

Instructions

The Demon Dialer

The DEMON DIALER is a revolutionary breakthrough in telephone dialers. The first thing you'll probably notice is that there are no controls of any kind on the dialer itself.

That's because the DEMON is pure computer "brain" with no moving parts. Plug it into your phone system, and any ordinary telephone becomes a "star" performer!

Press the * button on your Touchtone phone, and the DEMON DIALER silently redials a busy number repeatedly at high speed until it gets through. (On dial phones press the hook button instead of the * button.)

Press the * button twice, and it redials an unanswered phone every 10 minutes for up to 10 hours.

Dial in your friend's name, press the # button, and the DEMON DIALER finds the number and dials it automatically. It even handles "Alternate Long Distance" numbers up to 32 digits long, and office systems that make you wait for a second dial tone after you've begun dialing. The DEMON DIALER actually hears tones, instead of just pausing like other dialers, making it extremely fast and reliable.

Best of all, it's simple to install and simple to use. Just follow the easy instructions, and you'll be DEMON Dialing in just a few minutes.

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Installation

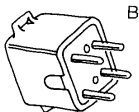
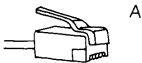
There are two different ways you may want to install your DEMON DIALER.

To use the DEMON with one single-line desk phone, the kind normally found in a home, go to the section called "**Single-line Phones.**"

You may want to use the DEMON with all the phones in your home, with all the lines of one multi-line phone, or on one extension shared by many multi-line phones. In this case go to the section called "**Multiple Phones.**"

Single-line Phones

First unplug your phone at the wall, and plug it into the DEMON DIALER jack marked "Phone." If your phone has a modular plug that looks like A, as most phones do, just squeeze the little clear plastic tab when plugging or unplugging. (If your plug looks like B, you'll need a "4-prong to Modular Plug Adapter" and a "Surface Jack Cover" available at any store that carries phones. Install them according to instructions before you go on.



Now find the nearest power outlet, and plug in the black Power Supply unit. (If the power outlet is too far away, use an extension cord.) Then plug the Power Supply cord into the round DEMON DIALER hole marked "Power Supply."

Select the DEMON DIALER cord with identical plugs on each end. Plug one end into the DEMON DIALER jack marked "Wall," and the other end into the jack where your phone was connected. (This cord must be used. If it's too short, connect it to a Modular Extension Cord.)

**That's It! Your DEMON DIALER
is Installed.**

Multiple Phones

Only read this section if you want to use one DEMON DIALER with all the phones in your home, with all the lines of one multi-line phone, or on one line shared by many multi-line phones.

In *all* these cases, the same item will be installed, a *Miniature 8-position Series Jack With Shorting Bar Connecting 1 to 4, 5 to 8.* We provide this jack with the DEMON DIALER. (See separate instructions.)

If you order the jack installed by a telephone or interconnect company, the installer will need a USOC code that specifies how to install the jack.

- For more than one single-line phone, order USOC RJ31X. The jack should be installed at the jack for the first phone reached by the phone line after it enters your premises, between the first phone and the central phone office.
- For the DEMON to automatically connect to whatever line you're using of one multi-line phone, order USOC RJ35X.
- For the DEMON to work on one extension connected to one or more multi-line phones, order USOC RJ34X. You probably want the DEMON on the line that gets the fewest calls. The jack is attached between the multi-line switching box and the first telephone.

Once the jack is installed, plug the DEMON Power Supply unit into the nearest power outlet. (If the outlet is too far away, use an extension cord.) Then plug the Power Supply cord into the round DEMON DIALER hole marked "Power Supply."

Now select the DEMON DIALER cord that has a big plug on one end, and put the big plug into the new Series Jack. Plug the other end of the cord into the DEMON jack marked "Wall."

**That's It! Your DEMON DIALER
Is Installed.**

Wall Mounting

The DEMON DIALER doesn't have to be mounted on the wall. It can be placed on a desk, in your closet, or anywhere that you like.

However, wall mounting has been engineered to be quick and convenient, and the DEMON's wall mounting bracket will keep your DEMON DIALER safely out of harm's way.

