Designed, Manufactured and Supported in the USA

VIKING PRODUCT MANUAL
COMMUNICATION & SECURITY SOLUTIONS

C-500
Advanced Two Door
Entry Phone Controller
with Call Forwarding
January 16, 2014

Advanced Two Door Entry Phone Controller with Call Forwarding and Door Strike Controls

The **C-500** allows single line telephones or a telephone system to share a phone line with two Viking entry phones. Tenants may answer an entry phone call, converse with the visitor and let them in with a touch tone command which activates one of two relays to control a gate or door strike.

The **C-500** also has a built in five number dialer to call your cell phone or an outside line if there is no answer on the inside phone. If the outside call is busy or ring no answer, the **C-500** can call up to four more numbers.

The **C-500** provides the house phones with entry phone "Caller ID" and a "Call Waiting" tone if they are already on a call. Tenants may also call the entry phones for monitoring purposes or enter touch tone commands to activate, deactivate or toggle the doorsrike/gate control relays.

The **C-500** allows up to 6 permanent keyless entry codes plus 2 "one time use" entry codes for each door. The **C-500** provides optional entry phone distinctive ring, two trigger inputs for "Request to Exit" and field programmable Caller ID or beep tones when answered to indicate which door is activated.

Features

- Allows single line telephones or a telephone system to share a phone line with two Viking entry phones
- Double and triple distinctive ringing, programmable entry phone Caller ID or beep tones allow you to distinguish front and back door entry calls from CO calls
- Stackable - connect up to four **C-500**'s to control up to eight entry points
- Built in five number dialer (if inside phone doesn't answer), detects busy or ring no answer and goes on to the next number
- Provide entry phone activated chimes and whole house paging when used with an **SLP-1** or **SLP-4**
- Analog Station Dial Through Mode allows entry phones to connect to analog PABX station or telephone line
- Two N.O./N.C. 5A door strike relays with 1 or 2 digit activation commands
- Monitor any entry phone by entering a touch tone
- Up to 6 different keyless entry codes, and two "one time use" keyless entry codes per entrance
- Auto answer for remote programming
- Two trigger inputs for Request to Exit (REX), immediate call forwarding or lighted doorbell switches to activate entry phone calls
- Produces "Call Waiting" tones if the entry phone is activated when the house phones are on a call
- Compatible with the following Viking entry phones:
  - **E-10A**, **E-20B**, **E-30**, **E-35**, **E-40**, **E-50**, **E-60**, **E-65**, **E-70**, and **E-75** Phones
  - **K-1500-7** Stainless Steel Panel Phone
  - **K-1700-3** and **K-1705-3** Phone with Keypad
  - **K-1900-8** Stainless Steel Panel Phone with Keypad
  - Or use with any analog touch tone phone

Applications

- Add one or two (expandable to 8) entry phones to your standard home or office phones to provide:
  - Door communication   - Gate Entry
  - Door entry   - Keyless Entry
- Provide commercial or residential security via two-way handsfree communication at the door and gate
- Connects in series with a single phone line or to a phone system's unused line input (loop start trunk input)
- High security building entry systems
- Doorstrikes and gates in conjunction with entry phones or hot-line/panel phones

www.vikingelectronics.com
Information: (715) 386-8861

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.)

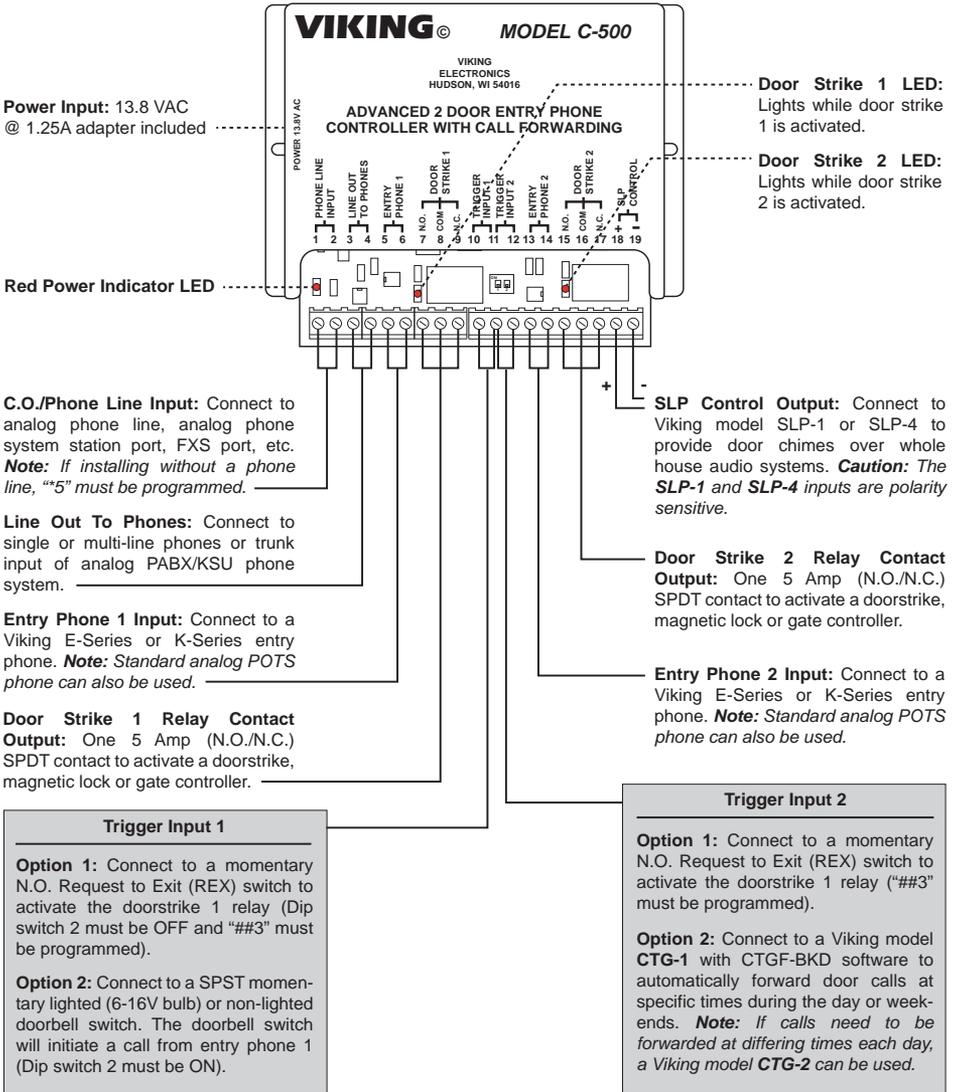**Environmental:** 0°C to 32°C (32°F to 90°F) with 5% to 95% non-condensing humidity

