PERSEUS

PERSEUS Wired Remote Dispatchers
DAC - Dispatcher Audio Console

Simulcast

TETRA

LAN

Optical Fiber

WiFi

WiMAX

Satellite

UMTS

Internet

SELEX
Communications
A Finmeccanica Company

PERSEUS Wired Remote Dispatchers
DAC - Dispatcher Audio Console

The **PERSEUS Dispatcher Audio Console (DAC)** is an audio device, which handles the TETRA voice streams directed to/from the dispatcher operators.

The Dispatcher Audio Console is connected via a physical audio path to a dedicated audio port available at a TETRA WDS (WAN Dispatcher Station), LDS (LAN Dispatcher Station used in the Control Rooms) or RDS (Radio Dispatcher Station) site and provides facilities to connect audio equipment such as a headset, microphone and loudspeakers.

The DAC is used as an audio device for exchanging audio and PTT signalling with the following types of Dispatcher Systems:

- **WDS** (WAN Dispatcher Station);
- **RDS** (Radio Dispatcher Station);
- **CRS/LDS** (Control Room Server)/(LAN Dispatcher Station).

Large choice of audio interfaces

The DAC offers an interface between a single dispatcher position and the following equipment:

- Desktop Microphone;
- PTT devices:
  - Foot Switch PTT;
  - Desktop PTT (included in the Microphone);
  - Handset PTT.
- Analogue Recorder;
- Two Loudspeakers (for listening to Selected and / or UnSelected calls);
- Two remote loudspeakers;
- Headset including microphone (as used in Call Centres);
- Handset including PTT button.

FUNCTIONAL FEATURES

Due to the number of audio accessories and PTT devices that can be connected at the same time, a method of operating has been established.

The table below illustrates the way the DAC operates when more than one choice is possible for audio and / or PTT signals.

For a better understanding of the table it is important to clarify the function of each loudspeaker:

- **Loudspeaker for Selected call(s):**
  this is the one dedicated to calls the Dispatcher Operator is participating in (i.e. the PTT function is active on these calls). There can be more than one call as the SELEX Communications wired Dispatcher Stations can manage more than one Selected call.

- **Loudspeaker for UNselected call(s):**
  this is the one dedicated to calls the Dispatcher Operator is only monitoring. There can be more than one call as the SELEX wired Dispatcher Stations can manage more than one Unselected call.

The behaviour of the DAC console can be modified by setting some internal dip-switches (see DAC Technical Handbook).

Mechanical aspects

The DAC chassis is suitable for fitting into a rack (in a console). For stand-alone use (e.g. for desktop use) the DAC is fitted in an enclosure that provides the desktop facilities. The chassis is strong enough to support a PC monitor (up to 21 inches diagonal).

Remote loudspeaker

The DAC is already equipped with two loudspeakers, but can also use custom loudspeakers, if required, having two dedicated outputs.

Audio recording

The DAC provides outputs for analogue recording of audio signals, distinguishing the audio of the Dispatcher Operator from the audio directed to the loudspeaker (calling / called users).

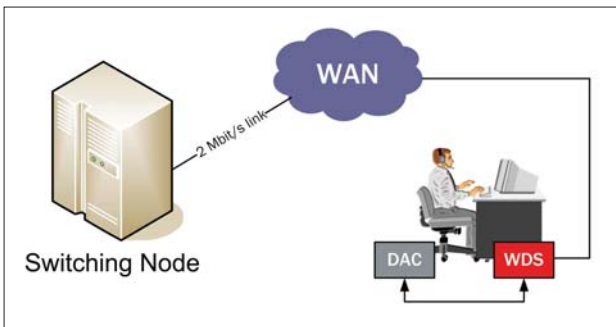| Condition	Output for UnSelected calls	Output for Selected calls	Input for Selected calls	Input for PTT signal
Plugged headset connector (handset on hook)	UnSelected headset speaker. It is possible to also hear the UnSelected calls in the UnSelected (left) loudspeaker. It is also possible to have the unselected output on both headset speakers.	Selected headset speaker. It is also possible to hear the Selected calls in the Selected (right) loudspeaker. It is possible to hear the Selected calls in both headset speakers.	Headset microphone	Foot PTT switch
Off hook handset	UnSelected (left) loudspeaker.	Handset speaker. It is possible to also hear the Selected calls in the Selected (right) loudspeaker.	Handset microphone	Handset PTT switch
Unplugged headset and hooked handset	UnSelected (left) loudspeaker.	Selected (right) loudspeaker.	Desktop microphone	Desktop microphone PTT switch. It is also possible to use simultaneously ("or" condition) the foot PTT switch
Unplugged handset and plugged Microphone	UnSelected (left) loudspeaker.	Selected (right) loudspeaker.	Desktop microphone	Desktop microphone PTT switch. It is also possible to use simultaneously ("or" condition) the foot PTT switch

TECHNICAL DATA

Vac supply range:	110 VAC to 230 VAC
Input frequency:	50 Hz to 60 Hz
Power consumption:	Max. 40 W
Output signal level:	400 mVrms
Size:	Max. 450 x 315 x 104 mm
Weight (net):	4,75 kg.
Cooling system:	Convection
EMC specifications:	CEI EN55022
Installation category:	II in accordance with IEC664

Environmental specifications
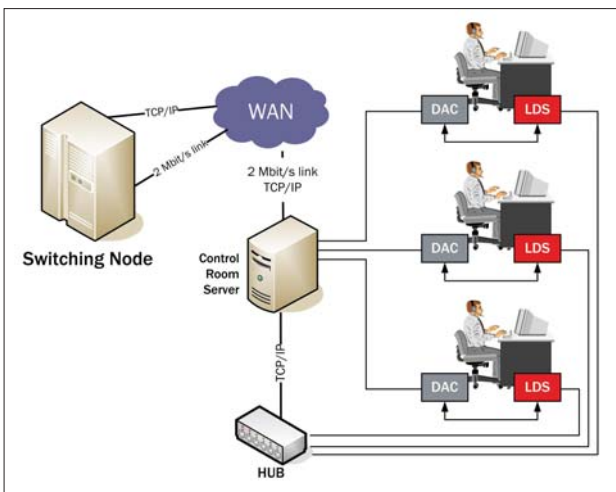
Operation:	ETSI ETS 300 019-1-3, class 3.1 (+5 °C to +40 °C)
Storage:	ETSI ETS 300 019-1-1, class 1.2 (-5 °C to +45 °C)
Transport:	ETSI ETS 300 019-1-2, class 2.2 (-25 °C to +70 °C)

DAC versions

DAC 1-A/R	DAC with audio recording outputs
DAC 1-AVR	DAC with audio recording outputs, audio volume controls and remotable loudspeakers

Example of WAN Dispatcher Station (WDS) connection

Example of LAN Dispatcher Station (LDS) connection

AUDIO ACCESSORIES

Desktop Microphone

The desktop microphone is equipped with:

- PTT button;
- PTT button lock;
- Yellow LED indicating PTT locking;
- Cable with anti-rip Kevlar reinforcement.

Headset

Equipped with:

- On/Off microphone switch (mute function)
- Headset speakers volume control
- High sensitivity adjustable microphone

Handset

A handset can be supported on the front of the DAC by means of a magnetic support (visible in the photograph). The handset is equipped with a PTT button.

Foot PTT

The foot-PTT is mandatory when the headset is selected, but is often used to free the operator's hand.

SELEX
Communications

e-mail: info@selex-comms.com • www.selex-comms.com