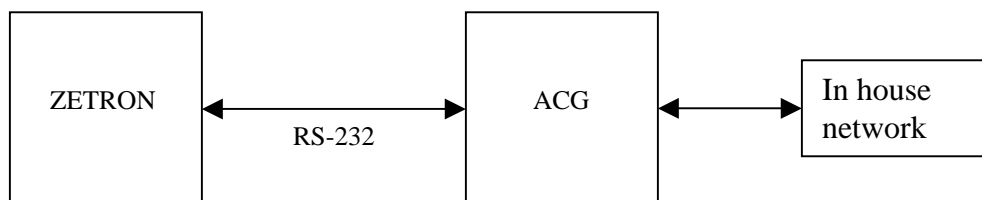


Application Note

Product: ACG
Purpose: Integration with a ZETRON Local Area Paging System
Date: 9/15/04

Integration of the ZETRON local area paging system with the Ascom Communication Gateway (ACG) will allow messages to be sent to any assigned pager in the ZETRON system from Desktop Messenger, Web Messenger, or any other Ascom application gate.

Communication between the ZETRON paging system and the Ascom Communication Gateway (ACG) is accomplished by using an RS-232 connection between the ZETRON paging system and the ACG.



RS-232 connection

- Use a null modem cable to connect the ACG and the ZETRON together. The maximum distance between the ACG and the ZETRON for RS-232 communication is 50 feet.
- The cable needs to have a DB9 female connector at the end connected to the ACG and a DB9 male connector at the end connected to the ZETRON.
- To avoid the RS232 distance limitation, a short-haul modem, the ATEN IC-150, may be used to increase the separation (up to 4,000 feet) between the ZETRON and the ACG. (See *the following section.*)

Application Note

Product: ACG
Purpose: Integration with a ZETRON Local Area Paging System
Date: 9/15/04

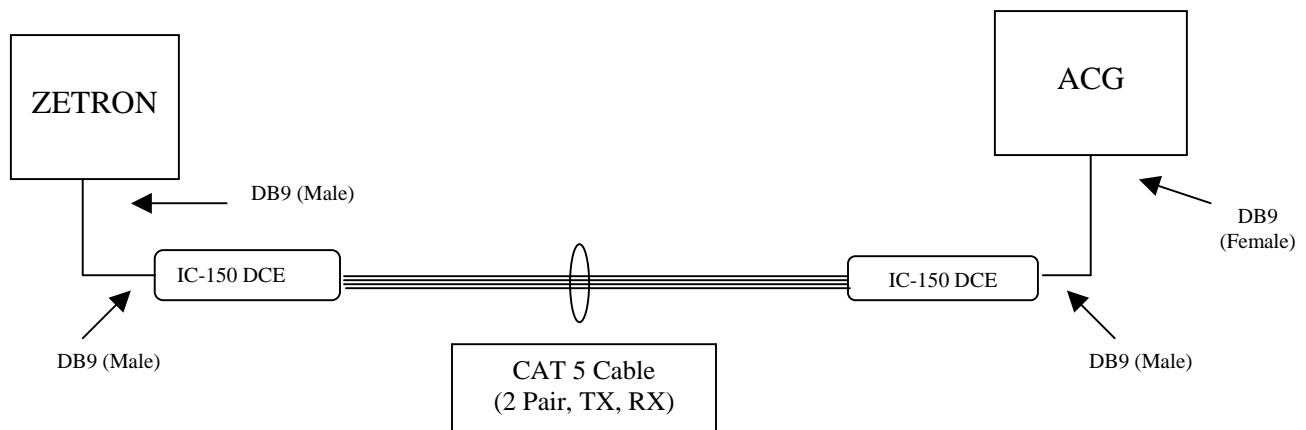
Short Haul modems

Vendor Information

- Vendor: ATEN
- Model: IC-150
- Cost: Approximately \$60 each

Technical Description

The IC-150 should be connected and configured as follows:



- Straight through DB9 Female to Male cable between the IC-150 and the ACG.
- Straight through DB9 Male to Male cable between the other IC-150 and the ZETRON serial port.
- 2 CAT5 house pairs connect the two IC-150's

IC-150 Interface Settings and Connections:

- IC-150 on ZETRON end set to DCE, Full Duplex.
- DCE terminal connector:

1	2	3	4
w/b	b/w	w/o	o/w

Application Note

Product: ACG
Purpose: Integration with a ZETRON Local Area Paging System
Date: 9/15/04

- IC-150 on ACG end set to DCE, Full Duplex.
- DCE terminal connector

1	2	3	4
o/w	w/o	b/w	w/b

ZETRON Paging System setup

- Pagers must be set up in the ZETRON paging system as they are normally set up for access from a ZETRON terminal using the ZETRON application MCU.
- The ZETRON paging system uses dual trunk cards. Each trunk card has two ports, each of which can be set up as an analog or serial port.
- Set up a port on one trunk card as a Serial port. This port will connect to the ACG. Setup information is contained in the following screen shots.
- Setup information is contained in the following screen shots for the Serial Trunk Card. Refer to the ZETRON technical manual for further information.

Application Note

Product: ACG
Purpose: Integration with a ZETRON Local Area Paging System
Date: 9/15/04

ZETRON Trunk Card Setup

Telephone Line Databases: Trunk Valid Numbers

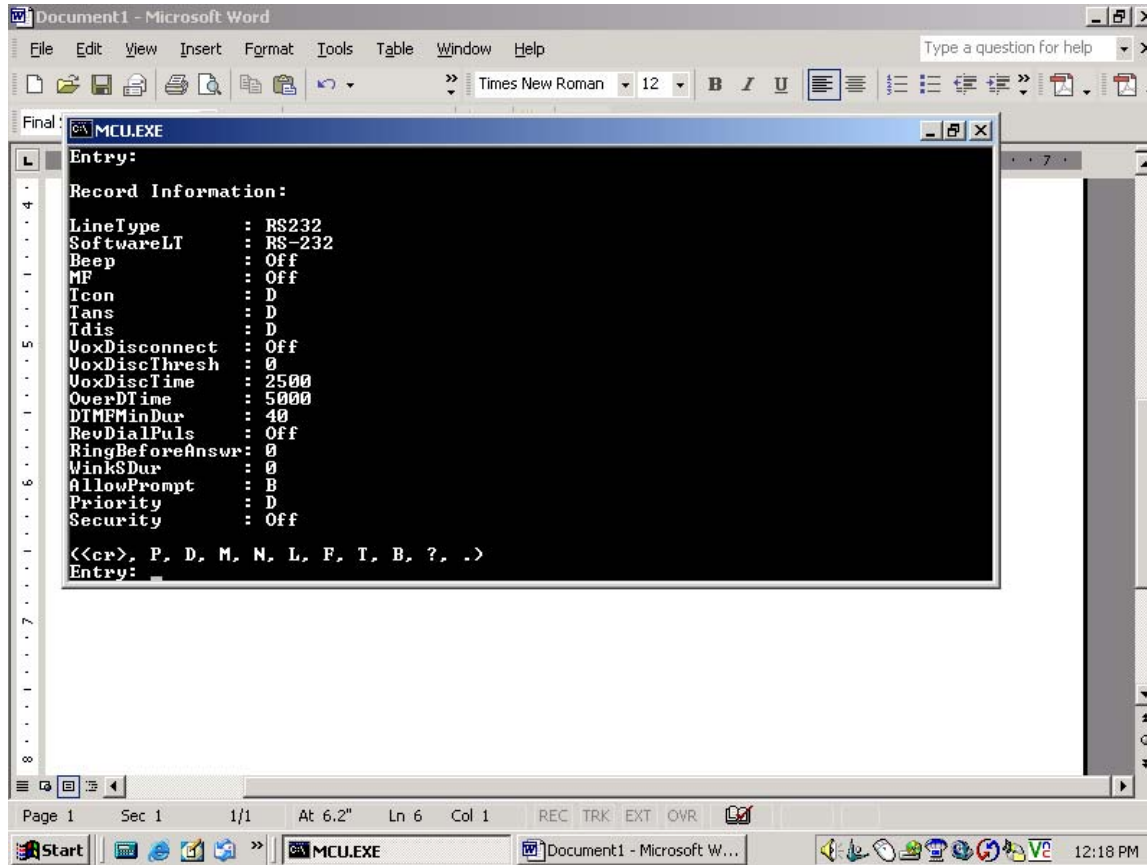
```
Final: MCU.EXE
Range10      : None
<<cr>, P, D, M, N, L, F, T, B, ?, .>
Entry:
Record Information:
ValidNumbers : serial
DIDOverdialNmbr: None
OverdialXlation: Off
OdialMaxDigits : 0
FeedDigits     : 0
Range1         : None
Range2         : None
Range3         : None
Range4         : None
Range5         : None
Range6         : None
Range7         : None
Range8         : None
Range9         : None
Range10        : None
<<cr>, P, D, M, N, L, F, T, B, ?, .>
Entry:
```