Ring Output: 5 REN, capable of ringing (10) 0.5 REN phones

Talk Battery: 32V DC

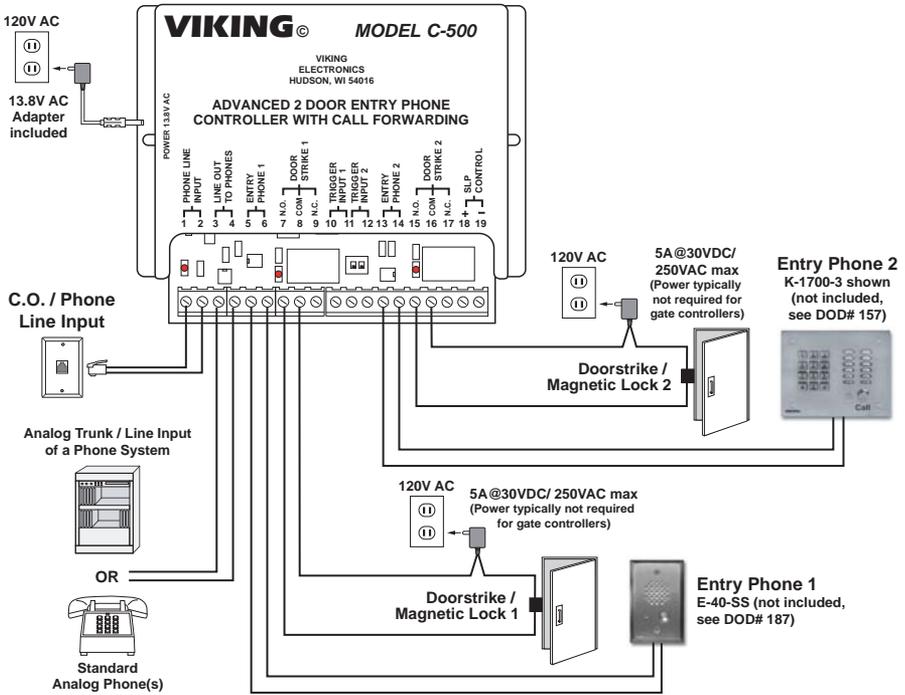**Relay Contact Rating:** 5A @ 30VDC / 250VAC Maximum

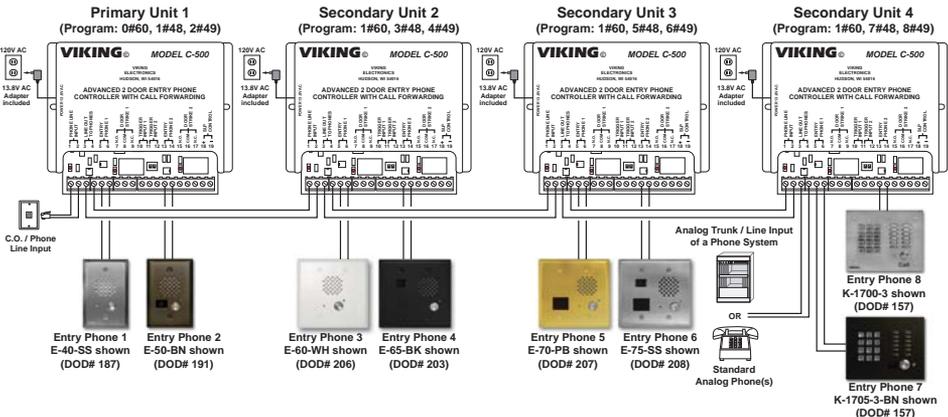**Connections:** (19) cage clamp screw terminals

Power Input: 13.8 VAC @ 1.25A adapter included

VIKING© MODEL C-500

VIKING ELECTRONICS HUDSON, WI 54016

ADVANCED 2 DOOR ENTRY PHONE CONTROLLER WITH CALL FORWARDING

POWER 13.8V AC

PHONE LINE INPUT — 1 2
LINE OUT TO PHONES — 3 4
ENTRY PHONE 1 — 5 6
DOOR STRIKE 1 N.O. COM N.C. — 7 8 9
TRIGGER INPUT 1 — 10
TRIGGER INPUT 2 — 11
ENTRY PHONE 2 — 12 13 14
DOOR STRIKE 2 N.O. COM N.C. — 15 16 17
SLP CONTROL + - — 18 19

Door Strike 1 LED: Lights while door strike 1 is activated.

Door Strike 2 LED: Lights while door strike 2 is activated.

Red Power Indicator LED

C.O./Phone Line Input: Connect to analog phone line, analog phone system station port, FXS port, etc. *Note: If installing without a phone line, "*5" must be programmed.*

Line Out To Phones: Connect to single or multi-line phones or trunk input of analog PABX/KSU phone system.

Entry Phone 1 Input: Connect to a Viking E-Series or K-Series entry phone. *Note: Standard analog POTS phone can also be used.*

Door Strike 1 Relay Contact Output: One 5 Amp (N.O./N.C.) SPDT contact to activate a doorstrike, magnetic lock or gate controller.

SLP Control Output: Connect to Viking model SLP-1 or SLP-4 to provide door chimes over whole house audio systems. *Caution: The SLP-1 and SLP-4 inputs are polarity sensitive.*

Door Strike 2 Relay Contact Output: One 5 Amp (N.O./N.C.) SPDT contact to activate a doorstrike, magnetic lock or gate controller.

Entry Phone 2 Input: Connect to a Viking E-Series or K-Series entry phone. *Note: Standard analog POTS phone can also be used.*

Trigger Input 1

Option 1: Connect to a momentary N.O. Request to Exit (REX) switch to activate the doorstrike 1 relay (Dip switch 2 must be OFF and "##3" must be programmed).

Option 2: Connect to a SPST momentary lighted (6-16V bulb) or non-lighted doorbell switch. The doorbell switch will initiate a call from entry phone 1 (Dip switch 2 must be ON).

Trigger Input 2

Option 1: Connect to a momentary N.O. Request to Exit (REX) switch to activate the doorstrike 1 relay ("##3" must be programmed).

Option 2: Connect to a Viking model **CTG-1** with CTGF-BKD software to automatically forward door calls at specific times during the day or weekends. *Note: If calls need to be forwarded at differing times each day, a Viking model CTG-2 can be used.*

A. 1 or 2 Viking E or K Series Entry Phones Sharing a Single Line with Optional Call Forwarding, Keyless Entry and Doorstrike/Gate Control


B. Connecting up to Four C-500's to Control up to Eight Viking E or K Series Entry Phones on a Single CO/Phone Line or Phone System Analog Station Port

**1. Connecting to a Single CO/Phone Line (0#63 / Factory Default)**

3

2. Connecting to a Single Phone System Analog Station Port (1#63 / Analog Station Mode Enabled)

Note: When connected to an entry phone, "Activate All" commands will only activate the two door strike relays on the *C-500* you are communicating with.

