rotary pot labeled TALK on the front of the Mini Console.
- Adjust the listen volume for the headset using the large knob labeled LISTEN on the front of the Mini Console.
- Toggle the in-line mute switch located between the headset cord and coil cord to mute the headset microphone.

If using the Mini Console in a system using “Private path,” the inline Mute switch must be disconnected and a footswitch must be used instead.

Wireless Headset

- Adjust the Microphone volume on the rear of the base station to approx. 6. This can be fine tuned later as needed.
- Set the listen volume for the headset to midway using the large knob labeled LISTEN on the front of the Mini Console.
- If using the Mini Console in a system using “Private path,” a footswitch must be used. Press the footswitch to communicate with the overhead speaker and Monitor Mic (“Public path.”)

Muting the wireless headset

To mute the headset for “Private Path,” press the Audio button in. The microphone is muted and the LINK LED on the base station flashes red.

To cancel muting, press the Audio button once more. The muting is cancelled and the LINK LED on the base station lights up blue.

Desk Microphone:

1. The talk volume for the desk microphone can be adjusted using the small rotary pot labeled TALK on the rear of the Mini Console.
2. The listen volume for the communication speaker is adjusted using the knob labeled LISTEN VOLUME on the 94A-07 console.

6.3 Combining a Vitalinq 94A-07 System with a Vitalinq 94W-15 For Using More Than 5 Wireless Headsets

NOTE: Please notify Vis-A-Vis at the time of order that the 94W15 will be used connected to a 94A-07 system so that it can be internally configured correctly!

System Setup

The setup information below provides instructions for connecting the 94W-15 to the 94A-07. Setup and operation of the 94W-15 is covered in detail in the Vitalinq 94W-15 Wireless Headset System Operations and Installation Manual which is provided with the wireless system. A copy of the Vitalinq 94W-15 Wireless Headset System Operations and Installation Manual is available via the “Documentation” link on the Vitalinq web site which at www.vitalinq.com.

1. Plug one end of the RJ9 to RJ9 cable into the jack labeled SILVER on the 94A-07 console and the other end into the jack labeled SILVER on the 94W-15 console.
2. Plug the foot switch into the foot switch jack on 94A-07 console on the SAME side that the headset is plugged into. For instance, if using the LEFT HEADSET JACK on the front of the 94A-07 console, plug the foot switch into the jack labeled LEFT FOOT SWITCH OR AUX IN on the rear of the console (directly behind the headset jack being used). If using the RIGHT HEADSET JACK, plug the foot switch into the jack labeled RIGHT FOOT SWITCH OR AUX IN

When the foot switch is not pressed, all the connected headsets can freely communicate (“Private Mode”). Pressing the foot switch allows the associated headset to also communicate with the Procedure Room overhead speaker and Monitor Mic (“Public Mode.”)

The desk microphone has two switches; a PUSH-TO-TALK and a PUSH-TO-LOCK switch. To use the PUSH-TO-TALK switch, press and hold the switch while speaking. The microphone will transmit while the switch is held down. Release the switch when you are finished speaking.

Use the PUSH-TO-LOCK switch to lock the microphone on. The microphone will remain on (keyed) until the switch is pressed again.

Please contact Vis-A-Vis at 800-319-6014, by email at orders@vitalinq.com or through our web site at www.vitalinq.com for pricing information

If you have any questions or need help with the setup or operation of your Vitalinq system, please give us a call at 800-319-6014 or email support@vitalinq.com. Also, please feel free to give us your feedback or suggestions.

END OF DOCUMENT

