Single Entry Phone Controller with Call Forwarding and Door Strike Control

The **C-250** allows single line telephones or a telephone system to share a phone line with a single Viking entry phone. Tenants may answer an entry phone call, converse with the visitor and let them in with a touch tone command.

The **C-250** also has a built in five number dialer to make an outside call if there is no answer on the inside phone. If the outside call is busy or ring no answer, the **C-250** can call up to four more numbers.

The **C-250** provides a "Call Waiting" tone when the phone line is in use. Tenants may also call out to the entry phone for monitoring purposes.

Features

- Allows single line telephones or a telephone system to share a phone line with a Viking entry phone
- Double burst ring pattern allows you to distinguish entry phone calls from CO calls
- Built in five number dialer
- Detects busy or ring no answer and goes onto the next number
- Built in door strike relay with 1 or 2 digit commands
- Remote programming
- Auto answer
- Detects touch tones as fast as 50 milliseconds
- Trigger input for postal lock, Request to Exit (REX) or immediate call forwarding
- Produces "Call Waiting" tones if the entry phone is activated when the house phones are already on a call
- Compatible with any Viking **E** Series or **K** Series entry phone or use with any standard analog phone

Applications

- Add an entry phone to your standard home or office phones to provide door communication
- Provide commercial or residential security via two-way handsfree communication at the door or gate
- Connects in series with a single phone line or with a phone system's line/trunk input

Phone…715.386.8861

http://www.vikingelectronics.com

Specifications

Power: 120VAC / 13.8VAC 1.25A, UL listed adapter provided
Dimensions: 133mm x 104mm x 44mm (5.25" x 4.1" x 1.75")
Shipping weight: 0.9kg (2 lbs.)
Environmental: 0°C to 32°C (32°F to 90°F) with 5% to 95% non-condensing humidity
Ring Output: 5 REN, capable of ringing (10) 0.5 REN phones
Talk Battery: 32V DC
Relay Contact Rating: 5A @ 30VDC / 250VAC Maximum
Connections: (12) cage clamp screw terminals

Our Technical Support Department is available for assistance Monday 8am - 4pm and Tuesday through Friday 8am - 5pm central time. So that we can give you better service, before you call please:
1. Know the model number, the serial number and what software version you have (see serial label).
2. Have your Technical Practice in front of you.
3. It is best if you are on site.

RETURNING PRODUCT FOR REPAIR

The following procedure is for equipment that needs repair:
1. Customer must contact Viking's Technical Support Department at 715-386-8666 to obtain a Return Authorization (RA) number. The customer MUST have a complete description of the problem, with all pertinent information regarding the defect, such as options set, conditions, symptoms, methods to duplicate problem, frequency of failure, etc.
2. Packing: Return equipment in original box or in proper packing so that damage will not occur while in transit. Static sensitive equipment such as a circuit board should be in an anti-static bag, sandwiched between foam and individually boxed. All equipment should be wrapped to avoid packing material lodging in or sticking to the equipment. Include ALL parts of the equipment. C.O.D. or freight collect shipments cannot be accepted. Ship cartons prepaid to:
   Viking Electronics, 1531 Industrial Street, Hudson, WI 54016
3. Return shipping address: Be sure to include your return shipping address inside the box. We cannot ship to a PO Box.
4. RA number on carton: In large printing, write the R.A. number on the outside of each carton being returned.

RETURNING PRODUCT FOR EXCHANGE

The following procedure is for equipment that has failed out-of-box (within 10 days of purchase):
1. Customer must contact Viking's Technical Support at 715-386-8666 to determine possible causes for the problem. The customer MUST be able to step through recommended tests for diagnosis.
2. If the Technical Support Product Specialist determines that the equipment is defective based on the customer's input and troubleshooting, a Return Authorization (R.A.) number will be issued. This number is valid for fourteen (14) calendar days from the date of issue.
3. After obtaining the R.A. number, return the approved equipment to your distributor, referencing the R.A. number. Your distributor will then replace the product over the counter at no charge. The distributor will then return the product to Viking using the same R.A. number.
4. **The distributor will NOT exchange this product without first obtaining the R.A. number from you. If you haven't followed the steps listed in 1, 2 and 3, be aware that you will have to pay a restocking charge.**

LIMITED WARRANTY

Viking warrants its products to be free from defects in the workmanship or materials, under normal use and service, for a period of one year from the date of purchase from any authorized Viking distributor or 18 months from the date manufactured, which ever is greater. If at any time during the warranty period, the product is deemed defective or malfunctions, return the product to Viking Electronics, Inc., 1531 Industrial Street, Hudson, WI., 54016. Customer must contact Viking's Technical Support Department at 715-386-8666 to obtain a Return Authorization (R.A.) number.

