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Before reading this section, read the instructions for using the DEMON again carefully, to be sure that you are using the correct commands. If you are still having a problem, find the section that describes your phone system or problem, and make the necessary adjustments.

Special Situations or Problems

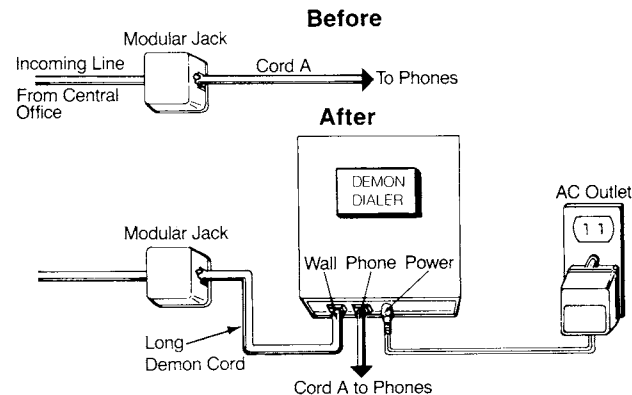
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Home installation of more than one phone without a Series Jack

In some homes the telephone line comes into the home and goes straight to a modular jack. A modular telephone cord connects this jack to your home's phones.

In this case the DEMON DIALER can be plugged in without the Series Jack as follows.



- 1) Plug in the DEMON's power supply.
- 2) Disconnect the cord plugged into the Modular Jack, and plug it into the DEMON jack marked "Phone."
- 3) Plug the long DEMON cord between the Modular Jack and the DEMON jack marked "Wall." You *must* use this cord.
- 4) Check that the DEMON now works for all your phones.

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Office Installations

The following private phone systems are known to interface with the DEMON. Not all of these systems will interface with both installation procedures hence the table format:

Manufacturer	Model	One Line All Phones	One Phone All Lines	Comments
Executone	Charter	yes	yes	Not with Privacy Option
	Equity	yes	no	
	Gateway	yes		
Western Electric	Horizon	yes	no	
	Centrex	yes	yes	
	Comkey 416	yes	no	
	Comkey 718	yes	yes	
	Comkey 1434	yes		
	Dimension 100	yes	yes	
	400	yes		
	2000	yes		
Stromberg Carlson		yes		
TIE	EK308	yes	no	Not with Privacy Option
	516	yes		
ITT		yes		
Mitel		"Super Switch"	yes	
Nippon	Electra 28	yes		
	Patrician	yes	yes	
Toshiba	EKT 102	yes		
	"Stratta 3"	yes		
Iwatsu	Omega III	yes		

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If your phones aren't working properly

There are 2 easy things you can do to see whether the DEMON DIALER is involved. Try these before calling the phone company.

- 1) Unplug the DEMON'S AC Adapter from the power outlet for 10 minutes, then plug it back in. Check to see if your phones are working properly. If they are, check that your DEMON is also working.
- 2) If your phones still aren't working properly, unplug the DEMON from your phone system. If you are using the DEMON with a Series Jack, unplug the DEMON'S cord at the Series Jack, **not at the DEMON DIALER**. After the cord is unplugged from the Series Jack, see whether your phone system is working. If it isn't, check that the Series Jack wires are still securely in place.

Systems with hook signaling and special commands

*Some systems have commands that start with pressing the * or #, or involve pressing the hook button. The DEMON will not interfere with these commands if you're aware of a couple of facts.*

- 1) The DEMON ignores a * or # if it isn't dialed within 4 seconds of taking the phone off-hook. If you don't want the DEMON to interfere with a command that starts with a * or #, wait 4 seconds to begin the command after coming off-hook.
- 2) If your system uses the "hook-flash" as a command, the DEMON won't interfere if you wait at least 4 seconds before generating tones.

