

## Silver Boxes: History, Construction

Well, now that I have you here, I may as well bore you with a little history of silver boxes. One day, some engineer over at Bell labs got the bright idea to sing to his computer, and found that the computer responded by dialing a fone number. Well, sort of. Anyway, the 10 digit (old style, with the # and \* blocked out) touch tone pad was born. Lo and be hold, though, 2 sets of people decided that 10 (now 12) buttons just wasn't enough they needed more. The two people of whom I am speakin are of course MaBell and Pa AUTOVON (the military phone net) So Ma decided to add an extra column to her phones, this one merging the standard row tones with a 1633 Hz tone (to provide the mystical DTMF) . Bell named these buttons A,B,C, and D (arent you glad we have such imagintive people at the bell system?) while the army named them Flash, Flash override, Priority, and priority interrupt (or is it Flash interrupt and priority override..) anyway... these are used as varying degrees of priority during wartime (& wargame) activities so generals can call their secretaries very quickly. Bell's use of ABC and D is not so clear. However, the last button (D) has an interesting property. On about 50% of the information lines in the country, it will give you a pulsing dial tone. You can then enter commands to what appears to be a test system for 4A boxes. Anyway, the mods Warning... turn on your printer now, and read these instructions several times b4 you actually try them. Make SURE you know how to solder... this could PERMENANTLY damage your phone!!!

Unscrew the two large screws on the base of your phone. Take the cover off and place it and the screws in a safe place. Now, loosen (but don't remove) the screws on the sides of the touch tone key pad. (these are on the sides, and attach it to its mounting brackets) Now CAREFULLY remove the pad from its brackets (don'T rip any wires!) You will notice a plastic cover on the pad. Separate the two halves, and get them out of your way (don't destroy them, they'll be needed just move them down the wire harness that goes through them. Now look at the top of the pad (so the 123 row is facing away, and the \*0# row toward U. Turn over the pad. You should see a mass of wires, gold plated contacts (yes, it's real gold), discrete components, and 2 big doughnut shaped black things. These R coils that make the frequencies Ma bell was always one for standards, so all the coils she manufactures are capable of generating all 4 primary tones (she only gives you connections to three of them, though). You are bout to make your own connection to the 4th, and make the third column of keys "bank switched" between normal and 4th row. Cut three lengths of wire of different colors about 2 feet long (better over kill than underkill..) I used Blue, Gray and Brown, these colors are arbitrary but I will be referring to these colors in the bulletin. Look at the coil on the left (with the 5 solder contacts facing you, rather than being perpendicular to you count over 4 contacts from the left (or 2 from the right) & solder a wire to the 4th post from the left. This is the 1633 hZ OUTPUT. Solder the other end of this wire to the left pole of the smallest SPDT switch U can find. This is the point of no return now... take a look at the bottom edge of the

keypad. You should see a row of three gold plated contacts (to the right of 2 very large capacitors) . Look at the one on the left. This one controls the rightmost bank of keys on the phone. GENTLY!! separate the two touching connectors (THEY ARE SOLDERED together with a drop of solder) and spread them apart. Solder the brown wire to the top contact (the one furthest from you) , and solder it to the RIGHT pole of the SPDT. Now, take the blue wire & solder it to the bottom (closest) contact. Solder the other end of this wire to the CENTER hole of the SPDT. YOU HAVE NOW COMPLETED OUR MODS. When the switch is in one position, you will get normal tones, in the other you will get 1633 tones. Some lines can be added by passing the 3 wires through the plastic cover, and in through the gap in the case of UR fone Under the place where you hang it up. Then solder the wires to the switch in the proper places, and you can glue the switch to the wall on the inside of that small alcove in the phone after taking the slack wire back into the phone. (this just to make sure you read the whole thing before trying it..) Now, call directory assistance using normal tones (out of state, that is) XXX 555 1212, Now switch quickly to 1633, and press down on the # key (now the D key) . If you are on an old switchbox (4A) , you will get a pulsing dial tone. You can then switch back to normal,& try dialin different numbers. Two of the most interesting are 6 and 7. These often form a loop around type connection,and two people can call in, one using 6 and the other 7, and talk in this manner. If enough people perform this mod, I will keep "office hours" on 1 of these.  
HAPPY PHREAKING...

Cain Note: U will not receive a pulsing

tone until the operator actually picks up on the line. If you hear ringing, keep pressing. The tone must be on at the same time the operator gives her "beep". If U hear her cursing at stupid people with stuck buttons, chances are this one doesn't work... try out of the way states like Montana, Wyoming, etc.