

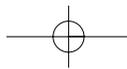
# Chapter Eight

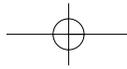


# Trouble Shooting



*DigiCom*  
S2000





# Trouble Shooting

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If you are having trouble with the DigiCom, this chapter can help you resolve the problem. This *Trouble Shooting* guide will help you find solutions by yourself, before calling your DigiCom technical representative. If it needs to be repaired, you will be instructed how to send it in to a service center.

To use this guide, look for the bold heading that describes the problem you are experiencing. Several suggestions will be given, from the simplest or most likely to occur, to the most complex or least likely to occur. Read the suggestions in the text and follow the instructions.

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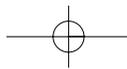
## **WARNING:**

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**You should not** attempt to repair the DigiCom yourself. Any hardware problems should be addressed by an authorized service center.

**Do not** remove the back from the DigiCom or attempt to disconnect any wires unless instructed by a Technical Service Representative. To do so will invalidate your warranty (see Warranty Card at the end of the manual).

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## The DigiCom Won't Turn On

If the DigiCom won't respond when you press a key, don't panic! There are a few simple things you can do to find out how serious the problem is — or isn't. Follow these instructions in order.

### ✓ Press and Hold a Function Row Key

The DigiCom may already be on. If the DigiCom is on and in *Play mode*, and the hold time is set for one or two seconds, the message keys will require a sustained press for a minimum of that time. So if the DigiCom has gone to sleep and you try to 'wake' it by touching a message key, you will have to hold it for a sustained time equal to or greater than the hold time. To test if a hold time is set, press the Volume Up, Down, or Set Up key and hold it at least 3.0 seconds to see if the touchpanel responds. If it does respond, try the message key using the appropriate hold time length.

### ✓ Press Reset

Press the Reset button. It is recessed, so you will need to use a pen or *paper clip*. The DigiCom should then turn on and display the following:



```
DigiCom 2000  
Version X.XX
```

```
Starting  
DigiCom 2000...
```

```
GROUP: PROGRAM  
LEVEL 1: Areas
```

### ✓ Press Reset (cont.)

The DigiCom should then be operable. Resetting the DigiCom **does not** erase any memory. Neither should it reset any of the parameters to default values. If it does, there are two possible causes:

1. While powering up, some portion of the memory has been corrupted (bad memory chips or an electrical disturbance) and so the DigiCom has cleared the user memory and restored all parameters to default values.
2. If the main DigiCom battery was allowed to drain then there would be no power to maintain the memory. Thus, when you press the reset button, it will revert to the last valid settings.

If you push reset and the DigiCom still does not turn on, go to the next step.

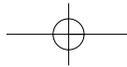
### ✓ Plug in the Charger

If the DigiCom won't turn on, the battery may be completely discharged. Plug the battery charger into a wall outlet. With the charger plugged in, push reset again and the DigiCom should turn on. If the battery was charged for a few hours, the DigiCom should still work when the charger is unplugged. If it does not, the battery may not be taking a charge and may need to be replaced. If the DigiCom still doesn't work when plugged in, check the outlet to be sure that it isn't switched off.



### ✓ Call Technical Support

If you have tried the suggestions above, and the DigiCom is still not working, you should call your DigiCom representative. They may offer some additional advice that will get the DigiCom going, or they may ask you to send it in for repair. Please refer to the final section of this chapter, *Servicing the DigiCom*.



## The Keys Don't Work

First make sure that the DigiCom is on. If the DigiCom seems to be on, but it does not respond to the keys you press, or it seems to interpret keys differently from the ones you press, try the following suggestions.

### ✓ Check the Overlay

A probable cause for keys not responding correctly is having the wrong overlay on the touchpanel. The overlay does not match the keyboard layout. Use the *Keyboard Layout function* to be sure you have the correct layout setting for the overlay you are using. If it is wrong, change the keyboard layout setting or change the overlay, and see how it works. See the section in Chapters 1 and 2 to understand overlays and keyboard layouts.

### ✓ Check the DigiCom Settings

There are many circumstances where setting changes affect the use of the DigiCom.

