



As broadcast mediums go AM radio has stood the test of time having been invented over 100 years ago by inveterate tinkerer Reginald A. Fessenden. Much has changed since those inaugural broadcasts, which startled nautical telegraphy officers who had never heard music and speech emanating from their coherers and crystal sets before!

AM transmitters have changed too - the first practical valve sets of some 30% power efficiency are now replaced with MOSFET based switching transmitters with line power to RF efficiencies in excess of 85% which are capable of much higher fidelity than their predecessors. AM radio is undoubtedly the most accessible medium on the planet with an incalculable number of sets in circulation. AM radio is still the principle means of disseminating information to the public in many parts of the globe - especially remote areas and of course the developing world.

Since the introduction of other platforms - notably FM broadcasting, AM has been seen by many to be in decline but many AM stations however have bucked this trend and are commanding healthy audiences into the 21<sup>st</sup> Century proving that regardless of the medium - content is king! Although many broadcasters are enjoying savings in electricity costs through transmitter upgrades, many are not yet reaping the benefits of the improved audio reproduction because of the continued use of vintage analogue processing equipment.

Audessence have introduced AM Pro (illustrated below), a versatile digital audio processor for all types of AM broadcasting. Selectable filters meet the requirements of all regions and administrations while a novel 'brightener' maintains the perception of tonal balance on music. Speech (often where many other audio processors fall over) sounds punchy and clean and configuration through the intuitive software interface facilitates rapid formatting to suit all listening and channel conditions from gentle and melodic, to loud 'intelligibility' processing suited to demanding long-haul HF broadcasting circuits.

AM Pro is ideal for accepting a pre-processed feed resulting in substantial savings for networks and it will also automatically compensate for any changes of level of the line or other feed. The compact form factor (1RU) makes it ideal for situations where rack space is at a premium such as rapid deployment systems and disaster recovery.

AM Pro can also improve the response of problematic or older transmitters with built-in 'tilt' compensation - a square wave generation function allows this to be performed with the minimum of external test equipment, and where legal AM Pro can limit negative peaks to within 100% while producing positive modulation to 150% - with a suitably rated transmitter.

The AM Pro is also pre-loaded with nine factory presets covering numerous level control scenarios and formats to suit all applications. These may be selected under local or remote control.

