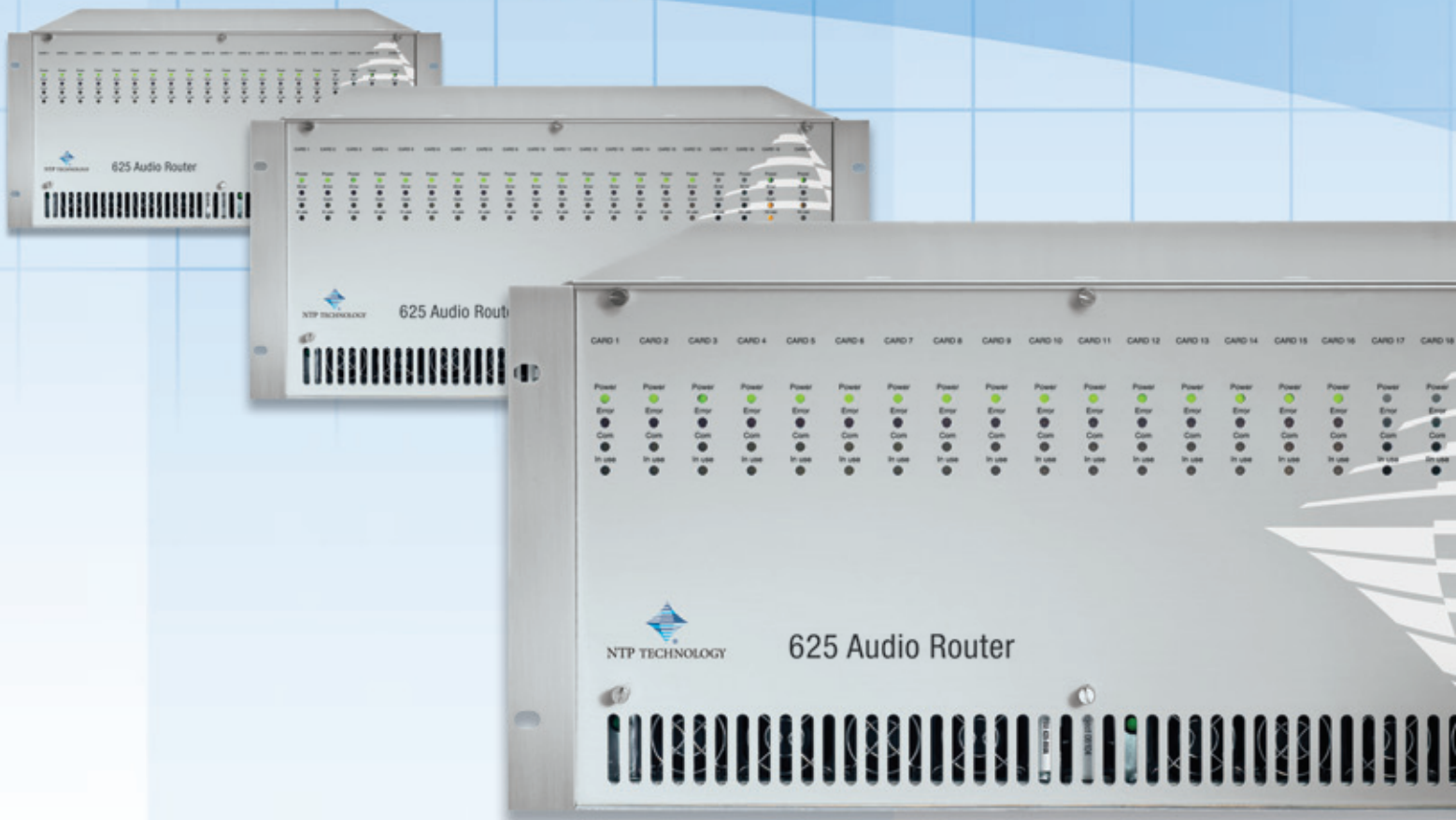


625 Audio Router



NTP TECHNOLOGY

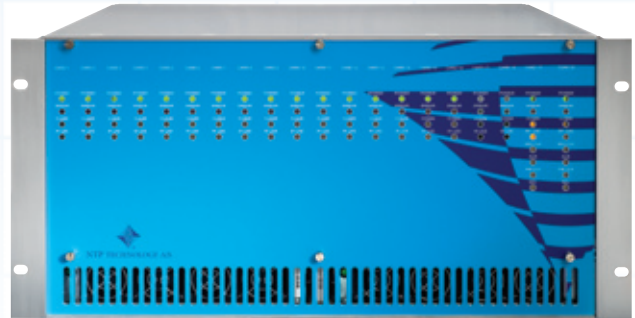
A DAN TECHNOLOGIES COMPANY

Enterprise scale routing systems

The NTP 625 Audio Router is extremely flexible. It has a variety of analogue and digital audio interface cards, enabling a compact implementation of large solutions up to 8192 mono channels as well as more moderate routing systems with 8 to 128 channels. Robust and reliable technology has been the trade mark for NTP products throughout three decades of supplying audio routing systems to many leading broadcast customers world wide.