Just take the small arrow-shaped bracket, and peel the protective paper from the back. Then press it, with the arrow pointing up, to any clean, dry, flat surface. Be sure to press it on firmly. (If you prefer, you can also nail the bracket to the wall.)

The special locking action of the bracket will assure that the DEMON DIALER will stay put, and yet be easily removed should the need arise.

One Time Redial

Tone Phones

If you wish to redial the last number dialed one time, just press the hook button \square and then the # button.

\square #

Rotary Phones

For rotary phones, starting with the phone off hook, click the hook button twice.

\square \square

(To complete one "click," press the hook button down for the time it takes to say "DEMON DIALER," then let the button up for the same amount of time.) It's okay to click the hook button twice after you've dialed a number, without hanging up first.

In systems where you first dial one or more digits to get an outside line, the DEMON DIALER actually hears the dial tone that tells you to continue dialing. As long as the tone lasts at least half a second, the DEMON hears it and remembers it. When you tell it to redial, it will automatically pause at the right time and listen for the dial tone. It continues dialing as soon as it hears the tone, or after 5 seconds elapse.

†The DEMON even works in offices that use hook clicks for special signaling. This is explained in the section called "Special Situations."

Demon Dialing

The DEMON works with either tone or dial phones, but it's easier to use with tone phones. Tone phones use the * button to initiate DEMON Dialing or signal extra tones, and the # button for one-time redial or as punctuation in a long command†. Since dial phones don't have the * and # buttons, pressing the hook button □ is used instead. (The hook button is the button that gets pressed down when you hang up the phone.)

Tone Phones

All tone phone commands start by pressing the hook button if the phone is already off the hook. If the phone is on the hook, simply take it off the hook. This is what we mean when we show a □ at the start of a command.

Rotary Phones

All rotary commands start with the phone already off hook. If the phone is on hook and you want to give it a command, first take it off hook. If you ever want to kill a command that's in progress, hang up for 4 or more seconds.

You may continue to hear a dial tone after you have given your command. This is because the DEMON is waiting until it is sure you have completed the command before it dials.

The following sections detail the commands. You'll find that the commands are very simple, and you'll pick them up quickly. A command summary is at the end of this instruction booklet.

†Some old tone phones don't have * and # buttons. Your phone company will probably let you exchange your old model for a newer model at no charge.

Demon Dialing Busy Numbers

The DEMON will repeatedly dial the last number dialed until it hears the phone ring.

Remember: When DEMON Dialing, leave the phone off hook.

Tone Phones

*To DEMON Dial a busy number, press the hook button □ and then the * button.*

□ *

Rotary Phones

For Rotary Phones, starting with the phone off hook, click the hook button 3 times.

□□□

To pick up the call when you hear the "Success Signal," just press the hook button.

The DEMON DIALER will dial the number for up to 2 hours, or until you tell it to stop by hanging up the phone.

The DEMON will redial the busy number about 10 times in the first minute, then once every two minutes in the first 10 minutes, and finally once every 10 minutes, for up to two hours. (Pulse dialing models are somewhat slower during the first minute, and dial once every two minutes for the first 20 minutes.)

If another call comes through while it's dialing, the DEMON DIALER will send a ring-like tone through your phone. To pick up the call, briefly press the hook button.

Demon Dialing an Unanswered Phone

The DEMON will repeatedly dial the last number dialed until someone answers the phone.

Remember: When DEMON Dialing, leave the phone off hook.

Tone Phones

To DEMON Dial an unanswered phone, press the hook button \square and then press the \star button twice.

$\square \star \star$

Rotary Phones

For rotary phones, starting with the phone off hook, click the hook button 4 times.

$\square\square\square\square$

To pick up the call when you hear the signal, just press the hook button.

The DEMON DIALER will repeatedly dial the number every 10 minutes for up to 10 hours, or until you tell it to stop by hanging up the phone.

If another call comes through while it's dialing, the DEMON DIALER will send a ring-like tone through your phone. To pick up the call, briefly press the hook button.

Stored Number 'Directory' Dialing

All models of the DEMON DIALER can store phone numbers up to 32 digits long in a computer "directory" that pairs each number with a name. Models 93 and 93T can store up to 93 7-digit numbers or 73 10-digit numbers, and Model 93T can store up to 55 23-digit "alternate long distance" numbers. Models 176 and 176T can store up to 176 7-digit or 143 10-digit numbers, and Model 176T can also store up to 112 23-digit "alternate long distance" numbers.

