ACN Digital Phone Service allows consolidation of voice and Internet access over a single Internet connection. The difficulty is that most homes were not designed with this in mind. This reference guide provides an overview to enable your home for Digital Phone Service using your home wiring to distribute phone service.

#### Option A -

## Simplest Option for Connecting a Cordless Phone System

This is the recommended approach. By simply connecting a cordless base station to the phone adapter, you can locate extensions throughout your home without making any wiring changes. For most ACN Digital Phone Service customers, this is the preferred solution.

# Option B -

Configuring House Telephone Wiring to Enable Dial Tone

## Overview

This option works best if you own your own single-family home. If you live in an apartment or a multiple-family dwelling you should check with your landlord before modifying telephone wiring.

While performing the steps to enable this option is not overly complex, you should have a basic understanding of telephone wiring. Also you should keep in mind that because you're dealing with lines that carry voltage, there's always a risk of causing a fire or damage to your phone lines and equipment. If you're not comfortable doing the work yourself, you should hire a professional electrician or telephone technician to do the job instead. Due to the wiring variations, ACN is not able to provide technical assistance through our technical support line.

#### Step 1 – Determine Your House Wiring Type

There are many combinations of household wiring. This is a general guide on how to get a dial tone from your phone adapter throughout your home. The scenarios below cover the majority of residential circumstances. Note that if your particular circumstance is not listed below, you should hire a professional.

| Table of Phone and DSL Service Scenarios |   |          |
|--|---|----------|
| Do you have landline phone service?      | Do you have DSL High<br>Speed Internet? | Scenario |
| No                                       | No                                      | 1        |
| Yes                                      | No                                      | 2        |
| No                                       | Yes                                     | 3        |
| Yes                                      | Yes                                     | 4        |

Please note the scenario for your home, as you will need to follow instructions specific to your particular scenario.

#### Step 2 – Locate the Network Interface Device (NID)

The first step in all scenarios listed in the chart is to identify the Network Interface Device or NID. This is a box located on the outside of your house where the telephone lines come into your home (Figure 1). It is the legal demarcation point where the outside wiring from the telephone company connects to the wiring



Figure 1 - NID

inside your home. When you open the box, which is usually fastened with a screw, you will have access to the side containing the wires going into your home, but not the side with the lines coming from the telephone company. You'll also see a ground wire coming out of the phone company's side of the box. This wire protects you against lightning strikes, so make sure you never disconnect it.

Once you have opened your side of the NID, you will see one or more sets of screw terminals inside. Each will have a short piece of telephone wire coming out of it with a phone connector on the



Figure 2 - Wiring Inside of NID

end plugged into a corresponding jack. To disconnect a line, simply unplug each of the short telephone wires from their corresponding jacks (Figure 2).

#### Step 3 – Modify Your Wiring Based Upon Your Scenario

From the previous table, follow the instructions below for your particular scenario.

## **SCENARIO 1:**

(I do not have landline phone OR DSL High Speed Internet service)

- 1. Go to NID and unplug lines 1 and 2.
- 2. Tape and label these disconnected lines to prevent someone from mistakenly reconnecting.
- 3. Close NID.
- 4. Go back inside.
- 5. Plug in telephone cable from Phone 1 port of phone adapter to a wall jack.
- 6. You should now have a dial tone throughout house on pair 1.

#### **SCENARIOS 2 THROUGH 4:**

Scenarios 2 through 4 require a commonly available device called a splitter. Note this is a two line splitter that splits two different lines to two ports as opposed to a one line splitter that splits one line to two ports. You will notice from Figure 3 that the splitter may have



three ports, the first is for line 1, the second is for line 2 and the third is a combined port for both lines. You may need more than one depending on your scenario. These are inexpensive devices and are available at electronic supply stores or stores that provide telephone wiring accessories.

#### **SCENARIO 2:**

(I have landline phone service but NO DSL High Speed Internet)

- 1. Go to NID, unplug line 2.
- 2. Tape and label this disconnected line to prevent someone from mistakenly reconnecting.
- 3. Close NID.
- 4. Go back inside and verify phone service is still operational.
- 5. Plug in above splitter into wall jack nearest to the phone adapter. If this jack was already in use, unplug the existing cable from the jack, plug in the splitter, and plug the existing cable into L1 on splitter.
- 6. Plug in telephone cable from Phone 1 port of phone adapter to L2 on splitter.
- 7. Connect a splitter to all wall jacks throughout the home where dial tone from the phone adapter is desired. Previous dial tone will be on line 1. Dial tone from phone adapter will be on L2 on splitter.

#### **SCENARIO 3:**

(I do not have landline phone service, but have DSL)

- 1. Turn off DSL modem.
- 2. Go to NID, unplug line 1. Move line from port 2 to port 1.
- 3. Tape and label the disconnected line to prevent someone from mistakenly reconnecting.
- 4. Close NID.
- 5. Go back inside.
- 6. Disconnect DSL filter from wall jack.
- 7. Plug in above splitter where DSL filter was connected.
- 8. Plug DSL filter into L2 on splitter.
- 9. Turn on DSL modem.
- 10. Verify DSL restores.
- 11. Plug in telephone cable to Phone 1 port of phone adapter to L1 on splitter.
- 12. You should now have a dial tone throughout house. You do not need a splitter or filter on the other jacks.

#### **SCENARIO 4:**

(I have traditional phone service AND DSL)

- 1. Go to NID, unplug line 2 from port 2. Close NID.
- 2. Tape and label the disconnected line to prevent someone from mistakenly reconnecting.
- 3. Go back inside.
- 4. Go to DSL jack in house, disconnect DSL filter from wall jack.
- 5. Plug in splitter to wall jack.
- 6. Plug DSL filter to L1 on splitter.
- 7. Power cycle DSL modem.
- 8. Verify DSL restores.
- 9. Plug in telephone cable to Phone 1 port of phone adapter or phone port from to L2 on splitter.
- 10. Connect a splitter to all wall jacks throughout house where dial tone is desired.
- 11. Previous dial tone will be on L1 of splitter. If you had filters on all lines for previous dial tone, will need to connect those filters to L1 on splitter.
- 12. Dial tone from phone adapter will be on L2 on splitter.



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