

**Dialer**  
*Installation & User's Guide*

# Contents

<b>GETTING STARTED .....</b>	<b>3</b>
HOW THE DIALER WORKS .....	3
<b>INSTALLING THE DIALER .....</b>	<b>4</b>
<b>SETTING UP THE DIALER.....</b>	<b>6</b>
LEARNMODE.....	6
ADVANCED LEARNMODE: ADDING KEYS.....	8
LEARNMODE TIPS .....	9
<b>SETTINGS.....</b>	<b>11</b>
ROUTING COMMANDS .....	12
DIALER TONE SETTINGS .....	14
<b>USING THE DIALER.....</b>	<b>15</b>
<b>FREQUENTLY ASKED QUESTIONS .....</b>	<b>17</b>
<b>COMMAND SUMMARY.....</b>	<b>28</b>
DIALER LEARNS A CALLING CARD USING LEARNMODE.....	28
SELECT DIALING MODE .....	28
MAKE A NORTH AMERICAN CALL .....	28
MAKE A CALL OUTSIDE NORTH AMERICA .....	28
CHANGE DIALING SPEED.....	29
CHANGE DIALING VOLUME .....	29
KILL A COMMAND THAT'S IN PROGRESS .....	29
ERASE ALL DIALER PROGRAMMING: CAUTION! .....	29
<b>DIALER LED DEFINITIONS .....</b>	<b>30</b>

# Getting Started

Thank you for purchasing our dialer. Before you begin installing it, you should read the section below.

## How the Dialer Works

The dialer simplifies using calling cards by dialing all the extra numbers automatically. When you first install the dialer, or when you get a new prepaid phone card, you set up the dialer using LearnMode™. You can use the dialer in one of two basic ways:

- 1) Automatic Mode: If you want the dialer to automatically route all North American or international toll calls using your prepaid phone card; or
- 2) Manual Mode: If you only want the dialer to route calls using your prepaid phone card when you come off-hook and dial \*. The dialer assumes you want Manual Mode unless you use a command to select Automatic Mode.

There is a special kind of Manual Mode that lets you assign keys for up to seven different users or calling cards.

Setting up and using the dialer involves these easy steps:

1. Install the dialer.
2. Once the dialer is installed, use LearnMode or Advanced LearnMode™ to teach your dialer how to make calls using your calling card.
3. If you wish, use Settings to tailor the dialer to your desired use. For instance, you can select Automatic Mode and change the DTMF tone settings.
4. Use the dialer.

# Installing the Dialer

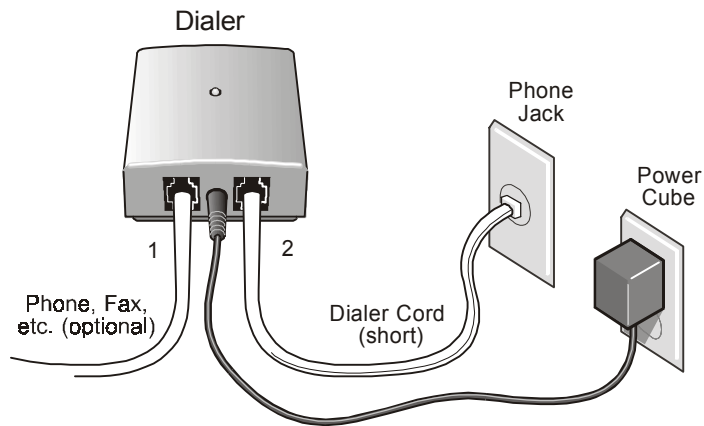
First, find a suitable location for the dialer. This location needs two things:

- A standard phone jack connected to the phone line you want to use for your dialer.  
It's okay if there's something plugged into that jack, since the dialer has an extra jack for that situation. (The dialer should not be used on a phone line that has ADSL service for high-speed Internet access.)
- An electrical outlet near the phone jack for plugging in the dialer's power cube.

This power outlet should be powered up all the time, and not turned on or off by a light switch.

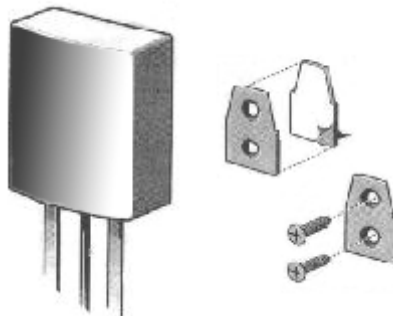
The dialer's location should be as close to where the phone line enters your premises as possible. See if you can tell where the phone line comes into your premises, and locate the dialer at the nearest phone jack if possible. If you can't tell and you have an apartment, pick a jack toward the center of the building. If you can't tell and you have a home, pick a jack on or near the first floor if possible.

