

# Picturephone® Service Switching System Designed for Business Customers

News of  
Customer  
Switching  
Development

Bell Laboratories engineers at Denver, Colorado, have developed a switching system for business customers to handle up to 89 lines for PICTUREPHONE® service. Until now custom-designed, nonstandard arrangements were needed to provide service for more than ten lines.

Called the 850A Picturephone PBX (private branch exchange, it may be used to connect video stations in intercom networks at business locations or to connect stations to the telephone company central office and telephone network.

Picturephone service, initiated in Pittsburgh in mid-1970, is becoming available gradually in other cities across the U.S. as central offices are modified for video service. Initially, most Picturephone service customers are expected to be businesses in urban areas.

The new Picturephone PBX works in parallel with the electromechanical types of current telephone PBX equipment being used by most medium-to-large companies to handle their ordinary telephone needs.

The 850A switching machine uses solid-state logic and a ferreed switching network. It is designed for flexibility. Plug-in circuit packs are added to increase its capacity from 10 to 89 Picturephone lines, as required by the customer. In operation, regular telephone calls are handled by the regular PBX. When a Picturephone call comes in, the 850A takes over.

The 850A performs all the switching operations required of a regular telephone PBX, such as conferencing and call transferring. It also can provide

access to a customer-provided computer to retrieve statistical or graphical information.

In operation, the PBX attendant's or receptionist's image could be transmitted to the caller until the call has been transferred to the desired Picturephone set. As an alternative, the PBX may be equipped with an optional piece of equipment, called a Video-Image-Generator (VIG), which is currently under development. The VIG would transmit a fixed image, such as the company's symbol, office picture, or

motto, to the calling party while the attendant processes his call.

The new 850A can be used to establish an "inside" intercom network for businesses served by central offices not yet equipped for video services.

The new Picturephone PBX will be manufactured by Western Electric at Denver for the operating telephone companies. One of the first units produced is being used for a Picturephone service network at the headquarters of Illinois Bell Telephone Company in Chicago.



*F. J. Bogart of Bell Labs 850A PBX Group at Denver, Colo., tests the conferencing capabilities of a new call switching machine for PICTUREPHONE® service. The 850A private branch exchange will handle up to 89 Picturephone lines per business customer location. The PBX also may be used for Picturephone intercom networks.*

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