

DCN Analog Audio Input/Output Module

Extending the possibilities of DCN Congress Systems

Connect interpreters at remote locations via a telephone coupler
Connect interpreters at remote locations via video conferencing equipment
Share languages between DCN systems
Record DCN audio
Distribute external music/audio on DCN interpreter channels



The DCN Analog Audio Input/Output Module (AIO module) provides an interface between DCN systems and external analog audio signals. This enhances the flexibility of DCN and offers several exciting new application possibilities. These include providing a long-distance audio (and video) link for simultaneous interpretation, linking different DCN systems to allow sharing of interpretations and offering extra scope for recording translations and distributing external music or speech. The AIO module offers an easy way to expand any DCN network. Installation is quick and straightforward - the AIO modules are simply daisy-chained to the existing DCN trunk cable - and the

modules themselves are easy to operate, and have LED status indicators. Controlling settings can be done from the modules themselves or remotely via customized panels. Each DCN system can accept as many as 30 AIO modules in total.

The AIO module is a standard Eurocard assembly (100 x 220 mm), and up to eight modules can be housed in a standard 19-inch Eurocard rack mounting frame* with a height of 3 HU (5.25 inches).

**To order 19-inch racks, refer to www.schroff.de*

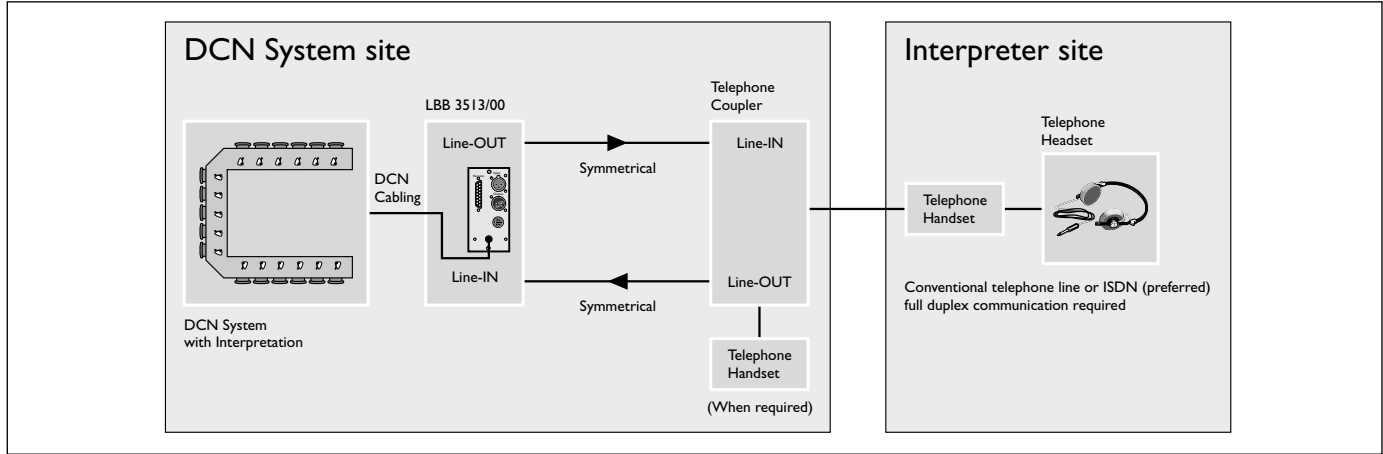
Connect interpreters at remote locations via a telephone coupler

The AIO module takes the sophisticated simultaneous interpretation possibilities of DCN one step further. Now interpreters can provide real-time translations - no matter where they are located. This saves time and reduces costs since interpreters no longer have

to be accommodated at the DCN site itself. All that is needed is one AIO module per interpreter and a telephone coupler. The floor or chosen language channel is sent to the interpreter via the telephone coupler, and the translation is returned via the coupler and AIO module, and distributed throughout the DCN system. Conventional telephone

lines providing basic telephone speech quality can be used, or for higher speech intelligibility, ISDN (recommended). ISDN G 722* and ISDN MPEG Layer 3* give even better audio quality.

