Ta4f wiring diagram

Prior to smart phones life was much simpler—at least with respect to the wiring for headsets used with portable music players vs cell phones. A recent project has me dealing with some wired headsets. In the beginning there was the pocket transistor radio. When Sony got around to it some transistor radios featured a 3. This was intended to receive an earphone for private listening. An old school portable music player, like an iPod or my Sansa MP3 player , had a single 3. In fact, this type of audio jack was basically universal. It came into prominence with the first Sony Walkman , which was introduced in You can still see these sort of connectors described as 3. As these devices were used exclusively for listening to music, the pin out of the 3. Since all devices used this wiring standard, basically any headset could be used with any player. Life was good. Well, it was basically good—unless you were involved in telephony or two-way radios. At least not as far as this 3. It needs to be wired in a fashion that considers the mono playback and the microphone. Many consumer DECT cordless phones use a 2. While many business class telephones us an RJ-9 type connector for a headset , some manufacturers do use 2. So now we have two standard ways of using this connector, varying only by application. Everyone is happy, even the call center staff. Since a smart phone can be used for both listening to music and making phone calls a 3-conductor connector is no longer adequate. In order to have both stereo music and a microphone signal a 4-conductor connector is required. Enter the 3. Where things get interesting is in how the conductors are used. There was some initial disagreement about the wiring. In truth, the OMTP standard came first, it was Apple who mixed things up by insisting upon going another way. Nokia has somewhat thrown in the towel on its OMTP standard by developing a way for their second generation of Lumia phones to sense what kind of headset is plugged in and act accordingly. So there can be some sense of peace, at least in the realm of mobile phones. One of my recent projects involved using a telecom operator type wired headset with an iPod Touch. Can you see the problem that implies? Despite the fact that the iPod Touch is a media player, not a mobile phone, it features a 3. Of course, my project involved using the iPod to host a SIP client, so I was seeking mobile-phone like compatibility with a call-center styled wired headset. None terminate in the 3. Headset Buddy sells adapters that allow you to use a 2. These can work, but sometimes suffer audio level issues. The solution to using a good, telephony style headset with an iPod Touch was to buy a proper, call-center style headset that used a Quick Disconnect QD system. VXi then offers various QD-to-whatever cables, allowing the headset to be used with whatever device you have before you. The intent is to lock you into using their gear. In looking at Addasound headsets last month I was surprised to find that they currently use a Plantronics type QD connector, but were also planning one of their own. That said, VXi does offer their headsets equipped with other companies QD connectors! Further, Plantronics makes a QD-to This combination has proven to work well together. They are capable of reliably delivering HDVoice over Wifi. It also happens that people sometimes need to use a telecom headset with a computer. My preference to date has been to use a USB-attached headset like the Logitech. Audio that I reviewed so long ago. A USB headset is obviously easy to connect and often appears as a separate, identifiable audio device to the OS, making its especially simple to setup in the soft phone. The project at hand had the potential to see the same headset deployed with an unidentified laptop. To accommodate this potential I found two possibilities;. Older and larger laptops, even desktops for that matter, have a pair of 3. The alternative bottom cable was very long and coiled. It reflects the fact that it is often used with desktop computers in call center applications. Thus the added cable length could be handy. The other adapter, while another widget in the wiring, is just a few inches in length. That makes it more appropriate when used with a laptop that would be right in front of the user. Ultrabooks and smaller laptops, like the MacBook Air and my Lenovo X1 Carbon, have much smaller surfaces available to hold their array of connectors. Thus they may offer a single 3. I made a plan, bought some gear, found that there were issues, then had to amend my plan to address those issues. At one point I thought that I could get myself out of a corner by modifying a handful of QD cables that I had purchased, replacing the molded in place 2. After making one such cable I decided to just bite the bullet and buy the correct cables! You are far better off to deploy a molded cable. A cable that I soldered and crimped by hand seemed much more likely to fail, making it a problem perhaps not too far down the road. Michael, thanks for the great run down on audio connections. I realise this is some time since your article. I wondered if on your travels you have come across any adapters to allow a 3. On a call being received and accepted by the operator, the QD signal line would override the additional source and mute it. Therefore, on cancelling the phone call QD line , the additional source audio would again play through unmute. I am imagining some junction box at the QD mid-way connector junction? They offer Y-cords for training purposes, but nothing more complicated. Great information. Just some input on using a USB sound device on PC; it turns out that the inexpensive C-Media based USB audio interfaces work very well and the common