For example:

- 1) If a long hold-down time is set, you are required to hold the key longer before the DigiCom will respond. Check your hold-down time under "key controls".
- 2) If a person defined a layout, the keys may not match up. As you press a key, do you see a small balloon with a grid drawn in it appearing in the LCD? (See diagram below.) If you do, someone customized the layout and you may have the incorrect overlay to match.



- 3) If the DigiCom is in "linked" Areas, Play Mode, the speak button must be pressed before the DigiCom will 'speak'. Check your "Immediate/Link" settings.





## ✓ Check the DigiCom Settings (cont.)

- 4) If your "Speech Controls" setting is for "SPEAK: PAUSE" in Picture or Spell Sequence, the DigiCom will automatically 'speak' after 3 to 3.0 seconds.
- 5) Finally, check to see if the DigiCom is 'locked' into one level. If so, only one level will work in Play mode. You must 'unlock' the level in Program mode before activating other levels.

Approach all problem solving by checking your current settings to understand why a key may not be responding as you think it should. Many times, it is responding as it is programmed to respond.

## ✓ Press the Reset Button

If you still cannot get the *Keyboard Layout* to work, or if it worked but key operations don't improve after setting it, press the reset button. The custom settings (which control the way the keyboard responds) are kept in RAM which, during a battery failure or other electrical disturbance, could be corrupted. If this is the case, pushing reset would restore the default values in the DigiCom. Place the appropriate overlay in the touch panel and see if the keyboard works now.

If you want to prevent potential loss of your message files we recommend purchasing a DigiCom Disk Drive to make backup of all your messages. Electronic disturbances can occur and the only way to prevent complete loss is to keep a backup.

## ✓ Call Technical Support

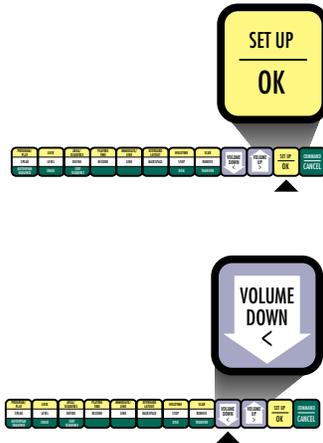
If you have tried the suggestions above and the DigiCom is still not working, call your DigiCom representative. They may offer some additional advice, or ask you to return the DigiCom for repair.

## The Battery Doesn't Charge

### ✓ Check Battery Level

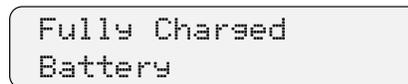
You will see warnings when the battery charge is low. Normally, plugging in the charger will remedy this situation. Once the battery has been charged, you will be able to use the DigiCom without it being plugged in. You will know the battery has been fully charged by one of two ways:

1. Unplug the charger from the DigiCom. Wait at least 10 minutes before moving to step 2.
2. In Program mode, press (Set Up) and then (Volume Down) and you will get a bar graph display of the battery charge level. It will look like this:



To further check charging:

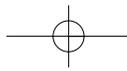
3. Plug in the charger and let the DigiCom sit for a few minutes without a key press. The display will show:



or if the battery is not charged, the display will show the following while the charger is still plugged in:

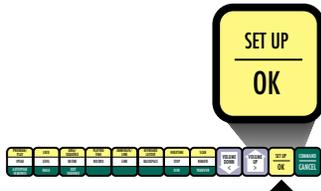


If the DigiCom does not display these messages after the charger has been plugged and unplugged, the battery may not be taking a charge. This indicates there may be a problem with the circuit board or that the battery needs to be replaced. Contact Technical Support for further instructions.



