

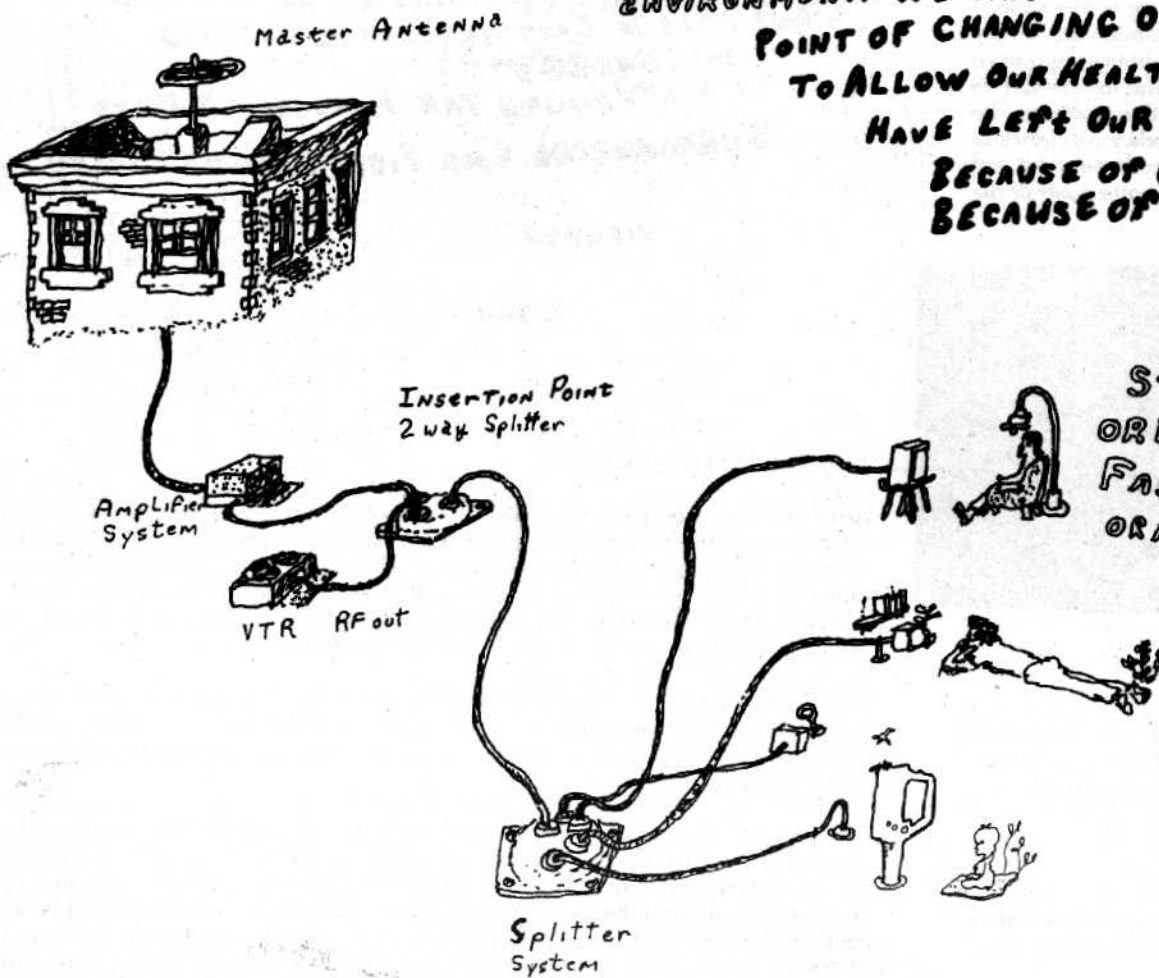
IN OUR EVOLUTIONARY QUEST WE ARE

RETARDED BY THE EXISTANCE OF WHAT WAS PREVIOUSLY CONSIDERED A NATURAL

ENVIRONMENT. WE HAVE EVOLVED TO THE POINT OF CHANGING OUR ENVIRONMENT

TO ALLOW OUR HEALTHY EVOLUTION. WE HAVE LEFT OUR "NATURAL STATE"

BECAUSE OF OUR DENSITY NOT NECESSARILY BECAUSE OF WILL.



