



## Integrating AMTELCO XDS Line Interface Boards in an Asterisk® Environment

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The AMTELCO XDS Asterisk channel driver has been designed for use under the Linux Gentoo Operating System (kernel 2.6) and has been tested for use alongside Asterisk version 1.4.7.1. The AMTELCO installation package includes the XDS device driver as well as the XDS Asterisk channel driver and supporting instructions.

The XDS channel driver currently provides support for the following XDS H.100 PCI boards:

H.100 24-Port Station Interface Board	H.100 4-Span T1/E1 Interface Boards
H.100 12/24-Port Loop Start Interface Board	H.100 8-Span T1/E1 Interface Boards
H.100 8-Port E&M Interface Board	

Included in the channel driver are the basic capabilities to receive and generate calls for each board type within the Asterisk environment. Caller ID (name and number) is also supported for Loop Start, Station, and T1/E1 interface boards. Distinctive ringing is supported for station interface ports.

Systems utilizing the 4-port XDS T1 or E1 interface boards also benefit from optional conferencing capabilities, which are accessible through an AMTELCO conferencing application (included with the XDS channel driver). While this conferencing utility is applicable only to channels associated with XDS interface ports, conferences of this nature can be accommodated using the integrated XDS hardware resources to minimize loading on the PCI bus and the PC host processor.

Native connections made directly between two XDS ports will have their audio paths established across the external H.100 bus between XDS boards, rather than the PCI bus. This also minimizes loading on the PCI bus and the PC host processor. Audio switching in these cases is managed by the XDS channel driver, and is transparent to applications at the Asterisk layer. If audio is still desired on the PCI bus for these connections (for logging or other requirements), this can be optionally enabled in the AMTELCO configuration file.

Larger applications can be designed within the Asterisk environment to utilize AMTELCO channels in the same way as those channels associated with other non-AMTELCO resources. This may include wider, more universal conferencing implementations for channels that span multiple vendors, as well as recording and playing back audio from a fixed data drive for voice mail, call logging, broadcasting of automated prompts, or other purposes. The AMTELCO Asterisk channel driver allows AMTELCO resources to be managed seamlessly within the standard Asterisk programming architecture for a true multi-vendor integration.

Legacy versions of the XDS boards listed above may be compatible with the XDS channel driver (contact AMTELCO XDS support for assistance in qualifying existing boards). New XDS H.100 boards currently purchased will be compatible. Asterisk specific board firmware is included with the AMTELCO Asterisk channel driver package, along with the required downloader application.

For sales assistance regarding the AMTELCO XDS Asterisk channel driver, as well as any XDS H.100 line interface products, please contact Jim Becker ([jim@amtelco.com](mailto:jim@amtelco.com)) or Bill Curtin ([bill@amtelco.com](mailto:bill@amtelco.com)) at 1-800-356-9224.

For technical support, or for assistance in downloading the AMTELCO Asterisk channel driver package or supporting documentation, please contact AMTELCO support personnel at [xdssrvc@amtelco.com](mailto:xdssrvc@amtelco.com) or at 1-800-781-6120.



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