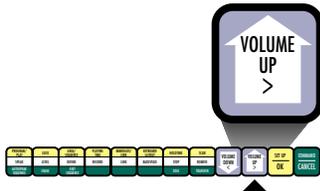
## The Battery Charge Doesn't Last

You may find that the battery charge is much shorter than it should be. There are several things you can check:



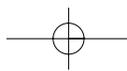
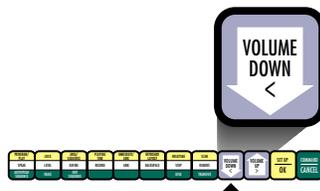
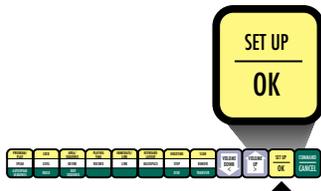
### ✓ Check the "Sleep Time" Setting

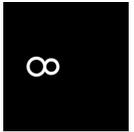
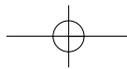
Check the "sleep time" ((Set Up) + (Volume Up) and see Chapter 2, *Adjusting the "Sleep Time"*) to see how long the DigiCom will 'stay' awake after a key is pressed. It may be set for up to 4 minutes. The longer the delay, the longer the DigiCom is on after each message. DigiCom used in scanning mode will use more power than when used in direct touch. Also, if the disk drive is used frequently, it too will draw power from the DigiCom unless the charger is plugged in each time it is in use.



### ✓ Turn the DigiCom Off When Not in Use

Something may be resting on the keyboard or touching it intermittently. This would 'wake' the DigiCom every so often. An example of this would be having a DigiCom with a stack of papers in the back seat of your car. The DigiCom could spend the entire trip turning 'on' and 'off'. This is why you should always turn the unit off ((Set Up) + (Volume Down) and see *Turning the DigiCom Off* in Chapter Two) when transporting the DigiCom longer distances. Although the DigiCom has a feature which protects it from being kept on by a continuous pressure, it is recommended that you **do not** place objects on top of the DigiCom touch panel.





## ✓ Check the Battery Purchase Date

If none of the remedies above seem to work, it may be that the battery is worn out. After considerable use, it may require replacement. Contact Technical Support for assistance.

## The DigiCom Won't Read or Write from Disk

Most problems you may encounter with backing up or restoring message files to/from disk can be easily remedied. Return to the Troubleshooting section in Chapter Seven.

## Scanning Doesn't Work

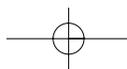
If the scanning doesn't work or it isn't working as you would expect, read the following suggestions. You should also refer to Chapter Six, Scanning and Joystick Selection Methods.

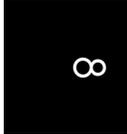
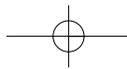
### ✓ Check the Scan Mode Settings

Go into *Scan Set Up*, according to the instructions in the section, *Scanning and Joystick Selection* in Chapter Six.

Some of the settings that might cause confusion are the time settings. For example, if the transition time, the scan speed, or the hold down time was set to a large number, the scanning would seem to run slow.

Another possible problem with the settings would be if the type of scan (*Auditory or Visual, One Switch, Two Switch, Auto, or Joystick scan*) or the method of scanning (*Row-Column, Row-Group-Column, or Linear scanning*) is not set as you thought. Check these settings. If there is some confusion on how the DigiCom should operate under each of these settings, go back to Chapter Six.





## Scanning Doesn't Work (cont.)

### ✓ Check the Switch or Joystick

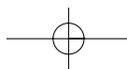
If you are planning to use a joystick, make sure that a single switch is not plugged in at the same time. If it still doesn't work, check the DigiCom with another switching device to see if there is something wrong with the switch or joystick. As switches and joysticks begin to deteriorate, they will sometimes work inconsistently. If you are seeing this occur, it is time to purchase new switches.

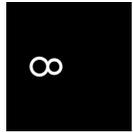
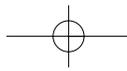
### ✓ Check the LED Lights

If none of the LEDs light up but there is still a feedback 'beep' in response to pressing the switch, you may have the DigiCom set so KEY HI LI (key highlighting) is off. Check the *Key Controls* to see if you have the proper key settings you want for touch (See Chapter Four, *Key Controls* for Meeting Visual Feedback Needs). Check the *Scan Controls* to see if you have the proper settings you want for scanning (See Chapter Six, *How to Select and Setup Scanning*).

If none of the LEDs light up but there is still a feedback 'beep' in response to pressing the switch, there may be a problem with the circuit board. Press the reset button and try again. If some of the LEDs light up, but not all that you would expect, first check the keyboard layout. If this isn't the problem, then one or more of the LEDs may have burnt out.