Please see the picture below. Plug the power cube into the power outlet, and plug its other end into the dialer power jack. The dialer's light will blink rapidly ON and OFF. If there's something plugged into the phone jack you've chosen, unplug it and plug it into the dialer phone jack 1 as shown. Now plug the short dialer phone cord into the dialer phone jack 2, with the other end of the dialer cord going into the wall jack you've chosen. Once you do this, the light should blink once a second to show that the dialer is installed correctly. If the light stays ON constantly, you should swap the cords plugged into the dialer, so that the short cord goes into jack 1. Now the LED should blink properly, showing that the dialer is installed correctly.



**Note:** If the dialer's LED remains on solidly (i.e., does not blink), plug the dialer cord into the dialer's phone jack 1. This is very important.

If you'd like, you can mount the dialer on your wall using the self-adhesive pad provided, or you can use screws if you prefer. To use the self-adhesive pad, peel off the tape on both sides of the pad, stick the pad to the bracket on the slightly smaller side with holes, and then attach the bracket to the wall. Instead of using the pad, you can attach the bracket with two  $\frac{3}{4}$ " #6 flathead wood screws, available in any hardware store.



# Setting Up the Dialer

If you want to share your dialer among people who will use different calling cards, please read the section **Advanced LearnMode** (page 8) for instructions on how to set up dialer keys. Otherwise please read about LearnMode below.

## LearnMode

You only have to do LearnMode once for each calling card. The dialer will route all appropriate numbers once you have completed LearnMode.

You may use your calling card in one of three ways.

- If you will use your calling card for **North American toll calls only**, follow the instructions below for North American Calling.
- If you will use your calling card **for calls going outside North America only**, follow the instructions on page 7 for Calls Going Outside North America.
- If you will use your calling card **for both**, follow the instructions under North American Calling, and then follow the instructions for calls going outside North America on page 7. (Note: You may use a different card for domestic and international calling.)

### North American Calling

To set up LearnMode for these calls, do the following:

1. Take your phone off-hook
2. Press **# 1**
3. Wait for dial tone
4. Make a North American toll call using your calling card
5. Listen for two confirmation beeps
6. Let your call go through, OR Hang up, as you prefer.

The dialer will learn the access number, PIN, and any other required numbers as you make your call.

Your dialer is now ready to route all North American toll calls. Now you can make prepaid calls using your dialer by coming off-hook and dialing

\* <number>

where <number> is a long distance number, 1 followed by 10 digits.

If you have any trouble, please see **LearnMode Tips** on page 9.

If you want to use your dialer for calls going outside North America, please continue below. If you don't, please go to the **Settings** section on page 11.

#### **Calls Going Outside North America**

To set up LearnMode for these calls, do the following:

1. Take your phone off-hook
2. Press # 1
3. Wait for dial tone
4. Make a call outside North America using your calling card
5. Listen for two confirmation beeps
6. Let your call go through, OR Hang up, as you prefer.

The dialer will learn the access number, PIN, and any other required numbers as you make your call.

Your dialer is now ready to route all toll calls outside of North America. Now you can make prepaid calls using your dialer by coming off-hook and dialing

\* <number>

where <number> is an international phone number, typically 011 followed by lots of digits.

If you have any trouble, please see **LearnMode Tips** on page 9.

Now please go to the **Settings** section on page 11.

## Advanced LearnMode: Adding Keys

You can define privacy keys in Advanced LearnMode. Keys configure the dialer so that only people who know the keys can use the dialer. Roommates with different calling cards can share a single dialer if each roommate has his or her own key. Keys are also convenient if you want to use different calling cards to dial different countries. You can assign a different key for each card you use.

Once you program a key, the dialer will only route calls after someone enters the key. Typically, if you don't dial the key, the dialer will let your call go through your normal long distance provider. (In AutoRoute Mode, if you don't dial a key, the dialer won't route your call, and will issue an error tone.) The dialer will accept up to seven keys.

Advanced LearnMode is just like LearnMode, except you add a key to the commands.

You only have to do Advanced LearnMode once for each calling card and call type. The dialer will route all appropriate numbers once you have completed Advanced LearnMode.