This warranty does not cover any damage to the product due to lightning, over voltage, under voltage, accident, misuse, abuse, negligence or any damage caused by use of the product by the purchaser or others. This warranty does not cover non-EWP products that have been exposed to wet or corrosive environments.

NO OTHER WARRANTIES. VIKING MAKES NO WARRANTIES RELATING TO ITS PRODUCTS OTHER THAN AS DESCRIBED ABOVE AND DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTIES OR MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

EXCLUSION OF CONSEQUENTIAL DAMAGES. VIKING SHALL NOT, UNDER ANY CIRCUMSTANCES, BE LIABLE TO PURCHASER, OR ANY OTHER PARTY, FOR CONSEQUENTIAL, INCIDENTAL, SPECIAL OR EXEMPLARY DAMAGES ARISING OUT OF OR RELATED TO THE SALE OR USE OF THE PRODUCT SOLD HEREUNDER.

EXCLUSIVE REMEDY AND LIMITATION OF LIABILITY. WHETHER IN AN ACTION BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE OR STRICT LIABILITY) OR ANY OTHER LEGAL THEORY, ANY LIABILITY OF VIKING SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT, OR AT VIKING'S OPTION, REFUND OF THE PURCHASE PRICE AS THE EXCLUSIVE REMEDY AND ANY LIABILITY OF VIKING SHALL BE SO LIMITED.

IT IS EXPRESSLY UNDERSTOOD AND AGREED THAT EACH AND EVERY PROVISION OF THIS AGREEMENT WHICH PROVIDES FOR DISCLAIMER OF WARRANTIES, EXCLUSION OF CONSEQUENTIAL DAMAGES, AND EXCLUSIVE REMEDY AND LIMITATION OF LIABILITY, ARE SEVERABLE FROM ANY OTHER PROVISION AND EACH PROVISION IS A SEPARABLE AND INDEPENDENT ELEMENT OF RISK ALLOCATION AND IS INTENDED TO BE ENFORCED AS SUCH.

FCC REQUIREMENTS

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. Located on the equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. If requested, this number must be provided to the telephone company.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive REN's on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of the REN's should not exceed five (5.0) To be certain of the number of devices that may be connected to a line, as determined by the total REN's, contact the local telephone company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX. The digits represented by ## are the REN without a decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

The plug used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this C-250 does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

If the C-250 causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications to maintain uninterrupted service.

If trouble is experienced with the C-250, for repair or warranty information, please contact:

Viking Electronics, Inc., 1531 Industrial Street, Hudson, WI 54016 (715) 386-8666

If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

Connection to Party Line Service is subject to State Tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

WHEN PROGRAMMING EMERGENCY NUMBERS AND (OR) MAKING TEST CALLS TO EMERGENCY NUMBERS:

Remain on the line and briefly explain to the dispatcher the reason for the call. Perform such activities in the off-peak hours, such as early morning or late evenings.