cm is one of the few USB audio chips that provides an independent adjustment for side tone shows up as mic signal in Windows playback volume setting. Dr Chair â€" Yes, side tone can be handy, most especially when using noise blocking headphones like my favorites from Etymotic. However, C-Media makes the audio chip sets. Also an old PCI sound card. Michael I was wondering if you have ever ran across a qd g to 3. So you could plug in any standard headphone w mic to the female audio 4 post? I work in a call center and I think my only option is to get the 4post male and just splice and shrink a new female connector but they allow any head phones and that requires a female connectorâ€¦. Not QD-to-3,5mm female. However, Headset Buddy has RJ-to We can use any equipment that works with qd and they will allow any head set even modded or after market. But all the headsets I like are trust models. I also plan on getting one of thouse small AAA battery powered amps that last 50 hours so I can turn up those soft spoken calls. Soâ€¦ yeah ill just mod one and reshrink heat and add a braid I guess is my only option. Interesting, and very useful, I was hooking up one of those cheap Chinese Bluetooth receivers and wanted to add a stereo plug for the input so I could use different amplifiers with it. I purchased some of those cheap Chinese breakout boards with the plug on it, I hooked it up and could not get stereo reception till I found this article that showed me my error, it had the 4 conductor plug and after I changed the wires it now works great. August 4, Michael Graves Prior to smart phones life was much simplerâ€¦at least with respect to the wiring for headsets used with portable music players vs cell phones. Operators Are Standing By Well, it was basically goodâ€¦unless you were involved in telephony or two-way radios. Then along comes the smart phone revolution to wreck it all. Smartphones Add Complexity Since a smart phone can be used for both listening to music and making phone calls a 3-conductor connector is no longer adequate. Computers, too! To accommodate this potential I found two possibilities; Older and larger laptops, even desktops for that matter, have a pair of 3. Like this: Like Loading Sounds to me like a task for a Raspberry Pi or something similar. Sorry, your blog cannot share posts by email. No user-serviceable parts inside. Refer all servicing to qualified service personnel. The safety certifications do not apply when the operating voltage is changed from the factory setting. Operate only with AA batteries. Note: Use only with the included power supply or a Shure-approved equivalent. Licensing: A ministerial license to operate this equipment may be required in certain areas. Consult your national authority for possible requirements. Changes or modifications not expressly approved by Shure Incorporated could void your authority to operate the equipment. Shure strongly urges the user to contact the appropriate telecommunications authority concerning proper licensing, and before choosing and ordering frequencies. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:. Note: 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 in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:. Note: EMC conformance testing is based on the use of supplied and recommended cable types. The use of other cable types may degrade EMC performance. Please follow your regional recycling scheme for batteries, packaging, and electronic waste. This device operates under an ACMA class licence and must comply with all the conditions of that licence including operating frequencies. Before 31 December , this device will comply if it is operated in the MHz frequency band. A breakthrough in wireless audio quality, Shure digital processing enables ULX-D to deliver the purest reproduction of source material ever available in a wireless system, with a wide selection of trusted Shure microphones to choose from. Extended 20 Hz â€" 20 kHz frequency range and flat response captures every detail with clarity, presence, and incredibly accurate low end and transient response. With greater than dB, ULX-D delivers wide dynamic range for excellent signal-to-noise performance. Optimized for any input source, ULX-D eliminates the need for transmitter gain adjustments. ULX-D sets a new and unprecedented standard for spectral efficiency and signal stability. The intermodulation performance of ULX-D is an incredible advancement in wireless performance, enabling a dramatic increase in the number of simultaneous active transmitters on one TV channel. Rock-solid RF signal with zero audio artifacts extends over the entire range. For scalability and modular flexibility, ULX-D receivers come in single, dual, and even quad channel versions. All receivers offer High-Density mode for applications where high channel counts are needed, greatly increasing the amount of simultaneous channels possible over one frequency band. Advanced Lithium-ion