Large solutions

The I/O of the 625 Audio Router can be centralised in a single chassis or distributed between a number of router nodes using optical fibre or Cat 6 connections. Redundancy is inherent in all NTP systems and systems can be configured with redundancy to single cross-point level. The Base Unit comes with dual controllers, dual power supply, and dual air-flow system. All systems can be configured with a dual backbone for the most critical applications



The 625 Audio Router is the core of the routing system with 2048 x 2048 cross points in one frame. It can be configured for up to 8192 x 8192 cross points, in a non blocking configuration. The 625 Audio Router can operate both as a main router and as a subrouter in the same system with fast switching capacity of 300 switching events per second. All modules are hot-swappable with access from the front of the 5U 19 inch card frame.

Advanced signal processing

The 625 Audio Router can perform advanced signal processing and surveillance functions directly on the audio inputs and outputs. Signal surveillance information can be used for intelligent switching between alternative signal paths in case of signal failure. The Signal surveillance also provides information for overall level monitoring. All signal processing is optional and the following can be installed:

Signal processing

Delay, summing, stereo-to-mono, cross fade, fade in and fade out, phase inversion, dynamic processing, graphic- and parametric equalizer

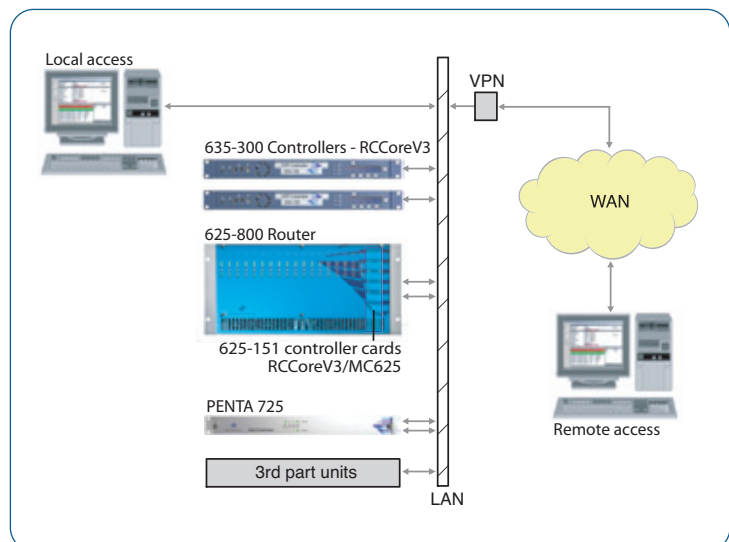
Signal surveillance

Level detection, peak programme meter, phase meter and signal compare

TCP/IP control

The 625 Audio Router can be TCP/IP controlled via the 635-300 or the 625-151 controllers or by client applications like BLISS and the VMC or from third party control systems. All control is network oriented with database driven online configuration and powerful configurable user interfaces, including user-rights handling and extensive system supervision. Control for third party routers can be handled in an easy and flexible way. Two Ethernet ports are available for redundant network connection.

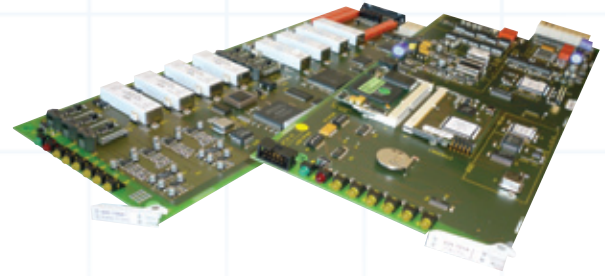
The 635-300 and 625-151 controllers runs the NTP Router Control System RCCoreV3 on QNX realtime OS platform providing easy system servicing using local or remote access.



Flexible I/O configuration

The 625 Audio router comprises a large range of I/O module for access to both analogue and digital audio signals.

A variety of analogue and digital audio I/O formats are supported. The analogue I/O interface can be with or without transformer coupled input/output, and is also available as microphone preamplifier. The digital I/O interfaces are MADi and AES/EBU with optional sample rate converter.



