the head). On the right door is a metal box of alligator clips. Take a few (Compliments of Bell.). On each door is a useful little round metal device. (Says 'insert gently' or 'clamp gently - do not overtighten' etc..) On the front of the disc, you should find two terminals. These are for your test set. (If you don't have one, dont despair - I'll show you ways to make basic test sets later in this article). Hook the ring (-) wire to the r' terminal; and the tip (+) wire to the other. (By the way, an easy way to determine the correct polarity is with a 1 ev LED. Tap it to the term. pair, if it doesn't light, switch the poles until it does. When it lights, find the longer of the two LED poles: This one will be on the tip wire (+). Behind the disc is a coiled up cord. This should have two alligator clips on it.. Its very useful, because you don't have to keep connecting and disconnecting the fone (test set) itself, and the clips work nicely. On the terminal board, there should be about 10 screw terminals per side. Follow the wires, and you can see which cable pairs are active. Hook the clips to the terminal pair, and you're set! Dial out if you want, or just listen (If someone's on the line). Later, I'll show you a way to set up a true 'tap' that will let the person dial out on his line and receive calls as normal, and you can listen in the whole time. More about this later... On major prefix-area bridging heads, you can see 'local loops', which are two cable pairs (cable pair = ring+tip, a fone line) that are directly connected to each other on the terminal board. These 'cheap loops' as they are called, do not work nearly as well as the existing ones set up in the switching hardware at the exchange office. (Try scanning your prefixes '00xx to 99xx #'s.) The tone sides will announce themselves with the 1008 hz loop tone, and the hang side will give no response. The first person should dial the 'hang' side, and the other person dial the tone side, and the tone should stop if you have got the right loop.) If you want to find the number of the line that you're on, you can either try to decipher the 'bridging log' (or whatever), which is on the left door. If that doesn't work, you can use the following:

## ANI # (Automatic Number ID)

This is a Telco test number that reports to you the number that you're calling from (It's the same, choppy 'Bell bitch' voice that you get when you reach a disconnected number)

For the:

213 NPA - Dial 1223 408 NPA - Dial 760 914 NPA - Dial 990

These are extremely useful when messing with any kind of line terminals, house boxes, etc. Now that we have bridging heads wired, we can go on... (don't forget to close and latch the box after all... Wouldn't want GE and Telco people mad, now, would we?)

"CANS" - Telephone Distribution Boxes

Basically, two types:

1.Large, rectangular silver box at the end of each street.

2.Black, round, or rectangular thing at every telephone pole.

Type 1 - This is the case that takes the underground cable from the bridge and runs it to the telephone pole cable (The lowest, largest one on the telephone pole.) The box is always on the pole nearest the bridging head, where the line comes up. Look for the 'Call before you Dig - Underground cable' stickers.. The case box is hinged, so if you want to climb the pole, you can open it with no problems. These usually have 2 rows of terminal sets. You could try to impersonate a Telco technician and report the number as 'new active' (giving a fake name and fake report, etc.) I don't recommend this, and it probably won't (almost positively won't) work, but this is basically what Telco linemen do.)

Type 2 - This is the splitter box for the group of houses around the pole (Usually 4 or 5 houses). Use it like I mentioned before. The terminals (8 or so) will be in 2 horizontal rows of sets. The extra wires that are just 'hanging there' are provisions for extra lines to residences (1 extra line per house, that's why the insane charge for line #3!) If its the box for your house also, have fun and swap lines with your neighbor! 'Piggyback' them and wreak havoc on the neighborhood (It's eavesdropping time...) Again, I don't recommend this, and its difficult to do it correctly. Moving right along...

## APARTMENT / BUSINESS MULTI-LINE DISTRIBUTION BOXES

Found outside the building (most often on the right side, but not always... Just follow the wire from the telephone pole) or in the basement. It has a terminal for all the lines in the building. Use it just like any other termination box as before. Usually says 'Bell system' or similar. Has up to 20 terminals on it (usually.) the middle ones are grounds (forget these). The wires come from the cable to one row (usually the left one), with the other row of terminals for the other row of terminals for the building fone wire pairs. The ring (-) wire is usually the top terminal if the set in the row (1 of 10 or more), and the tip is

in the clamp/screw below it. This can be reversed, but the cable pair is always terminated one-on-top-of-each- other, not on the one next to it. (I'm not sure why the other one is there, probably as a provision for extra lines) Don't use it though, it is usually to close to the other terminals, and in my experiences you get a noisy connection.

Final note: Almost every apartment, business, hotel, or anywhere there is more than 2 lines this termination lines this termination method is used. If you can master this type, you can be in control of many things... Look around in your area for a building that uses this type, and practice hooking up to the line, etc. As an added help, here is the basic 'standard' color-code for multi-line terminals/wiring/etc...

Single line: Red = Ring Green = Tip Yellow = Ground \*

\*Connected to the ringer coil in individual and bridged ringer phones (Bell only) Usually connected to the green (Tip)