rechargeability provides extended transmitter battery life over alkaline batteries, battery life metering in hours and minutes accurate to within 15 minutes, and detailed tracking of battery health status. Generations ahead of any other available system in its class, ULX-D brings a new level of performance to professional sound reinforcement. The ULXD4 receiver is available in dual channel and quad channel models. Both models share the same feature set and functionality, but differ in the number of channels available and the number of audio outputs. The descriptions and procedures in this guide are applicable to either the dual or the quad receiver. Illuminates when the receiver is connected with other Shure devices on the network. IP Address must be valid to enable networked control. Press the sync button while the receiver and transmitter IR windows are aligned to transfer settings from the receiver to the transmitter. Note: the receiver will not output audio unless one blue LED is illuminated. Note: In Frequency Diversity mode, simultaneous blinking of the red and yellow audio LEDs indicates that diversity audio has been routed to this channel. Applies a 30 dB pad in mic position. Connect to an Ethernet network to enable remote device control via WWB6 software. Also carries Dante digital audio and control signals for audio distribution, monitoring, and recording - see Dante Network topic. View menu screens and settings. Press any control button to activate the backlight. Align with the receiver IR port during an IR sync for automated transmitter programming. See Optional Accessories for a list of compatible cartridges. Indicates whether microphone is active or muted. The following settings are available:. To un-mute, restart the transmitter. OFFSET compensates for signal level differences between transmitters that share the same receiver channel. Mute Mode reconfigures the transmitter power switch to act a mute switch for the audio. Using the switch, the audio can be easily turned on or muted by presenters, sports referees, or anyone who periodically needs to speak. When the audio is muted, the transmitter RF signal remains on and ready at all times. Tip: The transmitter LED turns red when audio is muted and turns green when audio is enabled. Use the LOCK feature to prevent accidental or unauthorized changes to the hardware. Use the transmitter controls to select and lock any of the following transmitter functions. The following information cycles when a transmitter is tuned to the receiver's frequency:. Shure rechargeable battery: runtime is displayed in minutes remaining. The following text or icons report transmitter status to the receiver screen:. Indicates encryption is enabled on the receiver and has been transferred to the transmitter from a sync. Use the control wheel to edit values. Use the control wheel or gain buttons to adjust the channel gain from to 42 dB, in 1 dB increments. Sets the audio input attenuation options: KEEP , 0 , Configures the transmitter power switch to act as an audio mute switch. Create Custom Groups of up to 6 frequencies and export to networked receivers. Note: Additional information can be accessed from the selected networking option. Each parameter has the default value KEEP , which leaves that setting unaffected by a sync. Note: When Cust. Groups is set to on, it may take up to 30 seconds to complete an IR sync. System Presets allow a current receiver setup to be saved and restored. Presets store all receiver settings to provide a quick way to configure a receiver or switch between several different setups. Up to 4 presets can be stored in receiver memory. Use the included AA battery adapter when using batteries other than the Shure rechargeable battery. Handheld: Rotate and store the adapter in battery door when using Shure rechargeable battery. A 5-segment icon on the receiver and transmitter menu screens indicates battery charge. When using a Shure rechargeable battery, the receiver and transmitter home screens display the number of hours and minutes remaining. Note: For additional rechargeable battery information, visit Proper care and storage of Shure batteries results in reliable performance and ensures a long lifetime. Install the included battery contact cover 65A on the handheld transmitter to prevent light reflection in broadcast and performance situations. Note: Slide the cover off before inserting the transmitter in the battery charger. The receiver gain control sets the audio signal level for the entire receiver and transmitter system. Changes to the gain settings occur in realtime allowing for adjustments during live performances. When adjusting the gain, monitor the audio meter levels to prevent signal overloads. Tip: To quickly adjust the gain, press and hold a gain button to enable accelerated scrolling. The audio meter displays yellow, green, and red LEDs to indicate the audio signal level. When setting up the receiver, adjust the gain so that the average signal LED levels are solid green and occasionally yellow, with only the highest peaks causing the red LED to illuminate. Tip: If a vocalist is overloading a bodypack transmitter, try lowing the receiver gain. The audio output of each receiver channel can be independently muted to prevent audio from passing. Note: Receiver gain is disabled for muted channels to prevent unexpected changes in audio levels. Tip: Audio mute can be enabled remotely from Wireless Workbench or from an external controller. A power cycle will reset the receiver and unmute the audio output. The following warning displays on the receiver LCD panel when the transmitter input is clipped:. If the warning persists, reduce the level of input signal. Audio summing allows the dual and quad receivers to function as a 2 or 4

