

TECHNICAL Practice

TELECOM SOLUTIONS FOR THE 21ST CENTURY

K-6000-DVA

**Automated Voice
Message Delivery
System**

September 16, 2013

Automated Voice Message Delivery System



Model **K-6000-DVA** can automatically notify up to 1000 people of an event or an event cancellation, school or business closing or delayed opening. The **K-6000-DVA** is designed to connect to a standard analog CO line, PABX station or VoIP ATA or FXS port. To activate the unit, an authorized official calls the **K-6000-DVA**, dials a 6 digit access code, selects a pre-recorded message or records a live message up to 1 minute, then activates the unit via a touch tone command to automatically call all the phone numbers in a pre-programmed group. Up to 6 groups of phone numbers can be pre-programmed into the unit. Alternatively, activating an "All Call" command calls all pre-programmed numbers.

The **K-6000-DVA** can also be activated (or cancelled) by up to 8 external momentary push buttons (not included). In the event any called number is busy or doesn't answer, the unit will retry the unanswered numbers several times (programmable 1-9) after all other numbers are called. The maximum time the line is allowed to ring before calling the next number can be set from 10 to 59 seconds (1 to 10 rings). The unit waits 2 seconds for touch tones after the message is delivered, if a * is detected, the message is replayed once. For critical applications, the **K-6000-DVA** can be programmed to require a positive confirmation - the called party must send a pre-determined touch tone to confirm that the message was received. The **K-6000-DVA** can be programmed from your PC's USB or RS-232 port. **Note:** Delivering a message to 1000 people will take a significant amount of time. To speed up the process, use multiple **K-6000-DVA**'s and multiple phone lines.

Features

- Non-volatile memory (no batteries required)
- Stores up to 1000 14-digit numbers
- Up to 6 groups
- 6 minutes of total record time (1 minute per input)
- Eight normally open inputs for push buttons to activate groups 1-6, "All Call" or "Stop"
- Programmable ring delay for remote programming
- Call progress detection determines when answered
- Programmable ringback time for call progress
- Programmable "retry" limit (1-9) for calls that are busy or don't answer
- Remote security and access codes
- Local or remote programming and recording
- Program from your PC's USB or RS-232 port (RS-232 to USB adapter included)
- Up to 8 **K-6000-DVA**s can be connected to 1 PC
- Master/Slave mode for multiple levels of **K-6000-DVA**s
- Line level input for loading pre-recorded messages into the unit
- Activity reports available
- Selectable "Leave Message" or call back feature for compatibility with answering machines
- Record and forward mode

Applications

- Schools
- Churches
- Businesses
- Government / community
- Civic organizations
- Apartment/office information and notification, ie: snow removal, carpet cleaning, etc.

Specifications

Power: 120V AC/12V DC 500 mA, UL listed adapter provided

Dimensions: 211mm x 160mm x 46mm (8.3" x 6.3" x 1.8")

Shipping Weight: 1.02 Kg (2.25 lbs)

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

Talk Battery: 12V DC

Touch Tone Dialing: 140 ms on/off

CPC Detection Time: 320 ms minimum

Message Record Time: 6 messages, 1 minute each

Sampling Rate: 64 K (equivalent)

Input Detection Time: 80 ms

Serial Baud Rate: 57.6K

Connections: (1) RJ11 jack for telco connection, (2) 3.5mm jacks for 600-ohm audio output and record in, (1) 9 pin RS-232 for PC connection, (1) 13 position screw terminal block for inputs

Phone...715.386.8861

IF YOU HAVE A PROBLEM WITH A VIKING PRODUCT, PLEASE 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 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, whichever 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:AAEQ##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:AAEQ##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 K-6000-DVA 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 K-6000-DVA 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 K-6000-DVA, 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.

Definitions

Access Code: Touch tone code that is entered in order to start the calling process.

Address: A field in the PC programming screen that is only used for the convenience of the user, the **K-6000-DVA** does not make use of this information.

Assigned Group: The Group number that a particular Phone number belongs to.

Busy Delay: The minimum amount of time delay before a call that was logged as Busy will be recalled. This delay allows the called line time to become idle and stops the **K-6000-DVA** from calling back too quickly.

Com Port: The communication port that Windows has assigned to the **K-6000-DVA**.

