l'm not a robot



"Waiting for PC Wizard..." on screen: Unplug the radio and remove the battery out of the radio for 15-30 minutes and then reinstall the battery. The radio should be reset, and usage can resume. Speaker making a humming sound / background noise: when it is worn out which indicates that it needs to be replaced. Battery depleting too fast: A quickly depleting battery indicates the battery life. The louder you listen, the quicker the battery will only charge in standby mode. How do I scan for available DAB stations? Channels / Auto Scan: When entering DAB/DAB+ mode for the first time you will automatically be prompted to do an Auto Scan. If the radio is moved to a new location, you will need to scan again. To do this, open the menu by clicking the "Menu/Select" button on the remote, then use up/down arrows to find the Auto Scan option. How can I save a preset? Presets: Press and hold the 1-6 buttons on the remote or the unit itself. Bluetooth Not Connecting If you are seeing your PAL+ BT appear on your Bluetooth list but are having trouble connecting, try forgetting your PAL+ BT in the Bluetooth menu of your device and then re-pairing them. If that does not resolve the issue, please contact Customer Support for further assistance\*. \*Confirm that your smart device is running the latest firmware version I am attempting to turn up the volume on my device and it is maxed. How can I make the audio louder as it seems low? The audio's volume on the radio to reach your preferred overall volume. Hi, I've reviewed other posts on the forum for the Tivoli Model One but these are nearly all focused on the issue of hiss/scratchiness and tuning slippage in the device and diagnose cleaning/replacement of the varicon in the unit. I'm getting a different issue so, before I rip it open, I'm keen to get some advice on possible causes. The radio now emits white noise on all input settings (AM/FM/AUX) at low/med volume. When the volume knob is turned up very loud the noise dissipates and the audio signal comes through. Given the variability, is this pointing to shorting in the volume potentiometer at minimum settings or are there other things I should look at (e.g. cracks in PCB/bad solder joints). It basically started happening "overnight" and the unit wasn't dropped or damaged in any way. Any help appreciated. Seems like a problem with the volume control or associated wiring. Open it up and ohm the connections, something is probably open circuit. You're lucky that at least it's not the tuning capacitor. I'll help you revive this thread. I picked up a Model One, and it has an interesting set of symptoms. 1st, it came less the wall wart or standard 2-prong power cable. OK, found a wallwart in my junque drawer, good, powers on. I can see the Power LED on, and the Signal LED comes on as I tune across the dial, both AM & FM. Here's where it gets fun: No audio from speaker. But if I take an aux. sound out of the speaker. But if I take an aux. sound out of the speaker. But if I take an aux. bench, so that's where it's at. So obviously it's something in the audio chain between the headphone out and the AUX In. But I've had no luck finding a schematic. ANYWHERE!!! Looks like i just need to work out the diagram on paper myself. Again, that's about as far as I've gotten, what with other life things in the way. It will yield, but it may take some time. Share — copy and redistribute the material in any medium or format for any purpose, even commercially. The licensor cannot revoke these freedoms as long as you follow the license terms. Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. ShareAlike — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original. No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits. You do not have to comply with the license permits. You do not have to comply with the license permits. permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material. Battery does not charge: If your battery is no longer holding a charge, try jumpstarting the battery. To do this, please follow the instructions below: Make sure the radio is turned off and disconnected from the power supply Take the battery out of the radio off and let the battery back in Turn the radio off and let the If your PAL has become sticky, you can try cleaning it by using Goo-Gone or rubbing alcohol. However, these products will remove the numbering and lettering on your unit, so practice caution while cleaning the front of your radio. Hissing/ Humming noise, your radio drifts off of a station while listening, or you are hearing a lot of interference, try exercising the tuning dial. To do this, please follow the instructions below: Turn the tuning dial from one end of the frequency range to the other (from 88.0 to 108.0 FM frequencies) and back again, making sure you sweep all the stations in between. Repeat the process for 3 to 5 minutes. Tune in a station and see if it is working better Bluetooth Not Connecting If you are seeing your PAL BT appear on your Bluetooth list but are having trouble connecting, try forgetting your PAL BT in the Bluetooth menu of your device and then re-pairing them. If that does not resolve the issue, please contact Customer Support for further assistance\*. If you have a PAL BT from 2018 or newer (the serial number ends in 18 or higher), press and hold the pairing button on the back of the unit for 3-5 seconds and