channel mixer, respectively. Summed audio is available on all outputs Dante and XLR. Use the gain controls for each channel to create the overall mix balance. The front panel LEDs indicate the audio level for each channel. If an overload occurs, the red LEDs will illuminate indicating that the internal limiter is active and the display will show an overload message. To correct, adjust the overall gain balance. The following table describes the typical total system gain from the audio input to the receiver outputs:. Turn off all transmitters to prevent them from interfering with the frequency scan. Turn on any devices that might produce interference during the show so the scan can detect and avoid them, including:. The transmitter and receiver are now tuned to the same frequency. A setup using networked receivers is the fastest and easiest way to distribute the best open channel to each system. Leave the transmitter on and repeat this step for each additional system. Leave all transmitters on use the following steps to set up additional receiver channels:. Note: Using the 20 mW setting decreases the transmitter battery runtime and reduces the number of compatible systems. Interference Detection monitors the RF environment for potential sources of interference which can cause audio dropouts. If the warning display persists or the audio drops out repeatedly, perform a Scan and Sync at the first opportunity to find a clear frequency. High Density mode creates additional bandwidth for more channels in crowded RF environments. Frequency efficiency is optimized by running at 1 mW RF transmit power and narrowing the modulation bandwidth, allowing for the channel spacing to be reduced from kHz to kHz. Transmitters can be positioned on adjacent channels with unsubstantial intermodulation distortion IMD. High Density mode is ideal for applications where many channels are needed in a confined area, transmission distances are short, and the number of available frequencies is limited. Up to 30 meters of range is available in High Density mode. Frequency Diversity is an advanced ULX-D receiver feature that safeguards against loss of audio signal caused by RF interference or by power loss in a transmitter. In Frequency Diversity mode, the signals from two transmitters from a common audio source are routed to the outputs of 2 receiver channels. In the event of interference or power loss, the audio from the good channel is switched to both outputs to preserve the audio signal. Switching between channels is seamless and inaudible. When the receiver senses that the signal quality has improved, audio routing is restored without interrupting the audio signal. Note: WWB6 software offers an option to selectively lock the diversity audio source to a specific transmitter see Wireless Workbench 6 section. Enabling Encryption while in Frequency Diversity mode provides an additional layer of protection by only passing audio from the most recently synced encrypted transmitter for each receiver channel. TV bandwidth varies globally, so check local regulations to determine the regional TV bandwidth. Use this feature to create and export up to 6 groups of manually selected frequencies to networked receivers prior to a group scan to simplify system set up. See Use the control wheel to choose group, channel and frequency values. When encryption is enabled, the receiver generates a unique encryption key which is shared with a the transmitter during an IR sync. Transmitters and receivers that share an encryption key form a protected audio path, preventing unauthorized access from other receivers. Multiple transmitters can share the same encryption key, allowing them access to a single receiver. Use this method if you have multiple instruments or wish to use a combination of handheld and bodypack transmitters. Make sure only one transmitter is turned on during an IR sync or a performance to avoid causing cross interference between transmitters. Periodically regenerating the encryption key maintains security for transmitters and receivers that are paired for extended periods. Note: If multiple transmitters are encrypted to a single receiver, each transmitter must be IR synced to clear the encryption key. The receiver has 2 RF cascade ports on the rear panel to share the signal from the antennas with 1 additional receiver. Use a shielded coaxial cable to connect the RF cascade ports from the first receiver to the antenna inputs of the second receiver. Antenna ports A and B provide a DC bias to power active antennas. Set the DC power to off when using passive non-powered antennas. Selectable Dante networking modes route port signals for flexible network set up. Wireless Workbench WWB software provides comprehensive control for wireless audio systems. Wireless Workbench enables live remote adjustments to networked receivers for real-time changes to gain, frequency, RF power, and control locks. A familiar channel strip interface displays audio meters, transmitter parameters, frequency settings and network status. Wireless Workbench is available for Windows or Mac and can be downloaded at: Use the controller to create audio routes between networked components and to monitor the status of online devices. Version 2. When a device has a Dante lock turned on, Dante audio will continue to flow according to existing subscriptions, but its subscriptions and settings can't be controlled or configured. DDM is network management software that enables user authentication, role based security, and audit capabilities for Dante networks and Dante-enabled products. An IP address must be assigned to each device in the network to ensure communication and control between