Confirmation: A touch tone that a called party enters to let the calling **K-6000-DVA** know that the call has been answered. This digit can be 0 to 9 or #.

Dial Prefix: A string of touch tones dialed before the programmed Phone number and after the PBX number. Each Group can have its own Dial Prefix, up to 4 digits. This speeds up programming if all the numbers within a Group have the same area code, etc.

Global: A set of programming parameters that apply to each **K-6000-DVA** unit. These include Start Delay, Ring Delay, Busy Delay, RNA Delay, and PBX number.

Group: Each Phone number programmed into the **K-6000-DVA** must belong to 1 of 6 Groups. Each Group can be set up with different call handling parameters such as which Message to play, special Dialing Prefixes, Ring Times and Recall Limits.

Group Title: A name given to a Group in order to identify it more easily. This can be any string of characters, examples are "Teachers", "Students", "Custodians", "Choir members", etc.

Master Mode: Used when there are multiple levels of **K-6000-DVA**, one unit calling another unit. A Group within a particular **K-6000-DVA** can be designated as a Master type Group. This means it assumes it is calling other **K-6000-DVA** units that are in the Slave Mode. After dialing the Slave unit Phone number, it will send the 6 digit Master Code for security purposes.

Master Code: The 6 digit code that a **K-6000-DVA** will send to a Slave unit to gain access and start the Slave unit calling. The Master Code needs to match the slave code of the slave unit being called.

Message: The recording that is played when the **K-6000-DVA** determines the call has been answered. Each Group can be assigned a Message from 1 to 6, each Group Message can be different, all the same or a mixture.

Name: Any string of characters given to a Phone number in order to identify it. Name is also used in Data Logging. The Name is not actually stored in the **K-6000-DVA** but only used in the database for the convenience of the user.

Notes: A field in the PC programming screen that is only used for the convenience of the user, the **K-6000-DVA** does not make use of this information.

PBX: 1 or 2 digit number that is dialed before all other numbers no matter what Group they belong to. Usually used for getting an outside line when the **K-6000-DVA** is installed behind a phone system. The PBX number can include a ";" for one second or ";;" for four second pause after the PBX number is dialed ("9;" for example to dial a PBX number of 9 then pause for one second, then continue dialing). The PBX number is dialed before a Dial Prefix if there is one.

Phone: A string of touch tones that will be dialed when the **K-6000-DVA** starts a Group. Maximum is 14 digits, can include "*" , "#", ";" for 1 second pause, or ";;" for 4 second pause.

Recall Limit: The number of times a Phone number within a Group will be recalled after the initial call was made and the **K-6000-DVA** determined the call was not completed.

Repeat: The number of times the **K-6000-DVA** will Repeat the Message. A setting of "0" means the Message will be played one time.

Ring Delay: The number of rings the **K-6000-DVA** will wait before answering an incoming call.

Ring Time: The amount of time in seconds that the **K-6000-DVA** will allow a call to ring before it marks it as RNA. This range is from 10 to 59 seconds. If 0 is programmed, the **K-6000-DVA** will not limit the call due to Ring Time.

RNA: Ring, but No Answer.

RNA Delay: The minimum amount of time delay before a call that was logged as RNA will be recalled. This delay allows the called party time to return to their phone and stops the **K-6000-DVA** from calling back too quickly.

Slave Mode: Used when there are multiple levels of **K-6000-DVA**, one unit calling another unit. When a unit is in the Slave Mode, it will answer the line with a touch tone 1, and expect to receive touch tone information as to which Group to start dialing. When Slave Mode is selected, a special 6 digit Slave Code must be set for security.

Slave Code: A 6 digit number that a **K-6000-DVA** in the Slave Mode must receive before it will make calls. The Slave Code can not match any of the Access Codes programmed in the Slave unit.

Start Delay: The amount of time after the start command is given, that the **K-6000-DVA** will delay before calling. The Start Delay time is the same for all Groups. The value of the Start Delay ranges from 0, which is immediate, up to 20 hours in 1 hour increments.

