APPLICATION Note

TELECOM SOLUTIONS FOR THE 21ST CENTURY

Expand Your Existing C-2000B
Door Entry System to 8 Entry Phones
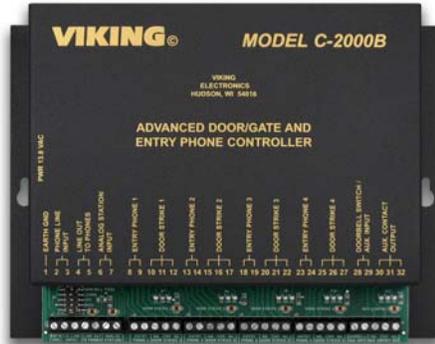
Two **C-2000B**'s can be wired together in residential or commercial applications for up to 8 entry phones. Any of the 8 entry phones will ring the house phones, PABX or KSU and the phones can then operate the appropriate doorstrike relay. The house phones have the ability to monitor 4 of the entry phones and can monitor all 8 if "dial 9 to access an outside line" is programmed in both controllers and a **DLE-200B** Line Simulator is added if there is no CO line.

Wiring

C.O. / Phone Line Input

OR

Optional DLE-200B Line Simulator, see Installation 4.

C-2000B #2

Entry Phone 8*
(E-30 shown, not included)

Entry Phone 5*
(E-40-PB shown, not included)

Entry Phone 6*
(E-20B shown, not included)

Entry Phone 7*
(K-1700-3 shown, not included)
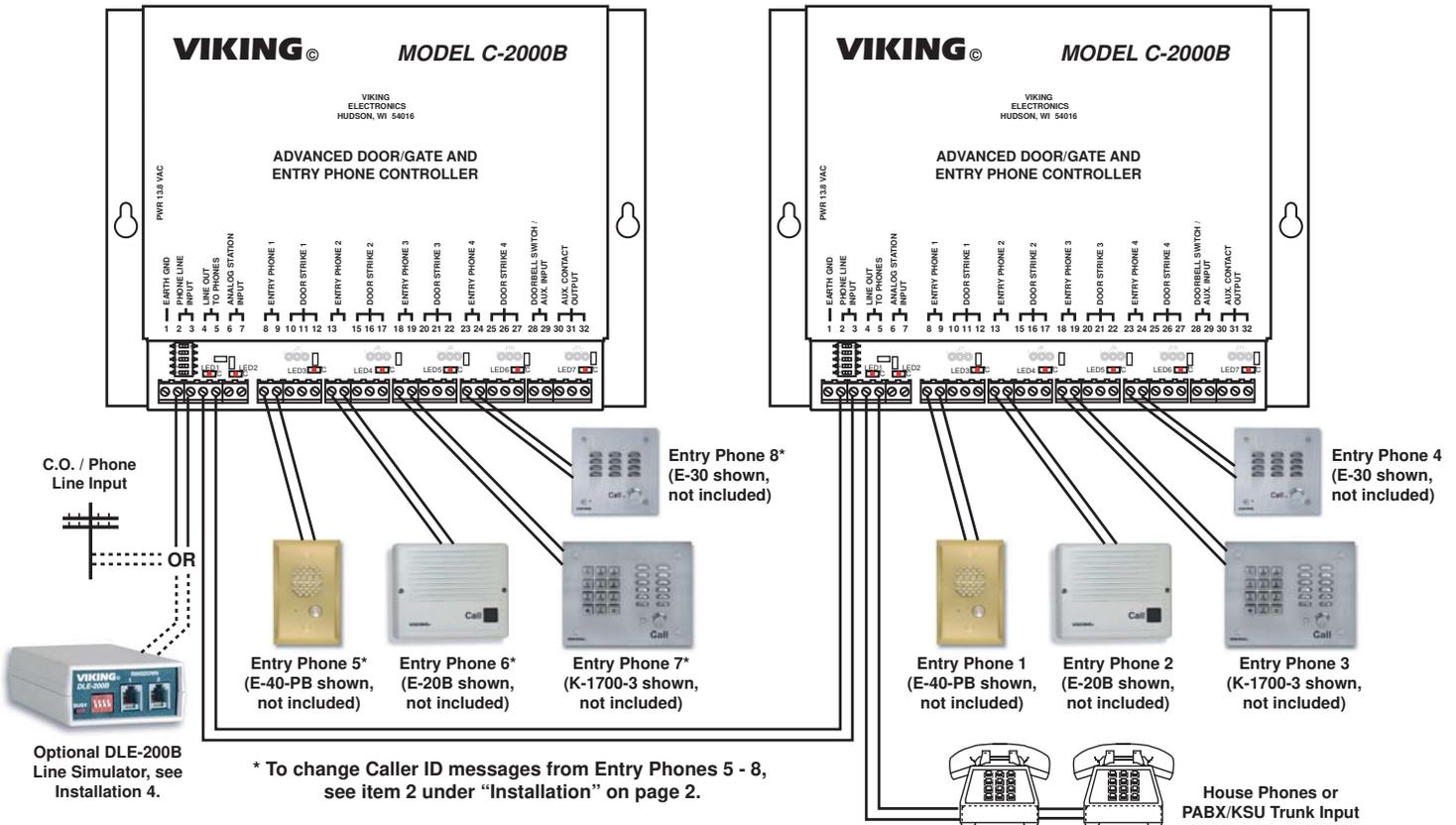
* To change Caller ID messages from Entry Phones 5 - 8, see item 2 under "Installation" on page 2.