Seconday Unit 4
(Program: 1#60, 1#63, 7#48, 8#49)

Seconday Unit 3
(Program: 1#60, 1#63, 5#48, 6#49)

Seconday Unit 2
(Program: 1#60, 1#63, 3#48, 4#49)

Primary Unit 1
(Program: 0#60, 1#63, 1#48, 2#49)

Analog Station Port on a Phone System (PABX/KSU)

Entry Phone 7
E-40-SS shown
(DOD# 187)

Entry Phone 8
E-50-BN shown
(DOD# 191)

Entry Phone 5
E-60-WH shown
(DOD# 206)

Entry Phone 6
E-65-BK shown
(DOD# 203)

Entry Phone 3
E-70-PB shown
(DOD# 207)

Entry Phone 4
E-75-SS shown
(DOD# 208)

Entry Phone 1
K-1700-3 shown
(DOD# 157)

Entry Phone 2
K-1705-3-BN shown
(DOD# 157)

C. Provide Paging with Four Different CD Quality Door Chimes and Control of up to Four Entry Phones and Doorstrikes from a Single Phone Line with the Viking SLP-4 and Two C-500's

The **SLP-4** can be used with one or two Viking **C-500** entry phone controllers. The phone line first runs through the **SLP-4**, then runs through one or two **C-500**'s before continuing on to the house phones. Connect both **C-500**'s "SLP Control" output terminals 18 & 19 to the **SLP-4**'s trigger input (*CAUTION: This connection is polarity sensitive.*) When entry phone 1, 2, 3, or 4 call in, the **SLP-4** will play its dip switch selected door chime. To provide up to 4 different door chimes, the **SLP-4**'s "Doorbell Mode" dip switch must be turned ON. The **C-500**'s entry phone ringing can be disabled be entering **0#62** in programming. *IMPORTANT: See the SLP-4 Product Manual for complete programming instructions (DOD# 479).*

Model SLP-4 (not included, see DOD# 479 for more info)

Primary Unit
(Program: 0#60, 1#48, 2#49)

Optional Seconday Unit
(Program: 1#60, 3#48, 4#49)

C.O. / Phone Line

*DIP Switch 1 must be ON

To "Page" input on your whole house audio controller.

To Additional Standard Analog Phones

Standard Analog Phone

D. Provide Whole House Paging, Control Up to 2 Entry Phones and Doorstrikes and Provide Entry Phone Triggered Unique Front and Back Door Chimes from a Single Line Phone

The **SLP-1** can be used with one Viking **C-500** entry phone controller. The phone line first runs through the **SLP-1**, then runs through the **C-500** before continuing on to the house phones. Connect the **C-500** "SLP Control" output terminals 18 & 19 to the **SLP-1**'s "Doorbell Sw Input" input (*CAUTION: This connection is polarity sensitive.*) When entry phones 1 or 2 call in, the **SLP-1** will play its dip switch selected door chime.
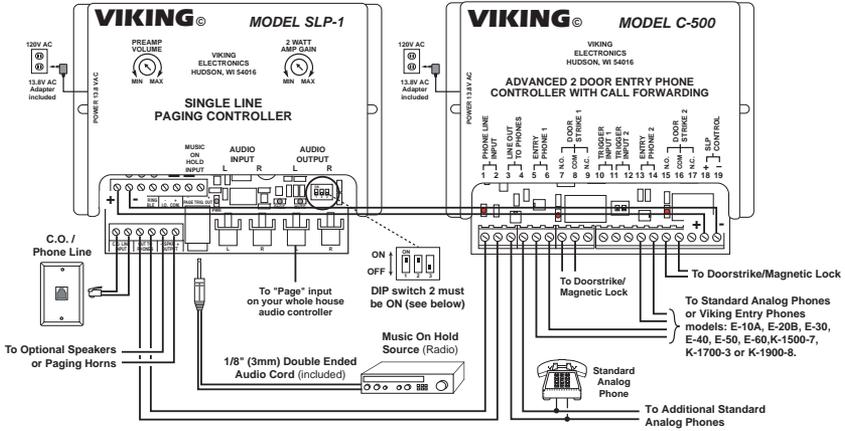
E. Using the C-500 with the CTG-1, CTG-2 or a Toggle Switch for Immediate Call Forwarding at Certain Hours of the Day
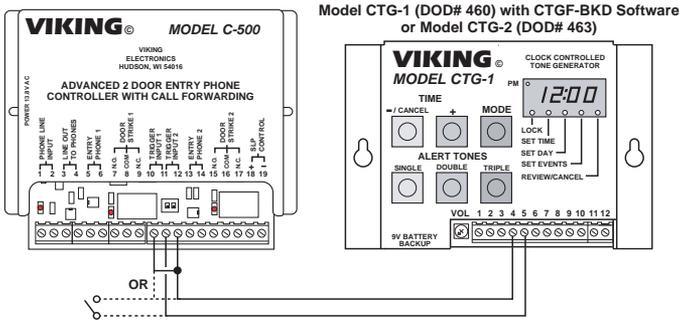
F. Using the C-500 with a Proximity Card Reader or a Separate Keyless Entry Keypad

Step 1	Program the **ES-1** "Relay Activation Time" to match the "Doorstrike Activation Time" on the **C-500**.
Step 2	Connect the **ES-1** relay output in parallel with the doorstrike output contacts on the **C-500**.

5
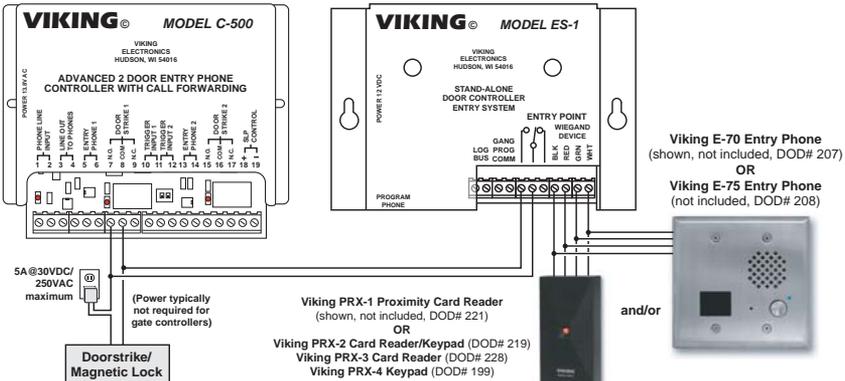
G. Using the C-500 Without a C.O. Line

The **C-500** can also be used without a C.O. line. This is ideal for connecting the **C-500** to an unused trunk/line input of your phone system of connecting to phones used only for doorbox communication.