the PAL BT should appear on your smart device. \*Confirm that your smart device is running the latest firmware version I am attempting to turn up the volume on my device and it is maxed. How can I make the audio louder as it seems low? The audio's volume output. We recommend placing your Bluetooth device at 80% output and adjusting the volume knob on the radio to reach your preferred overall volume. Battery Does not Charge: If your battery is no longer holding a charge, try jumpstarting the battery. To do this, please follow the instructions below: Make sure the radio is turned off and disconnected from the power supply and turn it on While the radio is turned on, put the battery back in Turn the radio off and let the battery charge for 4-6 hours. If the jump start does not resolve your issue, consider purchasing a new battery pack if yours is older than 2 years. Sticky Coating If your PAL has become sticky, you can try cleaning it by using Goo-Gone or rubbing alcohol. However, these products will remove the numbering and lettering on your unit, so practice caution while cleaning the front of your radio. Hissing or humming noise, your radio drifts off of a station, Interference: If you are experiencing a hissing or humming noise, your radio drifts off of a station while listening, or you are hearing a lot of interference. If you are experiencing a hissing or humming noise, your radio tuning dial. To do this, please follow the instructions below: Turn the radio ON to the FM position Turn the volume down Slowly turn the tuning dial from one end of the frequency range to the other (from 88.0 to 108.0 FM frequencies) and back again, making sure you sweep all the stations in between. Repeat the process for 3 to 5 minutes. Tune in a station and see if it is working better Bluetooth Not Connecting If you are seeing your PAL BT in the Bluetooth menu of your device and then re-pairing them. If that does not resolve the issue, please contact Customer Support for further assistance\*. If you have a PAL BT from 2018 or newer (the serial number ends in 18 or higher), press and hold the pairing button on the back of the unit for 3-5 seconds and the PAL BT should appear on your smart device. \*Confirm that your smart device is running the latest firmware versionI am attempting to turn up the volume on my device and it is maxed. How can I make the audio louder as it seems low? The audio's volume through Bluetooth is controlled by the device output as well as the speaker's volume knob on the radio to reach your preferred overall volume. We own several Tivoli Audio products. One of our Pals and our Model Three both suffered from power problems. In both cases the cause was cracked solder joints and the radios were good as new. The following photos show where I spotted the cracked joints: Model Three Repair I removed all screws from the back. I did not need to remove anything from the front. However there are several cables that go from back to front that have to be disconnected to get access to the board with the power jack, so I took reference photos like this. This is the top of the unit looking down (although the radio is sideways.) This photo is from the other side (the bottom) where I could see the cracked solder joints with a soldering iron. This is a close up of the two joints before I soldered them. I think only the one on the right was failing, but the one on the left looked stressed, so I heated up each joints. The black power jack is on the right. Close up of two cracked joints. The black power jack is on the right was failing, but the one on the left looked stressed, so I heated up each joints. The black power jack is on the right. as new! If you are experiencing a hissing or humming noise, your radio drifts off of a station while listening, or you are hearing a lot of interference, try exercising the tuning dial from one end of the frequency range to the other (from 88.0 to 108.0 FM frequencies) and back again, making sure you sweep all the stations in between. Repeat the process for 3 to 5 minutes. 4. Tune in a station and see if it is working better Status Not open for further replies. I would like to know if there are any fuses inside the Tivoli Model One radio. I am trying to diagnose a problem for a friend. Moderator: I posted this same request at the end of another post but thought it more appropriate that I start a new thread. Please remove as you see fit. Last edited: 2011-12-27 8:49 am Edit: Just found out the unit powers on and gets am and aux works but no matter various antennae can't get fm signal. sorry for the confusion and thanks for any input. I may have to start a new thread to get this moving. I have a Tivoli pal and had problems as well (not with the fm section though) I did find bad solders in mine (particularly the speaker connector. It worked fine for years then stopped). I would take the radio apart and check that the connections are solid between the various boards and also look closely at the tuner section for loose conections. For as good as these radios sound, they are pretty simple inside. Status Not open for further replies. I just bought a Tivoli Pal radio from ebay. The problem with this radio is that it can not charge it's internal battery pack on the back of the unit and did not see any obvious problems. The unit supplies 14.8-15 volts of DC voltage to the battery pack for charging. But the battery