Under any of these circumstances, after you have checked your settings, call technical support for additional information. And, if you need to have your unit sent in for repair, it may require replacement of LEDs due to burn out or damage.





## The Speech is Garbled, Missing, or Quiet

If the speech you record into the DigiCom is garbled, missing, or unusually quiet, then:

### ✓ Check to see if you have “Beep” on in Key Controls.

If you hear the beep, sound output is possible and it may be a recording problem.

### ✓ Check the External Microphone Battery

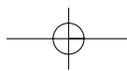
If the battery in the optional external microphone is low, it will not record very well. Speech will either be garbled or very quiet. If you encounter this problem with the optional external microphone, replace the battery.

### ✓ Check Your Recording Method

One cause of garbled or distorted speech is handling the microphone wrong or trying to record in a noisy environment. Make sure the microphone is at least two to four inches away from your mouth and be careful not to blow into it. Record in a quiet environment free of background noises. Finally, avoid recording in a windy place, either outside, or near inside venting or air conditioning ducts. When recording, keep your speech at an even rate to avoid distorted recordings.

### ✓ Check to see if anything sounds loose in unit

Did the DigiCom take a fall or hit? Is anything loose that may prevent quality sound output? Call your Technical Support representative for assistance if you hear anything loose.



## ✓ Check for a Speech Error

If the DigiCom detects there is a problem with the DSP *speech* processor (during reset or 'power up', recording or playing back messages), it will give the error messages:

```
DSP Read ERROR
0001      OK
```

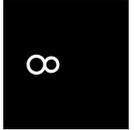
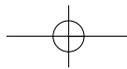
or

```
Timed out ERROR
0002      OK
```

or

```
Overrun ERROR
0003      OK
```

\*DSP is the name of the speech processor. If you see these messages, write down what occurred. Then try pressing the reset button on the DigiCom again. If this same message returns, it means serious hardware problems. Contact Technical Support for assistance.



## Messages You Have Recorded Seem to be Lost

There are several causes for losing messages from memory. It may be due to one of the following:

### ✓ The Keyboard Layout was Altered

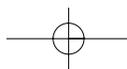
When you or someone else changes the keyboard layout, the DigiCom will clear out the messages stored in the old layout to provide room for the messages in the new layout. Other settings will stay intact. If you have lost messages, check with others to see if they programmed over your recordings. To avoid difficulties from this occurring, purchase a disk drive and backup your messages so they can be restored in the event this occurs. Also, mark your overlays and even tape a chart with notations on the back of the DigiCom telling people what Groups and Levels you have recorded. In this way, they can go to other Groups or Levels to practice and use their own recordings.

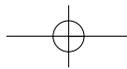
### ✓ You have Defined Multiple Key Areas

If you have previously defined areas consisting of more than one key and then re-record to one of them, the message recorded to the other(s) will be replaced with the new message too. To preserve the message on the other key(s), first define the key you wish to record to, as a new defined area, and then record the new message.

### ✓ You are in the Wrong Group

Check to see you are in the correct Group. If not, go to the correct Group and consider using Group Lock functions to avoid this in the future.





## ✓ You are Using the Wrong “Case” in Spell Sequences

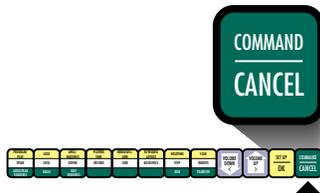
*Spell Sequencing* is case sensitive, meaning that it differentiates between an upper or lower case letter. If you are typing in the words or codes for spell sequences but you could not play it back by pressing (SPEAK). Check how the sequence(s) were originally defined and then use (BACKSPACE) to make the corrections. The spelling and the case of the letters can be checked with the Edit Sequence Command (see Chapter Five, *Viewing the Sequences*).

## ✓ You have Speech Controls Set Differently

You will need to take care in setting the Speech Controls so it does not appear messages have been lost when they were not. Check your Speech Control settings.