C-2000B #1

Entry Phone 4
(E-30 shown, not included)

Entry Phone 1
(E-40-PB shown, not included)

Entry Phone 2
(E-20B shown, not included)

Entry Phone 3
(K-1700-3 shown, not included)

House Phones or PABX/KSU Trunk Input

Installation

1. Connect the first four entry phones to **C-2000B** #1 and any remaining entry phones to **C-2000B** #2.

2. **C-2000B**'s with a part number of 261325D or higher have the ability of user programmable caller ID (See DOD 156). The programming sequences to change the caller ID to entry phones 5-8 would be:

Entry Phone 1 CID Characters:
Entry Phone 5

Two Digit Numbers:
3 7 7 8 8 4 8 2 8 9 0 0 4 8 7 2 7 9 7 8 6 9 0 0 2 1 **#71**

Entry Phone 2 CID Characters:
Entry Phone 6

Two Digit Numbers:
3 7 7 8 8 4 8 2 8 9 0 0 4 8 7 2 7 9 7 8 6 9 0 0 2 2 **#72**

Entry Phone 3 CID Characters:
Entry Phone 7

Two Digit Numbers:
3 7 7 8 8 4 8 2 8 9 0 0 4 8 7 2 7 9 7 8 6 9 0 0 2 3 **#73**

Entry Phone 4 CID Characters:
Entry Phone 8

Two Digit Numbers:
3 7 7 8 8 4 8 2 8 9 0 0 4 8 7 2 7 9 7 8 6 9 0 0 2 4 **#74**

For **C-2000B**'s with a part number of 261325A, B or C, special software can be installed to change the Caller ID messages to "Entry Phone 5" through "Entry Phone 8", to better identify the entry phone that is calling. This special software is part number "C2KB-CI2" and costs $30.00 per copy. The software can be purchased directly from Viking Product Support or through a Viking authorized distributor. Custom software can also be developed (for a nominal programming fee), to change the generic Caller ID messages to help the end-user identify the entry phone that is calling (from "Entry Phone 1" to "Front Gate", "Front Door", "Back Door", etc.). This custom software is normally purchased directly through Viking Product Support and is $115.00 per copy.

3. When a telephone line will be connected to the "Phone Line Input" of **C-2000B** #2 (normal residential applications):

If the end-user only needs the ability to monitor 4 of the 8 entry phones or "force" 4 of the 8 doorstrike relays to operate (when no call was originated at the entry phone), both controllers can be programmed with "instant outside line access" ("*6" while in the program mode). This allows the users to make outgoing calls on the telephone line as normal (without having to dial "99" first). If the end-user needs the ability to monitor all 8 entry phones or "force" any of the 8 doorstrike relays to operate (when no call was originated at the entry phone), both **C-2000B**'s must be programmed with "dial 9 to access an outside line" ("*5" while in the program mode). Users will then be forced to dial a "99" before the rest of the telephone number when making outgoing calls.