Page 3 Sec 1 3/3 At 6" Ln 5 Col 1 REC TRK EXT OVR

Application Note

Product: ACG
Purpose: Integration with a ZETRON Local Area Paging System
Date: 9/15/04

Telephone Line Databases: Trunk Line Type



The screenshot shows a Microsoft Word window titled 'Document1 - Microsoft Word' with a terminal window titled 'MCU.EXE' overlaid. The terminal window displays the following text:

```
Entry:
Record Information:
LineType      : RS232
SoftwareLT    : RS-232
Beep          : Off
MF            : Off
Tcon         : D
Tans         : D
Tdis         : D
UoxDisconnect : Off
UoxDiscThresh : 0
UoxDiscTime  : 2500
OverTime     : 5000
DIMPMinDur   : 40
RevDialPuls  : Off
RingBeforeAnswr : 0
WinkSDur     : 0
AllowPrompt  : B
Priority      : D
Security     : Off

<<cr>, P, D, M, N, L, F, I, B, ?, . .>
Entry:
```

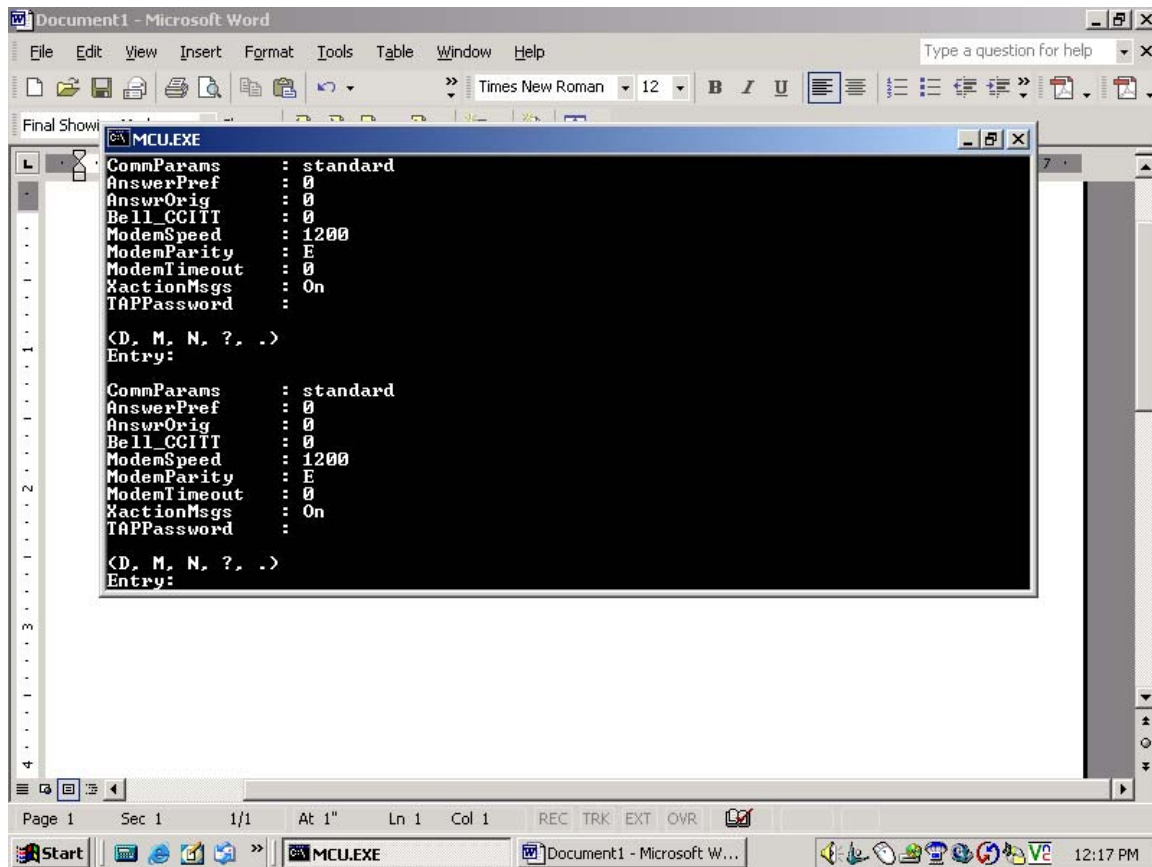
The terminal window also shows a vertical line of numbers on the left side, likely representing line numbers or a cursor position: 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