Keys are two-digit numbers. You may use any two digit number from 00 to 99. Keys may not contain \* or #.

To set up Advanced LearnMode for calls within North America, do the following:

1. Take your phone off-hook
2. Press **# 0 <key>**
3. Wait for dial tone
4. Make a North American toll call using your calling card
5. Listen for two confirmation beeps

Let your call go through, or hang up, as you prefer.

Now when you want to make a call within North America using this prepaid phone card and key, take your phone off-hook and dial

**\* # <key> <phone number>**

If you have any trouble, please see **LearnMode Tips** on page 9.



If you want to make calls outside North America, teach the dialer how to dial the number in Advanced LearnMode as follows. (You can use the same key you used for calls to North America, if you want to).

Keys are two-digit numbers. You may use any two digit number from 00 to 99. Keys may not contain \* or #.

1. Take your phone off-hook
2. Press **# 0 <key>**
3. Wait for dial tone
4. Make a call outside North America using your calling card
5. Listen for two confirmation beeps
6. Let your call go through, or hang up, as you prefer.

Now when you want to make an international call using this prepaid phone card and key, take your phone off-hook and dial

**\* # <key> <phone number>**

If you have any trouble, please see **LearnMode Tips** below. Otherwise please go to the **Settings** section on page 11.

## **LearnMode Tips**

As you use your calling card in LearnMode, the calling card service will prompt you for various information. Make sure you listen carefully to each prompt before dialing. Also, while you are dialing an entry, try to dial as evenly as possible, without leaving long pauses between digits.

About 12 seconds after you have completed dialing, the dialer will send two short beeps to show that the dialer has learned how to dial using your calling card. If you make any mistakes as you dial, or if you don't hear the acknowledgment beeps, hang up and then start again.

It's a good idea to check that the call goes through, so that you can be sure you entered all the numbers correctly. It's also a good idea to make a call to check that the dialer correctly routes calls using your calling card. If either call doesn't go through, repeat LearnMode, waiting a little

extra after the end of each prompt, and dialing each number smoothly, without long pauses.

If you only want to set up your dialer, but don't want to complete your call, you can hang up after you hear the acknowledgment beeps.

# Settings

In this section we tell you how to go into and use AutoRoute Mode, and how to vary the loudness or length of the DTMF tones generated by your dialer. If you don't care about these things, please go to **Using Your Dialer** on page 15.

In AutoRoute Mode, the dialer routes calls without your needing to dial a \* first, as long as the type of toll call – North American or international—has been programmed into the dialer using LearnMode. This mode is good if you want to make sure that these toll calls use your prepaid phone service. If you don't want to use AutoRoute Mode, you should ignore this section.

To place the dialer into AutoRoute Mode, take your phone off-hook and dial

**# 8 1 # #**

If you decide you want to return the dialer to manual mode, take your phone off-hook and dial

**# 8 0 # #**

If you set the dialer to AutoRoute Mode and you enable keys, the dialer won't route calls unless they start with a valid key.

Note that in AutoRoute Mode, if you run out of minutes on your service, the dialer will still attempt to route calls to that service. If you've run out of minutes, the call will not go through. In this case you can replenish your minutes, let the dialer learn a new calling card, or dial

**\* 0**

before the number you want to dial. \* 0 tells the dialer not to route the call you are making. [\* 0 will not work if keys are enabled).

In AutoRoute Mode, the dialer will route all North American toll calls through your calling card if you used LearnMode for a North American number. If you don't want the dialer to route local calls that start with 1, you need to tell the dialer your local area code. To do this, take your phone off-hook and dial

**#94 <local area code>##**

Example: If your local area code is 555, take your phone off-hook and enter #94 555 ##.

After getting this command, the dialer will no longer auto-route calls within your local calling area. (Note: your local calling area may include from one to about ten area codes. You only have to enter your own area code. The dialer knows all the other area codes in your local calling area.)

**Note:** If you skip this step and you will use the dialer to auto-route North American domestic calls, you must be sure you want to route all numbers that start with 1, even if they are Internet access numbers. Be careful about this, or you may get a big phone bill for Internet access!

If you later decide that you *do* want to route local calls that start with 1, take your phone off-hook and enter

**#93##**

If you want to tell the dialer a *new* local area code—for example, if you move—and you don't want the dialer to route local calls that start with 1, use the #93## command first, and then use the #94 <local area code>## command detailed above for your new area code.

(**Note:** Entering #93## will also reset any other special routing commands you may have entered. These other commands are detailed in the **Routing Commands** section below.)

