

TECH TALK



COMMUNICATION SYSTEMS DIVISION

JANUARY 1999

HAPPY HOLIDAYS

FROM PANASONIC CSD



THE NEW "-3" SUPER HYBRID
DIGITAL SYSTEMS AND THE
SUPER 7400's

THE NEW "-3" DIGITAL SYSTEMS

NEW HARDWARE

KX-TD171 8 Extension Card with SLT caller ID.... This expansion card is basically the same as the KX-TD170. The KX-TD171 allows Caller ID to be sent to an SLT connected to the 1st or 2nd port on the card. An SLT connected to ports 3 - 8 will not receive the Caller ID information. One card allowed on the KX-TD816, and two cards allowed per KX-TD1232 cabinet.

KX-TD185 4 Port DID Card.... This card is similar to the KX-TD180 Expansion Card but accepts 4 DID trunks instead of the normal loop trunks. DID trunks allow the caller to be routed directly to an extension, without speaking to a receptionist. The service provider will send over the last 3 or 4 digits of the number dialed and the KX-TD system will route it to the correct extension. One card allowed on the KX-TD816, and two cards allowed per KX-TD1232 cabinet.

KX-TD194 SLT Message Waiting lamp Adapter.... This is an external adapter that gets mounted next to the system. It adds 90 volt message waiting lamp capability to 16 SLT extensions. One digital extension is connected to the unit for control purposes. The 16 extensions are wired to the adapter using a standard 25 pair cable. They come back out of the adapter on another 25 pair cable. Coupled with the "-3" features, these adapters simply setup the Digital system for hotel/motel applications.

KX-TD197 Hi speed (28.8kbs) Internal Modem Card.... To satisfy your "need for speed" we developed this new 28.8 kbs internal modem card. The card will only work when installed in a KX-TD1232-3.

THE NEW 7400's

Five new phones and two new DSS Consoles make up our new 7400 series line of Digital phones that work with the KX-TD816 and KX-TD1232. All of the phones have the following: XDP Jack, Jog Dial volume Control (Handset, Ring, and Speaker), Handsfree Answerback, Redial Key, Speaker Phone Key, Hold Key, Flash key, Auto Answer/Mute Key, Auto dial/Store Key, Message Key, Intercom Key, Conference Key, Forward/DND Key, Program Key, Pause Key, and a Transfer Key. All 7400 series phones can initiate a Whisper OHCA, and only the 7400 series phones can receive a Whisper OHCA. The KX-T7436 is the only 7400 series phone that can receive a regular OHCA. They all require "-3" software to operate. These phones will only work on the Digital systems and they are available in both black and ash.



KX-T7436

24 Button Speakerphone
with a 6 line
Executive style Display



KX-T7433

24 Button Speakerphone
with a 3 line Display



KX-T7431

12 Button Speakerphone
with a 1 line Display



KX-T7425

24 Button Speakerphone



KX-T7420

12 Button Speakerphone



KX-T7440

This model has 66 programmable BLF/DSS keys. Maximum of 4 consoles per cabinet.

DSS CONSOLES

KX-T7441

This model has 48 programmable BLF/DSS keys, an Answer Key and a Release Key.



With both units you have a maximum of four consoles per cabinet. When using more than one paired to a phone, only one KX-T7441 is allowed. Remember, you must have "-3" software to run these units.

WHAT ARE THE CHANGES

NEW PROGRAMS

#134 - Hotel application/Room Status..... Allows the operator to see the status of the rooms. Operator's phone must be a KX-T7436 or KX-T7235 with a DSS Console attached.

#148 - Off Hook Monitor..... Allows the user of a KX-T7431, KX-T7433, or KX-T7436 telephone to monitor another extension over the speaker while off-hook and engaged in conversation on the handset.

#509 - Off Hook Call Announce..... Enables or disables the OHCA feature on a Class Of Service basis.

#510 - Night Service Access..... allows you to set which extensions (not only the operator) can activate the Day And Night modes. Assigned on a Class Of Service basis.

MODIFIED PROGRAMS

#001 & #002 - System Speed Dial Numbers & Names Set..... Amount of entries was increased from 100 - 500.

#005 - Flexible CO Button Assignment..... Addition of a "Night Switching Button". Code "73".

#100 - Flexible Numbering..... Two new codes were added, locations 90 and 91. "Paging Deny 721" and "Hotel - Room Status 736".

#109 - Expansion Unit Type.... Codes added for new expansion cards.

#110 & #111 - Caller ID Codes & Names Set..... Amount of entries was increased from 100 - 500.

#117 - Voice Mail Number Assignment.... Maximum number of voice mail ports was increased from 8 to 12.

