

TBDK-0028
May, 1999

Two-CO Line External Amplified Conference PCB

This bulletin provides information on an amplifier that works with the Strata DK Two-CO Line External Amplified Conference feature.

TAIS has identified the Tellabs 7206 2-Wire, Switched Gain, Compression Amplifier as a compatible product that enables this feature. The attached PDF file contains two new pages from the *Strata DK Installation and Maintenance Manual*. The Tellabs 7206 replaces the Rel-Tech VFR-5050.

The 7206 amplifier is a printed circuit board (PCB) that mounts in a card cage. More than one card cage configuration is available from Tellabs to support different quantities of amplifiers. These configurations require specific power supplies. For configuration assistance, call Tellabs at 1-800-445-6501. For a product description, visit Tellabs website at www.tellabs.com/products/analog-ssp/atp.html#vf and use your browser to search for "7206."

Amplified Talk Path

Figure 10-19 provides a functional diagram of a two-CO line amplified conference connection. (A Tellabs 7206 amplifier is used here.) The talk path for the connection is as follows: outside party 1 – public telephone network – CO PCB, CKTX – RCTU – PEKU, port A – into AMP, Line in, – AMP, Line out – PEKU, port B – RCTU – CO PCB, CKTY – public telephone network – outside party 2. This path is two-way so when outside party 2 talks, the talk level is amplified in the reverse direction.

Note Only the outside party 1 talk path is amplified to/from a system telephone when it is connected into a two-CO line conference.

Amplifier Requirements

- ♦ Customer-supplied (two maximum for DK40i and four maximum for DK424).
- ♦ Must be FCC-registered, Part 68, and provide automatic gain control.
- ♦ Each amplifier requires two PEKU station ports.
- ♦ See the amplifier manufacturer's installation documentation for amplifier grounding instructions.

► To connect a two-way amplifier to the Strata DK system

1. At MDF, connect the voice pair (VT, VR, port A) of circuit 2 on the designated PEKU PCB to one input of the customer-supplied two-way amplifier. In the example in Figure 10-19, this is CKTA (CO Side A) of the amplifier. (See the Amplified Two-CO Line Conference wiring diagram in Chapter 8 – DK40i/DK424 Universal Slot PCB Wiring.)
2. At the MDF, connect the voice pair (VT, VR, port B) of circuit 3 on the designated PEKU PCB to the other input of the amplifier. In Figure 10-19, this is CKTB (subscriber side B) of the amplifier.
3. Plug the amplifier's power cord into the 117VAC (standard) wall outlet.
4. Set the gain and other amplifier parameters options per the amplifier manufacturer's installation documentation.

Amplifier Programming

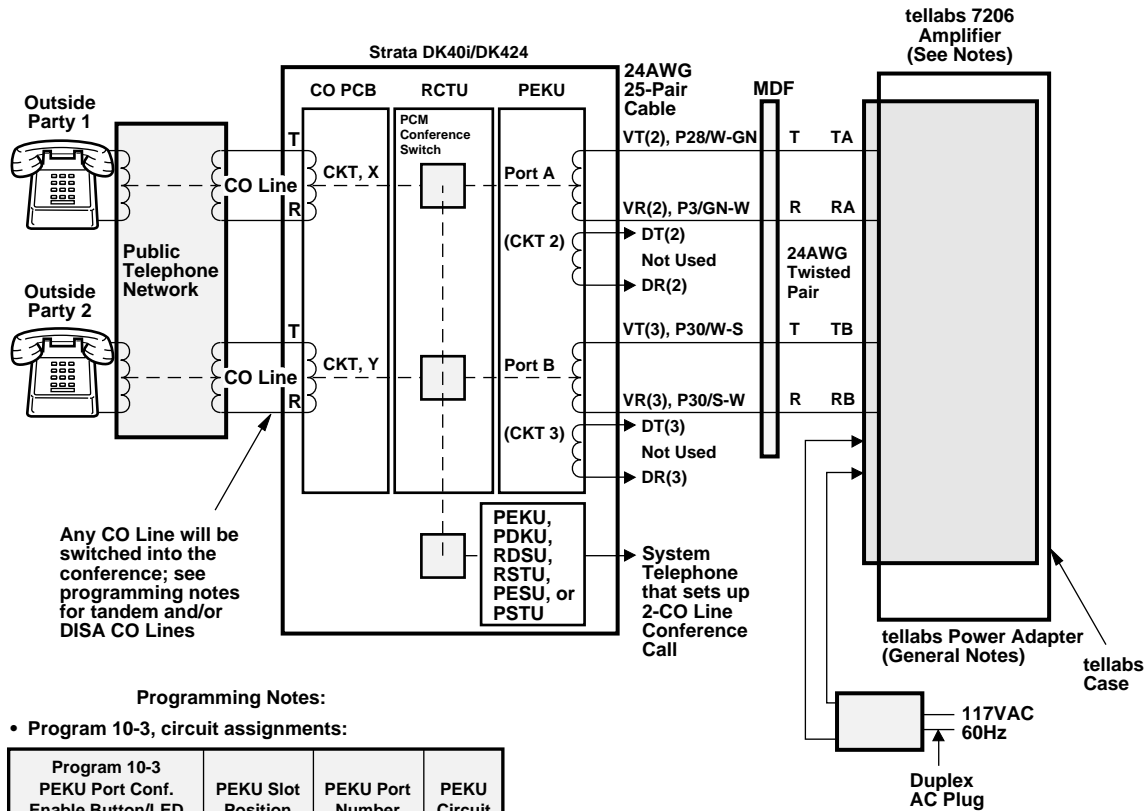
- ♦ Program 10-1: LEDs 19 and 20 must be ON.
- ♦ Program 10-2: LED 18 must be ON.
- ♦ Program 10-3: Enables the appropriate PEKU PCB ports for amplifier connection. Only enable the ports that will be connected with the amplifier(s).
- ♦ Program 15-5: Enables appropriate CO lines for Two-CO line tandem connection.

Note LED 19 in Program 10-1 should be ON if it is certain that an amplifier will always be available for two-CO line conference connections (four maximum, simultaneously). If this LED is ON and a two-CO line connection is established without an external amplifier, the Strata DK424 station may be unbalanced and receive a hum noise. LED 19 provides additional station amplification when external amplifiers are switched into two-CO line connections.

- ♦ Program 78-2: Enables appropriate CO lines if amplified DISA is required.

Peripheral Installation

Two-CO Line External Amplified Conference



Notes (Amplifier)

- All amplifier equipment is customer or dealer-supplied.
- Available in single and multiple configurations.
- For information regarding the tellabs 7206 two-way amplifier:
<http://www.tellabs.com>
1(800) 445-6501
- Install in accordance with tellabs technical manual *Through Signalling Configuration*.

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Figure 10-19 External Amplified Two-CO Line Call Functional Wiring Diagram