pack and noticed that something like a big resistor is connected in series between two batteries (of the six). This component has two legs and a metal body for cooling suspect. It writes KC100oC 250V 5A. Does anyone know what this is? Maybe this is causing the problem. Can I bypass it? Many thanks George That will be a 5A fuse. Fuses come in all shapes, some are axial and look like resistors, some have small square plastic packages that look like poly caps, some are axial and look like electrolytics. A new engineer started at work, checking a board. I asked "have you checked the fuses?" I checked the thermoswitch and it has zero resistance. I have left the radio on all night but the batteries show a 2.98volt between their output terminals. Any suggestions? Thanks again George I just found out from Tivoli that they have a problem with many Pal batteries 1.2v each on ebay for 20\$. So I plan to make a battery pack by myself using 6\*1.2v AA batteries = 7.2V The question I have is how to connect the batteries between them to form a pack. The problem is not the orientation of the batteries and their inbetween connections but how does one solder tabs between the batteries. Will my solder gun do? Do I need special equipment. On the batteries and their inbetween the batteries and their inbetween connections but how does one solder tabs between the batteries. marks. What shouls I do? Thanks George It's a fuse, trust me. While rechargeable cells are available with welded tags to simplify connecting them together to form a battery, I have successfully soldered short wires between them for the same purpose. First scratch away some of the plating and make it rough. If you don't do this, the solder blobs and doesn't wet the terminals. Then tin the terminal, after which you can solder the wire. I use an 18W Antex iron, and have successfully soldered to "C" size cells with this method, so you don't need a lot of heat, but more heat will help. The cells seem to tolerate this well. I connect a Schottky rectifier in reverse parallel with each cell, as recommended in an article from Electronics World. The reason given for this is that cells discharge at different rates, and when one is becoming exhausted, it is reverse - biased by the others. This damages the cell, and is of greater importance the more cells there are. on all night but the batteries have not charged. With the battery pack connected to the radio is on ac power the battery pack and the radio found that one cell showed ~0v (it is easy to remove the pack's plastic cover to gain acces to each cell terminal points). So, I planned to replace only the defective cell with a standard AA/R3 NiMH battery. The most "difficult" part in this operation was the soldering step: just like it is mentionned here by johnnyx, you have to scratch the metal surface before solder the new cell to the metal connectors. Finally, I used a kind of "rapid fix glue" to glue the new cell to other ones and then replaced the plastic cover and fixed it with scotch rubber. The battery pack was repaired! However, I face another problem: whenever the battery is charged, the radio won't turn on without the help of the power supply! Moreover, once it is on, I can unplug the power supply and listen to the radio for several hours just using the batteries. Note that my battery charge level detection. Am I clear enough? Does anyone faced the same issue? The problem might come from a single & simple component (maybe a damaged capacitor, a zener diode or whatever), but I really don't know yet. Hi, your post is quite old, but still, Tivoli radios are around the corner! I had a similar problem with my Tivoli's battery pack and found that one cell showed ~0v (it is easy to remove the pack's plastic cover to gain acces to each cell terminal points). So, I planned to replace only the defective cell with a standard AA/R3 NiMH battery. The most "difficult" part in this operation was the soldering step: just like it is mentionned here by johnnyx, you have to scratch the metal surface before solder the new cell to the new c glue the new cell to other ones and then replaced the plastic cover and fixed it with scotch rubber. The battery pack was repaired! However, I face another problem: whenever the battery is charged, the radio for several hours just using the batteries. Note that my battery pack is now ok and seems to be charged normaly. So, I think, the problem is only related to the battery charge level detection. Am I clear enough? Does anyone faced the same issue? The problem might come from a single & simple component (maybe a damaged capacitor, a zener diode or whatever), but I really don't know yet. Hi NicoLarve, guys. Did you solve the "radio won't turn on without the help of the power supply!" problem. I have one which is doing exactly the same. I did take the back off a while ago and found that a quick short-cut across two adjacent legs of the three-pin voltage regulator would bring the set on with charged batteries and without the PSU. Now that can't be right, so I wonder if one part of the voltage regulator is blown? But is that really the component that detects the right voltage? I had a similar problem with my PAL BT battery. The radio works great off of its power supply, but the battery charge lasts only 15 minutes then shuts down. When placed back on charge, it goes through the expected sequence of slowly blinking