

"PCBX<sup>TM</sup>"

BASIC INFORMATION

MAY, 1988





## PCBX

### BASIC INFORMATION

#### Introduction

PCBX is a professional Private Branch Exchange (PBX) Telephone system that doesn't require costly, button laden extensions. It enables small/medium size businesses to custom build their own telephone system to suit their specific needs for a surprisingly low cost.

Basically, the PCBX is a single board system with 3 optional interface boards. They are as follows:

1. 4 trunks, 12 stations (main board or optional)
2. 8 trunks, (optional)
3. 16 station (optional)

These boards are compatible with the AT&T 6300, AT&T 6300 plus, and IBM PC,XT, AT COMPAQ 386 or Compatible personal computers. The above may be used in any possible configurations. The basic card contains the logic to support all PCBX standard features.

Connections to the cards are made with a standard Amphenol RH21X that is provided with the card. This provides a simple interface incoming telephone lines as well as standard interface connection (RJ11) for almost all telephone handsets.

#### Protection

The system is designed to prevent foreign voltages from reaching the trunk under any circumstances. Transformer coupling and over-voltage protection are used for total isolation.

#### KEY SYSTEM ARCHITECTURE

The trunk interfaces provide all necessary protection to meet the PCC requirements, plus voice and signal conditioning. Voice and data information are passed to a matrix where the information goes to the system to indicate the current system condition.

The voice matrix is an analog crosspoint CMOS switch. The basic system consists of two 8X12 and two 8X4 crosspoint switches. Music-on-hold, station Touch Tones and System Progress Tones are separated to alleviate crosstalk within the switching structure.

PCBX has a battery reversal detector that alerts the CPU when the tip and ring polarity has been reversed. A loop detect circuit indicates when the connection has been terminated by the outside caller. Call progress detection is used to detect BUSY, RINGING, CONNECTION, DISCONNECTION and DIAL TONE. The ground loop detector is used to detect grounds on a groundstart trunk.

SYSTEM SETUP SCREEN

Provides for system configuring; i.e. computer type, processor speed and type, and terminal type. Also this screen allows entering of night-transfer numbers, adjustable timing values, and entering system programmable messages.

IMMM

Computer Type	IBM PC/XT
Screen Type	monochrome
Clock Speed	4.77 MHZ XT standard
CPU Type	8088 standard PC/XT

Hold Recall Time	30	seconds
Automatic Extension Callback Time	05	minutes
Redial wait Time	05	minutes
Call Transfer Pick-up wait Time	10	seconds

Night Transfer Number Trunk 1	27
Night Transfer Number Trunk 2	9 839-0122
Night Transfer Number Trunk 3	8 1 (818) 445-6754
Night Transfer Number Trunk 4	

Programmable Message 1	IN LAB ROOM
Programmable Message 2	NEW YORK OFFICE
Programmable Message 3	CONFERENCE RM#556
Programmable Message 4	OUT ON DEMO
Programmable Message 5	

Report Information File Name	report
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HHMMMMMMMM use cursor keys to select item or hit (end) to exit MMMMMMMMMMMM

PG-UP	-	to terminate program/with save
END	-	to terminate program/with save
ARROW KEYS	-	to select item
+ or -	-	to modify a numeric item
char/num keys	-	to enter programmable message
del	-	to delete message
backspace	-	to delete last char in message
(return)	-	to accept message entry
ESC	-	to save last changes to disk
^ C	-	to terminate program/no save





PG-UP	-	to return to previous screen menu
PG-DN	-	to View next screen menu
END	-	to exit current screen menu set
ARROW KEYS	-	to select item
+ or -	-	to modify a numeric item or to toggle on/off feat.
Char/num keys	-	to enter programmable message
DEL	-	to delete message
Backspace	-	to delete last char. in message