Step 1	Connect the power, required entry phones and doorstrike outputs (if required) as shown in section **A**.
Step 2	Connect an analog phone or unused phone system (PABX/KSU) line /trunk port to terminals **3** & **4**, "**LINE OUT TO PHONES**" on the **C-500**.
Step 3	Access programming as shown in **Programming** section **A**, **2**. below. Enter ✳**5**, two beeps should be heard.
Step 4	Enter additional desired programming, then hang-up the phone and place DIP switch 1 back to the **OFF** position.
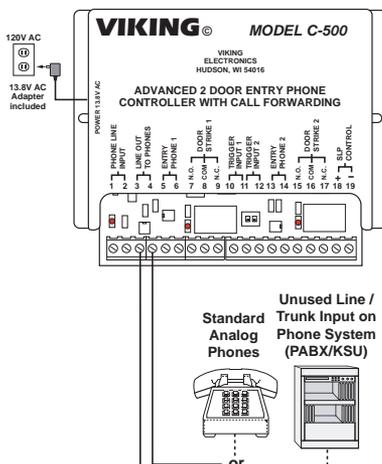
Accessing Programming

1. Accessing the Programming Mode with a Security Code

Step 1	Come off-hook with any house phone (device) connected to terminals **3** & **4**, **LINE OUT TO PHONES**.
Step 2	Enter ✳# followed by the 6-digit security code (factory set to **845464**, V-I-K-I-N-G, see **Quick Programming Features** page 7).
Step 3	A double beep will indicate that you have accessed the programming mode.
Step 4	You can now touch tone program the features listed in **Quick Programming Features** page 7.
Step 5	When finished programming, hang up.

2. Accessing the Programming Mode Locally (Security Code Bypass Mode)

*Note: This mode is useful if you have forgotten your security code or for programming the **C-500** without a telephone line connected.*

Step 1	Move DIP switch 1 to **ON** (Security Code Bypass Mode, see **DIP Switch Programming** page 11).
Step 2	Come off-hook with any house phone connected to terminals **3** & **4**, **LINE OUT TO PHONES**.
Step 3	A double beep will indicate that you have accessed the programming mode.
Step 4	You can now touch tone program the features listed in **Quick Programming Features** page 7.
Step 5	When finished programming, hang up and move DIP switch 1 to the **OFF** position.

3. Accessing the Programming Mode Remotely

Step 1	Call into the **C-2000B** from a touch tone phone. *Note: Call in from another line to avoid C.O. busy signals, etc.*
Step 2	Answer the call from any house phone (device) connected to terminals **3** & **4**, **LINE OUT TO PHONES**.
Step 3	From either phone enter ✳# followed by the six digit security code (factory set to **845464**, see **Quick Programming Features** page 7.).
Step 4	A double beep will indicate that you have accessed the programming mode.
Step 5	You can now touch tone program the features listed in **Quick Programming Features** page 7.

Note: Programming from a cell-phone may not be suitable in areas with weak coverage.

Description	Enter Digits	+ Location
Entry phone 1 first call forward number	1-20 digits (0-9)	+ #00
Entry phone 1 second call forward number	1-20 digits (0-9)	+ #01
Entry phone 1 third call forward number	1-20 digits (0-9)	+ #02
Entry phone 1 fourth call forward number	1-20 digits (0-9)	+ #03
Entry phone 1 fifth call forward number	1-20 digits (0-9)	+ #04
Entry phone 2 first call forward number	1-20 digits (0-9)	+ #05
Entry phone 2 second call forward number	1-20 digits (0-9)	+ #06
Entry phone 2 third call forward number	1-20 digits (0-9)	+ #07
Entry phone 2 fourth call forward number	1-20 digits (0-9)	+ #08
Entry phone 2 fifth call forward number	1-20 digits (0-9)	+ #09
To clear any call forward speed dial number	(no digits)	+ #00-#09
Privacy number (factory disabled)	0-6 digits (0-9)	+ #10
Entry phone 1 keyless entry codes (factory disabled)	4-6 digits (0-9)	+ #11-#16
Entry phone 1 keyless toggle entry code (factory disabled)	4-6 digits (0-9)	+ #17
Entry phone 1 keyless one time use codes (factory disabled)	4-6 digits (0-9)	+ #18-#19
Entry phone 2 keyless entry codes (factory disabled)	4-6 digits (0-9)	+ #21-#26
Entry phone 2 keyless toggle entry code (factory disabled)	4-6 digits (0-9)	+ #27
Entry phone 2 keyless one time use codes (factory disabled)	4-6 digits (0-9)	+ #28-#29
Entry phone 1 caller ID (factory set to "Entry Phone 1") .... **0-15 two digit characters** (see section 5, pg 8)		+ #30
Entry phone 2 caller ID (factory set to "Entry Phone 2") .... **0-15 two digit characters** (see section 5, pg 8)		+ #31
Door strike command (** = *, **** = **, 0-9 or 00-99, factory set to **)	1 or 2 digits	+ #32
Relay activation tone (buzz) volume (0 = off, 3 = maximum, factory set to 2)	0 - 3	+ #33
Door strike 1 activation time (00 = .5 sec, factory set to 5 sec)	00 - 99 sec	+ #40
Door strike 2 activation time (00 = .5 sec, factory set to 5 sec)	00 - 99 sec	+ #41
Call forward maximum call time (0 = 30 sec, blank = disable, factory set to 3 mins)	1 - 9 mins	+ #42
Call forward maximum ring time (00 = disabled, factory set to 30 sec)	01 - 59 sec	+ #43
Maximum ring count from entry phone before call forward (0=immediate call forward, factory set to 4)	1 - 9	+ #44
Incoming ring count before auto answer (00 = disables auto answer, factory set to 10)	01 - 99	+ #45
Security code (factory set to 845464)	6 digits	+ #47
Single entry dual door strike mode (factory disabled/blank, 00 = no delay, 01-99 sec)	00 - 99	+ #46
Entry phone 1 identifier (factory set to 1)	1 - 8	+ #48
Entry phone 2 identifier (factory set to 2)	1 - 8	+ #49
Multiple Unit setting (0 = Primary, 1 = Secondary, factory set to 0)	0 or 1	+ #60
Enable/disable Immediate Call Forward command (0 = disable, 1 = enable, factory set 1)	0 or 1	+ #61
Enable/disable Entry phone ringing (0 = disable, 1 = enable, factory set to 1)	0 or 1	+ #62
Analog Station Mode (0 = disable, 1 = enable, factory set to 0)	0 or 1	+ #63
Flash required before outgoing off-hook operation commands (0=disable, 1=enable/factory set)	0 or 1	+ #64
Entry phone chime control mode (0 = disable, 1 = enable, factory set to 0)	0 or 1	+ #65

Description	Enter Digits
Enable door strike latching and toggle commands (factory setting)	*1
Disable door strike latching and toggle commands	*2
Entry phone calls give custom ring cadence (factory setting)	*3
Entry phone calls give standard ring cadence (2 sec on, 4 sec off)	*4
Dial "9" to access an outside line (gives single beep on off hook to remind user)	*5
Instant outside line access (factory setting)	*6
To add a 4 - 6 sec pause anywhere in the dialing string	*7
To add a 1 sec pause anywhere in the dialing string	*8
Enable Entry phone identifier beeps (factory setting)	*9
Disable Entry phone identifier beeps	*0
To add a "*" to dialing string, privacy number, keyless code or strike command	**
To add a "#" to dialing string	*#
Ignore touch tones for programming Entry phone 1	##1
Ignore touch tones for programming Entry phone 2	##2
Trigger inputs activate door strike relays (factory setting)	##3
Trigger input 2 enables call forwarding when triggered	##4
Comcast mode ON (*Note: Should only be programmed on the first unit in multi unit applications*)	##5
Comcast mode OFF (factory setting)	##6
Exit programming	##7
Reset all programming to factory default settings	###

