



## Case history Central router with line equalizers



**Telekom Austria** operates a central router that switches all radio stations to the contribution and distribution lines all over Austria. In addition to the radio studios, Telekom Austria also switches the lines that come from the many **concert halls and theatres in Vienna**. These houses are connected via copper lines whose frequency response curves have to be equalized. **Mandozzi Elettronica SA** was the only manufacturer capable of offering and supplying a router that fulfilled Telekom's requirements. The router contains 240 redundant line equalizers that are adjusted and monitored by two separate operating positions. The equalizers are realized by means of digital signal processors whose parameters are stored in two separate memories. The frequency response curves are controlled by rotary knobs or by drawing the filter curves on touch screens that display the resulting line curves. The fully **redundant router** is managed by two separate working positions for redundancy. It has more than 300 audio inputs and outputs, 64 of which are four-wire connections. It realizes 60 stereo to mono conversions, a level monitoring system that compares the levels to pre-programmable upper and lower thresholds, a system to generate various voice announcements, and a system to listen to the audio signals and to display their levels.

Blockdiagramm Telekom Austria EQ Matrix