### **Bypassing the Dialer in AutoRoute Mode**

In AutoRoute Mode you can bypass the dialer for any call by taking your phone off-hook and dialing

**\* 0**

Now wait for dialtone, and then dial the number you want to call [\* 0 will not work if keys are enabled).

## **Routing Commands**

For most installations where AutoRoute Mode is selected, the configuration described above will be sufficient. In that case, please go to page 14 if you want to change the DTMF settings, and otherwise go to **Using the Dialer** on page 15.

When you tell the dialer your area code (via the **#94 <local area> ##** command), the dialer develops a list of "local"

area codes that includes all area codes in your local telephone area called a “LATA.” The dialer does not route to these area codes.

If you want to add to the list of area codes that the dialer won’t route to (will pass through), take your phone off-hook and dial

**#6 <xxx>#<xxx>#<xxx>##**

where <xxx> are the area codes that you want the dialer to pass through. For example:

#6 212 # 408# 314 ##

You may enter up to three area codes with each command. You can enter the command multiple times to pass through more than three area codes, up to a total of about 350 area codes.

If you want to remove an area code from the list that the dialer won’t route to, take your phone off-hook and dial

**#7 <xxx> ##**

In some cases, you may want to specify how to treat individual exchanges within an area code. For example, you may live close to the boundary of an area code. Calls to most exchanges in that area code may be toll calls that you want the dialer to route. However, some exchanges in that area code may be included in your local calling area. You can tell the dialer to pass through calls to those exchanges by taking your phone off-hook and dialing

**#6\* <xxx># <yyy> # <yyy> # <yyy> ##**

where <xxx> is the area code, and <yyy> are the exchanges within the area code.

You may enter three exchanges with each command. You can enter the command multiple times to pass through more than three exchanges, for a total of about 350.

You can remove exchanges from the do not route list by taking your phone off-hook and dialing

**#7\* <xxx> # <yyy> ##**

Note that the total number of area codes and exchanges passed through is limited to about 350.

## Dialer Tone Settings

The dialer dials by generating DTMF tones. You can adjust the DTMF tone volume and tone length to please you. However, if you make the tones too short or soft, they may not be consistently and reliably detected during dialing. Often you can make just the first tone of each number longer or louder, to make detection more reliable. If you don't want to change the DTMF tone settings, please turn to **Using the Dialer** on page 15.

**Tone Volume:** To control the volume, go off-hook and dial

- #\*34## for LOUD tones (nominally 0dBm)
- #\*33## for MEDIUM tones (nominally -6dBm) (default)**
- #\*32## for SOFT tones (nominally -12dBm)
- #\*31## for SOFTEST tones (nominally -18dBm)
- #\*60## first tones same as other tones (default)**
- #\*61## first tones LOUD

**Tone Length:** To control the length, go off-hook and dial

- #\*45## for 250 millisecond tones
- #\*44## for 150 millisecond tones
- #\*43## for 100 millisecond tones (default)**
- #\*42## for 70 millisecond tones
- #\*41## for 50 millisecond tones
- #\*50## first tones same as other tones
- #\*51## first tones long (250milliseconds)**

# Using the Dialer

When you place a call that should be routed, the dialer listens to the digits you have dialed and stores them. When the dialer is storing those dialed digits, they sound very soft because the dialer is preventing them from being heard by your local telephone office. When you have finished dialing, the dialer will route the call by adding appropriate digits, if any, to the digits you've dialed. When the dialer finishes dialing, it waits passively on the phone line for you to start another call.

If you want to redial the last number you dialed (because it was busy, for example), you can do so by dialing

**##**

The dialer will route the redialed number appropriately.

In the dialer's manual mode, numbers that don't start with a \* will not be routed. In all modes, some calls should not be routed, such as local calls that don't start with a 1. The dialer typically lets the digits dialed for these calls go directly to the central telephone office.

When you dial international calls starting with 011 that are routed by the dialer, the dialer will dial after you've stopped dialing for about three seconds. The dialer does this because international phone numbers vary in length, so it's hard for the dialer to tell when you've finished dialing all the required digits. To avoid the three-second delay, you can simply press # after you have dialed the last digit of the phone number. As soon as the dialer hears the #, it dials.

When you dial international calls that start with 1 (i.e., calls to other North American countries), your dialer will recognize when you have completed the call without your needing to wait or to dial a #. Most domestic calling cards handle these calls. If necessary, you can program the dialer to route calls to Canada and the Caribbean through your international calling card. See **Frequently Asked Questions** (page 17).