7

1. Call Forwarding Speed Dial Numbers (#00 – 09)

The call forwarding speed dial number stored in location **#00** is the first outside number that will be dialed if entry phone 1 goes off hook and the house phone does not answer within the ring count set by programming 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-500** 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 **09**), without any preceding numbers. If no numbers are programmed, the **C-500** will only call the house phone. To program a 4 to 6 second pause in the dialing string enter "∗**7**". To program a 1 second pause enter "∗**8**". To program a ∗ or **#** in the dialing string enter "∗∗" or "**##**". *Note: Up to 20 digits can be stored in each dial position. Special features such as one and four to six second pauses, and touch tone * and # count as a single digit.*

2. Privacy Number (#10)

The "Privacy Number" is factory disabled so an entry phone off-hook will automatically ring the house phones. If a "Privacy Number" is programmed, the visitor must touch tone dial the number to be able to call into the house. The "Privacy Number" may be from 1 to 6 digits and is stored in location "**#10**". To disable the "Privacy Number," clear the number's memory location by entering "**#10**" without any previous digits.

3. Keyless Entry Codes and One Time Use Keyless Entry Codes (#11-16, #18-19, #21-26, #28-29)

Each entry phone may have a combination of up to 6 keyless entry codes and 2 one time use keyless entry codes for touch tone keyless entry. The keyless entry codes may be from 4 to 6 digits in length and are stored in locations **#11 - #16** for entry phone 1 and **#21- #26** for entry phone 2. To clear any keyless entry codes, simply enter the location number (ie: "**#11**") without any previous digits.

4. Keyless Toggle Entry Code (#17, #27)

Each entry phone may have 1 keyless toggle entry code for toggling the door strike relay on or off. The toggle codes may be from 4 to 6 digits in length and are stored in location **#17** for entry phone 1 and **#27** for entry phone 2. To clear any toggle codes, simply enter the location number (ie: "**#17**") without any previous digits.

5. Entry Phone Caller ID (#30, #31)

The **C-500** is factory set to send "**Entry Phone 1**" or "**Entry Phone 2**" Caller ID data to the house phones when the corresponding entry phone is activated. The entry phone caller ID is programmable by entering a string of up to 15 two digit numbers into programming location **#30** for entry phone 1 and **#31** for entry phone 2. Use the chart below to enter the two digit number that represents the character to be programmed. To disable Caller ID simply enter the programming location number **#30** and **#31** without any previous digits.

Entry Phone 1 CID Characters:

___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

Two Digit Numbers:

__ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __   **#30**

Entry Phone 2 CID Characters:

___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

Two Digit Numbers:

__ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __   **#31**

Caller ID Programming Chart

2 Digit Number	Character	2 Digit Number	Character	2 Digit Number	Character	2 Digit Number	Character	2 Digit Number	Character
00	(space)	19	3	38	F	57	Y	76	l
01	!	20	4	39	G	58	Z	77	m
02	"	21	5	40	H	59	[	78	n
03	#	22	6	41	I	60	\	79	o
04	$	23	7	42	J	61	]	80	p
05	%	24	8	43	K	62	^	81	q
06	&	25	9	44	L	63	_	82	r
07	'	26	:	45	M	64	`	83	s
08	(	27	;	46	N	65	a	84	t
09	)	28	<	47	O	66	b	85	u
10	*	29	=	48	P	67	c	86	v
11	+	30	>	49	Q	68	d	87	w
12	,	31	?	50	R	69	e	88	x
13	-	32	@	51	S	70	f	89	y
14	.	33	A	52	T	71	g	90	z
15	/	34	B	53	U	72	h	91	{
16	0	35	C	54	V	73	i	92		
17	1	36	D	55	W	74	j	93	}
18	2	37	E	56	X	75	k	94	~

6. Door Strike Command (#32)

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 **#32** 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-500** 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-500** 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 "∗∗".

7. Relay Activation Tone (Buzz) Volume (#33)

The relay activation tone is a buzzing sound that is heard on the entry phone when the door strike relay is activated. The tone length will match the door strike activation time up to a maximum of 5 seconds. The tone can be programmed to three different volume setting **1 = Low, 2= Medium, 3 = High** in memory location **#33**. The tone can also be disabled by entering **0#33**.

8. Door Strike Activation Time (#40, #41)

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.

9. Call Forward Maximum Call Time (#42)

The Call Forward Max 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-500** 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.

10. Call Forward Maximum Ring Time (#43)

After the **C-500** dials an outside number, it listens to the phone line for busy, ringing, or someone answering at the other end. The Call Forward Max Ring Time is used to limit this process in the event that the **C-500** cannot determine if the call has been answered. If the **C-500** cannot determine that the call has been answered within the "Call Forward Max Ring Time", the line will be disconnected and the **C-500** 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.

11. Maximum Ring Count from Entry Phone before Call Forward (#44)

When the entry phone comes off hook, the **C-500** 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-500** 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 **Operation** section **B**) that can be used for immediate call forwarding. The factory setting is **4**.

12. Incoming Ring Count (#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-500** answers the call. This number can range from **01** to **99**, if blank or **00**, the Auto Answer feature of the **C-500** will be disabled. The factory setting is **10**.

13. Security Code (#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**".

14. Single Entry Dual Door Strike Mode (#46)

The **C-500** can be programmed to activate both of its door strike relays simultaneously or with a programmable delay before the second door strike relay is activated. This can be useful in larger entryways with both outside and inside locked doors. A delay can be programmed allowing the guest enough time to get to the second door before activating the second door strike. On incoming entry phone calls, when the user enters the door strike command, door strike relay 1 will activate first then after the programmed delay, door strike relay 2 will activate. In this application, if a request for exit switch is used it should be connected to the trigger 2 input. When the request for exit switch is activated, door strike relay 2 will activate first then after the programmed delay, door strike relay 1 will activate. The delay can be programmed from **1** to **99** seconds by entering **01 - 99 #46**. Both door strike relays can be simultaneously activated without delay by programming **00#46**. This feature can be disabled by entering **#46** without any preceding digits.

15. Entry Phone Identifier (#48, #49)

An entry phone identifier number must be programmed for each entry phone connected to the **C-500** (factory programmed to 1 and 2). The entry phone identifier will allow you to activate a specific door strike relay when using the "Outgoing Off-Hook Operation Commands". When using multiple **C-500**'s on a single phone line (up to 4 units total with up to 8 entry phones) for ease of operation we recommend programming the Primary **C-500** with entry phone identifiers **1** and **2** (**1#48**, **2#48**). Secondary **C-500** unit two with entry phone identifiers **3** and **4** (**3#48**, **4#48**). Secondary **C-500** unit three with entry phone identifiers **5** and **6** (**5#48**, **6#48**) and secondary **C-500** unit four with entry phone identifiers **7** and **8** (**7#48**, **8#48**).