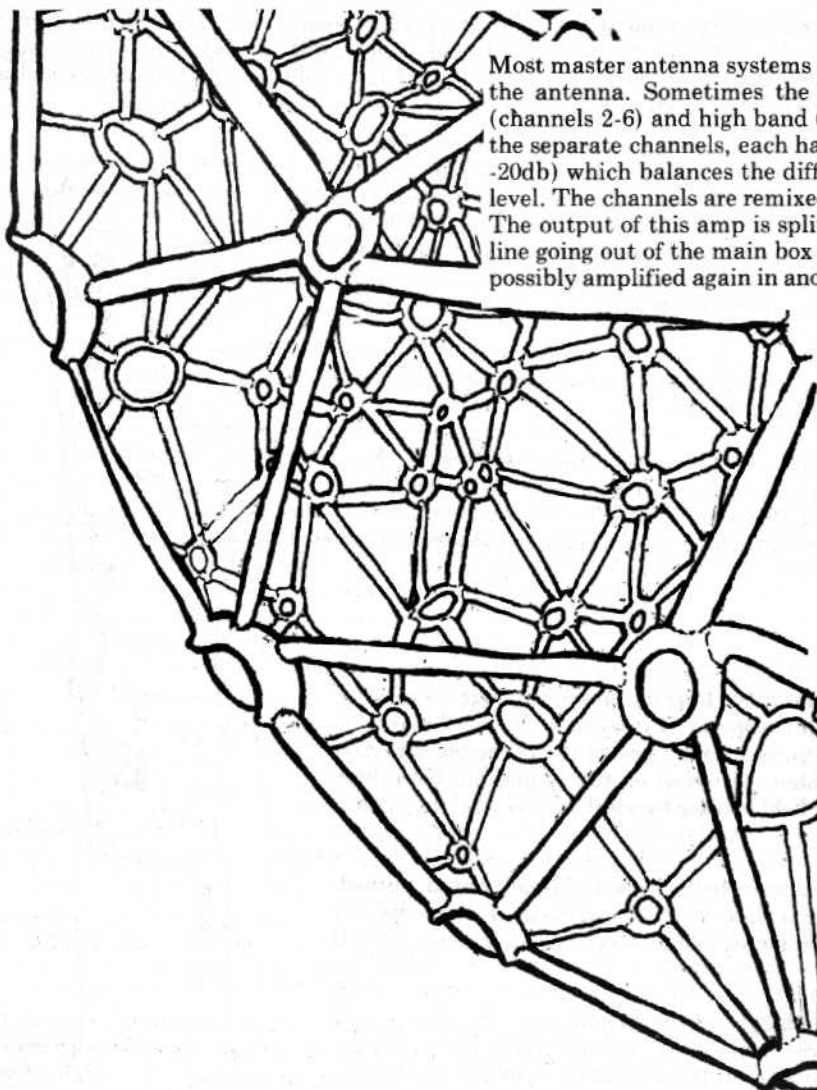
BUT DENSITY IS A STIMULUS AND AN EXISTANT NATURAL ORDER. THE PAIN OF A DELIVERY TOO FAST IS FORCING EITHER OUR DEMISE OR AN EXHILARATION INTO A SPIRAL OF ENERGY.



Most buildings (those square ones they drop people into) built recently in large cities, have a built in viable circulatory system which can be tapped for the community benefit. An antenna is placed on top of a building and connected to all apartments via cables in the walls in hopes that better reception will soon appear. It also provides the people with the potential for their own television channel. All that is needed is a portapack with an RF unit, coax cable, F connectors, possibly a filter, and time. Our own experience comes from working with the Westbeth system which is a huge building of 368 apartments located on the Hudson River in Manhattan. (See other article on Westbeth for info on funding and programing.)

## HOOKING INTO MASTER ANTENNA SYSTEMS

DEAN EVENSON



Most master antenna systems are simple with a broadband amplifier after the antenna. Sometimes the antenna lead is split into low bandwidth (channels 2-6) and high band (7-13). The high band is passively split into the separate channels, each having an inline attenuator or resistor (-10db, -20db) which balances the different levels so all channels are at the same level. The channels are remixed passively and sent to the broadband amp. The output of this amp is split and sent to the various apartments. Each line going out of the main box has about 5 apartments on it or is split and possibly amplified again in another section of the building.

More complex systems add strip amps to the system. These are RF amps specific for the channels in the area. They are used to both amplify the signals and to balance (each amp has a gain control) all the signals. Master antenna systems are kept at 75 ohms until they reach the television sets where a matching transformer (called a balun) changes the load to 300 ohms to match the tv's antenna taps.

Portapacks can be plugged into the antenna systems after the strip amps or broadband amp. At the place where these amps are split up for the apartments, a two way splitter is used, one input is the Sony RF signal, the other is the output of the amp system. The output of the splitter goes to where the amps were previously connected.

Sony RF units are messy for they spill over into a multitude of other channels when transmitting. We solved the problem by using a Hamlin bandpass filter for channel 3 (\$19.95, made in Japan).

HAMLIN INT. CORP., 126 SW 1535<sup>th</sup> ST., ALMOSE SEATTLE, WASH., 98166  
We found that the portapack RF unit had enough power to drive 368 apartments, however if a strip amp is added, you get a stronger more controlled signal.

Strip amps are about \$89.00 from Jerrold Corp. in Philadelphia, but why can't techno-folks come up with a tunable RF amp based on the one in Motorola's "Radio Amateur's IC Projects" (HMA36)?