components. If using Dante audio, a separate Dante IP address must also be assigned to the receiver. The Dante network interface has two ports Primary and Secondary to provide flexible routing and configuration options for network signals. Three selectable Dante network modes are available to control signal routing from the receiver ports to the Dante network. Select a Dante mode to configure network signal routing on the Primary and Secondary ports. Set all receivers on the network to the same mode. Note: Remove network connections from the receiver before changing the mode. Note: Use shielded Cat5e cable for network connections to ensure reliable performance. Switched mode is typically used for single network installations of star or daisy-chained networks. Switched mode is recommended for installations that don't require Dante audio. Can be configured with or without a DHCP server. Do not route audio through the server. Connect Dante receivers mixers, recorders, amplifiers to the Primary port. Use Redundant mode to carry a backup copy of the Dante audio on the Secondary network in case the audio on the primary network is interrupted. Note: Devices connected to the Redundant network must be compatible with Redundant audio. The Link-Local Dante Secondary address subnet is preset to Connect Dante receivers mixers, recorders, amplifiers to the Primary or Secondary ports. Use Split Mode to isolate control signals from audio signals by placing them on two separate networks. Connect the computer running the Dante controller to the Secondary port. Connect the computer running the Shure Control to the Primary port. Device IDs are used to identify devices on the network and for creating Dante digital audio routes. Using the following best practices will help to organize network setup and ease troubleshooting. Tip: Click on the device icon next to the channel name to Identify the receiver using the Flash function. If entering IDs from the receiver menu, additional ID modes are available for quickly adding sequential numbering to multiple receivers or adding a prefixes for network discovery by Dante enabled Yamaha mixing consoles. Note: Changing the Dante ID will cause a loss of audio signal. After an ID has been changed, use the Dante controller to restore audio route subscriptions using the new ID. The Dante controller's Identify Device feature flashes the front panel LEDs of a selected receiver to provide identification when multiple receivers are in use. The front panel LEDs of the selected receiver will respond by flashing. Devices that appear in the Dante controller are categorized as "Transmitters" and "Receivers". In order for audio to flow in the network, audio routes subscriptions must be configured between transmitters and receivers. Devices that have both inputs and outputs commonly appear as both transmitters and receivers. Launch the Dante Controller and click on the intersection point between components to form an audio route. The audio route is also referred to as a Subscription. If the icon is not illuminated, check the cable connection and the LEDs on the network jack. The receiver and the Dante network card can be reset to restore factory Dante settings. Performing a reset is helpful for clearing existing data before setting up a system. Tip: Prior to performing a factory reset, note the current Dante network mode and IP settings. System Reset clears the current receiver settings and restores the factory default settings. Firmware is embedded software in each component that controls functionality. Periodically, new versions of firmware are developed to incorporate additional features and enhancements. When updating receiver firmware, update transmitters to the same firmware version to ensure consistent operation. PATCH e. Ensure that receiver power and network connections are maintained during a firmware update. Do not turn off the receiver until the update is complete. Once the download is complete, the receiver automatically begins the firmware update, which overwrites the existing firmware. Use only one controller per system to avoid messaging conflicts. ULX-D receivers include gateway addressing to support cross-subnet routing. The gateway setting allows a single controller to manage devices assigned to different subnets such as multiple rooms or multiple buildings. Note: A gateway address is an advanced network setting. In most network configurations, the setting does not need to be changed. Note: When setting the gateway address, the IP address and Subnet must be set to valid addresses. Monitor the key elements of your wireless operation on a mobile device over Wi-Fi with ShurePlus Channels. Use alongside Wireless Workbench or as a stand-alone application for less complex coordination needs. Make sure that the receiver and transmitter are receiving sufficient voltage. Check the battery indicators and replace the transmitter batteries if necessary. Adjust the system gain on the front of the receiver. Ensure the output level XLR output only on the back of the receiver corresponds to the input of the mixing console, amplifier, or DSP. The transmitter and the receiver can be locked to prevent accidental or unauthorized changes. A locked feature or button will produce the Locked screen on the LCD panel. Paired transmitters and receivers must have the same firmware version installed to ensure consistent operation. See Firmware topic for firmware update procedure. This signal could be from the transmitter, or it could be from an interfering source, such as a television broadcast. If more than one or two of the amber RF LEDs are still illuminated while the transmitter is off, then that channel has too much