It is recommended that the customer install an AC surge arrester in the AC outlet to which this device is connected. This is to avoid damaging the equipment caused by local lightning strikes and other electrical surges.
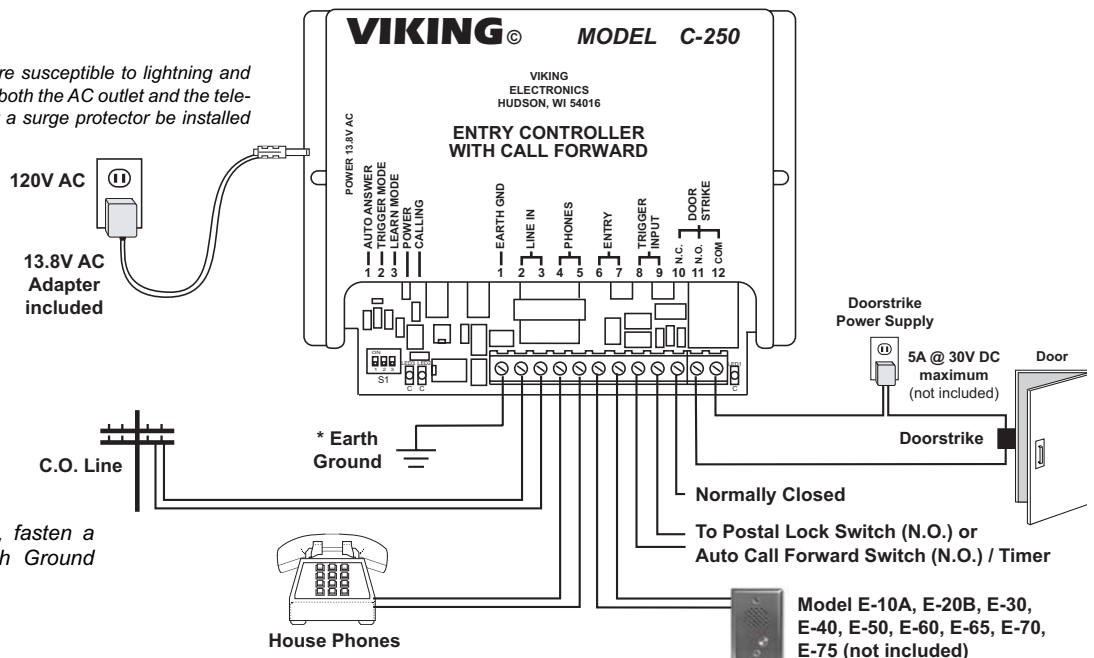
PART 15 LIMITATIONS

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Installation and Applications
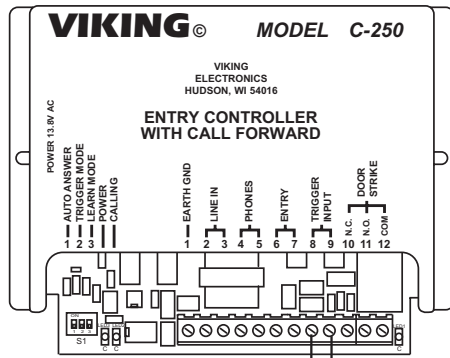
A. Basic Installation

⚠ **IMPORTANT:** *Electronic devices are susceptible to lightning and power station electrical surges from both the AC outlet and the telephone line. It is recommended that a surge protector be installed to protect against such surges.*
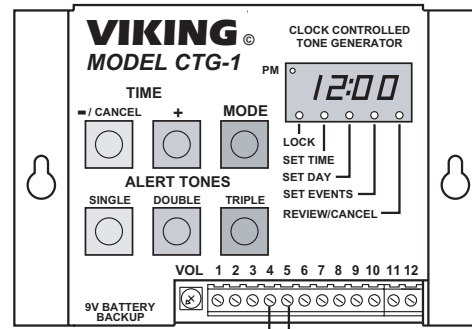

* **Note:** *To increase surge protection, fasten a wire from the screw terminal to Earth Ground (grounding rod, water pipe, etc.)*