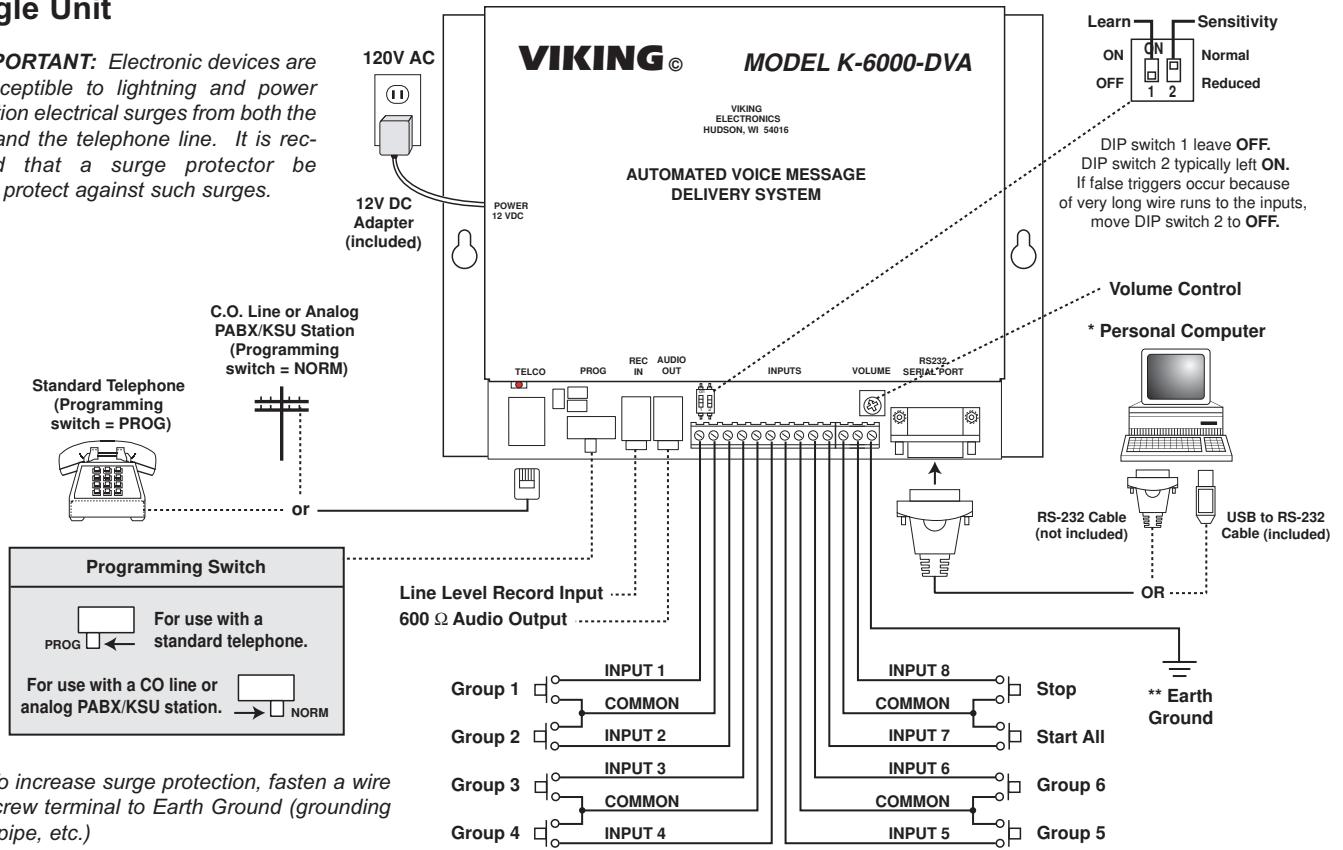
User Message: A Message that is recorded at the time of starting the calling process. If recorded, the User Message supersedes any other Messages. This Message is lost when the calling process is finished.

Installation

A. Single Unit



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.