Audio cards

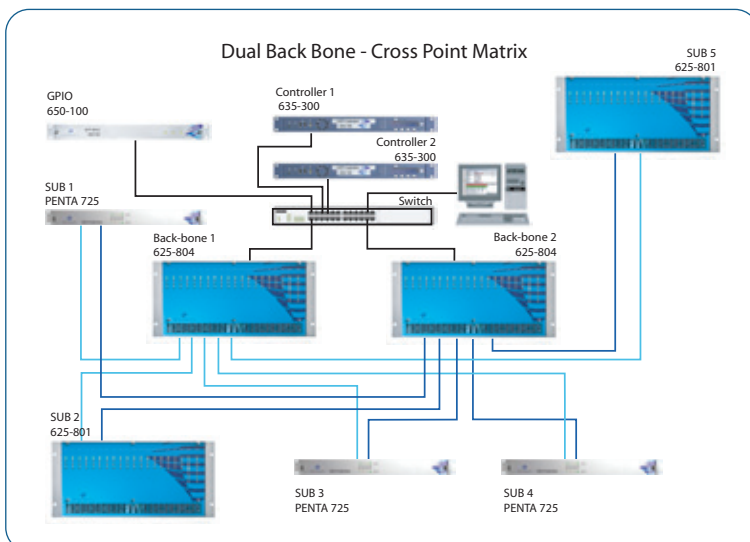
- 625-133 Analogue I/O card
4 Inputs/8 outputs in MONO (electronically balanced)
- 625-134 Analogue I/O card
8 Inputs/4 Outputs in MONO (electronically balanced)
- 625-130 Analogue I/O card
4 Inputs and 4 Outputs in MONO (transformer balanced)
- 625-190 Microphone input card
6 MONO channel inputs
- 625-170 AES/EBU I/O card
4 AES/EBU I/O channels (balanced)
- 625-531 QUAD TDM-bus card
4 TDM-bus I/O (4x128 Mono channels)
- 625-534 QUAD TDM-bus card
4 MADi I/O card (4x64 Mono channels)

Interface boxes

- 625-540 Quad passive interface
2 connections for XBus link
- 625-545 Quad electrical interface
4 electrical CAT6 connections
- 625-551 Quad optical interface
4 optical SFP slots for S/M & M/M fibre
- 625-555 Quad MADi optical interface
4 optical SFP slots for S/M & M/M fibre

Redundant router architecture

All vital elements of the 625 Audio router can be duplicated to ensure that any failure cannot stop the functionality of the whole system or cause failure in other parts. Controller cards, power supply and fans are duplicated for a full redundant configuration. The system has automatic seamless change-over functionality. If an error occurs the reserve circuit will be enabled within seconds.



Interconnection between more frames via optical fibre or CAT6 cables can be duplicated and the control system is able to automatically control switchover if a connection is damaged. For a fully redundant backbone structure, a dual backbone architecture can be deployed. This permits a very powerful self-healing configuration which also enables the two core main routers to be at separate locations.

Specifications

Specifications:

- 19" chassis frame, 5 RU
- 18 card slots for I/O modules
- Mixed analogue, digital AES3 & MADI I/O
- Easy expansion to larger systems
- 128 I/O channels @48 kHz with DSP on all I/O
- Main router structure 2048² cross points, and 8000² using more frames
- Transparent transfer – Dolby-E compatible
- Integrated signal processing
- Synchronisation via word clock, AES11, MADI or HotLink
- True monitor output, analogue and AES3 on XLR connectors
- Control via Ethernet TCP/IP
- Redundant system controller cards
- Controller runs on QNX realtime OS platform
- User control on windows based client software
- Redundant Power supply modules
- Power supply module are hot-pluggable
- Operating voltages 85V to 265V AC
47 Hz to 63 Hz

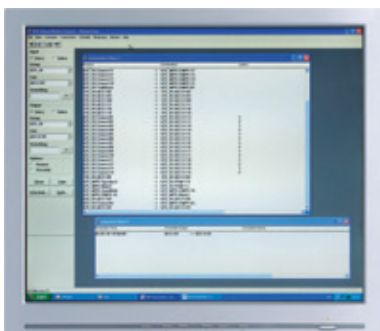
Rear panel

The 625 Audio Router has all I/O connections located on the rear side of the frame. Connections are made via 25 pin D-sub connectors.

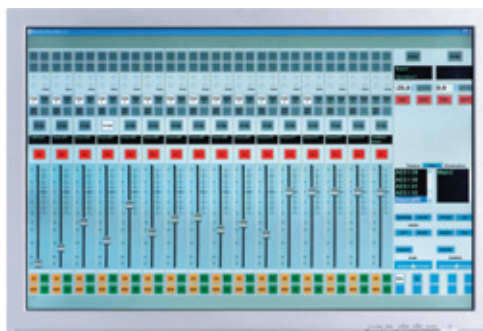
Optical fibre and CAT6 connections are interfaced using dedicated box modules attached to the D-sub connector of the rear panel. Sync I/O are connected via XLR or BNC connectors. Monitor output is available via XLR connectors.



Client software applications



VMC II



BLISS



S/D panel

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