We recommend that you use either of the following systems, or a combination of the two systems, for storing your numbers.

Directory Dialing. The DEMON DIALER will remember any name or code name from 2 to 6 letters long. You dial the name, and the DEMON dials the corresponding number. This eliminates the need to constantly consult your listing of stored numbers, since they are "listed" in the memory by an easy-to-remember code name. Instead of looking up the name, just dial it into your phone. This is especially useful when you are using the DEMON DIALER with more than one phone in your home or office. Of course, short code names will save dialing time.

If you try to store a name which has already been stored, the DEMON DIALER will sound a tone to tell you to pick a new name or delete the existing entry.

Code Number Dialing. Some may prefer to dial by number instead of name, like a conventional dialer. Just choose a 2-digit or 3-digit code number instead of a name. We suggest 01 through 176. Again, if you try to store a code number which has already been stored, the DEMON DIALER will sound a tone.

The directory at the end of this booklet can be duplicated on any copy machine.

Preparing the Directory

The DEMON DIALER's Directory should be erased when the DEMON DIALER is new. To erase the entire memory, dial **F # R # E # E #**

Tone Phones

Press □
Dial **F**
Press #
Dial **R**
Press #
Dial **E**
Press #
Dial **E**
Press #

Rotary Phones

For rotary phones, starting with the phone off hook, dial **F □ R □ E □ E □**. The □ stands for clicking the hook button.

This command should never be used again unless you want to erase all numbers in the directory.

How to Store Numbers

The DEMON DIALER can remember and dial any number up to 32 digits long. You store the number by pairing it with a name that's easy to remember.

You need from 2 to 6 letters to store a name. Nicknames such as MOM, or words like TENNIS for your tennis club, are good choices. Short names save you dialing time and use less directory space. Using initials is a good way to turn a long name into a short one.

Use the **S** on your phone dial to tell the DEMON to "Store a number."

Example: To store Bob Jones as BOB, 634-4127

Tone Phones

Press □
Dial **S**
Press #
Dial **B-O-B**
Press #
Dial **634-4127**
Press #

The store command can be summarized as

□ **S** # NAME # NUMBER #

Rotary Phones

For rotary phones, starting with the phone off hook, dial **S □ NAME □ NUMBER □**

In other words, the hook click substitutes for pressing the # button.

The number is now stored under the code name you selected, in this case BOB. If you try to store an invalid name or a number that won't fit into the Directory, the DEMON DIALER will sound a tone and refuse to obey your command.

The DEMON DIALER stores the name BOB as 262, the numbers associated with B-O-B on the telephone dial. If number 262 is already in the Directory, the DEMON DIALER sounds a tone to tell you to try a new number, or to delete the old entry.

Remember, if you would prefer to store by code number, just choose any 2 or 3 digit code number, and use that in place of the name.

How to Dial Stored Numbers

Example: To call Bob Jones, whose name is stored as BOB

Tone Phones

Press □
Dial **B-O-B**
Press #

Rotary Phones

For rotary phones, press the hook button twice in place of the # button. That is,

B-O-B □□

How to Delete a Stored Number

Use the **D** on your phone dial to tell the DEMON to "Delete a number."

Example: To delete the entry for BOB

Tone Phones

Press □
Dial **D**
Press #
Dial **B-O-B**
Press #

Rotary Phones

For rotary phones, press the hook button in place of the # button. That is,

D □ **B-O-B** □

If you hear a tone after the command is complete, you tried to delete an entry that wasn't in the Directory.

Alternate Long Distance' Dialing

More and more people are saving money on long-distance calls by using Sprint, MCI, ITT, and other "alternate long distance" systems. To dial a number using these systems, you call up a local computer first, and then dial an access code before or after the long-distance number you want to dial. This usually involves dialing about 23 digits, and listening for tones at the right time. The DEMON actually detects tones, instead of just pausing like other dialers, to improve dialing speed and reliability.

If you do not use an "alternate long distance" system, you can ignore this section. If you do use such a system, the DEMON DIALER will save you a lot of time.