**ISDN MPEG Layer 3 gives the highest audio quality, but produces a 300-millisecond delay. ISDN G 722 gives almost no delay.*



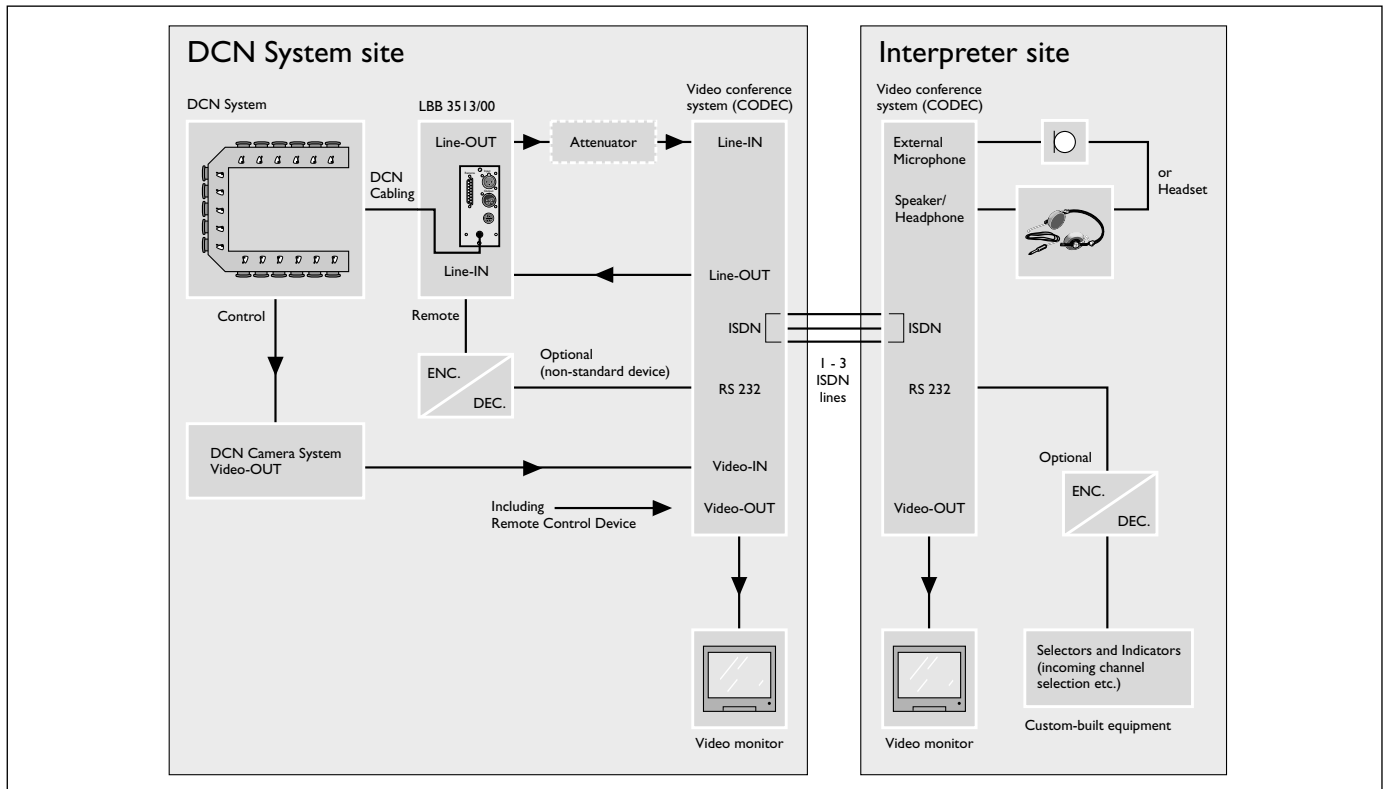
A telephone coupler is used to connect an interpreter at a remote site. It is recommended that the Telos ONE coupler (for normal phone lines) or Telos Zephyr coupler (for ISDN) is used (see www.zephyr.com). The AIO module limiter should be set to OFF. The AIO and Telos ONE are connected via the symmetrical audio input and output XLR connectors.

Connect interpreters at remote locations via video conferencing

To make simultaneous interpretation as lifelike as possible, and allow face to face communication, the AIO module can interface with a Video Conference

System. One AIO module per interpreter is connected to the CODEC of a Video Conferencing System at the DCN site, which is in turn connected to a remotely situated CODEC via ISDN lines. One CODEC is required at each

site. A video monitor is used at the interpreter site to view the speaking delegate. A menu-driven interface at both locations is used for dialing and configuring audio and video settings.