The dialer may need to generate fairly loud tones to work with some calling cards, so you may want to hold the phone away from your ear when the dialer is dialing. The dialer tone volume is adjustable, as discussed on page 29 in the **Settings** section.

You should also be aware that your off-hook phone puts room noises into the dialer's circuitry, which can make it harder for the dialer to hear voice prompts. If you are in a noisy room, or if you need to speak to someone, you can overcome this problem by putting your hand over the phone's mouthpiece when the dialer is dialing.

**Frequently Asked Questions** are covered in the next section. If you don't have a question, you're done. Enjoy your dialer!



# Frequently Asked Questions

**Q: When I dial, why do the dialed digits sometimes sound soft?**

A: When the tones are soft, the dialer is storing dialed digits while preventing them from being heard by the central telephone office. If the tones were loud, the central phone office would hear them and get confused.

**Q: Why isn't the dialer routing my calls?**

A: There are a number of possible reasons:

- 1.) Did you program the dialer in LearnMode?
- 2.) Are you in AutoRoute Mode? If not, are you dialing a \* before the numbers you want the dialer to route?
- 3.) The dialer didn't learn your card's numbers.
  - a.) Did you listen carefully to each prompt? You may need to wait a second or two after a short prompt before dialing.
  - b.) Did you remember to dial each entry smoothly, with only short pauses between digits?
  - c.) Did you hear the acknowledgment beeps when you finished LearnMode?
  - d.) Did you dial 1 before a domestic number, 011 before an international number? The dialer needs to see the prefix, even if your calling card doesn't require it.
- 4.) The dialer only routes appropriate calls.
- 5.) Your calling card may not handle calls to some destinations. Check your calling card instructions.
- 6.) Your calling card may have run out of minutes. You can replenish your minutes, let the dialer learn a new calling card, or if you're in AutoRoute mode, dial \* 0 to bypass the dialer.

- 7.) The dialer is not powered up. Check that the dialer's light flashes when your phones are all on-hook.
- 8.) Is the dialer's light on all the time when your phones are on-hook? If so, the phone line is plugged into the wrong dialer jack. Swap the phone line to the dialer's other jack.
- 9.) The dialer isn't plugged into an appropriate phone jack, or the wrong cord is being used. Please check that the dialer is installed properly.
- 10.) The dialer needs to dial longer or louder tones. Please see below.
- 11.) Your calling card provider may be experiencing difficulties. Please try again later. (AutoRoute Mode) To make a call right away, you can dial \* 0 followed by the number you want to reach. This call will be routed through your pre-subscribed long distance carrier. [\* 0 won't work when keys are enabled].
- 12.) Your calling card's sequence may have changed. If the dialer used to route your calls with no problems, but now it doesn't, and you are sure you haven't run out of minutes, it is possible that this has happened. Let the dialer learn your card's sequence again.
- 13.) The dialer may be defective.

**Q: When should I consider having the dialer generate longer or louder tones?**

A: If you hear the dialer dialing tones at the right time and those tones don't get you to the person you called, you may need to make the tones longer or louder. Often it's sufficient just to make the first tone of each number longer or louder, to break through the voice prompts. See the Settings section.

**Q: How can I make the dialer dial faster?**

A: There are three things you can try.

The first is that you can program the dialer to use shorter tones. See the previous question.

The second way to make the dialer work faster is to configure it to listen for the calling card company's voice prompts.

The command

**# \* 7 1 # #**

tells the dialer to listen for the first voice prompt after the dialer dials the calling card provider's access code.

The command

**# \* 8 1 # #**

tells the dialer to listen for voice prompts between subsequent numbers.

If you use these commands, the dialer will dial before the end of the switch's voice prompts. The advantage is faster dialing. The disadvantages are

- 1.) Sensitivity to background conversations, radio, TV, etc.
- 2.) The \* 8 1 command may cause you to miss hearing how much time is left on your card.

You can change back to the respective default settings with

**# \* 7 0 # #**

**# \* 8 0 # #**

**Q: How can I make the dialer tones quieter?**

A: Please see the question above about making tones louder.

Note that softer tones may not work as well as louder tones in some installations. You may be able to compensate by increasing tone length in some cases. Please see the question above about when to make tones longer to find out how to do this.