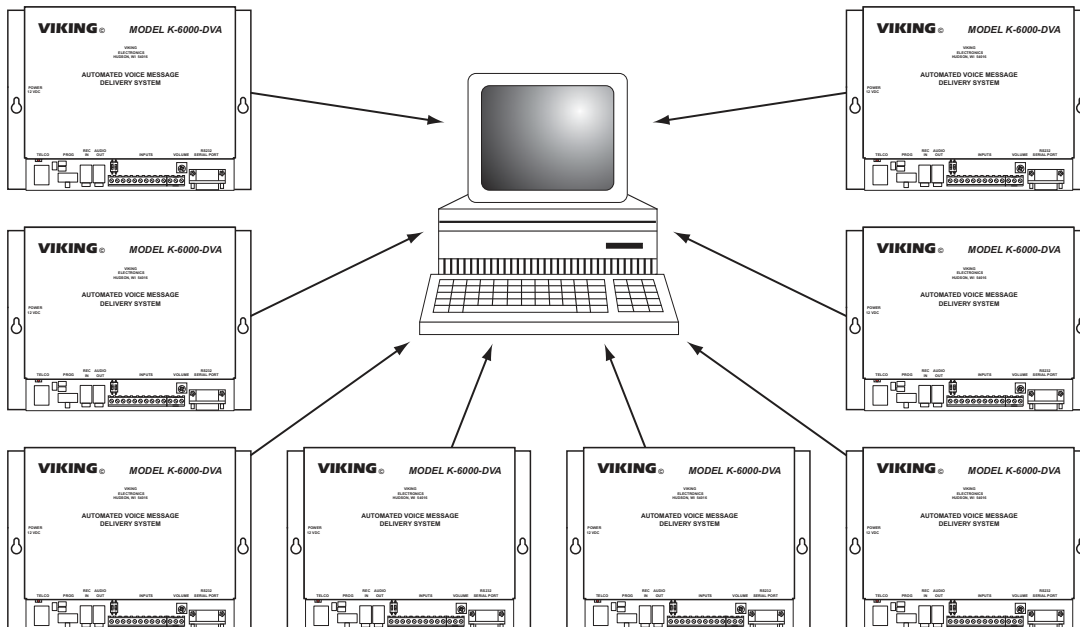


**** Note:** To increase surge protection, fasten a wire from the screw terminal to Earth Ground (grounding rod, water pipe, etc.)

*** IMPORTANT:** The computer must have **K-6000-DVA** PC programming software installed. Use the included CD or visit www.vikingelectronics.com to download free **K-6000-DVA** programming software. The software is compatible with any Windows based PC, using Windows 98 or higher. The software allows programming of all **K-6000-DVA** parameters using the computer (except the recorded messages for inputs). Viking Electronics will **NOT** support computer software or hardware problems. If you experience these problems, research your hardware/software instruction manuals or contact the manufacturer's technical support department.

B. Multiple Units on One PC

Up to 8 **K-6000-DVA**'s can be connected to a single PC provided that PC has enough serial ports and USB ports. The **K-6000-DVA** has an on board RS-232 connector, but an RS-232 to USB converter cable is included so USB ports can also be utilized. The **K-6000-DVA** software is capable of handling all 8 units, sending program information to one while collecting data from the others.