Video conferencing with DCN. In the example shown, three ISDN lines are used. However, depending on the application, it is possible to use two or even one ISDN line.

NOTES: Input and output audio levels can be adjusted at each CODEC. It is also possible to mute the microphone at the remote site. The limiter of the AIO module must be OFF. For the best results, the CODEC echo cancellor should be OFF. Some attenuation of the output signal from the AIO module to the CODEC may be neces-

sary. A delay of several hundred milliseconds may occur between transmission and receiving the translation. The application can be customized using dedicated hardware e.g. LED indicators and channel selection at the interpreter's site. These are connected via an encoding/decoding device to the RS232 serial data port of the CODEC. With respect

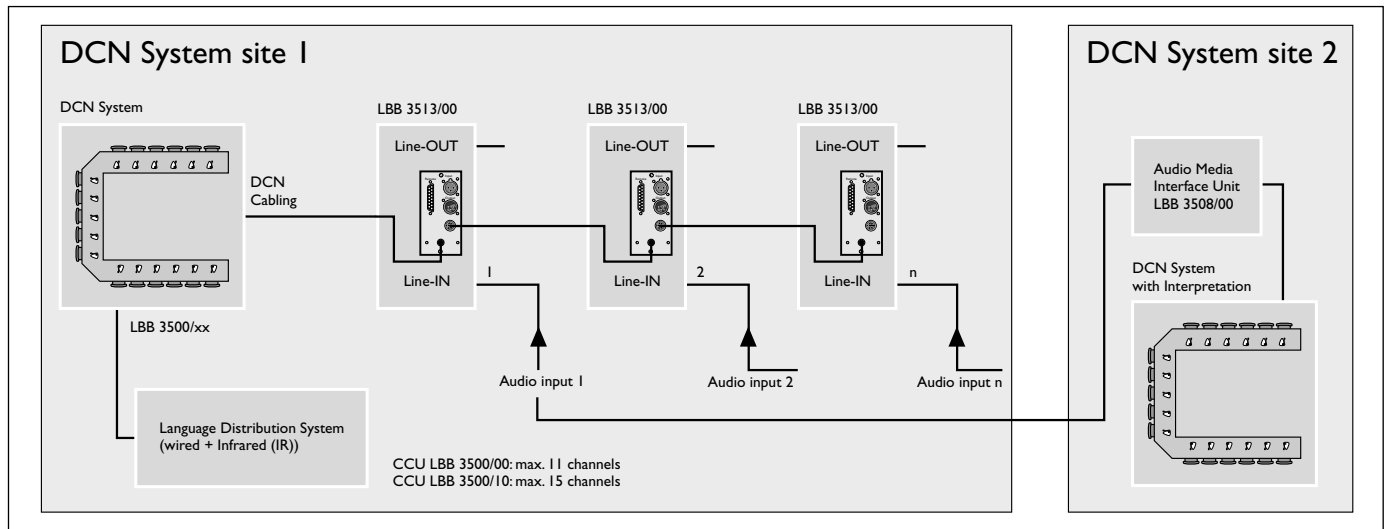
to interlock settings, the AIO modules are treated as though they are located in different booths. This means that only the 'Between Booths' interlock settings are applicable to AIO modules. If there is no microphone mute switch connected to the AIO modules, it is advisable to use the 'None' interlock setting.

Share languages between DCN systems

Maximize efficiency and economy by allowing two or more DCN systems to share the same interpretations. An Audio Media Interface Unit

(LBB 3508/00) supplies the output from one DCN system (site 2), which can either be an interpreter channel or the floor language. The AIO module at site 1 receives and distributes the audio via the language selectors. Each Audio

Media Interface Unit has four outputs. The DCN system can receive up to 11 interpretations (stand-alone and Multi CCU systems) or 15 interpretations (PC controlled systems).



An AIO module is used to allow two DCN systems to share the same interpretation.