**Q: (AutoRoute Mode) How do I bypass the dialer for a single call?**

A: If you are in AutoRoute Mode and you do not want the dialer to route a specific call, dial \*0 before the number you want to call. For instance, if you don't want the dialer to route the phone number 1-212-222-2222, take the phone off-hook and dial

**\*0 <wait for dialtone> 12122222222**

The next time you make a call, the dialer will route the call normally. (\* 0 won't work when keys are enabled).

**Q: Why do I still see some long distance calls on my phone bill?**

A: It's probably because the dialer did not route those calls. Please see the question above. Do you have the dialer in AutoRoute Mode? Even if you do, the dialer typically does not route certain calls including calls that it thinks are local, and calls completed by a directory assistance operator. If you need to route calls in your local area, see the Routing Commands section.

**Q: What do I do if the dialer has problems when I place calls using a fax machine or faxmodem?**

A: Sometimes the dialer won't work well with a fax machine or faxmodem. Here are some possible solutions:

If your fax sends CNG (CalliNG) tones, see if you can turn these tones off.

Route fax calls through your standard long distance service (Don't dial \* at the start of a fax call in dialer manual mode. Dial \* 0 at the start of a fax call in dialer AutoRoute Mode). [\* 0 won't work if keys are enabled]

**Q: I have two phone lines wired into one jack. How do I attach the dialer to the second line?**

A: A two-line jack is called an RJ-14 jack. You can purchase a line splitter that will provide two single-line jacks from one two-line jack. With this splitter you will be able to connect the dialer to either phone line.

**Q: How do I connect the dialer when all of the phone jacks in my house are for wall-mounted phones?**

A: You may purchase and install a wall plate adapter that provides a jack for the dialer. Another option is to connect a standard modular wall jack to the phone line and plug the dialer into that jack.

**Q: Does the dialer work with rotary or pulse phones?**

A: No, the dialer only works with tone phones connected to central telephone offices set up to accept standard tones called DTMF tones.

**Q: What happens if I finish dialing, and the dialer doesn't dial when I expect it to.**

A: When the dialer is storing digits you dial, you must complete your dialing within about 15 seconds of going off-hook for the dialer to properly process your number. If you think you have taken longer than this, please hang up and then try the call again.

**Q: Why don't people I call see my caller ID when I call with my dialer?**

A: Many calling card services do not forward caller ID. If your dialer is in AutoRoute Mode, and the person you are calling won't accept your call without caller ID, you can dial \* 0 before the number you are dialing to place the call through your normal long distance provider. [\* 0 won't work when keys are enabled.]

**Q: Why doesn't the dialer route a new call after I hang up briefly to end a previous call?**

A: Sometimes it takes calling card providers a few seconds to notice that you have hung up. In these cases, a new call may not go through unless you leave your phone on-hook for several seconds.

It is possible that the dialer may not detect a very short hook flash. If this happens, the dialer won't route your call. You won't hear the dialer dial its usual digits, and you will immediately hear ringback from the phone company. Try hanging up for a fraction of a second longer, and dial again. (Caution: if you let calls go through that the dialer doesn't route, you may get a large phone bill!)

**Q: Why won't the dialer route the second call when I try to place 3-way (conference) calls through my long distance service provider?**

A: Contact your calling card provider to see whether they support 3-way calling. If they do, you can route calls after a hook flash exactly as you route other calls.

Otherwise you will need to arrange for 3-way calling through your local telephone company. Note that if your dialer is set to AutoRoute Mode, you will have to dial \*0 after a hook flash to make a 3-way call through your local telephone company.

**Q: (AutoRoute Mode) Why won't the dialer let me place a 101xxxx call?**

A: If you normally use the dialer with prepaid cards and you want to place a call using a dial-around service with a 101xxxx prefix, please use the dialer's bypass mode, \* 0. [Note that the bypass feature won't work if keys are active in AutoRoute Mode.]

**Q: My calling card uses identical sequences for calls inside and outside North America. Is there a way I can avoid going through LearnMode or Advanced LearnMode twice?**

A: Yes. First make sure that your card doesn't ask you what kind of call you want to make (some cards ask you to dial 1 for domestic, and 2 for international calls, for example). Then, after you have completed LearnMode for domestic calls, enter

**# 2 # #**

If you have completed Advanced LearnMode for domestic calls, enter

**# 2 <key> # #**

Now your dialer will route international calls to your calling card.

**Q: Is there a way to make the dialer route 101xxxx calls instead of prepaid calls?**

A: Yes, and you can do this with or without AutoRouting. Teach the dialer how to dial the number in LearnMode as follows.