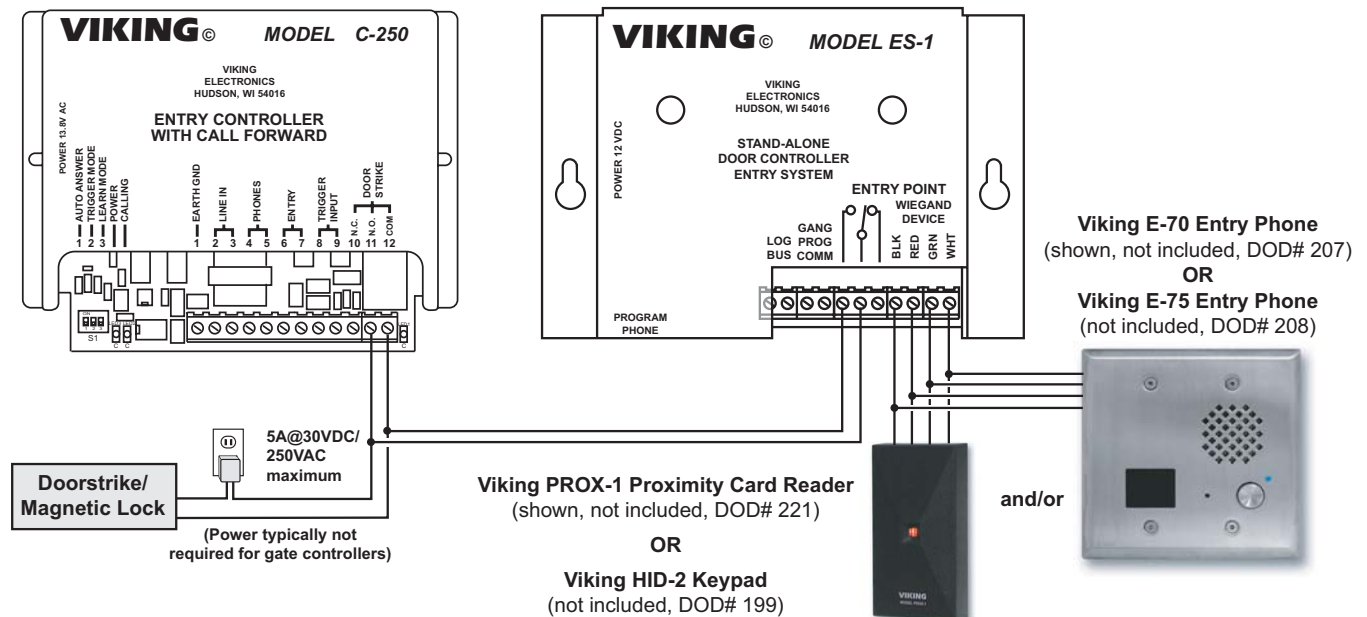## B. Using the C-250 with the CTG-1 or a Toggle Switch for Immediate Call Forwarding Certain Hours of the Day

Model CTG-1 (DOD# 460) with CTGF-BKD Software

Note: DIP Switch 2 must be ON.

C. Using the C-250 with a Proximity Card Reader or a Separate Keyless Entry Keypad

Step 1.	Program the **ES-1** "Relay Activation Time" to match the "Doorstrike Activation Time" on the **C-250**.
Step 2.	Connect the **ES-1** relay output in parallel with the doorstrike output contacts on the **C-250**.

Programming

A. Accessing the Programming Mode

The **C-250** can be programmed from any touch tone phone connected to the house phone port or by calling into the unit from a remote touch tone phone. A 6-digit security code is used to gain access, or set DIP switch 3 to the ON position for immediate access. If a command is entered correctly, 2 beeps will be heard, 3 beeps signal an error.

Once in the remote programming mode if no commands are entered for 20 seconds, you will hear 3 beeps and the programming mode will be terminated. If you do not want to wait 20 seconds, just enter "##7" and the programming mode will be terminated immediately.

1. **Local Programming**

   Set DIP switch 3 on the front of the **C-250** to the **ON** position. Come off hook with the house phone and 2 beeps will be heard signaling that the **C-250** is in the programming Mode. When finished programming, hang up the phone and set DIP Switch 3 to the OFF position.

2. **Remote Programming with the Security Code**

   Set DIP switch 1 on the front of the **C-250** to the **ON** position. Call into the unit from a remote touch tone phone. After the incoming ring count is up (factory set to 10), the **C-250** will answer the line and beep 1 time. Enter ✳ followed by the 6-digit security code (factory set to 845464). Two beeps will be heard signaling that the **C-250** is in the programming mode.

3. **Remote Programming without the Security Code**

   Set DIP switches 1 and 3 on the front of the **C-250** to the **ON** position. Call into the unit from a remote touch tone phone. After one ring, the **C-250** will answer the line and beep 2 times signaling that the **C-250** is in the programming mode. When finished programming, hang up the phone and set DIP Switch 3 to the OFF position.