4. If there is no telephone line connected to the "Phone Line Input" of **C-2000B** #2 (when it is a "stand alone" system or when the controllers are connected to an unused trunk input of a PBX or KSU):

If the end-user only needs the ability to monitor 4 of the 8 entry phones or "force" 4 of the 8 doorstrike relays to operate (when no call was originated at the entry phone), program **C-2000B** #1 with "instant outside line access" ("*6" while in the program mode), **C-2000B** #2 with "dial 9 to access an outside line" ("*5" while in the program mode) and a **DLE-200B** is not required.

If the end-user needs the ability to monitor all 8 entry phones or "force" any of the 8 doorstrike relays to operate (when no call was originated at the entry phone), both **C-2000B**'s must be programmed with "dial 9 to access an outside line" ("*5" while in the program mode) and a **DLE-200B** line simulator must be connected to the "Phone Line Input" of **C-2000B** #2. Set the **DLE-200B** to the "prison phone" mode by setting internal dip switch #1 to the ON position.

Programming

If both C-2000B's are programmed with "instant outside line access" (*6 while programming):

Programming C-2000B #1 is normal and these are the options:

1. Pick up a house phone and dial "*#" plus the security code (845464 by default).

2. Use the learn mode: on **C-2000B** #1, set dip switch 2 to on, pick up a house phone, two beeps are heard, you are in the program mode.

Programming C-2000B #2 is different than normal and these are the options:

1. Unplug the AC power from **C-2000B** #1 while programming **C-2000B** #2. Once #1 is unplugged (wait until the power LED goes out), pick up a house phone and dial "*#" plus the security code (845464 by default).

2. Use the learn mode. On **C-2000B** #2, set dip switch 2 to on, pick up a house phone, two beeps are provided and you are in the program mode.

If both C-2000B's are programmed with "dial 9 to access an outside line" (*5 while programming):

Programming C-2000B #1 is normal and these are the options:

1. Pick up a house phone and dial "*#" plus the security code (845464 by default).

2. Use the learn mode: on **C-2000B** #1, set dip switch 2 to on, pick up a house phone, two beeps are heard, you are in the program mode.

Programming C-2000B #2 is different than normal and these are the options:

1. Pick up a house phone and dial "99" plus "*#" plus the security code (845464 by default).

2. Use the learn mode. On **C-2000B** #2, set dip switch 2 to on, pick up a house phone and dial "9", two beeps are provided and you are in the program mode.

3. Unplug the AC power from **C-2000B** #1 while programming **C-2000B** #2. Once #1 is unplugged (wait until the power LED goes out), pick up a house phone and dial "*#" plus the security code (845464 by default).

Operation

1. When the call button is pressed on any of the 8 entry phones, the call will ring through to the house phones, which can then be answered to talk with the visitor. Any of the normal relay commands to let the visitor in if desired ("**", "*1" or "*0"), can then be entered from the house phone.

2. The house phones always have the ability to monitor the 4 entry phones connected to C-2000B #1, using the normal "#1" through "#4" monitor commands. The house phones can only monitor all 8 entry phones if both controllers are programmed with "dial 9 to access an outside line" ("*5" while in the program mode). For more information, see items 3 and 4 under "Installation". If both controllers are set to "dial 9 to access an outside line", the house phones can monitor the 4 entry phones on **C-2000B** #2 by dialing "99" first, then dialing the normal "#1" through "#4" monitor commands.

3. If both controllers are programmed with "instant outside line access" (because monitoring the 4 entry phones connected to **C-2000B** #2 is not required), any outgoing calls from the house phones are dialed out as normal. If both controllers are programmed with "dial 9 to access an outside line" (to monitor all 8 entry phones or "force" any of the 8 doorstrike relays to operate even though no call was originated at the entry phone), the users must dial "99" before the local or long distance phone number when making an outgoing call from a house phone.

4. The relays on **C-2000B** #2 can be "forced" to operate (if both controllers are programmed with "dial 9 to access an outside line"), by picking up a house phone and dialing "99" first, then "#1**" for timed activation of the doorstrike 1 relay, or dialing "99" first then "#2*1" to latch the doorstrike 2 relay, etc. Another way to "force" the **C-2000B** #2 relays is to pick up a house phone, dial the "99" first, then dial "#1" and wait to be connected to the entry phone. Once the entry phone answers, then the "**", "*1" or "*0" relay commands can be dialed to activate or deactivate the doorstrike 1 relay.

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