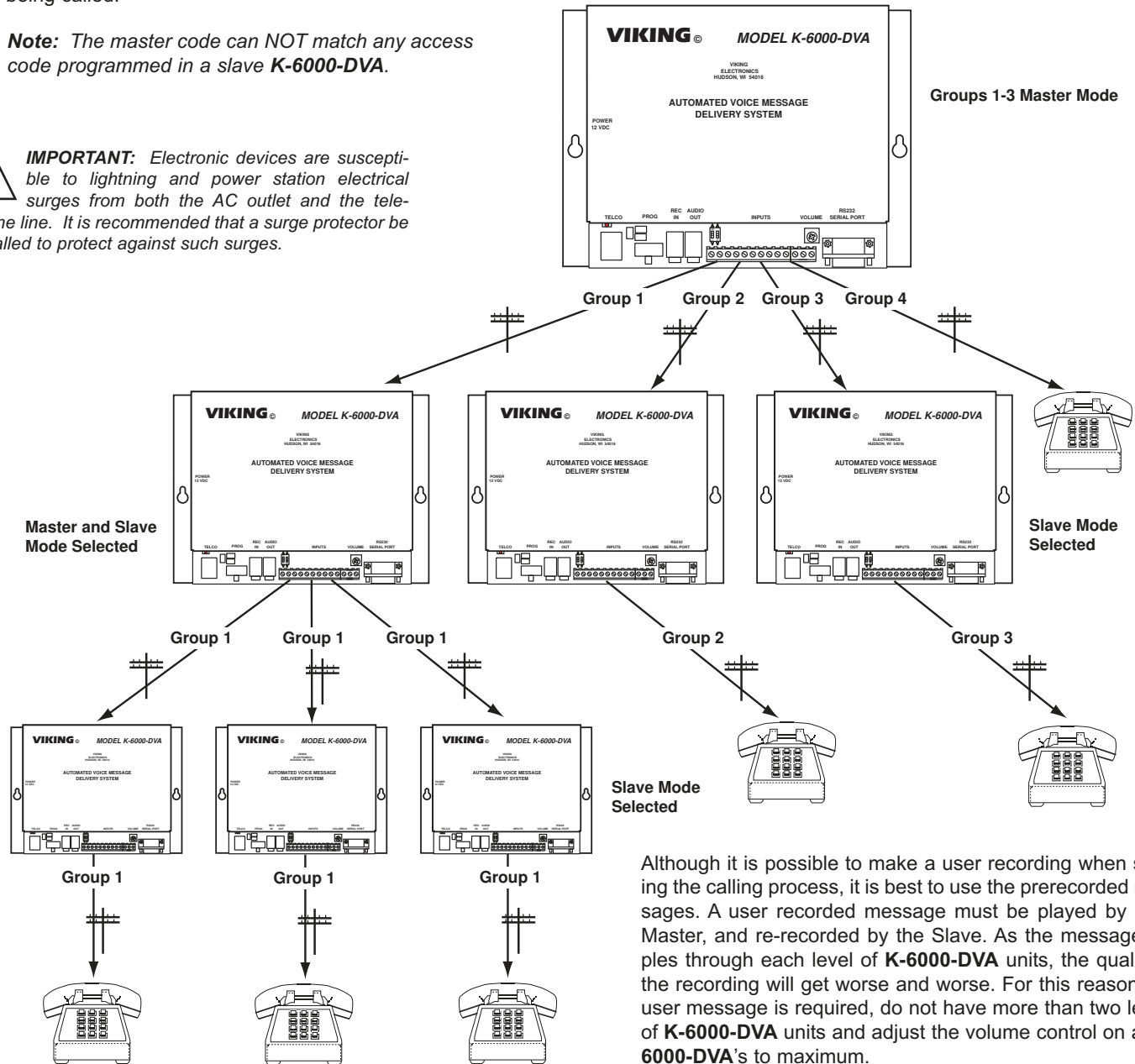


C. Calling Tree

The **K-6000-DVA** can be set up to call other **K-6000-DVA**'s, be called by a **K-6000-DVA** or both. This arrangement allows multiple calls to go out at the same time and is only limited by the number of phone lines available. The diagram below shows how different tiers of **K-6000-DVA**'s can be set up to call other **K-6000-DVA**'s. Master **K-6000-DVA**'s can activate slave **K-6000-DVA**'s and make standard phone calls. Master and Slave **K-6000-DVA**'s can only activate other **K-6000-DVA**'s. Slave **K-6000-DVA**'s can only make standard phone calls. If a unit is to be called by a **K-6000-DVA**, make sure that unit is programmed as a Slave. If a unit is to call other **K-6000-DVA**'s, make sure the phone numbers of those **K-6000-DVA**'s belong to a group that has been designated a Master Group. Last, make sure that the Master Code that is in the calling **K-6000-DVA** matches the Slave Code that is in the **K-6000-DVA** being called.

Note: The master code can NOT match any access code programmed in a slave **K-6000-DVA**.

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.



Although it is possible to make a user recording when starting the calling process, it is best to use the prerecorded messages. A user recorded message must be played by each Master, and re-recorded by the Slave. As the message ripples through each level of **K-6000-DVA** units, the quality of the recording will get worse and worse. For this reason, if a user message is required, do not have more than two levels of **K-6000-DVA** units and adjust the volume control on all **K-6000-DVA**'s to maximum.

Programming

Most programming can be done using a PC. Certain functions are also available using touch tone programming. These are shown in a table in section B. Recording the announcements can only be done by calling into the unit or by local programming using a touch tone phone.

The local or remote program modes of the **K-6000-DVA** can only be accessed while the **K-6000-DVA** is idle (status LED lit steady). Programming can not be accessed when the **K-6000-DVA** has been activated but is waiting for ring no answer or busy timers to expire. The dialing process can be stopped by sending a stop button closure (input 8), a stop command sent through the PC interface or by calling the **K-6000-DVA** and dialing a valid access code followed by "0".