B. Quick Programming Features

	Enter Digits +	Memory Location
First phone number	(1 to 20 digits) +	#00
Second phone number	(1 to 20 digits) +	#01
Third phone number	(1 to 20 digits) +	#02
Fourth phone number	(1 to 20 digits) +	#03
Fifth phone number	(1 to 20 digits) +	#04
To clear any speed dial number	(no digits) +	#00 to #04
Door Strike Activation Time	(00 to 99 sec, 00 = .5 sec, factory 5 sec) +	#40
Door Strike Command	(1 or 2 digits, blank is disable, factory 6) +	#41
Maximum Call Time	(1 to 9 mins, 0 = 30 sec, blank is disable, factory 3 min) +	#42
Maximum Ring Time	(00 to 59 secs, 00 is disable, factory 30 sec) +	#43
Ring House Phone Count	(1 to 9, 0 = immediate call forwarding, factory 4) +	#44
Incoming Ring Count	(01 to 99, 00 disables answer, factory 10) +	#45
Security Code	(6 digits, factory 845464) +	#47
To add a "✳" at any point in the dialing string or door strike code		✳✳
To add a "#" at any point in the dialing string or door strike code		✳#
To disable "No CO" mode (factory setting)		✳0
To enable "No CO" mode		✳1
To disable "Doorbell" mode (factory setting)		✳2
To enable "Doorbell" mode		✳3
To select a double burst ring pattern (factory setting)		✳4
To select a single ring pattern		✳5
To actuate the door strike relay		✳6
To add a four second pause at any point in the dialing string		✳7
To add a one second pause at any point in the dialing string		✳8
Ignore touch tones for programming entry phone		##1
To reset all programming to factory default settings		###
Exit programming		##7

The following commands are used during normal operation:

Enable Immediate Call Forward Mode	✳✳✳
Disable Immediate Call Forward Mode (factory setting)	###

C. Speed Dial Numbers (Memory Locations #00 to #04)

Note: Up to 20 digits can be stored in each dial position. Special features such as one and four second pauses, and touch tone ✳ and # count as a single digit.

The speed dial number stored in location #00 is the first outside number that will be dialed if the door phone goes off hook and the house phone does not answer within the ring count set by location **#44**. Additional speed dial numbers will be dialed if there is no answer or a busy at the first number. Each number is called only once. If all numbers are called without an answer, the **C-250** will generate a CPC signal and then a busy signal will be sent to the door phone. To clear a speed dial number position, simply enter a # and the location number (00 to 04), without any preceding numbers. If no numbers are programmed, the **C-250** will only call the house phone.

D. Door Strike Activation Time (Memory Location #40)

The value stored in the Door Strike Activation Time is the amount of time the door strike relay will be energized after a correct touch tone command is entered or the trigger input is activated. This two digit number can range from 01 to 99 seconds, or enter 00 for 0.5 seconds. The factory setting is 5 seconds.

E. Door Strike Command (Memory Location #41)

The one or two digit code stored in the Door Strike Command is the touch tone command that the person being called must enter on their touch tone phone in order to actuate the door strike. The code can contain the numbers 1 to 9, 0, ✳, # or any two digit combinations. To disable this feature enter #41 without any preceding digits. The code must be entered while the house phone or the remote phone is connected to the door phone.

The **C-250** determines which direction the touch tone is coming from and only responds to touch tones from the called phone. Because of this, single digit codes must be a minimum of 100 msec in duration. Some cell phones can only produce fast touch tones (< 100 msec). If using one of these phones, program a two digit Door Strike Command. When two digits are programmed, the entry phone will be dropped after the first digit, so the **C-250** can be sure the second digit is coming from the called phone. With a two digit code, the minimum duration of the tones can be as low as 50msec. The factory setting is 6.

F. Maximum Call Time (Memory Location #42)

The Maximum Call Time can be used to cut off a call that has rolled over to an outside number. The timer starts as soon as the **C-250** is done dialing each number. If the call lasts longer than the time programmed, the phone line will be dropped and a busy signal will be sent to the entry phone. This is useful if a standard telephone is being used for an entry phone and the handset is accidentally left off hook. This one digit number can range from 1 to 9 minutes or enter 0 for 30 seconds. To disable this feature enter #42 without any preceding digits. The factory setting is 3 minutes.

G. Maximum Ring Time (Memory Location #43)

After the **C-250** dials an outside number, it listens to the phone line for busy, ringing, or someone answering at the other end. The Maximum Ring Time is used to limit this process in the event that the **C-250** cannot determine if the call has been answered. If the **C-250** cannot determine that the call has been answered within the Maximum Ring Time, the line will be disconnected and the **C-250** will go onto the next speed dial number. This two digit number can range from 01 to 59 seconds and can be disabled by entering #43 without any preceding digits. As a general rule, allow 6 seconds for each ring you desire at the distant phone. The factory setting is 30 seconds or about 5 rings.