#118 & #119 - Voice Mail Ext. Number & Group Assignment.... Maximum number of voice mail Extensions was increased from 16 to 24.

#125 & #126 - Area Code Set..... The amount of Area codes was increased to 10.

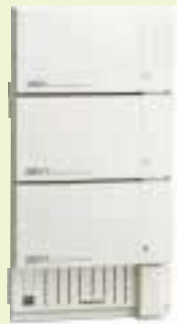
#211 - Dial Start Time..... The default was changed from 0 to 500ms.

#500 & #501 - Toll Restriction Level - Day/Night.... In the Class of Service #8, the default TRS levels were changed from 1 to 7.

#503 - Call Transfer To Outside Line..... The default values for all Classes Of Service was changed from "Enable" to "Disable".

#809 - DISA Security Types..... The default was changed from "Non" to "Trunk".

#811 - DISA User Codes..... The amount of DISA codes was increased from 8 to 32.



UPGRADES

You will have to upgrade the programming tool in your laptop to version 3.40. If you did not receive your copy in the mail yet, then you can download it from our BBS at 201-271-3346. The file name is e1232a.exe.

All of our chip upgrades and CPU upgrades are available from VND (Valley National Distributors) at 888-201-4030.

Any "-2" system can be upgraded to a "-3" by simply installing the new chips. (VND part #KXTD1232MA or KXTD816IA).

In order to upgrade a KX-TD1232 system that is earlier than "-2", you will have to replace the 8Mhz CPU card with a 12Mhz CPU card. This upgrade kit is now available from VND. (VND part #KXTD1232CPU12M)

CPU upgrade kits are not available for the KX-TD816

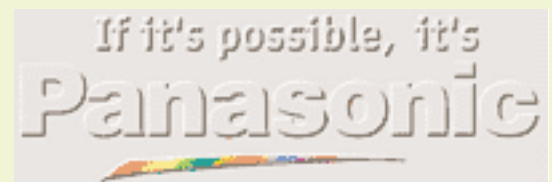
TECH NOTES

In a dual cabinet system, both units must be "-3". A "-2" cabinet will not sync up with a "-3" cabinet.

The new KX-TD185 DID card requires a good ground to operate correctly. This is accomplished by using the supplied screw to secure the card to the system. The ground is only present when the front cover of the system is properly closed, so when testing the card, and after installation make sure that the cover is closed.

**** REMEMBER ****

When hooked up to a "-3" cabinet, all of the 7400 series phones can receive a Whisper OHCA (from another 7400 phone), but only the KX-T7436 can receive a normal OHCA.



DPITS

JUST WHAT EXACTLY DOES IT STAND FOR?

What do you do after you think you did all of the required programming and made the correct connections, only to have the programming device on the TVS Voice Mail system stuck on "DPITS connection not established - Off line mode"? We've all been there, I'm talking about the point of frustration where you are about to pull out whatever little bit of hair that you have left.

No matter what you try, your TD (digital) system will not connect to your TVS in the DPITS mode. Right off the bat I can tell you that the most common reason for this, is that the port of the phone system that is connected to the TVS is not the same as the one that is programmed under the "Voice Mail Integration" area of the TD (Prog. #117). That is to say ...you wired the wrong extension up to the TVS.

TECH TALK TIP

If the Power light on the TVS is steady, and the systems are connected in the DPITS mode, but only one of the two Voice Mail ports work, then check your wiring very carefully. If you used a "chop-down Block", you might be off by one color but most likely you have a bad connection at the block, or a poor crimp at the Voice Mail end of the wire.

I wish that I can say that this is the first place to look, but I cannot. Once again, we've all been there. It's late Friday afternoon, after a very tough week, your tired, and your watching everyone else leaving for an early get-away weekend. You're really not all there, so please just turn around one more time and make sure that you are working on a **Digital** 1232 or 816 and not the KX-T123211D. Remember, DPITS stands for Digital Proprietary Integrated????? Your TVS system can work in the DPITS mode only if you use one of our digital phone systems. The next step, after verifying that you have a digital phone system, is to verify that the extensions that you wired up are the correct ones and that

they are terminated correctly. This is done by going into system programming and removing the entries that you made in program #117 (Voice Mail Integration). Then remove the extensions going into the Voice Mail (at the TVS) and plug them, one by one, into the back of a digital display set. The phone should work, If not you must try to get the port working as a phone first. Faulty wiring is usually the culprit. Once you get the phone working, hit the star button. Read the display and verify that it is the correct extension.

Once the correct extension is working on the display phone, you can go back and reprogram the phone system...program #117. The phone should go dead and you can move the wires back up to Voice Mail.

