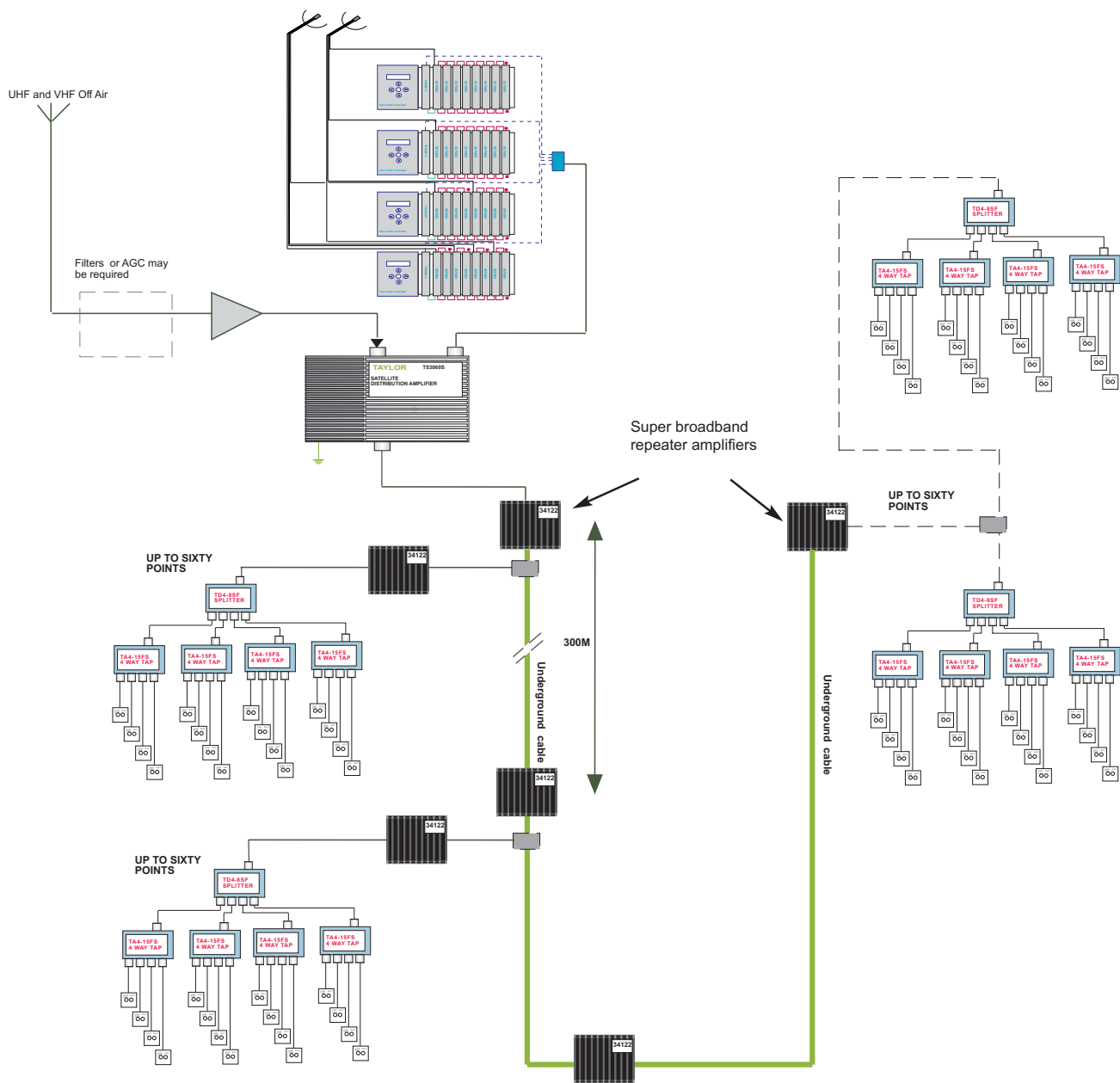


Typical large sat system using a single coax



Above is a typical system distributing analogue or digital satellite channels plus terrestrial VHF and UHF.

For large systems this is the only optional way of distributing satellite if the running multiple underground trunk cables is prohibitive.

Systems of over a thousand points can be constructed using coax or tens of thousands of points using a hybrid fibre/coax system. The limitations to the size of system are the same as existing cable networks except greater care has to be taken in calculating frequency response errors at higher frequencies.

The limitations of using a single cable for distribution of satellite is bandwidth, and the software in sky digiboxes being unable to locate transponders, that have been relocated in the IF spectrum. There are various partial solutions to this software problem, see our website, but at the moment no complete solution unless Sky update the receiver software in the future.

As more channels are allocated various options can be used to optimize the available bandwidth.

For example, using satellite demodulators and remodulating, programmes that are broadcast clear in the UHF or VHF band, makes more capacity available in the one to two GHz spectrum for subscription programmes.

Digital broadcast make more efficient use of bandwidth and as broadcasters move over to digital more channels can be distributed in the available bandwidth. If the most efficient current technology is used a single coax system can carry fourteen hundred and seventy channels.