Application Note

Product: ACG
Purpose: Integration with a ZETRON Local Area Paging System
Date: 9/15/04

Telephone Line Databases: Communications

- Baud rate set to 1200/7/E/1



```
Document1 - Microsoft Word
File Edit View Insert Format Tools Table Window Help
Type a question for help
Times New Roman 12 B I U
Final Show
MCU.EXE
CommParams : standard
AnswerPref : 0
AnswerOrig : 0
Bell_CCITT : 0
ModemSpeed : 1200
ModemParity : E
ModemTimeout : 0
XactionMsgs : On
TAPPassword :

<D, M, N, ?, .>
Entry:
CommParams : standard
AnswerPref : 0
AnswerOrig : 0
Bell_CCITT : 0
ModemSpeed : 1200
ModemParity : E
ModemTimeout : 0
XactionMsgs : On
TAPPassword :

<D, M, N, ?, .>
Entry:
```

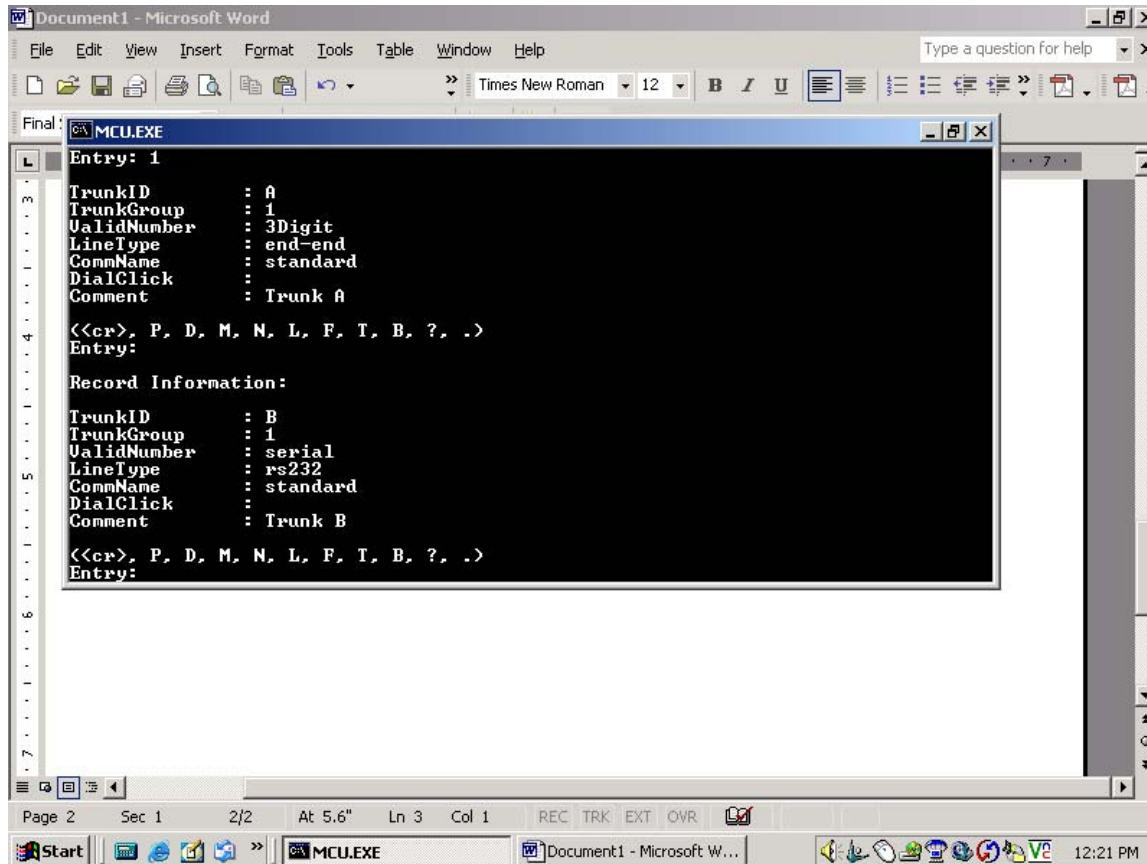
Page 1 Sec 1 1/1 At 1" Ln 1 Col 1 REC TRK EXT OVR