16. Multiple Unit Setting (Primary/Secondary) (#60)

When using multiple **C-500**'s on a single phone line (up to 4 units total with up to 8 entry phones) one **C-500** must be programmed as a Primary unit. **C-500** units 2, 3 and 4 must be programmed as Secondary units (see **Installation** section **B**).

17. Enable/disable Immediate Call Forward command (#61)

If a touch tones "∗∗∗" conflict with your phone system, the immediate call forward operation command (∗∗∗) can be disabled by entering **0#61** in programming.

18. Enable/disable Entry Phone Ringing (#62)

The **C-500**'s entry phone incoming ring can be disabled. Disabling the ring can be useful when using a **C-500** with a **Viking SLP-1** or **SLP-2** which can supply chimes over a whole house audio system when an entry phone is activated. Disabling the ring can also be useful when using the **C-500** in the "Entry phone chime control mode" to activate your door chime when an entry phone is activated. See **Programming** section **21**.

19. Analog Station Mode (#63)

In this mode, when an entry phone is activated the **C-500** accesses the analog PABX extension or telephone line it is connected to and speed dials the first call forwarding number programmed for that entry phone. When the remote party answers the call, they can dial a touch tone command to activate the door strike relay. If one of the **Viking E-series** entry phones is using the line and a second entry phone goes off hook, the second entry phone will not function until the first entry phone hangs up. In this mode, custom double ring cadence from the Entry Phone is not compatible, no caller ID data is generated by the controller and no "entry phone identifier beeps" are provided when the call is answered. Monitoring an entry phone or forcing a door strike relay to operate is accomplished by calling the analog PBX extension or telephone line connected to the **C-500**, the unit will answer and output a single beep, you can then dial **#1 - #8** to monitor a specific entry phone or enter a valid "Outgoing Off-Hook Operation" touch tone command. Remote programming of the **C-500** and any of the **Viking** hands-free entry phones connected is also possible in this mode. See "Ignore touch tones for programming entry phone" commands "**##1**" and "**##2**". Touch tone keyless entry codes can also be programmed per entry phone to provide keyless entry. *Note: When using multiple **C-500**'s on a single station port and communicating with an entry phone, "activate ALL" commands will only activate the 2 door strike relays of the **C-500** you are connected to.*

20. Flash Required before Out Outgoing Off-Hook Commands (#64)

If the **C-500**'s "Outgoing Off-Hook Operation Commands" conflict with your phone line or phone system, you can program the **C-500** to require a 0.5 second hookswitch flash from the phone prior to entering the commands. This can be enabled by entering "**1#64**" and disabled by entering "**0#64**" in programming.

21. Entry Phone Chime Control Mode (#65)

With the **C-500**'s "Entry Phone Chime Control Mode" is enabled (**1#65**), door strike relay 2 will actuate whenever an entry phone is activated. Connect a door bell or chime (and power supply) to the normally open door strike 2 contacts. The door strike relay will energize for the programmed "Door Strike 2 Activation Time" See **Programming** section **8**. To enable this mode enter "**1#65**" in programming. To disable this mode enter "**0#65**" in programming.

22. Enable/Disable Door Strike Latching and Toggle Commands (∗1, ∗2)

If door strike relay latching and toggle commands are not required they can be disabled by entering (∗**2**) in programming. Disabling these commands can be useful if you want to eliminate any chance of inadvertently latching open a door or gate.

23. Entry Phone Call Ring Cadence (∗3, ∗4)

Entry phone calls are factory set to ring the line out to phones port in 4 different custom ring cadences. This is useful to help distinguish which entry phone is calling in. With entry phone custom ring cadence enabled (∗**3**/factory setting) entry phone calls will ring in the following cadence; Entry phone 1: Single ring, Entry phone 2: Double ring, Entry phone 3: Triple short-long-short ring, Entry phone 4: Triple short-short-long ring. When using four **C-500**'s on a single line, entry phones 5 - 8 will have the same ring cadence as entry phones 1 - 4.The **C-500** can be programmed to give a standard ring cadence for entry phone calls (2 seconds of ring, and 4 seconds off between rings) by entering "∗**4**" in programming. Entry phone ringing can also be disabled by entering "**0#62**". This is useful when connecting the **C-500** to a **SLP-1** or **SLP-4** to provide unique front and back door chimes over your whole house audio system.

24. Outside Line Access, Dial "9"/ Instant (∗5, ∗6)

1. Dial "9" to Access the Outside Line - To program the **C-500** for C.O. dial tone, enter "∗**5**" while programming. To gain access to C.O. dial tone, dial a touch tone "**9**". *Note: "∗5" must be programmed when connecting a C-500 to an unused phone system trunk/line input and no C.O. line is connected to the C-500.*

2. Instant Outside Line Access (factory default) - To program the **C-500** for private dial tone, enter "∗**6**" while programming. House phones will instantly have the outside line dial tone on an off-hook.

25. Enable/Disable Entry Phone Identifier beeps (∗9, ∗0)

With "∗**9**" programmed, when an entry phone call is answered 1 or 2 beeps (up to 8 beeps with multiple **C-500**'s) will be heard to identify which entry phone is calling in. This can be disabled by entering "∗**0**" in programming.

26. Ignore Touch Tones for Programming Entry Phones (##1, ##2)

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** or **##2** is entered, the **C-500** will send a ring signal to the entry phone port 1 or 2 respectively. If the device on that port answers the line, the **C-500** 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-500** will stay in the programming mode. Once connected to the entry phone, the **C-500** 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-500** will hang up. In any of the other programming modes, the timer is disabled and the **C-500** only watches for the entry phone to hang up.

27. Trigger Inputs Activate Relays (REX)/ Trigger Input 2 Enables Call Forwarding (##3, ##4)

The **C-500** has two Trigger Inputs that can be used for external Postal Lock switches or Request to Exit (REX) switches. The switches must have a momentary, normally open contact. With "Trigger Inputs Activate Relays" **(##3**) programmed, when the **C-500** detects a contact closure on trigger input 1 or 2, the corresponding door strike relay 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-500** will re-energize the door strike relay and go through another Door Strike timing cycle.

With "Trigger Input 2 Enables Call Forwarding" (**##4**) programmed, Trigger input 2 now controls whether or not the house phone will ring when either entry phone goes off hook. If Trigger Input 2 is shorted, the house phone ringing will be skipped (Immediate Call Forward Mode), if Trigger Input 2 is open, the **C-500** will ring the house phone when either entry phone goes off hook. The touch tone command "∗∗∗" overrides the status of Trigger Input 2 when the trigger switch is open. The "**##4**" mode can be useful when using a Viking model **CTG-1** (with CTGF-BKD software) or **CTG-2** to automatically forward entry phone calls at certain times of the day. *Note: With ##4 programmed, trigger input 2 cannot be used for activating door strike relay 2.*

28. Comcast Mode On/Off (##5, ##6)

If a touch tone # as the first digit entered from off hook conflicts with your Comcast VOIP modem, the "Comcast Mode" (**##5**) can be programmed. With **##5** programmed, when a # is entered as the first digit the **C-500** will immediately switch the phone to artificial talk battery, allowing you to enter "Outgoing Off-Hook Operation Commands". *Note: This should only be programmed on the "Primary" C-500 in multi-unit applications.*

Dip Switch Programming

A. Learn/Security Code Bypass Mode (Dip Switch 1 – ON)

This mode is useful for entering programming without a security code or programming the **C-500** without a telephone line connected. See "Accessing the Programming Mode Locally" (Security Code Bypass Mode) section 2 page 6.