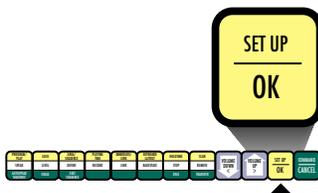
## ✓ You have “Too Much” Memory Available

Check the available Recording Time on your DigiCom by pressing COMMAND and then SET UP. The display will show:



Total Recording Time = XX:XX

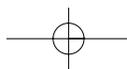
\*where X indicates minutes and seconds  
Immediately following this display it will show:

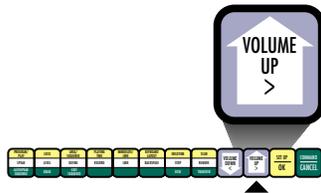
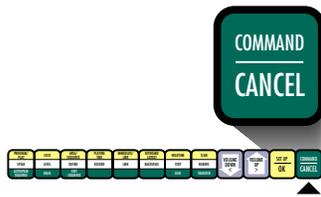


Remain: XX:XX:XX  
■■■

If the remaining memory is close to or equal to the total recording time and you know you have lost some messages.

Once messages are lost, they cannot be retrieved unless a backup has been made.





## ✓ *The Memory was Cleared in all Groups and all Levels*

When in Program mode, you may manually erase all the DigiCom memory and reset all settings to default values by performing the following:

1. Press (COMMAND) and then (VOLUME UP).
2. The display will show:

```

Erase All?
      OK Cancel
  
```

3. Press (OK) to clear the memory, (CANCEL) to exit the Erase command.
4. If you press (OK), you will get the prompt:

```

ARE YOU SURE ?
      OK Cancel
  
```

5. Press (OK) to clear the memory.
6. The display will show:

```

Initializing
DigiCom...
  
```

```

20% Complete
■■■■■■■■
  
```

after 100% it will show:

```

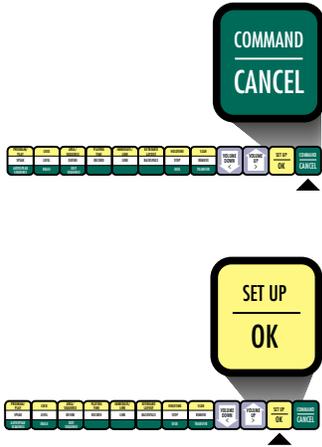
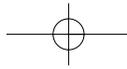
Updating Info
Files.....
  
```

```

20% Complete
■■■■■■■■
  
```

When completed, the display will show the current settings.

It's not likely that you would go through this whole sequence by accident and erase the DigiCom memory, but if somebody else did intentionally, it would explain the loss of memory.

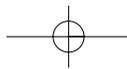


### ✓ *The Memory is Damaged*

If the DigiCom detects a problem in any of its FLASH memory blocks while initializing the flash filing system or erasing it, it will retire those blocks and utilize the remaining blocks. This will allow you to record speech and to use the memory until all the 'good' memory is filled. The DigiCom will not use 'retired' memory blocks. If you notice any potential loss of the total recording time, then this may explain the cause of the problem.

If you have already recorded speech onto the DigiCom, you will lose your speech if the flash memory becomes damaged. You should have this serviced as soon as possible.

We again recommend you use a DigiCom Disk Drive to keep a backup of your page files.



## Error Messages

While using the DigiCom on a day to day basis, you will probably be able to work around most of the obstacles you run into. The DigiCom is designed to guide you through user mistakes by displaying prompts indicating procedural errors. Refer to the following:

### ✓ *Procedural Error*

Here is a list of error messages that may appear and their corresponding explanations:

```
Very Low Battery  
Plug in Charger
```

This prompt will be accompanied by 4 beeps. The battery is low and should be charged. Plug the charger into the DigiCom and the wall outlet.

```
Undefined Seq.
```

If you enter a sequence that has never been 'defined' you'll get this prompt.

```
Buffer is Full!  
0014 OK
```

You have reached the maximum limit for recording messages.

```
List is Full!  
0012 OK
```

The memory for storing the key patterns for sequences is separate from the memory for storing speech. You have run out of memory to program in new sequences.