Record DCN audio

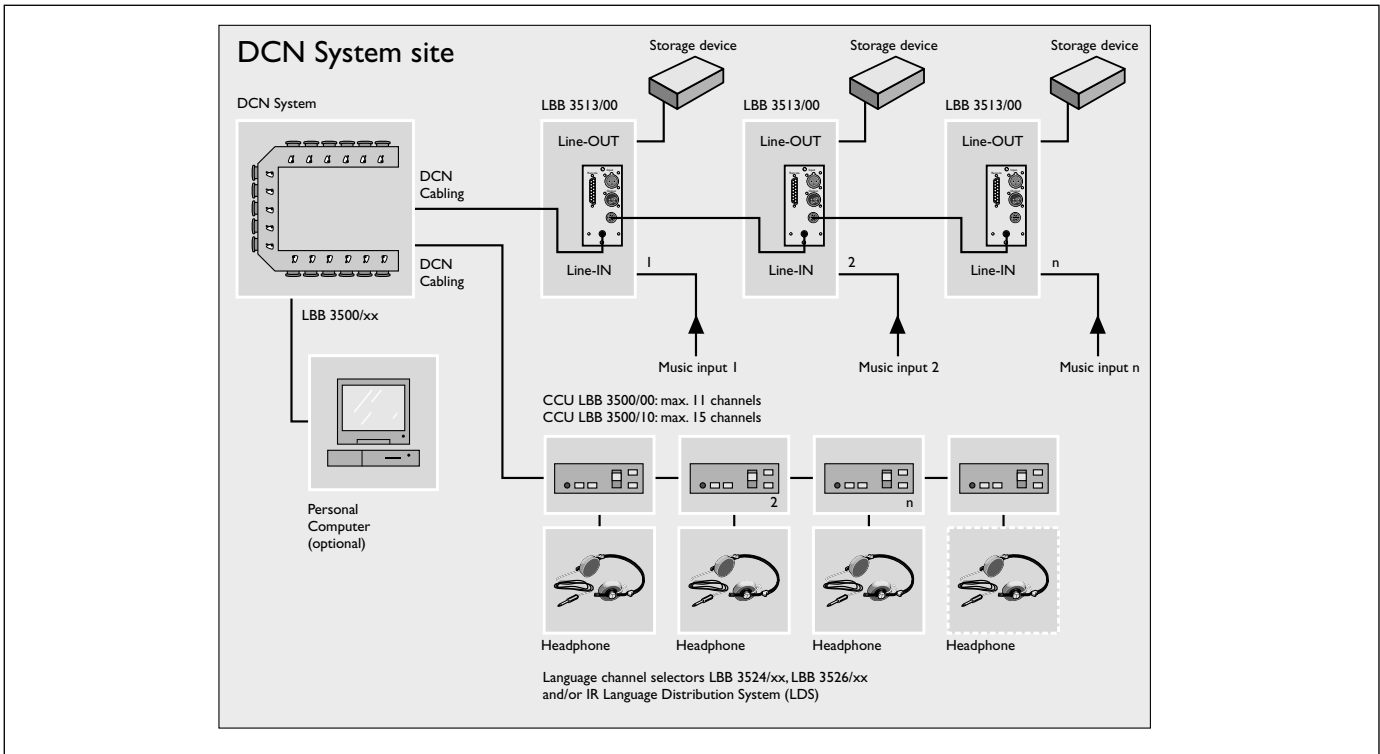
It is often crucial to record interpretations made during a conference, so that they can be accessed later. DCN now offers two ways of achieving this. Firstly, the Audio Media Interface Unit has four outputs that can route audio to the chosen storage media. However, if only one channel must be recorded, the AIO module offers a simple

solution. Each AIO module can receive and route one channel.

Distribute external music/audio on DCN interpreter channels

DCN systems can distribute an external music source via language channels. Delegates can simply select the required channel on their Channel Selectors and listen to the music over headphones.

Alternatively, delegates can use infra-red receivers via the Infra-Red Language Distribution System. One or more AIO modules provide the interface for the music source(s) with the DCN system. The maximum number of inputs is 11 (stand-alone system with Basic CCU or Multi CCU system) or 15 interpretations (PC controlled systems).



The AIO module offers a simple, cost-effective way of recording translations and distributing music.

Note: For more information and support, the Philips CSI Sales Support group can be contacted through your local Philips sales organization.

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