interference, and you should try a different channel. This will usually not cause a problem unless you are using more than one system at the same time, in which case, it can cause interference in the other system. If the transmitter is more than 6 to 60 m 20 to ft from the receiver antenna, you may be able to increase range by doing one of the following:. Positive pressure on microphone diaphragm produces positive voltage on pin 2 with respect to pin 3 of XLR output and the tip of the 6. The values in this table are typical of fresh, high quality batteries. Battery runtime varies depending on the manufacturer and age of the battery. Note: Frequency bands might not be available for sale or authorized for use in all countries or regions. Note: Please follow your regional recycling scheme for batteries and electronic waste. This product meets the Essential Requirements of all relevant European directives and is eligible for CE marking. Note: For transmitters operating in the V50 and V51 bands: nominal free space antenna gain at middle of the band is typically -6 dBi, and rolls off at the band edges an additional -4 dB. This device operates on frequencies shared with other devices. Consult the Federal Communications Commission White Space Database Administration website to determine available channels in your area prior to operation. No user-operated control of power, frequency, or other parameters are available beyond those specified in this operating manual. This device operates on a no-protection, no-interference basis. Should the user seek to obtain protection from other radio services operating in the same TV bands, a radio licence is required. KEEP these instructions. HEED all warnings. DO NOT use this apparatus near water. DO NOT block any ventilation openings. DO NOT install near any heat sources such as open flames, radiators, heat registers, stoves, or other apparatus including amplifiers that produce heat. Do not place any open flame sources on the product. 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 wider 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. PROTECT the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. USE only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. Explanation of Symbols Caution: risk of electric shock Caution: risk of danger See note. Risk of fire or burns. Replace only with same or equivalent type. Never put batteries in mouth. If swallowed, contact your physician or local poison control center Do not short circuit: may cause burns or catch fire Do not charge or use battery packs other than Shure rechargeable batteries Dispose of battery packs properly. Check with local vendor for proper disposal of used battery packs. Batteries battery pack or batteries installed shall not be exposed to excessive heat such as sunshine, fire or the like Do not immerse the battery in liquid such as water, beverages, or other fluids. Do not attach or insert battery with polarity reversed. Keep away from small children. Do not use abnormal batteries. Pack the battery securely for transport. Operation is subject to the following two conditions: This device may not cause harmful interference. This device must accept any interference received, including interference that may cause undesired operation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna. Increase the separation between the equipment and the receiver. Connect the equipment to an outlet on a circuit different from that to which the receiver is connected. Australia Warning for Wireless This device operates under an ACMA class licence and must comply with all the conditions of that licence including operating frequencies. Quickstart Instructions. Hardware Interface Receiver Front Panel. Back Panel. Boundary and Gooseneck Base Transmitters. Transmitter Audio Mute Mode Mute Mode reconfigures the transmitter power switch to act a mute switch for the audio. Press enter to save. Home Screen Display Options Receiver. Menu Screens Receiver Channel. Turn the control to adjust the selected parameter. Turn the control wheel to edit a highlighted character Press the control wheel to advance to the next character Press ENTER to save changes Note: The channel name is transferred to a transmitter during a sync. MUTE Mutes the receiver audio output. Group Create Custom Groups of up to 6 frequencies and export to networked receivers. Creating a System Preset System Presets allow a current receiver setup to be saved and restored. Battery Runtime Charts A 5-segment icon on the receiver and transmitter menu screens indicates battery charge. The tables display the approximate hours and minutes remaining h:mm. Shure SB Series Rechargeable Battery When using a Shure rechargeable battery, the receiver and transmitter home screens display the number of hours and minutes remaining. Important Tips for Care and Storage of Shure Rechargeable Batteries Proper care and storage of Shure batteries results in reliable performance and ensures a long lifetime. Installing the Battery Contact Cover Install the

included battery contact cover 65A on the handheld transmitter to prevent light reflection in broadcast and performance situations. Align the cover as shown. Slide the cover over the battery contacts until it is flush with the transmitter body. Setting Receiver Gain The receiver gain control sets the audio signal level for the entire receiver and transmitter system. Reading the Audio Meter. Muting a Receiver Channel Audio Output The audio output of each receiver channel can be independently muted to prevent audio from passing. Transmitter Input Clip The following warning displays on the receiver LCD panel when the transmitter input is clipped:. Audio Summing Audio summing allows the dual and quad receivers to function as a 2 or 4 channel mixer, respectively. Adjusting Gain for Summed Outputs Use the gain controls for each channel to create the overall mix balance. Scan and Sync Use this procedure to tune a receiver and transmitter to the best open channel. Before you begin: Turn off all transmitters to prevent them from interfering with the frequency scan. Turn on any devices that might produce interference during the show so the scan can detect and avoid them, including: Other wireless systems or devices Computers CD players Large LED panels Effects processors Press SEL to select a receiver channel. Press SCAN. When the scan is done, the receiver displays the group with the most available frequencies. Power on the ULXD transmitter. Press