HEADEND SINGAL-MANAGEMT FOR COAXIAL SEGMENTS AND PASSIVE SIGNAL-MANAGEMENT

The coaxial segments' servicing is slightly more complicated than the optical segments' servicing, because in this case the DS and the US are not divided into 2 separate transmission mediums (i.e. 2 optical fibers at least at the output of the WWDM filter). To solve this problem the HRF-RR4 product has 4 diplex filters (their breakpoint frequencies according to the customer's requirements). The HRF-RR4 has 4 bidirectional ports which forward the coaxial sections to the first amplifiers. Each port has a DS input. Through these ports the DS Signal-management output spectrum can be transmitted to the CATV network.

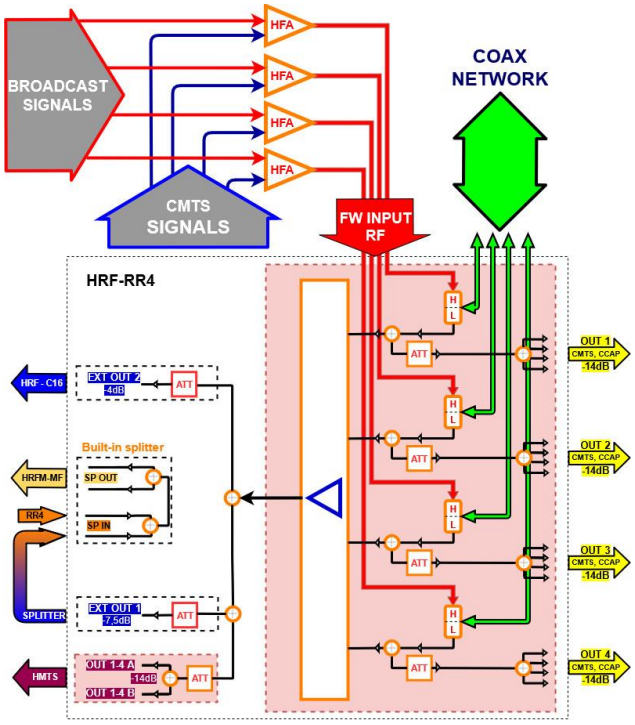
HRF-RR4 1U high signal-level interface

The HRF-RR4 product is capable to receive 4 RF segments. Each coaxial cable is connected to the built-in diplex filter which couples in the signals from external source (i.e. HFA) while couples out the US signals. The coupled signal is distributed and amplified to get the right level for the the CMTS and for monitoring gateway.

The US section operation is similar to the HRF-OR4, there are given 4 unique, non-summarized, -14 dB relative level bidirectional port, 2 summarized outputs with the same ideal relative level and one high-leveled output for the HRF-C16 product and a medium-level output to drive the built-in 2x2 summarizer.

The HRF-RR4 provides the ideal signal-levels by amplifier stages. The product's power consumption is 1W, where the power is provided by the HRF-PSC power supply.





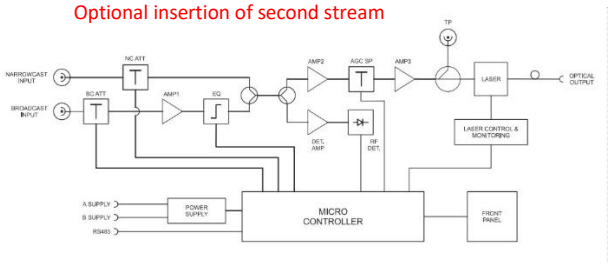
HFA-xx Downstream headend amplifier

The HFA product has been designed to compensate the attenuation of the signal-summing network and to provide the desired signal level at the input of the optical transmitter and at the input of the coaxial line. The product is made in the standard COMTECH headend design with electronic adjustment, RF testpoint and a second "narrowcast" input.

The product has full electronic settings, it can be integrated into OCM-2012 and into OCM-2002 platforms, and can be connected to monitoring system.



Optional insertion of second stream



HRFM-MF Passive signal-management

The HRFM product-family consits of symmetrical splitters and asymmetrical directional. Each element has a low-level testpoint in addition to the normal outputs. All HRFM products can be built-into the standard 1U COMTECH mainframe.