Start MCU.EXE Document1 - Microsoft W... 12:17 PM

Application Note

Product: ACG
Purpose: Integration with a ZETRON Local Area Paging System
Date: 9/15/04

Telephone Line Databases: Trunks



The screenshot shows a Microsoft Word window titled "Document1 - Microsoft Word" with a terminal window titled "MCU.EXE" overlaid. The terminal window displays two entries of trunk information. Each entry starts with "Entry: 1" and lists various fields with their values. The first entry is for Trunk A, and the second is for Trunk B. Both entries include a "Record Information:" section with the same fields as the main entry. The terminal window also shows a prompt "<<cr>, P, D, M, N, L, F, I, B, ?, .)" and "Entry:" before each entry.

```
Final: MCU.EXE
Entry: 1
TrunkID      : A
TrunkGroup   : 1
ValidNumber  : 3Digit
LineType     : end-end
CommName     : standard
DialClick    :
Comment      : Trunk A

<<cr>, P, D, M, N, L, F, I, B, ?, .)
Entry:
Record Information:
TrunkID      : B
TrunkGroup   : 1
ValidNumber  : serial
LineType     : rs232
CommName     : standard
DialClick    :
Comment      : Trunk B

<<cr>, P, D, M, N, L, F, I, B, ?, .)
Entry:
```

Application Note

Product: ACG
Purpose: Integration with a ZETRON Local Area Paging System
Date: 9/15/04