H. Security Code (Memory Location #47)

The security code must be 6 digits long and cannot contain a "✳" or "#". The factory default code is "845464" and can be changed in programming by entering 6 digits followed by "#47".

I. Ring House Phone Count (Memory Location #44)

When the door phone comes off hook, the **C-250** will start ringing the house phone. The number of times the house phone will ring is stored in location #44. This value can range from 1 to 9, if blank or 0 is entered, the **C-250** will skip ringing the house phone and immediately start calling the programmed phone numbers. This feature is useful when the user is not at home and they want the fastest connect time to their cell phone. There is also an operational command of ✳✳✳ (see **Operation** section **B**) and a trigger input (see section **N**, DIP switch 2) that can be used for immediate call forwarding. The factory setting is 4.

J. Incoming Ring Count (Memory Location #45)

The 2 digit number in this location determines how many times a call coming in from the phone line will ring the house phones before the **C-250** answers the call. This number can range from 01 to 99, if blank or 00, the Auto Answer feature of the **C-250** will be disabled. The factory setting is 10.

K. Ignore Touch Tones for Programming Entry Phone (##1)

This feature is useful if you have a entry phone that requires touch tone programming and can answer a ringing line after 1 ring. All Viking Handsfree Entry Phones have this capability. After entering the programming mode, if ##1 is entered, the **C-250** will send a ring signal to the entry phone port. If the device on that port answers the line, the **C-250** will connect it to the calling device (local or remote). If the entry phone does not answer, 3 beeps will be heard and the **C-250** will stay in the programming mode. Once connected to the door phone, the **C-250** no longer reacts to touch tones (except to reset the 20 second programming timer in the remote programming mode). In the remote programming mode, if the 20 second programming timer elapses, the **C-250** will hang up. In any of the other programming modes, the timer is disabled and the **C-250** only watches for the door phone to hang up.

L. "No CO" Mode (∗0,∗1)

When enabled, this mode allows the **C-250** to be used in installations that do not have an incoming phone line. In this mode, the house phone is connected directly to the internal artificial line. When the house phone comes off hook, the door phone will start to ring. If the door phone has auto answer, the person in the house can monitor any outside activity. Door phone calls are handled the same as in the normal mode except it will not roll over to the phone line if there is no answer at the house phone. To enable this mode, enter "∗**1**" when in programming. To cancel the "No CO" mode, enter "∗**0**".

M. "Door Bell" mode (∗2,∗3)

If the door strike relay is not being used, it can be configured to operate a door bell. When in this mode, the door strike relay will actuate whenever the door phone goes off hook. Connect the door bell or chime (and power supply) to the normally open door strike contacts. The door strike relay will energize for a fixed time period of 1 second. To enable this mode, go into programming and enter "∗**3**". To cancel the "Door Bell" mode, enter "∗**2**".

N. Ring Pattern (∗4,∗5)

In the factory setting (∗**4**), the **C-250** will ring the house phones with a double burst pattern when the door phone goes off hook. This is done so that the person in the house can tell the difference between a visitor at the front door and a regular phone call. In a few instances the double burst pattern may not be detected by some cordless phones. If this is the case, go into programming and enter "∗**5**". This will cause the **C-250** to send a single burst pattern when the door phone goes off hook. To go back to the double burst pattern, go into programming and enter "∗4".

O. Remote Door Strike Actuation (∗6)

The door strike relay on the **C-250** can be actuated remotely without the **C-250** initiating the call. To do this, dip switch 1 must be in the ON position and a value must be entered in the Incoming Ring Count location **#45**. From the remote location, call into the **C-250**. After it answers, enter a "∗" followed by the 6 digit security code. Wait for the 2 beeps and enter "∗**6**". After a short pause, the door strike relay will actuate for the programmed amount of time in the Door Strike Activation Time position **#40**.

