

DNA934P

Telephone Dialer Recorder

Ring Communications Inc.



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INTRODUCTION

The DNA934P is an interface used for connecting the Intercom Central Exchange to a telephone line connected to a PABX or the Central Office. One FXO Port is provided. Recorder messages, phone numbers, number of rings and number of times to play the Caller ID message are programmed using a master intercom station and a DNA100/PC. The DNA934P is compatible with CB901EX, RM5000EX and CB901CA.

OPERATION

The DNA934P Interface transfers calls from the intercom exchange to the telephone network. Up to 4 telephone numbers can be programmed. If a Busy or Ring-No-Answer is encountered then the next number on the list is dialed. If all 4 numbers are busy or no one answers then the dialer will continue to dial all 4 numbers until one of the numbers answers. When the dialed telephone answers, a recorded message is played to that telephone. This message will identify the name and address of the building where the call is coming from. Following this message the called party will receive a message identifying the intercom number that placed the call. The final message instructs the telephone operator to accept the call by dialing #1 or to refuse the call by hanging up. These messages are repeated 3 times (programmable) or until the #1 is dialed. If the telephone operator does not dial #1 or hang up then the next number on the list is dialed automatically. While in conversation the telephone operator may replay the caller ID message by dialing #2.

INSTALLATION

The DNA934P Interface connects to the telephone line on modular connector J3. Modular connector J1 connects to the Ring-Master Central Exchange for Power, Voice and Data.



Illustration 1: DNA934P rear view

J1 Connector:

Use a modular jack with screw terminals (KB171) for external connections. Connect the external jack to J1 using a modular cable (BF640A).

<u>Pin</u>	<u>Description</u>
1	- No Connection
2	- +12 VDC
3	- Data +
4	- Intercom audio (b)
5	- Intercom audio (a)
6	- Data -
7	- -12 VDC
8	- External Alarm

Connect Intercom Audio, 24VDC and RS485 Data to the Central exchange using 3 twisted pair cable (unshielded).

J3 Connector:

Use a modular jack with screw terminals (KB161) for connection to the telephone line. Connect the external jack to J3 using a modular cable (BF961).

Pin	Description
1	- No Connection
2	- No Connection
3	- Tip
4	- Ring
5	- No Connection
6	- No Connection

Connect the telephone line to pin 3/4 (twisted pair).

Front Panel Switches and Indicators:

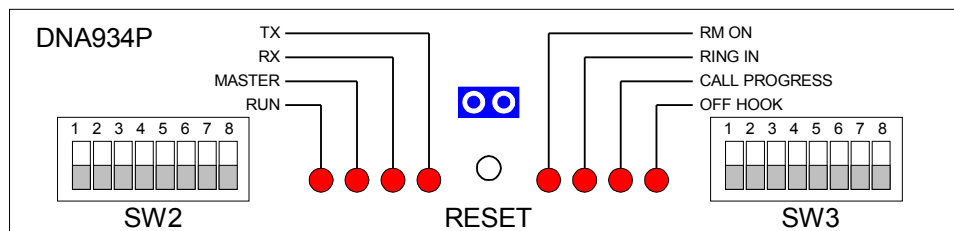


Illustration 2: DNA934P front view

Indicators:

RUN	-	Processor is active
MASTER	-	The Master of the RS485 Network will have this LED on.
TX	-	Transmit Data to the Network
RX	-	Receive Data from the Network
RM ON	-	Intercom port is active
RING IN	-	Telephone line is ringing
CALL PROGRESS	-	Audio detected on the telephone line
OFF HOOK	-	Telephone line off hook

Switches:

SW2 - Network Address.

RESET - Reset of Telephone interface.

SW3 - Options:

1. OFF
2. Exchange Interface for remote Conference Telephone Monitoring
3. Exchange Interface for remote Conference Handset
4. Interface at remote Conference Handset
5. OFF
6. OFF
7. OFF
8. OFF

Resetting Battery RAM:

When the system is first installed the DNA934P must be reset before any configuration is done.

Procedure

1. Set all 8 DIP switches in SW2 to OFF
2. Push and release RESET switch
3. Wait for MASTER LED to start blinking (reset complete)
4. Set Network address
5. Push and release RESET switch

CONFIGURATION

One DNA100 and a PC is used for programming the DNA934P. The DNA100 sets up a link to the DNA934P and the PC is used to input configuration commands. The configuration is stored in battery back up memory in the DNA934P. When the system is first installed the DNA934P must be reset before any configuration is done (see page 4).

Type fonts:

boldface type indicates user input
`courier font` indicates output

Prompt:

<> Angle brackets enclose input parameters
\$ Hexadecimal value

Error Handling:

Misspelled command input will give the following message: *Unknown Command*
Parameter errors will print `ERROR:` then prompt for the parameter again.