If the power light on the TVS does not go steady, then you did not find the problem yet. If the power light is blinking with a special pattern, like 4 or 5 times then stopping, then keeps repeating this pattern, turn off the unit and check for a loose ribbon cable on the hard drive connector. If it was not a loose ribbon cable, you will have to call Tech Support.

TECH TALK TIP

Make sure that the lowest jack that you are using to connect to the Voice Mail unit is placed in the left-hand RJ-14 of the lowest positioned card in the TVS100 or TVS200.

On the TVS75, make sure to use the upper position.

If the power light is blinking at a steady rate it means that the Voice Mail does not find any errors with it's hardware. Make sure that the Rotary switch is on 0 (leaving it on 5 is never recommended. This setting is used only to initialize the system). We now have to look at the TVS program settings.

The first area of the Voice Mail program

that you should look at is "program--hardware settings--PBX settings--Dialing Parameters" make sure that it is set for the correct system and that the "Integration Type" is set for DPITS.

TECH TALK TIP

All of us here at Tech Support agree that one of the most important troubleshooting devices that you have is one of our Proprietary Display phones. The display won't tell you exactly what is wrong, but it should always be able to point you in the right direction when a certain feature or function is not working properly. What shows up on the display can help you to find the problem. Make sure to keep a spare digital and analog display phone in your truck at all times.

If both of those settings are correct, then back up and go into "Utilities" and type "onln". If it still refuses to connect in the DPITS mode then I would go ahead and swap out the TVS102 or TVS204 card in the Voice Mail. If you have a TVS100 or TVS200 with two cards then you have a spare card right there that you can try. It is unlikely that you will have two bad cards, let alone one.

If you are still having trouble then you should go through all of these steps again, and also try calling us at Tech Support. As always, you will get 100% of the help and troubleshooting advice that we can extend to you. Remember our phone Number...201-392-4843. Don't forget that you have to be certified technician with a valid DIN number, in order to get tech support on any of the Digital Super Hybrid systems.

By the way, I just remembered, DPITS stands for **"DIGITAL PROPRIETARY INTEGRATED TELEPHONE SYSTEM"**

REMEMBER....DON'T EVER LEAVE THE ROTARY SWITCH ON 5

MORE

FREQUENTLY ASKED QUESTIONS

Q) How do I take a certain CO trunk, or Trunk Group, out of the "dial 9" group?

A) In the KX-TD308, KX-TD816 and KX-D1232, use program #103 to enable or disable complete trunk groups.

You can remove only one trunk by isolating that trunk to the removed group. You can also use program #103 to prioritize the order in which the trunk groups are accessed when "dial 9" is used.

In the KX-T30810, KX-T61610 and KX-T123211D, use the "Auto CO access" program to remove individual trunks from the "dial 9" group. The Program numbers vary throughout the three different systems and versions, so please refer to the your manuals for the correct program numbers.

Q) Even though I forwarded a certain extension to a different location in my digital system, the outside lines still ring there. What did I do wrong?

A) Call forwarding on any individual extension is ignored if a co trunk is programmed to ring that extension by using the "DIL 1:N" ring program. Only CO lines that are programmed as "DIL 1:1" to ring a certain extension, will follow that stations call forward settings. In other words, calls that ring on multiple extensions will not follow any call forwarding set on those extensions.

Not only does this hold true for the digital systems but it also holds true for the KX-T123211D.

Q) One of my customers, with a KX-TVS100, called me and said that they just re-recorded the company greeting, and now it only plays the canned (system's default) greeting.

A) This happens when the customer erases the present company greeting instead of just recording the new greeting over the old one. When the Company greeting is erased before recording a new one, the TVS system automatically blanks out the "Company Greeting" settings under "Port settings". You will have to reprogram those settings so that the newly recorded greeting will be played.

This situation can be avoided in most of your Voice Mail Systems. If you set the ports to answer with company greeting #32 and a certain Custom Service, you can record a split second of dead silence as Company Greeting #32, and record your full greeting into the assigned Custom menu. The caller will be answered with an invisible split second of silence and then get your custom menu. Don't even tell the customer about company greeting #32. If they erase the custom greeting during the re-recording process, the "Port Settings" are not affected, and you just prevented a costly service call.

GREAT QUESTION

Q) How do I set up my TVS system so that when a caller is listening to my custom menu, they can hit a digit, for a given department and ring a group of phones. If the call is not answered I want the voicemail to take a message and notify the department manager.?

A) This application can be accomplished by connecting any of our digital systems (dash 1 or later) to any of the TVS systems.