The DEMON DIALER lets you store the local number and access code under a 3-digit name, such as MCI (or SPC or ITT or any 3-digit name). Other stored numbers point at the 3-digit name. This saves storage space, and lets you change the local number or access code of all your MCI numbers at once.

First store your MCI or other Alternate Long Distance information in the memory. This will make it fast and easy to store your MCI phone numbers later.

Example: To store under the 3-digit name MCI a local number 482-3002 and access code 012345.

Press □
Dial **S**
Press #
Dial **M-C-I**
Press #
Dial **482-3002**
Press * *
Dial **012345**
Press #

The two stars ** after the local number tell the DEMON to look for an alternate long distance tone. Use **two stars** as shown for MCI, Sprint, and other systems in which the access code is dialed **before** the long-distance number. Use **three stars ***** instead of two for ITT and other systems where the access code is dialed **after** the long-distance number.

If you now take the phone off hook and dial M-C-I #, the DEMON will dial the local number, wait until it hears the computer tone, and dial the access code. You can then dial the long-distance number to complete the call.

Once the MCI number is stored, other long-distance numbers can refer to it as follows.

Example: Assume JOHN has the long-distance number 212-123-6543. We store it as an MCI number as follows.

```
Press □  
Dial S  
Press #  
Dial J-O-H-N  
Press #  
Press *  
Dial M-C-I  
Dial 212-123-6543  
Press #
```

The DEMON interprets * MCI as a short hand for the stored MCI number. When the DEMON sees * MCI, it retrieves the local number and access code already stored under the name MCI.

If we had stored under ITT the access code and number, we would have dialed I-T-T instead of M-C-I above.

If we take the phone off hook and dial J-O-H-N #, the DEMON will dial the entire number. You just wait to hear the phone ring.

For rotary phones, dial **J-O-H-N** □□□

You can have many entries pointing at MCI. **If the MCI local number or access code change, just re-program the one entry** for MCI. You can also use more than one "alternate long distance" system.

The DEMON DIALER is very good at handling extra dial tones that may occur when a number is dialed. In some offices and hotels, for instance, you have to dial a "9," and then wait for an extra dial tone that tells you to keep dialing. Like you, the DEMON DIALER needs to wait for a dial tone at the right time.

In storing a number with a tone phone, the DEMON needs to be told when it should look for a tone. The * means "look for a dial tone." For instance, consider this command.

```
□ S # TOM # 9 * 867-5080 #
```

The * after the 9 tells the DEMON to listen for a dial tone after dialing the 9.

In Store commands for rotary phones, the DEMON DIALER *automatically* knows when to listen for dial tones. (It notices them when you are storing the number.)

When you have just dialed a number, the DEMON DIALER also notices any extra dial tone. (As long as it lasts at least half a second.) If you then command the DEMON to redial the last number dialed, the DEMON listens for the extra dial tone automatically. If the DEMON doesn't hear an expected tone in 5 seconds, it continues dialing.

You may also want the DEMON to listen for a tone at least 3 seconds long, such as a computer access tone. Two stars in a row tell the DEMON to "look for a tone at least 3 seconds long."

```
Example: □ S # SPC # 482-3003 * * 012345 #
```

(See also "Alternate Long Distance Dialing.")

Setting Rotary Dialing Speed/ Battery Changing

Setting Rotary Dialing Speed

(Models 93 and 176 only)

The DEMON dials at either 10 or 20 pulses per second. You select the fastest speed that your central phone office can handle.

First set the speed at 20 pulses per second using the Dial Speed command.

Tone Phones

□ D # S # 2 #

Rotary Phones

D □ S □ 2 □

Now dial a local number, and then command the DEMON to one-time redial it. (For Tone Phones □ #) (For Rotary Phones □ □)

See if the DEMON dials successfully. If it doesn't, your phone office can't accept 20 pulses per second. If it does dial successfully, try one-time redial a few more times to make sure that the DEMON *reliably* dials at 20 pulses per second.

If it will not dial at 20 pulses per second, set the speed at 10 pulses per second.