green light and after a period, the green light resumes it's slow blinking. This sequence keeps repeating itself and when the power supply is unplugged and the radio turned on, the battery lasts only 15 minutes before the radio shuts down. Does this sound more like a typical ailing battery that can no longer provide adequate current or is it more likely to be a problem within the radio,'s charging circuit? Hi, I have i georgious white pal bt that I love! Suddenly it stopped working. The LED it's green with the power socket connected but there are no sound at all. I've tried both with earphones and without. It's just dead. Any idea what's wrong and where to start? After some fiddeling I got it to play fm for some seconds but I have no idea why it crashes? See: Again, noting that this is an old thread, have a Al BT with a similar problem. Mine worked perfectly for a long time after a battery replacement. Then one day after using it on BT with battery power, I forgot to turn the power off. Some weeks later when I tried to use it, the battery was dead. When I plugged it back in, the LED started flashing, supposedly indicating fully charged, but still no sound. All I hear is a fraction of a second of program sound as it is turned on, accompanied by an equally short flash of the LED. Does anyone have an idea of what is going on, or how to fix it? Any responses greatly appreciated. Don I just got a used Tivoli PAL BT rev. 1 radio, the 12v version. It is very clean and seems to work perfectly in all modes. The battery was stone dead when I got it, but after charging, worked fine, except that the battery charge lasted only an hour after the first charging seemed to go through cycles. The LED on the front initially went through it's slow intermittent flashing series for a few hours then went off, indicating charged status. Then followed a pattern of the LED going through phases of slow flashing followed by periods of being totally off. Doing a bit of research, I found that this model calls for a 3-wire MA4 battery. Checking the battery compartment. I found that an MH2 2-wire battery was installed. Both batteries are 7.2v Ni-MH type. My question is what is the difference in these batteries, and why does the radio work (after a fashion), with the wrong battery? What is the difference between the 2-wire and 3-wire versions? I can't speak to the right vs wrong thing but I've had PAL's (more than one) since they came out and I would say battery? What is the difference between the 2-wire and 3-wire versions? I can't speak to the right vs wrong thing but I've had PAL's (more than one) since they came out and I would say battery? more depending on how loud your are playing it. If you check Amazon there should be plug & play replacements, 'seems the last one I did was in the \$30 range, highly recommended as those are nice little units. Thanks rider33, Any idea about the the difference in how the battery functions differ between the battery with 3 vs. 2 leads? It could be that the third wire is part of the charging circuit and without it you are getting the unusual behavior of the charging LED and reduced play time. Another thought is that this could be a dual voltage output battery: One lead provides a portion of the 7.2v for the control, BT or memory while a second lead provides the full 7.2v to the amplifier and the third lead is the ground/negative lead. I don't recall multiple leads. The battery it came with had a clip connection, the replacement the same. I just opened it up, unhooked the battery lead and clipped in the new. It should look something like this: it maybe a generation thing. There were multiple iterations of that radio over its run. Mine were the earlier ones with the dark grey rubberized case. I'm fixing little tools and toys like that all the time, the information on the internet rarely matches what's inside. I'd replace it with the exact same thing (as long as it looks like someone hasn't already done a replacement). Most of the time the numbers are for different sizes or connectors if the voltage is the same (just an personal observation). I would think the owner's manual would be online somewhere to confirm the real part number. Replacements are also a crap-shot, some new batteries show up dead, some work 1/2 as long, etc. Unless I'm getting a package with a known brand, I don't expect much. Several things about this (gen 1) version of the PAL BT that I don't understand. First, though the gen 1 comes with a 12v power supply and gen 2 a 9v supply, they both use 7.2v batteries. I saw an ad that illustrated the Tivoli 3-wire battery in my gen 1 has a 2-wire battery that is labeled as MH2. This tells me that my PAL BT has been outfitted with the wrong battery. I have on order a 3-wire MH4, but it is not the original Tivoli brand. I'll follow up after it arrives and I've had a chance to try it. I've had a NiMh batts they break down and become useless. At \$25 or \$30 a pop I'll never buy another, until they make a lithuim version. That's the same reason I replaced all my NiMh power tools, when you need it the most the battery's dead. Attached below is a Tivoli advertisement the illustrates a 3-wire Tivoli battery that is said to be for the PAL, iPAL and PAL BT Gen1. This is my ninth used Tivoli, A PAL BT Gen1. It is fitted with a 2-wire Tivoli battery that is labeled as NH2. This radio works fine on its power supply is not