A. Entering the Programming Mode

1. Local without the Security Code

Step 1.	Move the PROG/NORM switch to PROG and plug an analog phone into the TELCO jack. Set DIP switch 1 to ON.
Step 2.	After taking the phone off hook, wait for two beeps.
Step 3.	Program as shown in sections D-I .
Step 4.	To exit programming, hang-up. Set the PROG/NORM switch to NORM . Set DIP switch 1 to OFF.

2. Local with the Security Code

Step 1.	Move the PROG/NORM switch to PROG and plug an analog phone into the TELCO jack.
Step 2.	After taking the phone off hook, wait for the answering message.
Step 3.	Enter "*" and the six-digit security code, wait for 2 beeps.
Step 4.	Program as shown in sections D-I .
Step 5.	To exit programming, hang-up. Set the PROG/NORM switch to NORM .

3. Remote without the Security Code

Step 1.	Make sure the PROG/NORM switch is set to the NORM position and that there is a CO line or analog PABX/KSU extension in the TELCO jack. Set DIP switch 1 to ON.
Step 2.	Call into the K-6000-DVA on that line or extension. The unit will answer after the set ring delay (see Programming section F) and two beeps should be heard.
Step 3.	Program as shown in sections D-I .
Step 4.	To exit programming, hang-up and set DIP switch 1 to OFF. After the 20 second timeout has elapsed, the K-6000-DVA will be ready for normal operation. Alternatively, dial ##7 , hang up and set DIP switch 1 to OFF. The K-6000-DVA will now be immediately ready for normal operation.

4. Remote with the Security Code

Step 1.	Make sure the PROG/NORM switch is set to the NORM position and that there is a CO line or analog PABX/KSU extension in the TELCO jack.
Step 2.	Call into the K-6000-DVA on that line or extension. The unit will answer after the set ring delay (see Programming section F) and play the answer message.
Step 3.	Enter "*" and the six-digit security code (factory set to 845464). If the correct code is entered, two beeps should be heard. Note: The security code must be entered within 20 seconds otherwise the K-6000-DVA will time out and hang up. When in programming, if 20 seconds elapse without touch tones being entered or a message being recorded, the K-6000-DVA will automatically exit programming and hang up.
Step 4.	Program as shown in sections D-I .
Step 5.	To exit programming, hang-up. After the 20 second timeout has elapsed, the K-6000-DVA will be ready for normal operation. Alternatively, dial ##7 and hang up. The K-6000-DVA will now be immediately ready for normal operation.

Note: Correct programming entries are implemented and then acknowledged by two beeps. Incorrect programming entries are discarded and receive three beeps to indicate an error.

B. Quick Programming Features

	Enter Digits	- then -	Enter Memory Location
To program the ring delay	2 digits (00-99)	then	#45
To program the security code	6 digits (0-9)	then	#47
To program the access codes	1-6 digits (0-9)	then	#50 - #59
To record	*8	then	(1-6)
To playback	*9	then	(1-6)
To erase	*0	then	(1-6)
To hang up	##7		
To erase all messages and phone numbers and restore factory defaults	###		

C. Factory Default Settings

Security Code	845464 (V-I-K-I-N-G) (see section D)
Access Code	123456 (see section E)
Phone Numbers	Not Programmed
Messages	Not Recorded (see section G)
Ring Delay	1 (see section F)
PBX	none
Slave Code	none
Master Code	none
Start Delay	0 (immediate)
Busy Delay	3 minutes

RNA Delay	5 minutes
Com Port	1
Ans Machine	Disabled
Dial Prefix	none
Ring Time	30 seconds
Confirmation	none
Message Number	same as group number
Recall Limit	1
Group	1
Repeat	0 (play message once)

D. Security Code (memory location #47)

The security code allows the user/installer to program the **K-6000-DVA**. The factory set security code is 845464 (V-I-K-I-N-G). It is recommended that the security code be changed. **Example:** To store 654321 as the security code:

Step 1.	Access programming as shown in Programming section A.
Step 2.	Enter 654321 #47 .
Step 3.	Exit Programming as shown in Programming section A.