Tone Phones

□ D # S # 1 #

Rotary Phones

D □ S □ 1 □

When the DEMON is plugged in, it automatically sets itself to 10 pulses per second. This means that it also sets itself to 10 pulses per second after a power failure.

Battery Changing

Changing the battery is easy, and we recommend that you do it every 4 years to assure that your phone numbers are not erased. The slot on the bottom of the case is made for a screwdriver or a coin, so you should find it very easy to pry off the cover.

The replacement battery is available in many camera stores and camera departments. Ask for Eveready No. 532, Mallory PX24, or a comparable 3-volt battery. (You shouldn't have any trouble finding the battery. If you do, check the Battery section of your phone book for an Eveready or Mallory distributor.)

Your new battery just plugs in where your old battery was. Be careful when you remove the old battery from the snap-in connectors - they were purposely made tight to assure a good connection. It helps to slip the edge of a kitchen knife between the battery and the connector, and then twist the knife until the battery comes out.

It is perfectly safe to do this with the DEMON's Power Supply plugged in, to preserve your stored phone numbers. Try to avoid touching any electronic part besides the battery and its connectors, since this could cause the loss of your phone numbers.

Limited Warranty

If this DEMON DIALER fails to function properly because of any defect in workmanship or materials, we will repair or replace it free of charge. This warranty applies only to the original retail purchaser for one year from the date of original purchase. This DEMON DIALER must not have been subject to accident, misuse, abuse, or operation contrary to the accompanying instructions. This warranty is in lieu of all other warranties expressed or implied. We do not assume or authorize assumption for us of any other obligation or liability in connection with this product. Some states do not allow the exclusion or limitation of the duration of implied warranties; so the above limitations or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. To obtain replacement under this warranty, return the DEMON DIALER with its sales slip to the place of original purchase. ZOOM Telephonics, Inc., Boston, MA.

FCC Notice

THIS DEVICE HAS BEEN GRANTED A REGISTRATION NUMBER BY THE FEDERAL COMMUNICATIONS COMMISSION, UNDER PART 68 RULES AND REGULATIONS FOR DIRECT CONNECTION TO THE TELEPHONE LINES. IN ORDER TO COMPLY WITH THESE FCC RULES, THE FOLLOWING INSTRUCTIONS MUST BE CAREFULLY READ AND APPLICABLE PORTIONS FOLLOWED COMPLETELY:

1. DIRECT CONNECTION TO THE TELEPHONE LINES MAY BE MADE ONLY THROUGH THE STANDARD PLUG-ENDED CORD FURNISHED TO THE PROPER MODULAR JACK. NO CONNECTION MAY BE MADE TO PARTY OR COIN PHONE LINES. PRIOR TO CONNECTING THE DEVICE TO THE TELEPHONE LINES, YOU MUST:
 - a. CALL YOUR TELEPHONE COMPANY AND INFORM THEM YOU HAVE AN FCC REGISTERED DEVICE YOU DESIRE TO CONNECT TO THEIR TELEPHONE LINES. GIVE THEM THE NUMBER(S) OF THE LINE(S) TO BE USED, THE MAKE AND MODEL OF THE DEVICE, THE FCC REGISTRATION NUMBER AND RINGER EQUIVALENCE. THIS INFORMATION WILL BE FOUND ON THE DEVICE OR ENCLOSED WITH INSTRUCTIONS, AS WELL AS SPECIFICATION OF THE JACK(S) SUITABLE FOR YOUR DEVICE.
 - b. AFTER THE TELEPHONE COMPANY HAS BEEN ADVISED OF THE ABOVE, YOU MAY CONNECT YOUR DEVICE IF THE JACK IS AVAILABLE, OR AFTER THE TELEPHONE COMPANY HAS MADE THE INSTALLATION.
2. REPAIRS TO THE DEVICE MAY BE MADE ONLY BY THE MANUFACTURER OR HIS AUTHORIZED SERVICE AGENCY. THIS APPLIES AT ANY TIME DURING AND AFTER WARRANTY. IF SUCH UNAUTHORIZED REPAIR IS PERFORMED, REGISTRATION CONNECTION TO THE TELEPHONE LINES AND REMAINDER OF WARRANTY PERIOD ALL BECOME NULL AND VOID.
3. IF, THROUGH ABNORMAL CIRCUMSTANCES, HARM TO THE TELEPHONE LINES IS CAUSED, IT SHOULD BE UNPLUGGED UNTIL IT CAN BE DETERMINED IF YOUR DEVICE OR THE TELEPHONE LINE IS THE SOURCE. IF YOUR DEVICE IS THE SOURCE, IT SHOULD NOT BE RECONNECTED UNTIL NECESSARY REPAIRS ARE EFFECTED.
4. SHOULD THE TELEPHONE COMPANY NOTIFY YOU THAT YOUR DEVICE IS CAUSING HARM, THE DEVICE SHOULD BE UNPLUGGED. THE TELEPHONE COMPANY WILL, WHERE PRACTICABLE, NOTIFY YOU THAT TEMPORARY DISCONTINUANCE OF SERVICE MAY BE REQUIRED. HOWEVER, WHERE PRIOR NOTICE IS NOT PRACTICABLE, THE TELEPHONE COMPANY MAY TEMPORARILY DISCONTINUE SERVICE. IF SUCH ACTION IS REASONABLY NECESSARY, IN SUCH CASES THE TELEPHONE COMPANY MUST (A) PROMPTLY NOTIFY YOU OF SUCH TEMPORARY DISCONTINUANCE, (B) AFFORD YOU THE OPPORTUNITY TO CORRECT THE CONDITION AND (C) INFORM YOU OF YOUR RIGHTS TO BRING A COMPLAINT TO THE FCC UNDER THEIR RULES.
5. THE TELEPHONE COMPANY MAY MAKE CHANGES IN ITS COMMUNICATIONS FACILITIES, EQUIPMENT, OPERATIONS OR PROCEDURES, WHERE SUCH ACTION IS REASONABLY REQUIRED IN THE OPERATION OF ITS BUSINESS AND IS NOT INCONSISTENT WITH FCC RULES. IF SUCH CHANGES CAN BE REASONABLY EXPECTED TO RENDER ANY CUSTOMER'S DEVICES INCOMPATIBLE WITH TELEPHONE COMPANY FACILITIES, OR REQUIRE MODIFICATION OR ALTERATION, OR OTHERWISE MATERIALLY AFFECT ITS PERFORMANCE, WRITTEN NOTIFICATION MUST BE GIVEN TO THE USER, TO ALLOW UNINTERRUPTED SERVICE.

JACKS (USOC) RJ11 RJ31X RJ34X RJ35X
RINGER EQUIVALENCE = 0.0B

Command Summary

All tone phone commands start by pressing the hook button if the phone's already off hook. If the phone is on hook, simply take it off hook. Then you have 5 seconds to begin your command.

All rotary phone commands start with the phone off the hook.

Redial One Time:

Tone # Rotary #

DEMON Dial Busy Number:

Tone * Rotary #

DEMON Dial Unanswered Phone:

Tone * * Rotary # #

Complete a connection when tone signals

DEMON Dialing success:

Click hook button once

Answer the phone when off-hook phone is ringing:

Click hook button once

Dial a number stored under NAME:

Tone NAME # Rotary NAME #

Store a NUMBER under NAME:

Tone S # NAME # NUMBER #

Rotary S NAME NUMBER #

Delete an entry stored under NAME

Tone D # NAME #

Rotary D NAME #

Kill a command that's in progress:

Hang up the phone

Erase the entire DEMON Directory *Caution!*

Tone F # R # E # E #

Rotary F R E E #

Alternate Long Distance (MCI, Sprint, ITT, etc.)

For Tone Phones Only

Store a local **NUMBER** and **ACCESS CODE** under 3-digit **CODENAME** (Example uses MCI)

S # MCI # NUMBER * * ACCESS CODE #

For ITT type systems, use three stars instead of two (Example uses ITT)

S # ITT # NUMBER * * * ACCESS CODE #

Store under **NAME** an Alternate Long Distance number which has

- 1) the local number and access code stored under a 3-digit **CODENAME**
- 2) a specific long-distance **NUMBER**:

S # NAME # * * CODENAME NUMBER #

Set Pulse Dialing Speed to 20 PPS:

Tone D # S # 2 # Rotary D S 2 #