B. Doorbell Mode (Dip Switch 2 - ON)

With the **C-500** in the doorbell mode (DIP switch 2 ON), a normally open switch (SPST 6-16V lighted or non-lighted doorbell button, etc.) can be connected to trigger input 1 or 2. The switches should be located near entry phone 1 or 2. A momentary closure on either of the **C-500**'s trigger inputs will call the corresponding entry phone. The entry phone will automatically answer (see the Technical Practice for your entry phone) and begin ringing the house phones (LINE OUT TO PHONES). The house phones can then be answered, door strike commands entered, etc. (see **Operation** sections **A-H**). *Notes: Entry phones ringing the house phones can be disabled in this doorbell mode, if it is desirable to have the doorbell chime but not the house phones ring. Program the C-500 with "0#62" (disable entry phone ringing). To control the chime, "Entry Phone Chime Control Mode" must be enabled "1#65". See Programming section 21. When the doorbell chimes, picking up a house phone will instantly connect the house phone to the entry phone.*
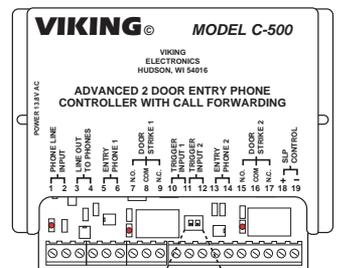
A. Visitors

When a visitor presses the call button (comes off-hook) on the entry phone, the **C-500** will begin ringing the house phones with a distinctive ring cadence to identify it is an entry phone call and entry phone "Caller ID" information is sent. If a house phone is on a C.O. call, a call waiting tone every 12 seconds will be heard. A touch tone "**#**" from the house phone will put the C.O. call on hold and connect the house phone to the entry phone (1 to 8 beeps will be heard, indicating which entry phone you are connected to). Enter Touch Tones "**∗∗**" to momentarily activate that entry phone door strike and return to the C.O. call or enter "**#**" to just return to the C.O. call without activating the door strike. If the door strike is activated, a buzz sound will be heard confirming the strike has been activated. If you require the door strike to remain on continuously (ie: a truck delivery), enter Touch Tones "**∗1**" to continuously activate that relay and return to the C.O. call. A 5 second buzz sound will indicate the door strike relay is latched on. When the visitor calls in again (ie: they are finished unloading the truck), enter Touch Tones "**∗0**" to deactivate the relay. Alternatively, the door strike relay can be de-activated by going off-hook with any house phone and entering **#1∗0** for door strike relay 1, **#2∗0** for door strike relay 2, etc. See **Operation** commands. A short buzz will indicate the door strike relay is off.

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. If no call forward numbers are programmed, the **C-500** 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 automatically hang up. If the **C-500** senses that the entry phone has not dropped off, it will send a busy signal. If call forward numbers are programmed, it will dial the first one then watch for a busy or no answer for the duration of the Maximum Ring time. If this time elapses and the **C-500** has not determined the call has been answered, it assumes that the call was not answered and goes on to the next call forward number. If all numbers are called without an answer, the **C-500** will send a CPC signal to hang up the entry phone. The Maximum Call Time is started as soon as the **C-500** 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-500** to skip ringing the house phone and immediately forward all entry calls to the programmed call forward 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. The second way is to go off hook with any house phone and enter "**∗∗∗**". This places the **C-500** 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. If the **C-500** has trouble detecting touch tone commands from off hook or if "**∗**" or "**#**" commands conflict with your phone system, you can hook flash the line which places the phone on artificial talk battery. A beep will be heard and you can now enter your operation commands. The third way is to provide a contact closure across trigger inputs 1 and 2 (**##4** must be programmed). A Viking model **CTG-1** (with CTGF-BKD software) or **CTG-2** can be used to provide the Immediate call forward contact closer automatically at certain times of the day.

C. Monitoring or Receiving Entry Phone Calls

If the tenant wants to monitor the entry phone, they can pick up any phone in the house and dial out to an entry phone that supports auto-answering capability by dialing "**#1**" or "**#2**" (**#1 - #8** when using multiple **C-500**'s) to call entry phones 1 or 2 respectively. All Viking Handsfree Entry Phones are equipped with an Auto-Answer feature. If the tenant is on an outside call and a entry phone comes off hook, a call waiting tone will be heard every 12 seconds. The tenant can then enter a touch tone "**#**" to put the CO call on hold and connect to the entry phone that is calling. When the conversation with the person at the door is done, the tenant can return to the original caller by entering another touch tone "**#**".

The **C-500** is factory programmed to automatically answer an incoming call after 10 rings. This will allow you to remotely program the **C-500**. The auto answer feature can be disabled by entering "**00#45**" in programming. If this feature is enabled, there cannot be anything else on the phone line that could answer the call before the **C-500** such as an answering machine.

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-500** 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-500** can be programmed to handle either a 1 digit or 2 digit Door Strike Command (programming position "**#32**"). If a single digit is being used, the minimum touch tone length is 100 milliseconds. During this time the **C-500** must determine if the touch tone is coming from the entry phone or the called party. If the **C-500** 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-500** can then be sure that the touch tones are coming from the called phone.

E. Trigger Inputs

The **C-500** has two Trigger Inputs that can be used for external Postal Lock switches or Request to Exit (REX) switches. The switches must have a momentary, normally open contact. With "Trigger Inputs Activate Relays (**##3**) programmed, when the **C-500** detects a contact closure on trigger input 1 or 2, the corresponding door strike relay 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-500** will re-energize the door strike relay and go through another Door Strike timing cycle.

With "Trigger Input 2 Enables Call Forwarding" (**##4**) programmed, Trigger input 2 now controls whether or not the house phone will ring when either entry phone goes off hook. If Trigger Input 2 is shorted, the house phone ringing will be skipped (Immediate Call Forward Mode), if Trigger Input 2 is open, the **C-500** will ring the house phone when either entry phone goes off hook. The touch tone command "✶✶✶" overrides the status of Trigger Input 2 when the trigger switch is open. The "**##4**" mode can be useful when using a **Viking** model **CTG-1** (with CTGF-BKD software) or **CTG-2** to automatically forward entry phone calls at certain times of the day. *Note: With ##4 programmed, trigger input 2 cannot be used for activating door strike relay 2.*

F. Privacy Number

The privacy number feature is useful for preventing unwanted (prank) entry phone calls from visitors. If a privacy number has been programmed, an off hook entry phone is given 4 seconds of dial tone to allow the visitor to enter the privacy number. If the visitor enters the correct privacy number, the **C-500** will ring the house phones. If they enter an incorrect number, they will be disconnected.