If the DEMON pauses too long before dialing a number

If the DEMON pauses 5 seconds or more before dialing, it is not hearing a dial tone. If you hear a dial tone, move Trimmer 2 clockwise until dialing is consistently correct. (See page 6). If you don't hear a dial tone, check that Trimmer 1 is fully counter-clockwise. (See page 6.) If it is counter-clockwise and the problem persists, a technician should change R41 to 100 ohms. Then adjust Trimmer 1 so that it is as far clockwise as possible, with the DEMON consistently dialing correctly.

If you are using a tone phone with a rotary-dialing DEMON

Redial Commands:

- # Redial one time
- * Demon Dial busy number, with success signal
- * * Demon Dial unanswered phone

Other Commands eliminate the leading

S#NAME#NUMBER#	Stores NAME
D#NAME#	Deletes NAME
NAME#	Dials NAME
D#S#2#	Sets dialing speed to 20 PPS
F#R#E#E#	Erases entire directory

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If the DEMON has trouble DEMON Dialing

There are 2 things that might keep the DEMON from DEMON dialing.

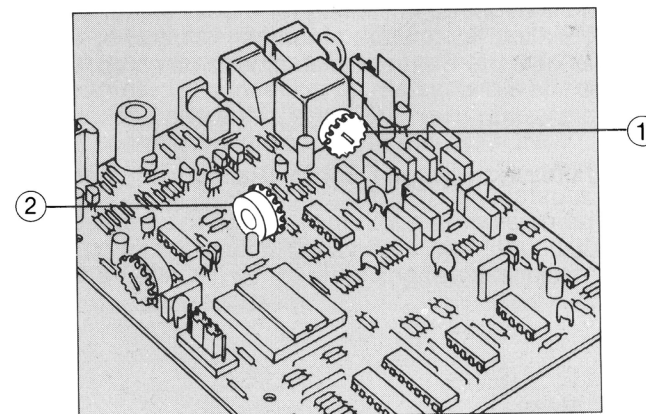
Symptom 1 is that the DEMON signals that it's heard a ring before it actually detects one when dialing a busy number.

Symptom 2 is when the DEMON doesn't seem to notice a busy or ring signal when it occurs.

In either situation, adjust trimmer 2 inside the case.

First remove the cover from the case. Find the slot on the bottom of the case, and pry off the cover with a screwdriver or a coin.

Now locate trimmer 2.



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Adjusting the trimmer control.

For Symptom 1: Move the control knob counter-clockwise one-eighth of a turn. Try the DEMON again and see if DEMON dialing improves. If not, keep turning the knob counter-clockwise 1/8 turn until the situation improves.

For Symptom 2: First turn **Trimmer 2** clockwise all the way. At this point there are 3 possible solutions.

- 1) The DEMON works fine.
- 2) Symptom 1 occurs. Then turn **Trimmer 2** counter-clockwise 1/16 turn at a time until Symptom 1 goes away.
- 3) Symptom 2 persists. Find **Trimmer 1**, on the board. Turn **Trimmer 1** counter-clockwise 1/8 turn at a time until the DEMON is unable to dial a stored number. Then turn it clockwise 1/16 turn until it dials properly. If Symptom 2 still persists, there's nothing more you can try. If you now experience Symptom 1 see point 2 above.
- 4) If you notice pulses or noises on the line that you think the DEMON might be mistaking for a busy signal when DEMON Dialing, try to store a number followed by a *1 or **1 to give the Central Office time to catch up, for example:

#S#NAME#1-617-123-4567 *1#

This will only work when DEMON Dialing from memory.

If the DEMON pauses at the wrong time when it's dialing

This problem is very rare. But since the DEMON has been programmed to look for extra dial tones, it may think that it's hearing them if you have a "noisy" phone line. In this case, every time it thinks it has heard a dial tone, it will wait 5 seconds before it continues to dial.

If this is a *continuing* problem, and your phone does not have extra dial tones†, go to the "**Jumper Adjustment-Dial Tone**" section, and follow the instructions to override the "**extra dial tone detector**."