the sync button on the receiver. Align the IR windows until the receiver IR port turns red. Multiple System Setup A setup using networked receivers is the fastest and easiest way to distribute the best open channel to each system. Note: Networked receivers must all be within the same frequency band. Networked Receivers Turn on all receivers. Press ENTER to accept the group number and automatically assign the next best channel to each receiver on the network. The receiver LEDs will flash when a frequency has been assigned. Turn on a transmitter and sync to the receiver. Non-networked Receivers Turn on all receivers. Sync a transmitter to each receiver channel. Use the control wheel to adjust the group, channel, or frequency. For increased channel reuse at close distances 10 mW m ft. For hostile RF environments or long-distance applications Note: Using the 20 mW setting decreases the transmitter battery runtime and reduces the number of compatible systems. Interference Detection. During High Density channel scanning, turn on all other transmitters and move them to their intended position. Perform a walk test to verify transmitter range If using custom groups, the groups loaded into the receiver must be compatible with High Density mode. Frequency Diversity Frequency Diversity is an advanced ULX-D receiver feature that safeguards against loss of audio signal caused by RF interference or by power loss in a transmitter. Best Practices for Frequency Diversity Use the same microphone type and model for each transmitter Place microphones within close proximity to the source Use the gain controls to match the output levels for each receiver channel If Audio Summing is active, use a Y-cable Shure AXT to connect the bodypacks to a single audio source to prevent comb filtering. Frequency Diversity and Encryption Enabling Encryption while in Frequency Diversity mode provides an additional layer of protection by only passing audio from the most recently synced encrypted transmitter for each receiver channel. Custom Groups Use this feature to create and export up to 6 groups of manually selected frequencies to networked receivers prior to a group scan to simplify system set up. Audio Signal Encryption When encryption is enabled, the receiver generates a unique encryption key which is shared with a the transmitter during an IR sync. Perform an IR Sync to share the encryption key with the selected transmitter. Encrypting Multiple Transmitters to a Single Receiver Multiple transmitters can share the same encryption key, allowing them access to a single receiver. Perform an IR Sync to share the encryption key with the first transmitter. Turn off the transmitter and perform an IR Sync to share the key additional transmitters. Regenerating Encryption Keys Periodically regenerating the encryption key maintains security for transmitters and receivers that are paired for extended periods. IR Sync the transmitter and receiver to clear the encryption key. RF Cascade Ports The receiver has 2 RF cascade ports on the rear panel to share the signal from the antennas with 1 additional receiver. The frequency band must be the same for both receivers. Visit Dante Controller and Lock Settings Version 2. Dante Domain Manager Version 2. Otherwise, access to Dante settings, device factory reset, and device firmware updates will be disabled. When a device is managed by a Dante Domain and the Dante Domain is disconnected, access to Dante settings, device factory reset and device firmware updates will be disabled. When a device reconnects to the Dante Domain, it follows the policy set for it in the Dante Domain. IP Address Configuration An IP address must be assigned to each device in the network to ensure communication and control between components. Overview of Dante Network Modes The Dante network interface has two ports Primary and Secondary to provide flexible routing and configuration options for network signals. Cycle receiver power to enable the mode change. Network Connection and Configuration Examples Note: Use shielded Cat5e cable for network connections to ensure reliable performance. Switched Mode Switched mode is typically used for single network installations of star or daisy-chained networks. The

computer running WWB6 must also be on this subnet. Redundant Audio Mode Use Redundant mode to carry a backup copy of the Dante audio on the Secondary network in case the audio on the primary network is interrupted. Split Mode Use Split Mode to isolate control signals from audio signals by placing them on two separate networks. Best Practices Using the following best practices will help to organize network setup and ease troubleshooting. The Dante network requires unique Dante device IDs to prevent a loss of audio signal routing. Any duplicate IDs on the network will be tagged with a number such as -1, -2, -3, etc Open the Inventory View. Click on the Device ID to enable editing. ID Use the control wheel to edit the ID. Enter the ID using a keyboard from the Dante controller. Sequential: Adds a 3-digit numerical prefix to the receiver model name to create the device ID. Use the control wheel to increment the prefix value. Yamaha: Adds a prefix starting with "Y" followed by 3-digits to the receiver model name to create a device ID that allows Dante enabled Yamaha mixing consoles to discover ULX-D receivers on a Dante network. Use the control wheel to increment the prefix numerical value. Identify Device Feature The Dante controller's Identify Device feature flashes the front panel LEDs of a selected receiver to provide identification when multiple receivers are in use. Configuring Audio Routes with the Dante Controller Devices that appear in the Dante controller are categorized