CSD

TECH TALK

APRIL 1999

COMMUNICATION SYSTEMS DIVISION TECH SUPPORT NEWSLETTER

SELL BIG AND YOU CAN WIN A TRIP TO OUR FACTORY IN THE UNITED KINGDOM WITH THE

TOOLS OF THE TRADE II

SALES PROMOTION

How often have you heard this one when trying to record a greeting? "SORRY, THIS FUNCTION IS NOT AVAILABLE"

All that you have to do in this case is back out of the programming mode. The TVS system will not let you record a company greeting or a custom greeting while you are still in programming.

By hitting the backslash on your keyboard, you should back out until you see the little arrow or "greater-than" sign. At that point you can record any greeting that you desire.

LIGHTNING NEVER STRIKES TWICE

IN THE SAME PLACE

(OR DOES IT?)

Though the old saying goes "lightning never strikes twice in the same place", I'm sure that you will agree that once is really quite enough. Did you know that at any moment nearly 2,000 thunderstorms occur around the world and that lightning from those storms can strike the Earth 100 times per second? In Florida during the heat of the summer they generally get a thunder shower almost every afternoon, usually accompanied by lightning. Since Spring kicks off this annual period of intense Electrical activity, the lightning season will soon be upon us again. Homes and especially businesses that are not protected against lightning are putting themselves in harms way.

It's a fact that property losses caused by lightning run into the hundreds of millions of dollars each year. A significant portion of that damage happens to business and home telephone equipment. Lightning causes an estimated 30 billion dollars worth of damage each year.

Lightning doesn't even have to hit directly in order to cause thousands of dollars worth of damage to a home or business. Lightning striking several miles away can send power surging through the ground to the electrical wires inside your building.

The cause of all that damage is the power surge that occurs when a lightning bolt hits the ground. The electrical charge that makes up the lightning, sometimes as much as 100 million volts, hits the ground and then spreads out. The surge finds its way into buried telephone, electrical or cable wires. Other times, it may strike the high tension power cables running from the electrical generating plant to the power company's substations and then travel on to businesses and homes.

Once it finds a wire conduit, the power spike, technically called a "transient voltage surge" can travel several miles before discharging. If that discharge takes place inside the telephone system,the results can be, and frequently are, beyond repair. The result of a surge is the "burning out" of sensitive components within the system, usually rendering it useless.

There is a solution: Using Surge Protection in the form of Surge Suppressors and Lightning Protection. Surge suppressors are devices that absorb the energy of the surge and dissipate the charge through an electro-chemical process. Lightning Protection is usually accomplished by using fuse/circuit breaker type devices that are connected to the telephone wires at various locations.

Even though Panasonic systems have a certain level of surge protection engineered into the circuitry, it will almost always be connected to wires running outside the building, and will also be connected to an electrical power source. This combination makes the phone system and any auxiliary equipment, such as a Voice Mail system, favorite targets for these "high voltage surges and spikes". That is why we recommend that you spare no expense on protecting your customer's systems.

First we strongly recommend that you install a reliable surge protector on the AC power source. A good surge protector will have a ground lug that has to be connected to a good ground as well as the "Third Prong" ground on the AC outlet.

Next we recommend that you connect "Lightning Arrestors" wherever necessary. Many different types are available these days and are made by many different manufacturers. Don't skimp on the cost. Go with the better equipment, you get what you pay for. They are available in many different "Clamping" values, for many different applications.

The proper usage and installation instructions should be obtained from the manufacturer of whichever devices you choose to use. The Panasonic systems are very well known by the many lightning protection companies and they should be able to help you choose the correct protection devices for your installs.

A good surge protection plan should be part of every business or home Telephone System installation. Surge suppressors are important elements in that plan and should be viewed as an insurance policy put into place to safe-guard expensive and often critical equipment. Prudent business and/or home owners should seriously consider surge suppression coverage.

After all,
you never know where
lightning will strike next.

TECH NOTES

These “Tech Notes “ are meant to be a quick reference sheet used by an installer when programming the various Panasonic Phone Systems and Voice Processing Systems.

TECH NOTE #TD1232-001
System interconnection for a new dual cabinet KX-TD1232

Hardware Requirements:

-Two KX-TD1232 systems with the same firmware in both cabinets[1]
-One KX-TD192 Interconnection Kit.

[1]There is only one exception to this requirement. You can connect a “-1” cabinet to a “-2” cabinet, but you must make the “-2” cabinet the master.

Procedure:

1. With the power to both systems turned off, install the KX-TD192 interconnection kit.
2. Set the “Master/Slave” switch on the Master to the Master position and on the Slave to the Slave position.
3. Place both “System Clear” switches to the **CLEAR** position.
4. Power on **BOTH** systems at the same time. If this is not possible, then make sure to turn on the Master first and then turn on the Slave immediately after you turn on the Master.
5. When **BOTH** Power lights start to flash, simultaneously move the “System Clear” switches back to the **NORMAL** position.
6. You must now wait at least **FOUR** minutes with **NO ACTIVITY AT ALL** on the system. (**This means no CO calls and no Intercom calls.** You might want to disconnect the station and trunk connections.)
7. After you have waited four minutes, test cabinet to cabinet communications, by calling from an extension in the first cabinet to an extension in the second cabinet.
8. Program the system as required.