If a privacy number is not programmed, then an off-hook entry phone will immediately ring the house phones. *Note: The "Privacy Number" may be programmed with the first 6 digits of the actual home/office phone number. Visitors may dial the actual 7- digit phone number as if they are making an actual telephone call to the home/office.*

G. Keyless Entry Codes and One Time Use Keyless Entry Codes

Touch tone keyless entry codes may be used by the tenants to provide keyless entry. Each entry phone may have up to 6 keyless entry codes. If a keyless entry code has been programmed, an off-hook entry phone is given 4 seconds of dial tone before ringing the house phone. During this time a touch tone "**#**" + the "keyless entry code" may be entered.

A correct keyless entry code will provide a timed door strike activation for that entry phone location. One time use keyless entry codes function as described above but can only be used **ONCE**. After the one time use keyless entry code has been used, it is instantly cleared from the **C-500**'s memory. This is ideal for issuing keyless entry codes to service personnel, etc. *Note: A short buzz sound indicates when the relay has been activated and the visitor can now open the door.*

H. Programming the Entry Phones

Many of the **Viking** handsfree entry phones are touch tone programmed with the extension number or phone number to dial, silence timing, vox switching speed and other timing and/or dialing options. The **C-500** has an "Ignore Touch Tones for Programming Entry Phone 1 or 2" programming feature that allows the remote programming of these entry phones. For complete details, see **Programming** section **26**. In the Analog Station Dial Through mode, this feature allows you to remotely program the **C-500** or any of the entry phones used.

Operation Commands

Entry Phone Call Operation Commands:

Momentarily activate the door strike of connected Entry phone (1 or 2 digits, factory set to ∗∗)	∗∗
Un-Latch (deactivate) the door strike of connected Entry phone	∗**0**
Latch (continuously activate) the door strike of connected Entry phone	∗**1**
Disconnect an Entry phone call	**#**

Outgoing Off-Hook Operation Commands:

Enable Immediate Call Forward	∗∗∗
Disable Immediate Call Forward (factory setting)	**###**
Monitor any Entry phone	**# + (Entry phone identifier 1 - 8)**
Momentarily actuate selected door strike	**# + (Entry phone identifier 1 - 8) ∗∗**
Un-Latch (deactivate) selected door strike	**# + (Entry phone identifier 1 - 8) ∗0**
Latch (continuously activate) selected door strike	**# + (Entry phone identifier 1 - 8) ∗1**
Toggle selected door strike	**# + (Entry phone identifier 1 - 8) ∗2**
Answer or disconnect an Entry phone call while on a C.O. call	**#**
Momentarily activate ALL door strikes	**#∗∗**
Un-Latch (deactivate) ALL door strikes	**#∗0**
Latch (continuously activate) ALL door strikes	**#∗1**
Toggle ALL door strikes	**#∗2**

Quick Operating Reference Guide

*Note: Make a photocopy of the **Operating Commands** (below) and place one near your phones for quick reference to all of the **C-500's** Touch Tone operating commands.*

Entry Phone Operation Commands:

Feature	Tone Tone Command	Description
Activate Doorstrike	∗∗	Momentarily activate doorstrike of connected entry phone (1 or 2 digits, factory set to ∗∗).
Un-Latch Doorstrike	∗**0**	Un-latch (deactivate) the doorstrike of the connected entry phone.
Latch Doorstrike	∗**1**	Latch (continuously activate) the doorstrike of the connected entry phone.
Disconnect Phone	**#**	Disconnect an entry phone call.

Outgoing Off-Hook Operation Commands:

Tone Tone Command	Description
∗∗∗	Enable Immediate Call Forward
###	Disable Immediate Call Forward (factory setting)
# + (Entry phone ID 1-8)	Monitor any Entry phone
# + (Entry phone ID 1-8) ∗∗	Momentarily actuate selected door strike
# + (Entry phone ID 1-8) ∗**0**	Un-Latch (deactivate) selected door strike
# + (Entry phone ID 1-8) ∗**1**	Latch (continuously activate) selected door strike
# + (Entry phone ID 1-8) ∗**2**	Toggle selected door strike
#	Answer or disconnect an Entry phone call while on a C.O. call
#∗∗	Momentarily activate ALL door strikes
#∗0	Un-Latch (deactivate) ALL door strikes
#∗1	Latch (continuously activate) ALL door strikes
#∗2	Toggle ALL door strikes

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.
DOD# 187

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

Double gang entry phone with built-in
color video camera. **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. **DOD# 191**

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

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

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

Double gang entry phone.
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. **DOD# 208**

Speaker Phones that Provide Convenient Handsfree Communication

The **E-10A** and **E-20B** are telephone line powered
entry phones designed to provide two-way handsfree
communication. Both function identically, but are avail-
able in two different housings to better suit the appli-
cation. When the "Call" button is pressed, the **E-10A**
or **E-20B** will come off-hook and will remain off-hook
until a CPC signal is detected, the programmed time-
out has elapsed, a busy signal is detected, or the call
goes silent, making the unit automatically disconnect.

E-10A/E-10A-EWP   **E-20B/E-20B-EWP**

The **E-10A-EWP** and **E-20A-EWP** shares all of the
features of the **E-10A** and **E-20B** in addition to Enhanced Weather Protection (EWP) for outdoor installations
where the unit is exposed to precipitation or condensation. See **DOD# 210** for more info.

Vandal Resistant Handsfree Entry Phones with Built-In Keypad

The **K-1700 Series** and **K-1705 Series** entry
phones provide a tough and attractive hands-
free phone for apartment, and residential
door entry or applications requiring a vandal
resistant speaker phone. The **K-1700 Series**
and **K-1705 Series** entry phones are avail-
able in two attractive finishes: "brushed stain-
less steel" and "oil rubbed bronze".

K-1700-3
"Brushed 316 Stainless Steel"

K-1705-3-BN
"Oil Rubbed Bronze"

The **K-1700 Series** and **K-1705 Series** come
complete with a standard, flush mount, rough-
in box. In addition, an optional **VE-6x7** weather resistant, surface mount box is available (see **DOD#
424**).The **K-1705 Series** also features a built-in high resolution color video camera.

The **K-1700-3-EWP** and **K-1705-3-EWP** shares all of the features of the **K-1700-3** and **K-1705-3** in ad-
dition to Enhanced Weather Protection (EWP) for outdoor installations where the unit is exposed
to precipitation or condensation. See **DOD# 157** and **159** for more info.

15

Warranty

IF YOU HAVE A PROBLEM WITH A VIKING PRODUCT, CONTACT: VIKING TECHNICAL SUPPORT AT (715) 386-8666

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 Viking product 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.

TWO YEAR 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 two years from the date of purchase from any authorized Viking distributor. 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. This warranty does not cover stainless steel surfaces that have not been properly maintained.

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