†This problem and its solution have absolutely no relationship to dial tone detection when dialing Alternate Long Distance numbers.

If the DEMON ignores commands

You probably are hooked up to some system with its own special commands. These can interfere with the DEMON commands. Try cancelling all the system's special commands, and see if this helps. If it does, experiment to find which commands interfere with the DEMON.

You may have a system with a "Privacy Feature" that prevents people in your office from listening to an ongoing call. Some "Privacy Feature" models interfere with the DEMON, so try removing the associated circuitry from your phone system.

If the DEMON starts dialing when you answer the phone (Only for one DEMON used with one multi-line phone)

If you use *one* DEMON for *all* the lines of your multi-line phone, it is remotely possible that the DEMON will start dialing when you answer the phone. This can only happen within the first few seconds after you press down one of your phone's line-selector buttons, if your phone was on a line that wasn't being used. It occurs if your voice generates a tone similar to certain touchtone tones. Otherwise it helps to answer the phone in a moderate voice, rather than a loud one. If you do accidentally cause the DEMON to start dialing, briefly pressing your phone's hook button should restore the connection. **If you leave your phone on hook for 4 seconds after you've pressed the line-selector button, you will never have this problem.**

If the DEMON doesn't respond to computer tones

The DEMON listens for a computer tone that lasts at least 3 seconds, to distinguish the tone from a shorter tone associated with a ring. Some computers generate short tones. For these computers, moving a jumper can tell the DEMON to employ Time-lapsed Override. Then the DEMON assumes the computer tone occurred if 16 seconds elapse after the DEMON finishes dialing the computers. Go to the **"Jumper Adjustment—16-Second Timeout"** section to make this adjustment.

If you do not hear tones in your tone phone's earpiece after starting a DEMON command

After you press the # or * button, the DEMON sends power to your phone so that more tones can be generated. If you don't hear tones after the # or * is pressed, somewhere in your phone system two wires are backwards. (These wires are called Tip and Ring.) Here we assume that your phone worked before the DEMON was installed.

Situation 1: If you installed the DEMON Series Jack.

In installing the jack, you attached the screw at Target Screw 1 and Target Screw 2. First remove the DEMON jack, and put the one loose wire back in place. Then "re-name" the two screws, so that former Target Screw 1 is now Target Screw 2, and former Target Screw 2 is now Target Screw 1. Now attach the DEMON jack using the DEMON jack instructions, with the screws re-named.

Situation 2: If the Series Jack was installed by the phone company.

The jack was probably installed incorrectly. Ask them to install it correctly, checking the cost, if any.

Situation 3: If you use the DEMON with one single-line phone, and do not use the Series Jack.

Your phone attaches to a wall jack through a cord. First remove the cover of this jack, and locate two screws.

Screw 1 connects to at least two wires, including at least one Red wire. Screw 2 connects to at least two wires, including at least one Green wire.

Remove all the wires from under Screw 1, and use a piece of tape or rubber band to keep them together. Do the same for all the wires under Screw 2. Now fasten to Screw 1 all the wires that were under Screw 2. Fasten to Screw 2 all the wires that were under Screw 1.

If you use the DEMON for many phones on one long line, and there is a hum when the DEMON is dialing

Another symptom of the same problem is the DEMON's mistaking a busy signal for a ring, or dialing an Alternate Long Distance number within 4 seconds of dialing the local computer's number, without waiting for the computer tone. Then locate jumper J1. Jumper J1 is in the front left corner of the board, next to the two black phone jacks and the white box. It is labeled "J1" on the board.

The jumper normally connects pins 1 and 2, the two pins closest to the front of the board (the side that the jacks face). Remove the jumper from pins 1 and 2, and put it on pins 2 and 3.

You will still hear a hum, but the DEMON may now work properly.

If the DEMON makes a tone when you try to store a name

Did you use a name between 2 and 6 digits?

Did you FREE the memory when you first installed the DEMON?

Are you trying to store a name that's already in memory?