HELP COMMANDS:

The Help command list all the commands in the Configuration program.

DNA934P>**help**

DNA934P Command Summary

```
=====
?      Help
H      Help
LSD    List Speed Dial
SSD    Set Speed Dial
SRT    Set Ringing Timer
SMC    Set Message Count
R      Record Message
P      Play Message
```

Telephone Numbers:

Up to 4 telephone numbers can be programmed in speed dial list.

PROGRAMMING

The following commands are used:

SSD Set Speed Dial Number
SRT Set Ringing Timer
SMC Set Message Counter
LSD List Speed Dial Numbers

Example:

Program 631-585-7418 as the first number to dial

Program 631-585-7431 as the second number to dial

DNA934P>**SSD 1 6315857418**

DNA934P>**SSD 2 6315857431**

DNA934P>**LSD**

Choice	Telephone Number	Ringing Timer	Message Count
=====	=====	=====	=====
1	6315857418.....	5(x6sec.)	3 (times)
2	6315857431.....	5(x6sec.)	3 (times)
3			
4			

To Undefine a telephone number use the U option.

DNA934P>**SSD 3 U** removes choice 3 telephone number if programmed.

To insert a Pause in the dialed number use the P option.

The number following the P is the number of seconds of the delay.

DNA934P>**SSD 1 P46315857418** waits 4 seconds before dialing the number.

To insert a "wait for dialtone" use the option D.

DNA934P>**SSD 1 9D6315857418** choice 1 dial 9, wait for dialtone then dialing the number.

To change how long time it should ring for a telephone number:

Default is 30 seconds (5 x 6seconds)

DNA934P>**SRT 1 4** choice 1 ring for 24 seconds(4x6) then call choice 2.

To change how many times the recorded message is played for each choice:

Default is 3 times.

DNA934P>**SMC 1 6** choice 1 play message 6 times then call choice 2.

RECORDED MESSAGES

The recorder has 12 recorded messages:

<u>ID</u>	<u>Message</u>
0	“zero”
1	“one”
2	“two”
3	“three”
4	“four”
5	“five”
6	“six”
7	“seven”
8	“eight”
9	“nine”
10	“this call is from ring communications 57 trade zone drive you have a call from intercom number”
11	“to accept this call dial one to reject this call hang up”

To listen to a message:

Disconnect Telephone Line.

From a intercom master station dial the extension of the DNA934P.

From the PC enter the command

DNA934P>**P 10**

Message number 10 will now be played to the intercom speaker.

To change a message:

Disconnect Telephone Line.

From a intercom master station dial the extension of the DNA934P.

From the PC enter the command.

DNA934P>**R 10**

Speak the new message to the microphone of the intercom station, then hit enter to stop the recording.

RM5000EX / CB901EX CONFIGURATION

The DNA934P consist of one station port and one annunciator port in the Central exchange. The interface can be used to manually dial out on the telephone line from a master station by dialing the extension of the DNA934P. A telephone can dial in to the central exchange by dialing the phone number of the DNA934P then dial any intercom extension.

When the DNA934P receives a transfered call it will dial the telephone numbers that are programmed in choices 1-4.

Example:

Adding the DNA934P to an existing system.

Connect voice to call number 30.

Connect data to RS485 using Network address 0C.

Calls are to transfer from intercom 10 to the DNA934P if not answered by intercom 10 within 30 seconds.

Programming commands that need to be added to RM5000EX:

EX500>**SDT 30 2** Set device type ICM

EX500>**SPT 30 11 +** Set privilege "silent ring"

EX500>**SNA 30 1 0C** Assign annunciator to call number 30

EX500>**STN 10 1 30** Set transfer from intercom 10 to 30

EX500>**STD 10 1 05** Set transfer delay (5x6=30 seconds)

CB901CA CONFIGURATION

(CB901+DXC901)

The DNA934P consist of one station port and one annunciator port in the Central exchange. The interface can be used to manually dial out on the telephone line from a master station by dialing the extension of the DNA934P. A telephone can dial in to the central exchange by dialing the phone number of the DNA934P then dial any intercom extension.

When the DNA934P receives a transfered call it will dial the telephone numbers that are programmed in choices 1-4.

Example:

Adding the DNA934P to an existing system.

Connect voice to call number 130 subscriber address 1E.

Connect data to RS485 using Network address 0C.

Calls are to transfer from intercom 100 to the DNA934P if not answered by intercom 100 within 30 seconds.

Programming commands that need to be added to CB901CA:

For subscriber address 1E set device type = 2 (ICM)

For subscriber address 1E set annunciator = 0C

For each substation (type 1) set annunciator address 2 = 0C, delay = 5 (5x6=30 seconds)