- Take your phone off-hook
- Press **# 1**
- Dial 101xxxx
- Wait three seconds
- Dial the long-distance number (1 followed by 10 digits)

- Dial **##**
- Listen for two confirmation beeps
- Hang up.

Now you can come off-hook and dial \* followed by the North American long-distance number to route North American calls through your dialer.

If you want to use the same 101xxxx number for calls going outside North America, you can take the phone off-hook and dial

**#2##**

Now coming off-hook and dialing \* followed by the international number (011 plus lots of digits) will route international calls through your dialer.

If you want to use a different 101xxxx number for calls going outside North America, teach the dialer how to dial the number in LearnMode as follows.

- Take your phone off-hook
- Press **# 1**
- Dial 101xxxx
- Wait three seconds
- Dial the international number (011 followed by lots of digits)
- Dial **##**
- Listen for two confirmation beeps
- Hang up.

**Q: Can I use keys to route 101xxxx calls?**

A: Yes, and you can do this with or without AutoRouting. Teach the dialer how to dial the number in Advanced LearnMode as follows. A key is two digits, using only the numbers 0-9, and not \* or #.

- Take your phone off-hook
- Press **# 0 <key>**
- Dial 101xxxx
- Wait three seconds
- Dial the long-distance number (1 followed by 10 digits)
- Dial **##**

- Listen for two confirmation beeps
- Hang up.

Now you can come off-hook and dial \* followed by the North American long-distance number to route North American calls through your dialer.

If you want to use the same 101xxxx number for calls going outside North America, you can take the phone off-hook and dial

**#2 <key>##**

Now coming off-hook and dialing \* followed by the international number (011 plus lots of digits) will route international calls through your dialer.

If you want to use a different 101xxxx number for calls going outside North America, teach the dialer how to dial the number in LearnMode as follows.

- Take your phone off-hook
- Press **# 0 <key>**
- Dial 101xxxx
- Wait three seconds
- Dial the international number (011 followed by lots of digits)
- Dial **##**
- Listen for two confirmation beeps
- Hang up.

**Q: Is there a way to make the dialer route calls using a calling card that doesn't require a PIN?**

A: Yes, and you can do this with or without AutoRouting. Teach the dialer how to dial the number in LearnMode as follows.

- Take your phone off-hook
- Press **# 1**
- Dial the calling card's access code
- Wait for the prompt and dial the long-distance number (1 followed by 10 digits)
- Dial **##**
- Listen for two confirmation beeps
- Hang up.



Now you can come off-hook and dial \* followed by the North American long-distance number to route North American calls through your dialer.

If you want to use the same calling card for calls going outside North America, you can take the phone off-hook and dial

**#2##**

Now coming off-hook and dialing \* followed by the international number (011 plus lots of digits) will route international calls through your dialer.

If you want to use a different calling card for calls going outside North America, teach the dialer how to dial the number in LearnMode as follows.

- Take your phone off-hook
- Press **# 1**
- Dial the calling card's access code
- Wait for the prompt and dial the international number (011 followed by lots of digits)
- Dial **##**
- Listen for two confirmation beeps
- Hang up.

Now you can come off-hook and dial \* followed by the number outside North America to route these calls through your dialer.

**Q: Can I use keys to route calls using a calling card that doesn't require a PIN?**

A: Yes, and you can do this with or without AutoRouting. Teach the dialer how to dial the number in Advanced LearnMode as follows. A key is two digits, using only the numbers 0-9, and not \* or #.

- Take your phone off-hook
- Press **# 0 <key>**
- Dial the calling card's access code
- Wait for the prompt and dial the long-distance number (1 followed by 10 digits)
- Dial **##**
- Listen for two confirmation beeps

- Hang up.

Now you can come off-hook and dial \* followed by the North American long-distance number to route North American calls through your dialer.

If you want to use the same calling card for calls going outside North America, you can take the phone off-hook and dial

**#2 <key>##**

Now coming off-hook and dialing \* followed by the international number (011 plus lots of digits) will route international calls through your dialer.

If you want to use a different calling card for calls going outside North America, teach the dialer how to dial the number in LearnMode as follows.

- Take your phone off-hook
- Press **# 0 <key>**
- Dial the calling card's access code
- Wait for the prompt and dial the international number (011 followed by lots of digits)
- Dial **##**
- Listen for two confirmation beeps
- Hang up.

