



# COMMUNICATIONS CONVERGENCE

REDEFINING  
TELECOM

August 2002

## FORUM CONFER III



by John Jainschigg [jjainschigg@cmp.com](mailto:jjainschigg@cmp.com)

Audioconferencing can be a problem for small businesses. Maybe your phone system doesn't do conferencing. Maybe it only lets three people conference together. Maybe it can't be accessed remotely without inside help — not good, if you spend a lot of time on the road.

Dial-up conference services are a possibility. But they cost money. You may have to reserve space on a bridge. And dialup conferencing may be harder to use than a simple “let's get together and chat” conference really requires.

What's the answer? One good solution is found in Forum Communication's (Richardson, TX — 972-680-0700, [www.forum-com.com](http://www.forum-com.com)) ConferIII: an unobtrusive, easy-to-install, inexpensive conference bridge that serves informal (“meet me”) conferences with up to eight participants, or can be reconfigured to support two conferences of four persons each. The ConferIII bridge can also be extended by cabling additional units to the main unit and providing sufficient station-side connections. These devices can be daisy-chained together across a new digital backplane. This lets you build a 72-port conference system in a single

**This eight-port, “meet me” teleconference bridge is inexpensive, easy to install and use, and has some nice features. And it expands!**

card cage. Up to three cages can be daisy-chained together for a maximum system size of 216 ports.

The ConferIII is an upgrade of Forum's six-port ConferII product: a reliable bridge with several years of field history and a solid reputation. Like the ConferII, the III is housed in an oblong blue metal box with keyslots for wall-mounting. Along the side of the box are eight modular jacks, a few simple controls, and a pair of LED readouts, plus mini-jacks for attaching audio recording gear (should you want to record conferences).

Installing the box involves mounting it on the wall (or not), plugging it into an AC outlet and attaching modular cables from up to eight PBX analog station ports or regular POTS lines. Typically, extensions serving the bridge are arranged in a hunt-group, so that incoming calls find a free port. If the bridge is

configured to support two four-party conferences, two hunt groups makes sense. We used a multiline analog line simulator from Teltone (Bothell, WA — 425-487-1515, [www.teltone.com](http://www.teltone.com)) to spin up our eval unit. Since echo cancellation is now standard, no impedance-matching is required on installation.

Configuration comes next. This can be done through a phone connected to the first (Conference Manager) port, by flipping DIP switches (you need to remove the metal cover), or by attaching an RS-232 cable and PC-based terminal emulator to the serial maintenance port. Defaults are sensible; passcodes are easy to change. The one tricky configuration step is a set-and-forget one, unlikely to be repeated: you need to determine how your phone system signals far-end hangup to an extension: by tone, fast busy, loop-current drop, or other means. This prevents ports from remaining open once a participant has left. If none of the built-in options work (unlikely), the bridge will accept DTMF input (press “9#”) from a participant as a signal to hang up their port.

Using the bridge is easy. You dial an extension, listen to a brief greeting message, enter a four-digit passcode, and you’re joined to the current conference (depending on bridge configuration, this can be an eight-port conference or one of two four-port conferences, held on the lower four and upper four ports, respectively). Participants hear a “join tone” and then can talk freely. Once all participants are accounted for, the conference (or four-port bridge zone) can be locked (or unlocked) by any participant — the virtual equivalent of shutting (and later opening) the conference room door. There are also simple (DTMF-actuated) controls that let participants mute their own input, and let the current speaker boost their own voice.

Sound quality on this device is clear and bright. The noise-floor is obviously being detected and cancelled to some degree. The bridge automatically cancels echo on each port, and provides automatic gain control: polling inputs to detect the current speaker and boosting their signal a little to insure good intelligibility. There are no glitches in the (minimal) configuration or access routines, DTMF commands are received and processed without flaw. Later in our testing, we stressed the bridge’s noise-handling systems by attaching it to outside POTS lines and dialing into it with cell phones, creating a mixed conference with both wired and wireline participants. Worked fine — nothing to report.

We’re looking forward to testing the ConferIII expansion system and the conference monitor option due later this year. Though the price has yet to be finalized, at essentially the same price per port as the previous version, the ConferIII represents a uniquely solid value, that’ll keep users happy.