TECH NOTE #TD1232-002
Adding a second cabinet to an existing one cabinet KX-TD1232

Hardware Requirements:

-Two KX-TD1232 systems with the same firmware in both cabinets[1]
-One KX-TD192 Interconnection Kit.

[1]There is only one exception to this requirement. You can connect a “-1” cabinet to a “-2” cabinet, but you must make the “-2” cabinet the master.

Procedure: (**Before you start make sure to make a back-up of the database.**)

1. With the power off to both cabinets, set the “Master/Slave” switch on the Slave cabinet to the Slave position.
2. Place the “System Clear” switch on the **SLAVE ONLY** to the **CLEAR** position.
3. Power on the **SLAVE** system **ONLY**.
4. When the Power light starts to flash move the “System Clear” switch to the **NORMAL** position.
5. Power off **BOTH** systems and install the KX-TD192 interconnection kit.
6. Power on **BOTH** systems at the same time. If this is not possible, then make sure to turn on the Master first and then turn on the slave immediately after you turn on the Master
7. You must now wait at least **FOUR** minutes with **NO ACTIVITY AT ALL** on the system (**This means no CO calls and no Intercom calls.** You might want to disconnect the station and trunk connections.)
8. After you have waited four minutes, test cabinet to cabinet communications, by calling from an extension in the first cabinet to an extension in the second cabinet.
9. Program the system as required.

At **PANASONIC** our goal is to achieve **100%** customer and dealer satisfaction. We understand that in today's world of constant change, that you, our valued dealer, have changing telecom needs. To address your needs accordingly, we need your assistance. Please list in order of priority the telecom system features and options needed to meet your customers telecom needs.

Please mail the completed form back to us at the following address:

MIKE GILLESPIE
PANASONIC COMPANY
1 PANASONIC WAY (3G-9)
SECAUCUS, NJ 07094

You can also fax this form back to us at fax # 201-348-8378... Attention: Mike Gillespie

YOUR COMPANY NAME : _____ YOUR DEALER ID : _____

YOUR NAME :_____

PLEASE CHECK OFF THE SYSTEMS THAT YOU INSTALL :

__ KX-T336 __ KX-T30810 __ KX-T61610 __ KX-T123211D __ KX-TA624
__ KX-TD308 __ KX-TD816 __ KX-TD1232 __KX-TD500
__ KX-TVS75 __ KX-TVS100 __ KX-TVS200

In the space below please list your thoughts and ideas on what you would like to see in our future products, or changes that you feel we need to make to our present systems. (Please do not call Tech Support with your suggestions. Write them here and mail or fax this form to us, and we will pass them on to our developers.) Make sure to state the system that you are referring to.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

OVER

You can also fax this form back to us at fax # 201-348-8378... Attention: Mike Gillespie

Please use this page if you need more space.

OVER

You can also fax this form back to us at fax # 201-348-8378... Attention: Mike Gillespie

FREQUENTLY ASKED QUESTIONS

Q) I programmed some Speed Dial numbers into the system and they do not work. What did I do wrong?
A) On all of our systems, when you store any type of Speed Dial Number, whether it is a Station or System Speed Dial, you must program a trunk access code (9, 81, 82, etc.) in front of the number. If the system does not see one of these trunk access codes in front of the number to dial, it will not work correctly.

Q) I just installed a DSS Console on a PANASONIC digital system. The customer says that the DSS acts like a "X-Mas tree". The LED's sometimes start flashing for absolutely no reason. I cannot find anything wrong. Please help!
A) This happens because the DSS is seeing ghost images of the CO buttons from when the port was programmed as a regular phone. You have to de-program the port as a DSS, then go into Flexible Buttons and change all of the buttons back into the correct CO's. Then you can re-assign that port as the DSS again and reprogram the buttons as you wish.

TECH TALK TIP

When a plastic anchor mounted in drywall comes loose and damages the original hole, use an E-Z Lock anchor to replace the original plastic anchor . E-Z Lock anchors have very large threads that will catch the damaged drywall.

If an E-Z Lock is not available, try wrapping a piece of index card or matchbook cover around the original anchor. This will add extra thickness to the anchor which might be enough to make it catch and hold securely. You might also try replacing the screw with a slightly thicker one.

Q) I have a KX-T7030 on a digital system. I'm throwing the switch on the back of the phone to program and pressing 99, but the phone is not going into the program mode. Why not?
A) When an analog proprietary phone is connected to a digital system, you have to press the "Pause" button and then 99, to get into station programming. The program switch on the back of the Analog Proprietary phone is not active when connected to a digital system.

Q) **How do I check for loop current, and how many milliamps of current should I have on my CO's?**
A) *With your meter in series with the tip side of the CO line and the meter set to milliamps, go off hook and draw dial tone. The meter should show the loop current. We are looking for 27-32 milliamps.*

PANASONIC CONSUMER ELECTRONICS COMPANY
COMMUNICATION SYSTEMS DIVISION
ONE PANASONIC WAY (3G-9)
SECAUCUS, NJ 07094