# System and Critical Errors

If the DigiCom detects there is an error with the system, it will try to allow you to do a recovery from these errors when possible. There are several causes of receiving errors:

## ✓ System Errors

1. If the display shows one of the below system errors:

```
INVALID Instruct
00XXXXXX      OK
```

or

```
ZERO Divide
00XXXXXX      OK
```

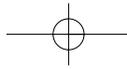
or

```
Address ERROR
00XXXXXX      OK
```

\* where 00XXXXXX is the location at which the system fails

2. Write down the failure location for reporting to the DigiCom technical support representative. Then follow the steps below. If these do not help you fix the error, call technical support.
3. Press (OK) to continue. The display will show:

```
Restore Config.?
< >  OK  Cancel
```



## ✓ *System Errors* (cont.)

3. Press (OK) to restore the known good settings from the Flash memory.



**The next steps are very important -- follow them carefully.**

4. The display will show:

```
Reinit DigiCom?
< >      OK Cancel
```

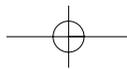
5. Press (Cancel) to continue.
6. The display will show:

```
Reset DigiCom?
< >      OK Cancel
```

Press (Cancel) to turn the DigiCom off.

7. Press (Reset) to turn unit on again.

This may correct the System error. If it does not, you will need to reinitialize your DigiCom which will erase all memory including your keyboard layouts and messages. If this occurs, call your technical support representative for assistance.



## ✓ *The Flash Filing System* *Critical Errors*

If you receive any critical errors relating to the Flash Filing System, you may get your DigiCom working again but you will lose the memory thus erasing your keyboard layouts, messages and speech information. If you decide to take this step, do the following:

1. If the display shows one of the below screens:

```
Media Missing
00C5      OK
```

```
Not Erasable
00C6      OK
```

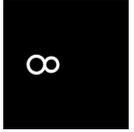
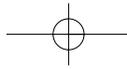
```
Not Writeable
00C7      OK
```

```
WriteErase Fault
00C8      OK
```

```
No Attribute Mem
00C9      OK
```

```
No Blk Info
00CA      OK
```

or so on...



## ✓ *The Flash Filing System* *Critical Errors (cont.)*

2. Write down the error code for reporting to the DigiCom technical support representative. Then follow the steps below. If these steps do not help you fix the error, call technical support.
3. Press (OK) to continue. The display will show:

```
Restore Confis.?  
< >      OK Cancel
```

3. Press (CANCEL) to continue. The display will show:

```
Reinit DigiCom 2000?  
< >      OK Cancel
```

4. Press (OK) to initialize the system to default settings and initialize the Flash Filing System. The display will show:

```
Reset DigiCom 2000?  
< >      OK Cancel
```

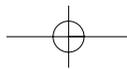
5. Press (OK) to allow the system to reset itself.

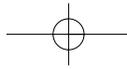
### **+** **HELPFUL HINT:**

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If the error still persists or if you corrected the problem, you may have faulty Flash memory devices. You should contact your Technical Support Representative.

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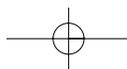
# Getting Service for DigiCom

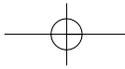
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This Trouble Shooting Guide is intended to help you solve simple problems that do not require factory service. If there is a problem that you cannot solve using this guide, you will need assistance. First, contact your DigiCom technical support representative. He or she may be able to suggest something to rectify the problem. If the problem persists, you may need to make arrangements to send the DigiCom in for repair.

## **Here's how to contact the service center and send in the DigiCom:**

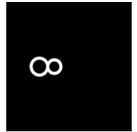
1. Call: 1-408-456-0133.
2. You will be assisted by a technical support representative or asked to hold for the next available representative.
3. In either case, tell the serial number of the unit (located on bottom plate – red tag) and describe the problem in as much detail as possible. If you have written down what occurred prior to calling, you will expedite this call and service.
4. If the problem cannot be resolved over the phone, you will be issued a Return Authorization number (RA#).
5. Place the DigiCom in its original packing materials with a written description of the problem, the RA# and your return address.





## Getting Service for DigiCom (cont.)

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6. Send the DigiCom via UPS (or preferred courier) to the service center indicated by your technical support representative.
7. Your warranty does not cover the cost of shipping this product in for repair.

When under warranty or extended warranty, the cost of labor, parts and return shipping to the customer, from the repair facility, is covered under the warranty.