ACG setup

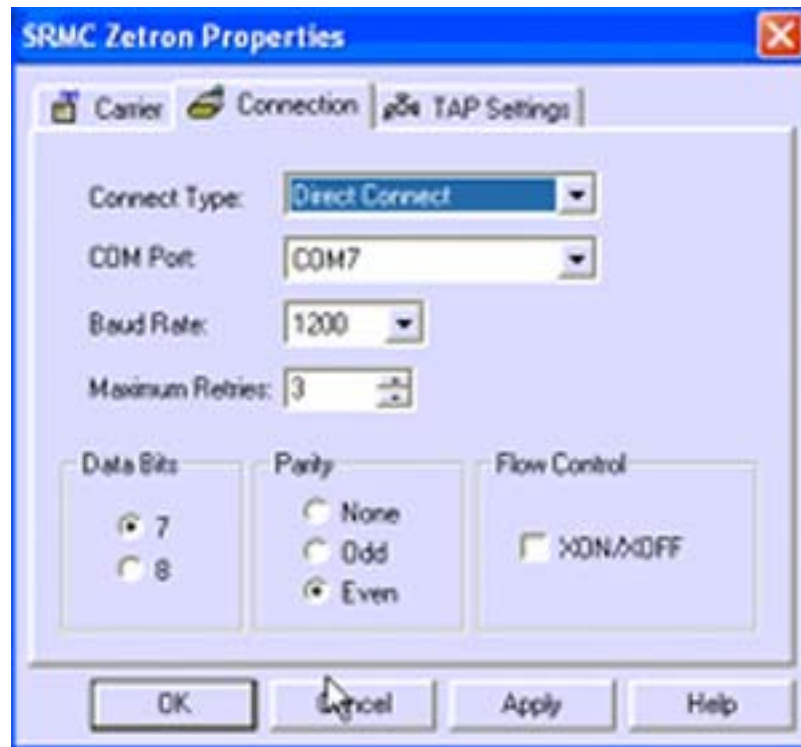
- Setup a Carrier in the ACG for the ZETRON paging system.
- Name the Carrier and select TAP protocol.



Application Note

Product: ACG
Purpose: Integration with a ZETRON Local Area Paging System
Date: 9/15/04

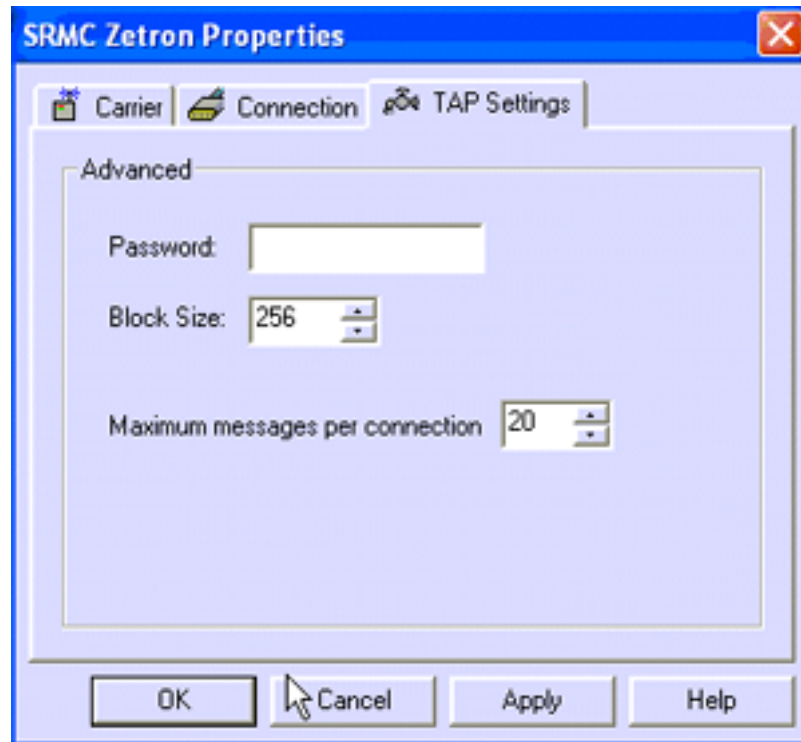
- Set Direct Connect as the connection type and choose the COM Port.
- Set the Baud Rate/Data Bits/Parity to 1200/7/Even.



Application Note

Product: ACG
Purpose: Integration with a ZETRON Local Area Paging System
Date: 9/15/04

- Use the default setting on the TAP Settings tab.



- A list of the users and their pagers that are set up in the ZETRON system must be obtained so that the users may be created in the ACG database.
- Create new users and/or groups to reflect the needs of the customer.

Application Note

ascom
Ascom® Wireless Solutions Inc.

Product: ACG
Purpose: Integration with a ZETRON Local Area Paging System
Date: 9/15/04

Sending a page

- Use Desktop Messenger or Web messenger
- Look up the user.
- Select the user and type in the message to be sent.
- Send the message.