plugged in. When it is powered up from what seems to be a fully charged battery, the radio plays for only about 20 minutes before shutting down. When it is placed back on charge, the green light flashes slowly and intermittently for a period of time, the intermittent flashing period is repeated. Even if the radio is not turned on for several days, when it is operated from the battery, it only plays for about 20 minutes before it again shuts down. When tested with no load, the battery shows about 8.2 volts after aliquot time for full charging. I'm wondering if this seem to indicate a faulty battery or a fault in the radio's charging circuit? This is the Tivoli Audio ad. for it's battery \$24.99 FREE SHIPPING ABOVE \$199.99If you find the playback time of your PAL series portable radio is noticeably reduced\*, it is probably time to invest in a replacement battery. Don't worry, the process is simple, just two little screws and your radio will be just as good as the day you brought it home. Buying your battery directly from Tivoli Audio ensures you are getting the correct replacement for your radio. This replacement battery pack is compatible with the following Tivoli Audio products: PAL, iPAL BT Gen 1. To determine if your PAL is Gen 1, please refer to the power input on the back of your unit. If labeled "12V 500mA", this is the correct battery for you. If labeled "9V 2A", please purchase the PAL BT Gen 2 battery pack. As I await arrival of a replacement battery and continue to observe my PAL BT go through it's repetitive routine of periods of flashing it's green light indicating "charging" followed by periods of flashing it's repetitive routine of periods of flashing it's repetitive routine of periods of flashing it's green light indicating "charging" followed by periods of flashing it's repetitive routine of periods of flashing it's repetitive routine of periods of flashing it's green light indicating "charging" followed by periods of flashing it's green light indicating "charging" followed by periods of flashing it's green light indicating "charging" followed by periods of flashing it's green light indicating "charging" followed by periods of flashing it's green light indicating "charging" followed by periods of flashing it's green light indicating "charging" followed by periods of flashing it's green light indicating circuit. Does this indicate that the ailing Nu-MH battery is so weak that it keeps drifting into the low charge area even while being charged; or does it indicate a problem in the PAL's charging circuit? I don't know much about batteries, but I am very curious as to what is going on and I'd appreciate any comments. Don My PAL #15273 with 2 pin battery connector had an unmarked battery pack with a 5a fuse bridging the midpoint of the 6 cell series string. After being informed by Tivoli that the original Mk1 battery was in fact a 7.2v Ni-MH pack, I connected an HORP 1800mAh 2pin and was able to charge it to a no-load 8.01v. The PAL still refuses to operate on battery alone. An old Tivoli notice to power up the PAL first and then connect the battery was also tried with no success. It seems likely that changes in the power supply i do not see how this can be solved. My PAL #15273 with 2 pin battery connector had an unmarked battery pack with a 5a fuse bridging the midpoint of the 6 cell series string. After being informed by Tivoli that the original Mk1 battery was in fact a 7.2v Ni-MH pack, I connected an HQRP 1800mAh 2pin and was able to charge it to a no-load 8.01v. The PAL still refuses to operate on battery alone. An old Tivoli notice to power up the PAL first and then connect the battery was also tried with no success. It seems likely that changes in the power supply circuit are responsible for this very finicky attitude but without a circuit diagram, (which Tivoli have refused to supply) I do not see how this can be solved. The thought occurs that if it is a critically voltage sensitive issue, perhaps someone with access to a variable DC supply could try varying it while connected and find if the PAL triggers on at a particular value. Battery does not charge, try jumpstarting the battery. To do this, please follow the instructions below: Make sure the radio is turned off and disconnected from the power supply Take the battery out of the radio to the power supply and turn it on While the radio off and let the battery back in Turn the radio off and let the battery bac become sticky, you can try cleaning it by using Goo-Gone or rubbing alcohol. However, these products will remove the numbering and lettering on your radio drifts off of a station while listening, or you are hearing a lot of interference, try exercising the tuning dial. To do this, please follow the instructions below: Turn the volume down Slowly turn the tuning dial from one end of the frequency range to the other (from 88.0 to 108.0 FM frequencies) and back again, making sure you sweep all the stations in between. Repeat the process for 3 to 5 minutes. Tune in a station and see if it is working better Bluetooth Not Connecting, try forgetting your PAL BT in the Bluetooth menu of your device and then re-pairing them. If that does not resolve the issue, please contact Customer Support for further assistance\*. If you have a PAL BT from 2018 or newer (the serial number ends in 18 or higher), press and hold the pairing button on the back of the unit