P. Exit Programming (##7)

When this command is entered, the **C-250** will leave the programming mode and go back to normal operation. This command is useful in remote, auto answered programming. It causes the **C-250** to drop the phone line immediately rather than waiting for the 20 second time out.
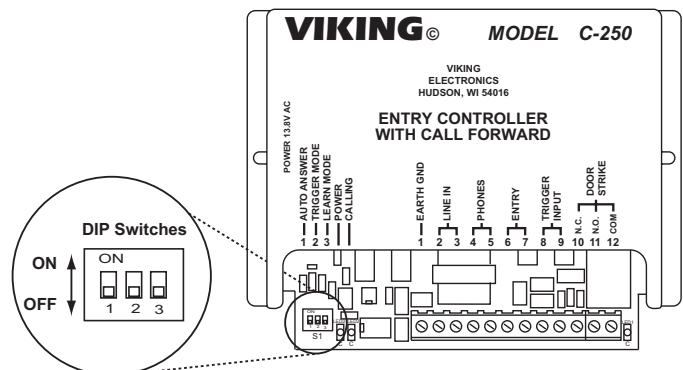
Q. Reset All Programming to Default (###)

This command resets all programming parameters to their factory settings and clears out all programmable phone numbers.

R. DIP Switch Programming

Switch 1	Description
OFF	Ignore incoming calls (factory setting)
ON	Answer incoming calls

Switch 2	Description
OFF	REX, postal lock trigger mode (factory setting)
ON	Immediate Call Forward mode

Switch 3	Description
OFF	Normal operation (factory setting)
ON	Learn mode

1. **DIP Switch 1**

    Dip Switch 1 enables the auto answer feature. When in the ON position, the **C-250** will answer an incoming call after the number of rings programmed into location #45. If position #45 is cleared, or contains 00, the **C-250** will not answer the line. If this feature is enabled, there cannot be anything else on the phone line that could answer the call before the **C-250** such as an answering machine. If security is an issue, it is best to not allow remote programming and leave DIP Switch 1 in the OFF position. The factory setting is OFF.

2. **DIP Switch 2**

    DIP Switch 2 determines the operating mode of the Trigger Input. When DIP Switch 2 is OFF, a momentary closure connected to the trigger input will cause the Door Strike relay to actuate for the programmed amount of time in location #40. If DIP Switch 2 is in the ON position, the Trigger input now controls whether or not the house phone will ring when the door phone goes off hook. If the trigger input is open, the house phone will ring for the number of times programmed in location #44. If the trigger input is closed, the **C-250** will skip ringing the house phone and go right to calling the preprogrammed phone numbers. This Trigger Input mode is useful if you want to control the operation of the **C-250** by some other piece of equipment such as a phone system placed in the night mode, a clock controlled relay or a toggle switch. The factory setting is OFF.

3. **DIP Switch 3**

    DIP Switch 3 in the ON position is used to gain access to the programming mode without needing a security code. When the house phone goes off hook, two beeps will be heard signaling that the **C-250** is ready for programming commands. If a call comes in and the auto answer feature is also enabled (DIP Switch 1 ON), the **C-250** will answer the call on the first ring and send 2 beeps. When in the off position, the security code in position #47 has to be used in order to enter programming. This switch needs to be off for normal operation. The factory setting is OFF.

Operation

A. Visitors

When the entry phone goes off hook, the house phones will ring with a distinctive double ring cadence to identify it is a entry phone call (programmable to a single ring cadence. The number entered into programming position #44 determines how many times the house phone will ring from an entry phone call before the call is forwarded using the auto dialing numbers. If no numbers are programmed, the **C-250** will send a CPC signal to automatically hang up the entry phone. All Viking hands free phones are able to detect the CPC signal and hang up. If the **C-250** senses that the entry phone has not dropped off, it will send a busy signal. If auto dial numbers are programmed, it will dial the first one and watch for a busy or no answer for the duration of the Maximum Ring time. If this time elapses and the **C-250** has not determined the call has been answered, it assumes that the call was not answered and goes on to the next speed dial number. If all numbers are called without an answer, the **C-250** will send a CPC signal to hang up the entry phone. The Maximum Call Time is started as soon as the **C-250** is done dialing each number. If this timer elapses, that call is terminated and no further numbers are dialed.