In the phone system you will have to place the necessary extensions into a separate extension group and name that group as a ring group. (Enabling "DND" or "Call Forwarding" will remove that station from the ring group. This is good to remember when you are troubleshooting a non ringing member of a ring group.)

In the TVS, under the appropriate "Custom Service Settings", go to "Keypad Assignment", use choice "B" (Transfer to Extension) to assign one of the digits to transfer to the pilot number of the ring group. (For example: Digit 2 can say...Trans to Ext 192... for Ring Group 2) Assign a mailbox to the pilot number. Use the pilot number as the "Extension of the owner". Use a different "Class Of Service" for this mailbox. This "Class Of Service" should be programmed to auto

forward the messages to the manager's mailbox. (5 minutes (00:05) is the lowest setting possible for "forwarding delay time")

You must set up the TVS to do a screened transfer to the ring group. If you use a blind transfer, an unanswered call will simply transfer recall back to the TVS system only to get the main greeting again. (The dreaded endless loop) To set up screened transfers, in the TVS, set your "Extension Transfer Sequence" to "FXA". (These settings can be found under "Dialing Parameters" after "Program... Hardware Settings...PBX Settings) In some cases where you want to do blind transfers to the rest of the extensions, you can use "Alternate Transfer Sequence" and place only the Pilot number in the "Alternate Transfer list".

Q) Why am I getting a "Not Valid" on my display when I am trying to light someones message light by calling their phone and hitting my message button?

A) Most often this is caused by a mistake in programming. The programmer might have accidentally labled the "Extension Group" that all of the stations are in as a "V" or "A" group under "Hunting Group Type"(Program #106). The system does not allow messages to be left for a Voicemail/Auto Attendant port. (You do not have to define an extension group as a "V" or "A" group under "Hunting Group Type", when you are using DPITS integration.) Make sure that only the voicemail ports are in a "V" or "A" hunt group.

**FOR
TECH SUPPORT
CALL
201-392-4843**

WHY WAIT ON HOLD? FAX US YOUR QUESTIONS AT 201-348-4641

FREQUENTLY ASKED QUESTIONS

Q) I have a Digital System with a TVS Voice mail attached to it. Before the voice mail was added, Caller ID was showing up on the phones. Now with voice mail, I lost my Caller ID. What happened?

A) In order to receive Caller ID at the station, you have to set up the TVS to do a "blind" transfer. This is done by adding a "D" to the end of the Extension and Operator Transfer Sequence, which can be found in the TVS under ..Program... Hardware Settings...PBX settings... Dialing Parameters. In some areas where the Caller ID information is sent after the first ring, you will have to go into "Port Settings" in the TVS and set the delay answer time for a 1 or 2 seconds. This will allow time for the Central Office to send the Caller ID information, before the Tvs actually answers the call. **Also note that when you set up the TVS to do a blind transfer, you have to forward the phones back to voice mail.

Q) I am installing a KX-TD308 for the first time and I find that on the last four ports, my XDP doesn't work. What could be the problem?

A) When you take the KX-TD308 out of the

box, the last four ports will only except a Digital 7200 series phone. In order to use a 7000 series phone, basic 2500 set, or to use the XDP feature on ports 5 through 8 you have to install the KX-TD30870 expansion card.

****TECH TALK TIP****

If you have a Dual Digital 1232 connected to a TVS, using ports in the second cabinet for your DPITs connection, you might be experiencing some weird troubles. We have found that you should not use ports above 44 for your DPITs connection. (Ideally, you should use ports in the Master cabinet) Even after moving to ports below 44, you might still have to go to all of the phones and do a station clear (code 790) and then re-forward them to voice mail. You will also have to re-assign any features, such as call waiting, that you might have originally assigned on the phones.

Q) I'm trying to hook up a regular 2500 (pots) phone in parallel with a 7030. I'm not getting any Dial Tone on the

single line phone. When I pick up the single line phone, I have side-tone and when I talk, my voice comes over the speaker of the proprietary phone. I have the correct level software, and I did the programming (parallel connection), so what else is there.

A) I can answer this with just two words, "Background Music". That's correct, in the manuals it states that Background Music does not work when "Parallel Connection" is enabled. Not only doesn't it work, but it creates the exact scenario in the above question. You must turn off Background Music on the Proprietary phone. Also, "Parallel Connection" does not work in the earlier versions of some of our systems, so make sure that you have the correct version in your system.

Q) My customer has a KX-T123211D and he hears double digits when he dials. Did I do something wrong? How can I fix this?

A) There is a program in the 123211D that is not documented. Modifying program number 93.... "Time Of st Digit Output" will fix this problem. In most cases all you have to do is set this program to "0ms".

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