as "Transmitters" and "Receivers" In order for audio to flow in the network, audio routes subscriptions must be configured between transmitters and receivers. Forming an Audio Route Launch the Dante Controller and click on the intersection point between components to form an audio route. Find the intersection between the transmitter and receiver channels. Click on the where the components meet. A green checkmark indicates that the audio route has been established. Check the audio to verify that the audio route has been formed. For additional information about the Dante controller, visit Network Troubleshooting Use only one DHCP server per network All devices must share the same subnet mask All receivers must have the same level of firmware revision installed Look for the illuminated network icon on the front panel of each device: If the icon is not illuminated, check the cable connection and the LEDs on the network jack. If the ping returns success no packet loss , then the computer can see the device on the network. If the pings are successful and the devices still do not show up in the WWB6 inventory, check to ensure all firewalls are either disabled or allow the WWB network traffic to pass to the application. Check that firewall settings are not blocking network access. Restoring Dante Factory Settings The receiver and the Dante network card can be reset to restore factory Dante settings. Allow the Dante controller to refresh before making any additional changes. System Reset System Reset clears the current receiver settings and restores the factory default settings. Firmware Firmware is embedded software in each component that controls functionality. Firmware Versioning When updating receiver firmware, update transmitters to the same firmware version to ensure consistent operation. Select the updates and click Download. The new downloads are added to the Firmware tab, making them available to install on the device hardware, Connect the receiver and computer to the same network. Place the transmitter on its side and align the IR ports. IR ports must be aligned for the entire download, which can take 50 seconds or longer. Press the control wheel to navigate to the first digit of the GW gateway setting. Turn the control wheel to change a value, press the control wheel to advance to the next octet. Visit the Wireless Workbench page to download Workbench. Visit the Workbench help page to learn how to use Workbench with your system, Visit the Channels page to download ShurePlus Channels. Visit the Channels user guide to learn how to use Channels with your system. Troubleshooting Issue See Solution Gain Adjust the system gain on the front of the receiver. Cables Check that all cables and connectors are working correctly. Interface Locks The transmitter and the receiver can be locked to prevent accidental or unauthorized changes. Encryption Mismatch Re-sync all receivers and transmitters after enabling or disabling encryption. Firmware Mismatch Paired transmitters and receivers must have the same firmware version installed to ensure consistent operation. Compatibility Perform a Scan and Sync to ensure the transmitter and receiver are set to the same group and channel. Look at the label on the transmitter and receiver to make sure they are in the same band G50, J50, L50, etc Reducing Interference Perform a group or channel scan to find the best open frequency. Perform a sync to transfer the setting to the transmitter. For multiple systems, check that all systems are set to channels in the same group systems in different bands do not need to be set to the same group. Maintain a line of sight between transmitter and receiver antennas. Move receiver antennas away from metal objects or other sources of RF interference such as CD players, computers, digital effects, network switches, network cables and Personal Stereo Monitor PSM wireless systems. Eliminate RF overload see below. Increasing Range If the transmitter is more than 6 to 60 m 20 to ft from the receiver antenna, you may be able to increase range by doing one of the following: Reduce interference see above. Increase transmitter RF power level. Use Normal mode instead of High Density

mode. Use an active directional antenna, antenna distribution system, or other antenna accessory to increase RF range. Eliminating RF Overload If you see the red RF LED on a receiver, try the following: Reduce the transmitter RF power level Move the transmitter further away from the receiverâ€"at least 6 m 20 ft If you are using active antennas, reduce antenna or amplifier gain. Use omnidirectional antennas. PASWB 2 ft. L x Dia. LEMO Connector. For the band Z17 MHz , it

sunbeam alpine series 2 wiring diagram

frontier 2006

chevy s10 motor

 must be used indoors only. Canada Warning for Wireless This device operates on a no-protection, no-interference basis. Operation is subject to the following two conditions: This device may not cause interference. This device must accept any interference, including interference that may cause undesired operation of the device. Download PDF. Table of Contents. Acts as a 'back' button to return to previous menus or parameters without confirming a value change. Power , Menu , All , None. Alkaline , NiMH , Lithium. Shure Control Dante Audio and Control. Primary and Secondary ports are configured are 2 separate networks. The Secondary port carries a backup copy of the Primary digital audio signal. Primary and Secondary ports are configured are 2 separate networks to provide isolation between control signals and audio signals. Cannot turn transmitter off or change frequency settings, or can't program receiver. Cable, Instrument, 2. Cable, Instrument, 2-foot 0. Passive Directional Antenna MHz.