B. Immediate Call Forward

The entire sequence of the house phone ringing when the entry phone goes off hook can be skipped. This is useful if the user will not be at home and wants the **C-250** to skip ringing the house phone and immediately forward all entry calls to the programmed phone numbers. There are several ways to do this. The first is to clear the house phone ring count or set it to 0 in programming position #44. This can only be done in the programming mode, but can be done locally or remotely if auto answer (DIP Switch 1) is on. The second way is to go off hook with any house phone and enter "✳✳✳". This places the **C-250** in the Immediate Call Forward mode. With this mode enabled, each time the house phone goes off hook, a single beep will be heard in order to let the user know that this mode is on. To cancel the Immediate Call Forward mode, pick up the house phone and enter "###". Two beeps will be heard letting the user know the Immediate Call Forward mode has been cancelled. These immediate call forward commands must be entered within 5 seconds of off hook. The third and final way is to provide a contact closure across the trigger input (DIP switch 2 must be ON).

C. Monitoring or Receiving Door Phone Calls

If the tenant wants to monitor the entry phone, they can pick up any phone in the house and hook flash within 5 seconds. This will cause the **C-250** to ring the entry phone up to 5 times. Hook flashes after the 5 second time out will be passed along to the CO line. This is useful for using standard CO call waiting features. If the tenant is on an outside call, and the entry phone comes off hook, a call waiting tone will be heard every 12 seconds. The tenant can then hook flash to put the CO call on hold and connect to the entry phone. When the conversation with the person at the door is done, the tenant can return to the original caller with another hook flash. If using a 2 digit door strike code, the entry phone will be dropped after the first digit.

D. Activating the Door Strike Relay

Anytime the house phone is connected to the entry phone, the tenant can actuate the door strike by entering the door strike command on their touch tone keypad. The **C-250** determines if the touch tones are coming from the house phone or the entry phone and only accepts commands from the house phone. Once a valid command is detected, the door strike relay will actuate for the amount of programmed Door Strike Activation time. If an invalid command is entered, wait a few seconds and try again. The **C-250** will wait 3 seconds after any touch tone entered to assure no more tones are coming, then it looks for a command match. The **C-250** can be programmed to handle either a 1 digit or 2 digit Door Strike Command (position #41). If a single digit is being used, the minimum touch tone length is 100 milliseconds. During this time the **C-250** must determine if the touch tone is coming from the entry phone or the called party. If the **C-250** is having trouble detecting touch tones from a remote phone because the tones are too fast, use a 2 digit door strike command. When using 2 digits, the touch tones can be as fast as 50 milliseconds, but the entry phone will be dropped after the first digit is detected. The **C-250** can then be sure that the touch tones are coming from the called phone.

E. Trigger Input

The **C-250** has a Trigger Input for an external Postal Lock switch, or a Request to Exit (REX) switch. The switch must have a momentary, normally open contact. Once the **C-250** detects a contact closure on terminal positions 8 and 9, the door strike will be energized for the amount of programmed Door Strike Activation Time. If the contact is still made after the programmed time is up, the **C-250** will re-energize the door strike relay and go through another Door Strike timing cycle.

If DIP Switch 2 is in the ON position, the Trigger Switch input now controls whether or not the house phone will ring when the entry phone goes off hook. If the Trigger Input is shorted, the house phone ringing will be skipped (Immediate Call Forward Mode), if open, the **C-250** will ring the house phone when the entry phone goes off hook. The touch tone command ✱✱✱ overrides the status of the Trigger Input when DIP Switch 2 is ON.

Compatible Products

Single Gang and Double Gang Entry Phones Available in 5 Attractive Finishes

E-40-SS
"Brushed Stainless Steel"
(similar to brushed nickel)

Compact single gang entry phone. See **DOD# 187**.

E-65-WH
"Satin White"
(satin white powder paint)

Double gang entry phone with built-in color video camera. See **DOD# 203**.

E-50-BN
"Oil Rubbed Bronze"
(satin dark brown powder paint with fine copper metallic)

Compact single gang entry phone with built-in color video camera. See **DOD# 191**.

E-70-BK
"Satin Black"
(fine texture satin black powder paint)

Double gang entry phone with built-in proximity card reader. See **DOD# 207**.

E-60-PB
"Polished Brass"
(with clear gloss powder paint to prevent tarnishing)

Double gang entry phone. See **DOD# 206**.

E-75-SS
"Brushed Stainless Steel"
(similar to brushed nickel)

Double gang entry phone with built-in proximity card reader and color video camera. See **DOD# 208**.

Product Support Line…715.386.8666　　　*Fax Back Line…715.386.4345*