If the DEMON makes a tone when you tell it to dial a stored name

Is the name's entry using a pointer to another name, such as a stored Alternate Long Distance number? If so, it must be pointing to a 3-digit name that is already stored.

If the DEMON has memory problems

Did you FREE the memory when you first installed the DEMON?

Are you pressing the buttons too quickly when storing a number? Try entering the digits more slowly.

During the STORE command, are you pausing at least 2 seconds after dialing the NAME and pressing the # button? For example:

#S#NAME#2 SECOND PAUSE 123-4567#

If the DEMON sometimes has trouble redialing the last number dialed (Tone Phones only)

First slow down your dialing a little, since short tones are harder to detect. If this doesn't help, the central phone office may be sending a "tone blanking signal" while you're dialing the last digit of some local numbers. You can hear this when you press the last digit, since you'll hear a tone, then no tone, then a tone. This is seen by the DEMON as two tones, and can cause mis-dialing. For these numbers, you need to press the last digit's button a short enough time that the second tone doesn't occur. The problem is that too short a time makes the tone difficult to detect. If you are unable to adjust your dialing to this problem, there's still a solution. After coming off hook, dial # followed by the number you want to DEMON-dial. Press the hook button, and then issue the DEMON-dialing command as normal.

Cordless phones, mobile radio phones, and other equipment

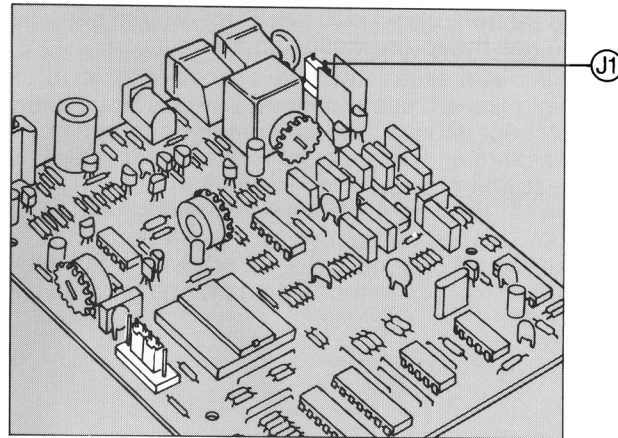
The DEMON DIALER wants to hear true DTMF signals. If the # key on your equipment does not make a true touch-tone the DEMON will not work with it.

If the equipment will make rotary pulse digits at 10 pps (ask the manufacturer) and has some way to hang up, you can use the rotary dialing commands.

Jumper Adjustment

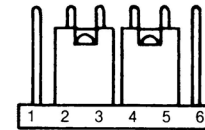
To adjust a jumper, first remove the cover from your DEMON DIALER. Just find the slot on the bottom of the case, and pry off the cover with a screwdriver or coin.

Find the jumper



There are two jumpers. The Extra Tone Jumper determines whether the DEMON looks for extra tones, and the 16-Second Timeout Jumper determines whether the DEMON waits until it hears a tone, or continues to dial after 16 seconds elapse whether it hears a tone or not.

Extra Tone Jumper 16-Second Timeout



Looking from edge of Board

To move a jumper, simply pull it off its pins and push it onto 2 other pins.

Extra Tone Jumper Adjustment

The Extra Tone Jumper goes over either pins 1 and 2, or 2 and 3. Your DEMON comes with the jumper over pins 2 and 3.

Pins 1 and 2—If the DEMON *should not* look for extra dial tones

Pins 2 and 3—If the DEMON *should* look for extra dial tones (normal)

16-Second Timeout Jumper Adjustment

The Timeout Jumper Adjustment goes over either pins 4 and 5, or 5 and 6. Your DEMON comes with the jumper over pins 4 and 5.

Pins 4 and 5—If the DEMON *should wait for the computer tone* (normal)

Pins 5 and 6—If the DEMON *should continue dialing after 16 seconds*

Jumper J1 is Discussed on Page 11