for 3-5 seconds and the PAL BT should appear on your smart device. \*Confirm that your smart device is running the latest firmware version I am attempting to turn up the volume on my device and it is maxed. How can I make the audio louder as it seems low? The audio's volume output. We recommend placing your Bluetooth device at 80% output and adjusting the volume knob on the radio to reach your preferred overall volume. This article includes a list of references, related reading, or external links, but its sources remain unclear because it lacks inline citations. (February 2024) (Learn how and when to remove this message) Tivoli Audio PAL Features I/O 3,5 mm stereo output 3,5 mm stereo AUX DC adaptor port (12V) The PAL or Portable Audio Laboratory is a radio produced by Tivoli Audio. It was designed as an outdoor, portable version of the earlier Model One. 2.5" magnetically shielded, treated full-range speaker 5:1 ratio analog tuning dial AC/DC operation (External AC power supply/charger included) Auxiliary Input Battery status indicator Built-in battery status indicator Built-in battery charger Built-in telescoping FM antenna Designers colors available Henry Kloss Analog AM/FM Tuner with AFC NiMH rechargeable battery pack (Included) One Year Warranty Optional Carry Bag Portable Stereo Headphone Output Water-resistant cabinet Description at Tivoli Audio The PAL at audioreview.com This article related to radio communications is a stub. You can help Wikipedia by expanding it.vte Retrieved from " Could it be the Adire AV3 ? From the Tivoli marketing blurb, they use equalisation on their drivers to get the characteristic 'full' sound of their radios. So if starting from scratch, there are probably a number of drive unit options out there which would like to add a second speaker to a Tivoli alarm clock radio without paying the extortionate price charged by the UK importers, the identity of the Tivoli drivers would still be useful. I'm usually naturally inquisitive, but I haven't yet worked up the nerve to open my Model One. I would also very much like to know what driver it has, as it sounds superb (with built-in EQ). I can only tell you that it is not shielded. If I could get my 3" Tang Band center channel to sound like that, I would be quite satisfied.... Bumping an old thread... any news on the used driver on these? I'm planning to build tiny home theater speakers and I guite like the sound of model one. Maybe the Peerless 3" 830986 would do fine...? I doubt the driver is off-the-shelf. I would assume they are manufactured for about \$1.00 each. In 1989, I visited Cambridge Soundworks when it was a start-up, working out of a loft in West Newton. And Henry Kloss was there. He was testing a batch of drivers (maybe 6" woofers, I can't recall) lined up in a certain way, and it seemed to me they had all come out of a big box (i.e., not separate boxes), so evidently custom made as opposed to off-the-shelf. At least that was my impression. To my ears, the Tivoli sounded warm, almost like a loudness contour. That should be possible to emulate with a carefully proportioned cab and / or circuit (or whatever EQ is available). I am also curious about this and have asked it before. Still no one knows. Perhaps some design detail of the Tivoli helps performance. The Bose radio has that tunnel thing that was diagrammed once. Or maybe it's just the simplicity. I cut down an old MLTL for the FE127e just for use as a radio speaker for streaming audio. For some reason it is immensely satisfying and so I have not done any builds for a while. Maybe it's the placement. Anyway keep the thread going so we find this out. Well I can attest to the idea that they have a contour circuit in them. And the circuit applies to the AUX input as well as the radio. A year or two ago I had a Model Two, and on a lark I disassembled the speaker wires to one of my B20's in its 2cuft sealed enclosure. Figured if it sounded all right I would look at using the Tivoli electronics to drive some Fostex's, like FE127E or an FE167E's. In a word - horrible. It was chock full of mid bass bloat and there was very little bottom end. Not that B20's are all thet great but in a 2cuft sealed enclosure mated with a Dayton Neo tweeter, as mine are, they are pleasent sounding. But when driven by the Tivoli electronics it seemed everything was out of whack. As to who made the driver in the modual I opened up I do not know. I looked at it briefly and when none of the numbers on it rang a bell I just continued on with the experiment. R/ Jim "Waiting for PC Wizard..." on screen: Unplug the radio and remove the battery. Keep the battery out of the radio for 15-30 minutes and then reinstall the battery. The radio should be reset, and usage can resume. Speaker is making a humming sound / background noise: This can be due to an old battery will produce background noise when it is worn out which indicates that it needs to be replaced. Battery depleting too fast: A quickly depleting battery indicates the battery is worn out and needs to be replaced. Your listening volume can also affect the battery life. The louder you listen, the quicker the battery will only charge in standby mode. How do I scan for available DAB stations? Channels / Auto Scan: When entering DAB/DAB+ mode for the first time you will automatically be prompted to do an Auto Scan. 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