

## Telos Zephyr Express

By Ted Tait

**S**implicity and flexibility wage a constant battle in the realm of technology. The more options you have, the more complex using a piece of hardware or software becomes. Just look at the pulldown menus on your computer programs, and you'll know what I mean. Ultimately, a wealth of choices can lead to greater flexibility, but they can also be daunting for the new user.

### Audio flow

The mixer handles two mic inputs, two line-level inputs and two line-level outputs, with flexible monitoring. At this point, the unit can seem confusing, but it can be set up as simply as you like. The Express can use one or both of the two ISDN bearer channels for increased audio performance on mono or stereo feeds. It can also separate the channels to send two different mono feeds

to different destinations. This feature has come in handy when feeding various news outlets on a breaking story.

Each of the two mic inputs can feed either or both of the codec channels. The two

line inputs can feed each codec channel in-



### Performance at a glance

- Combined mixer, HP amp, TA and codec
- Lightweight
- G.722, Layer II, Layer III and ISDN voice supported
- Flexible operation modes
- Safe mode for inexperienced operators
- Well-written documentation in plain English
- External power supply
- Internal or external NT-1

At a remote broadcast, the last thing you need is a piece of equipment with so many options your staff cannot figure it out. The Telos Zephyr Express addresses this issue. It is a powerful device for the person who knows how to use it, yet those with less

experience will find it simple and user-friendly.

We all hate lugging crates of gear to and from remote locations. The Zephyr Express provides almost everything you need for a remote broadcast in one box. It combines an ISDN terminal adapter, a codec, a mixer and a headphone amp in one lightweight unit that includes a carrying handle and an external power supply. The ISDN portion of the unit is just like the Telos Zephyr, which may already be familiar to you. The Zephyr Express offers an integral NT-1 if needed or it can be hooked to a circuit that already has the NT-1 provided. The codec handles Layer II, Layer III and the ubiquitous G.722 formats. It is also possible to place regular voice calls over the ISDN circuit using the mic and headphones.

dividually, or they can be combined and fed to both. There is only one volume control for both line feeds, which is a drawback. (Apparently, the designers figured the unit was most likely to be used for a single stereo input rather than two independent mono inputs.) The line input connectors are interesting in that they accept either an XLR or ¼" plug on the same connector.

Monitoring is flexible as well. There are two separate monitor circuits, each of which can listen to either (or both) send channels as well as either (or both) returns. In addition to a headphone jack, monitor one feeds XLR connectors on the back for a PA system feed if needed (such as for a live audience). The other monitor circuit appears only as two isolated ¼" headphone jacks. Since you can select which monitor gets which audio, it is easy to set up your monitoring the way you want.

The Zephyr Express comes with an external power supply that plugs into the back of the unit. The unit was designed this way because of concerns related to heat if an internal power supply were used. Even so, the unit has a cooling fan and vents on the side. The unit produces a fair amount of heat, even without the power supply inside, so the cooling fan performs an important function.

When my Express was delivered, I had only one problem with it: The cooling fan was rather noisy. The Telos folks responded quickly to my call; they promptly sent a replacement fan. They offered to replace the part themselves, but I decided to do it. When I opened the

unit, I was able to replace the fan quickly and painlessly. Once I changed the part, noise was no longer a problem. As an aside, Telos is good about allowing you to open their gear when necessary without voiding the warranty.


All of the settings for ISDN and codec configuration, mic and line sensitivity, mixer panning, and auto-dial numbers are configurable using the controls on the front. The large knob is the main interface with which you dial up or down to a selection. You then press briefly to enter the selection. Holding the knob down makes it function as an Escape key, exiting you out of a menu. Just about anything you can think of is configurable, which makes the unit confusing at first. It takes an engineer a little time to get the hang of the menu layout.

### Playing it safe

The Safe mode makes the unit simple to operate. If the unit will be used by less experienced per-

sonnel, all the proper settings can be made in advance, then the unit can be placed in Safe mode. In this mode, you can lock a user out of any of the menus. At its most restrictive, you can prevent a user from changing anything other than the levels on the pots. Yet you can allow or block each feature as you see fit, so you can customize the Safe mode to the technical ability of the user. You can prevent staff from changing vital settings like the SPIDS and switch type or you can restrict access to everything but your preprogrammed auto-dial numbers. As with each of the setups, you can create a Safe mode configuration, give it a name and recall it for use as needed.

I have sent our Zephyr Express out with journalists on various trips with minimal instructions. As long as the programming is right before it goes out the door, it is easy to use. Journalists who have use it have been pleased with its simplicity. What makes the unit even

more flexible is the fact that Safe mode does not lock the unit. If you need to talk a user through a setting change in the field, all they have to do is move a DIP switch on the back to revert to full access of all menus. Safe mode does not lock the unit from intentional tampering. Rather, it simply stops the inexperienced user from changing settings accidentally. In our case, that is exactly what we needed. 

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