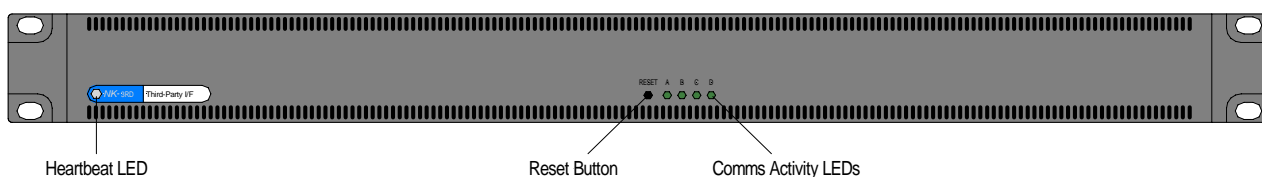


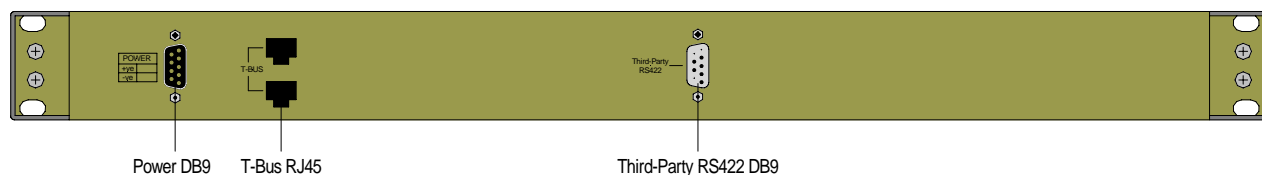
NK-3RD Third-Party Interface

Overview

The Codan Broadcast NK-3RD Third-Party Interface enables a third-party control system to control an NK Series routing switcher system using a subset of the SW-P-08 protocol. Using this protocol, an NK Series router can be controlled, allowing crosspoint switching, and status updating with minimal configuration. The NK-3RD connects directly to the NK Series T-Bus using Cat5 cable and to a third-party system using RS422 via a DB9 connector.



NK-3RD Front View



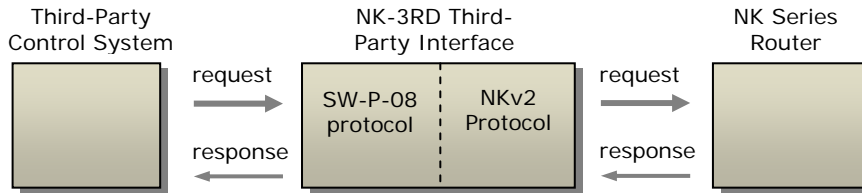
NK-3RD Rear View

Features

- Works with any NK Series router, including new NK-3G routers
- Supports crosspoint switch commands, and crosspoint status requests.
- Up to 1024 outputs may be controlled
- Up to 1024 inputs may be controlled.
- Supports up to 16 levels.
- Matrix number can be configured, up to a maximum of 16.
- Virtual routing is supported through NK-VRC Virtual Routing Core.
- Firmware is fully upgradable using Phoenix Control Surface with downloads from the Codan Broadcast website
- Slim, modular design integrates with NK Series routers via T-Bus
- Minimal configuration required for operation. Default settings allow it to work with any NK Series router.
- Comms Activity and Heartbeat LEDs indicate operational status

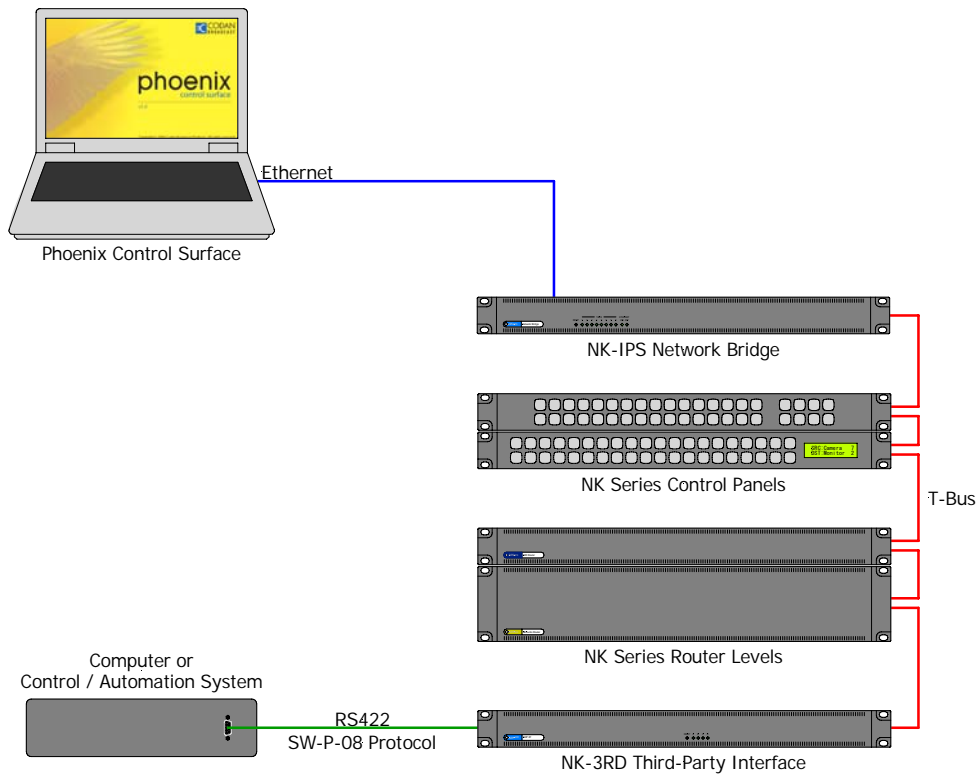
Functional Overview

On power up the NK-3RD requests the complete NK Series status or tally information. The third-party system requests this status on startup as required. The NK-3RD will also send status change messages from the NK Control System, so polling is not required. Any switch requests or tally requests received by the NK-3RD are converted to NK Series switch or status requests.



Block Diagram of Protocol Emulation

The NK Series system may be as complex or as simple as required. A medium scale system is shown with control panels and Phoenix control. For the simplest installation, control panels and Phoenix are not required, only a single router level.



Typical System Connection Diagram

Configuration is simple, using Phoenix Control Surface software or a web browser via the NK-IPS Network Bridge. For simple systems, the NK-3RD will work out of the box, requiring no further configuration.



NK-3RD Phoenix Configuration