



TRS DAB and DAB+ Tunnel Rebroadcasting System with Audio Break-in for Emergency Messages

VDL's new Digital Radio Rebroadcast System for Tunnels **TRS** enables tunnel operators to replace audio programmes with live or pre-recorded announcements, providing information and instructions in the event of an emergency.

TRS monitors the live Ensemble for all current audio service configurations and automatically manages the replacement of normal programmes with the emergency announcement using the same audio bit-rate. This ensures a seamless transition and avoids receiver reconfigurations, which would otherwise lead to a delay in the reception of announcements.

To prevent the need for receivers to re-tune, the system maintains RF frame synchronisation when switching between live programmes and announcements, thereby avoiding disruption to the digital radio signal.



VLP-1 Very Low-power Repeater for Shops, Department Stores and Exhibitions



In order to effectively demonstrate DAB/DAB+/DMB receivers in shops and department stores, it is often necessary to boost the indoor signal strength. This can be achieved by using a low-power repeater connected to an external antenna.

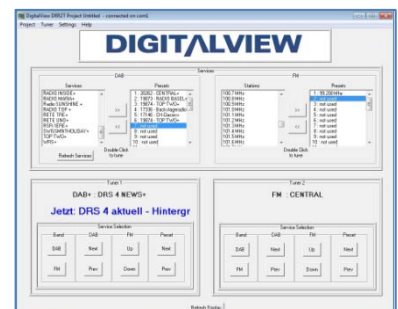
VLP-1 In-store Repeater has been specifically designed to retransmit a very low power DAB/DAB+/DMB signal in the immediate area of a retail store. The power level used is approximately one thousand times lower than a typical cellular phone.

The In-store Repeater is available for wall/ceiling mounting and can be optionally specified with in a rack-mount chassis.

DRR-2TEU Professional Twin-Tuner DAB/DAB+/FM Radio Receiver

DRR-2TEU is the ideal choice for studio monitoring and the distribution of digital or analogue radio in a multi-room audio environment. With the benefit of two independent DAB/DAB+ and FM tuners, the receiver provides a comprehensive, professional solution for digital radio and FM reception requirements.

All the necessary rear panel audio output connections are provided for digital and/or audio output connection. The front panel includes the system navigation buttons and a high contrast LCD display to show the time, programme data and the current system status.



DABSTOR-Rx DAB/DAB+/DMB Ensemble Logging and Monitoring Receiver

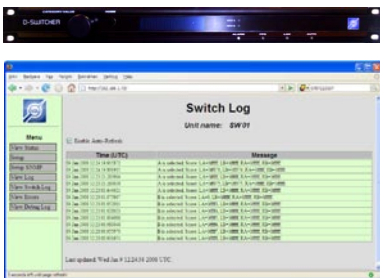
DABSTOR-Rx is a dual-band DAB/DAB+/DMB receiver that is available with a choice of application software, including an Ensemble Logger, Ensemble Analyser and Service Publisher/Subscriber.

The latest version of DABSTOR-Rx features a new Band-III & L-Band receiver module that provides additional signal quality status.

Designed for broadcasters and network operators, the DABSTOR-Rx provides evidence of transmission, with live monitoring, logging and off-line analysis of a complete DAB/DAB+/DMB Ensemble.

The DABSTOR-Rx Ensemble Logger application provides continuous capture to disk, using sequential-file endless-loop recording.

With the Publisher and Subscriber options, users are able to simultaneously view multiple Audio, Video and Data services from a single receiver at one or more remote locations.



D-SWITCHER-II ETI Switch for Multiplexer Redundancy

D-SWITCHER-II is an ETI Switch for use in DAB/DAB+/DMB transmission networks to provide backup redundancy protection without causing interruptions to transmission.

The ETI Switch provides automatic source selection with input priority, manual or automatic operation, a Web interface and SNMP.

SecureSync GPS Clock with NTP

Available as part of a VDL DAB/DAB+/DMB Head-end, **SecureSync™** GPS Clock combines precision master clock technology and secure network-centric approach with a compact modular hardware design to provide a powerful time & frequency reference system.

Included with the basic unit is an extremely accurate 1PPS timing signal aligned to a 10MHz frequency signal without any phase discontinuity.

Option cards are available that support a variety of input/output timing signal types and quantity, including additional 1PPS, 10MHz, 2.048MHz, multi-network NTP, and PTP.



TIME AND FREQUENCY STATUS	
Selected Time Reference Source	GPS 0
Selected 1PPS Reference Source	GPS 0
Synchronization	OK
Holdover	Not In Holdover
Time Figure of Merit (TFOM)	3
Estimated Time Error (ETE)	10 ns < ETE <- 100 ns
Timescale Reference	UTC
Oscillator Type	OCXO (1ppgh)
Oscillator State	Lock
1PPS Phase Error (ns)	25
10MHz Frequency Error (Hz)	0.000200