**Q: Why won't my calling card route calls to Alaska, Hawaii, Canada, or the Caribbean?**

A: Some cards only process calls within the contiguous U.S. Configure the dialer to route calls to other areas using another card. All the following commands are given after you take your phone off-hook. Note: "Domestic" and "international" refers to the type of call used to set up the card originally in LearnMode.

# 952 ## Route Canadian calls via international card

# 953 ## Do not route Canadian calls via domestic card (pass through)

**# 951 ## Route Canadian calls via domestic card (default)**

# 962 ## Route Caribbean calls via international card

# 963 ## Do not route Caribbean calls via domestic card (pass through)

**# 961 ## Route Caribbean calls via domestic card (default)**

# 972 ## Route AK/HI calls via international card

# 973 ## Do not route AK/HI calls via domestic card (pass through)

**# 971 ## Route AK/HI calls via domestic card (default)**

# Command Summary

All commands begin right after you take your phone off-hook.

## Dialer Learns a Calling Card using LearnMode

Dialer learns calling card for North American calls:

**#1 <Call a North American number using calling card>**

Dialer learns calling card for calls outside No. America:

**#1 <Call an international number using calling card>**

Dialer learns calling card for North American calls using 2-digit key <XY>:

**#0 <XY><Call a No. American number using card>**

Dialer learns calling card for calls outside No. America using key <XY>:

**#0 <XY><Call an international number using card>**

Note: When a LearnMode command is done, dialer makes two beeps to signal the command was successful.

## Select Dialing Mode

Manual Route Mode: # 80 ##

AutoRoute Mode: # 81 ##

Set Local Dialing Area: # 94 <local area code> ##

## Make a North American Call

Manual Route Mode: \* < Dial 1 plus 10-digit number >

AutoRoute Mode: < Dial 1 plus 10-digit number >

Route with 2-digit key <XY>:

**\*# <XY> < Dial 1 plus 10-digit number >**

## Make a Call outside North America

Manual Route Mode:

**\* < Dial 011 plus international number >**

AutoRoute Mode:

< **Dial 011 plus international number**>

Route with 2-digit key <XY>:

\*# <XY> < **Dial 011 plus international number**>

Redial any Call: ##

### **Change Dialing Speed**

Very Fast Tones (50msec): \*\* 41 ##

Fast Tones (70msec): \*\* 42 ##

Standard Tones (100msec): \*\* 43 ##

Slow Tones (100msec): \*\* 44 ##

Very Slow Tones (250msec): \*\* 45 ##

### **Change Dialing Volume**

Softest Tones ( -18 dBm): \*\* 31 ##

Softer Tones ( -12 dBm): \*\* 32 ##

Soft Tones ( -6 dBm): \*\* 33 ##

Loud Tones ( 0 dBm): \*\* 34 ##

### **Kill a command that's in progress**

Hang up the phone.

























### **Erase all dialer programming: Caution!**

\*\*\* 3 3 3 2 8 5 8 ##

**If dialer LED is on solidly, plug the short dialer phone cord into the dialer's other jack.**

# Dialer LED Definitions

The dialer's LED can give you useful information about the dialer and the line it's connected to. Here is a table that shows the LED's blinking patterns and what they mean.

LED Pattern	Meaning
ON 	When the LED is ON solidly, it indicates that the dialer's short phone cord is plugged into the wrong dialer jack. <b>Please plug this short phone cord into the dialer's other jack.</b>
OFF	The dialer is OFF HOOK.  This is usually because someone is using a phone or a modem or fax. The LED will also be OFF if the dialer has no power.
One Blink Every Second:        <i>Repeats Continuously</i>	This pattern of one blink per second indicates that the dialer is in <b>normal (manual) mode</b> , and the line is ON HOOK. The dialer is ready to route calls.
Two Rapid Blinks Every Second:      <i>Repeats Continuously</i>	This pattern of two blinks per second indicates that the dialer is in <b>normal mode with keys active</b> , and the line is ON HOOK. The dialer is ready to route calls.
Three Rapid Blinks Every Second:    <i>Repeats Continuously</i>	This pattern of one blink per second indicates that the dialer is in <b>AutoRoute Mode</b> , and the line is ON HOOK. The dialer is ready to route calls.
Four Rapid Blinks Every Second:     <i>Repeats Continuously</i>	This pattern of four blinks per second indicates that the dialer is in <b>AutoRoute Mode with keys active</b> , and the line is ON HOOK. The dialer is ready to route calls.
Other Blinking Patterns    	The dialer will blink in other patterns when first powered up and while routing calls.  This is normal.

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