Note: The security code must be 6 digits, cannot include a * or a #.

E. Access Codes

Each **K-6000-DVA** can be programmed with up to 10 Access Codes. Enter a 1 to 6 digit number followed by #50 to #59 depending on which Access Code is being programmed. To Clear a position just enter the position number without any preceding digits. If all Access Codes are cleared, the calling sequence can be remotely started without any code. This code can only use numbers 0 to 9.

F. Ring Delay

The number of rings the **K-6000-DVA** will ignore before answering the line can be programmed into position #45. If 00 is entered before the #45, the position will be cleared and the **K-6000-DVA** will not answer any incoming calls. The range of Ring Delay is from 00 to 99 rings.

G. Recording Messages

Recording of the voice messages may be done either locally or remotely. Once programming has been entered, touch tones are used to start and stop the recording process. To start a recording: enter *8 followed by the number of the input (1-6). The **K-6000-DVA** gives a single beep to indicate that it is recording and then starts the recording process. Speak into the handset of the telephone or provide line level audio to the **REC IN** jack to record the message. The **K-6000-DVA** has a maximum message time for each input of one minute. When finished recording the message wait 1 second then enter any touch tone to stop the recording process. At this point the **K-6000-DVA** automatically plays back the message just recorded. If the recording process goes over one minute the **K-6000-DVA** stops recording and starts playing back the message. To clear a single message: enter *0 followed by the number of the input.

H. Playing Back Messages

When in programming, enter *9 followed by the number of the input (1-6). The message recorded for that input will play back. If no message has been recorded, nothing will be heard.

I. Return to Default

IMPORTANT: Executing the following programming erases all phone numbers and messages and returns the **K-6000-DVA** to default settings. To erase all messages and phone numbers and to return the **K-6000-DVA** to its original default settings enter ### while in programming.

J. Hang Up

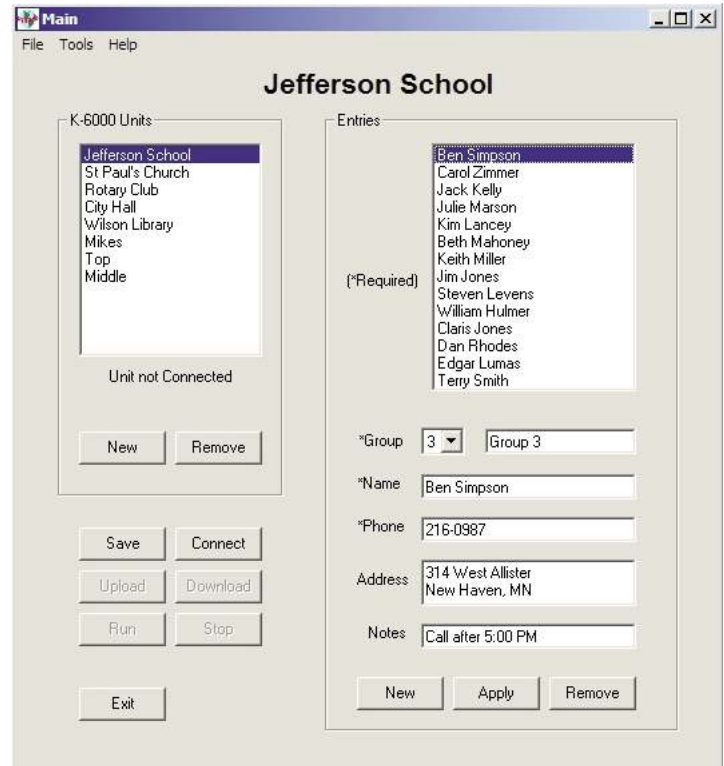
To hang up the **K-6000-DVA** in the remote programming mode enter ##7. The **K-6000-DVA** will then hang up.

PC Programming

A CD ROM is included with each **K-6000-DVA**. The CD contains the application **K-6000-DVA** used to program the unit using a PC. Install the application on your PC by placing the CD ROM into your PC's drive. The installation should start automatically. Follow the directions on the screen. When installation is completed, be sure to restart the computer.

To start the **K-6000-DVA** application, double click on the **K-6000-DVA** icon on your desk top. The Main screen will appear that allows the user to create new **K-6000-DVA** files, and enter up to 1000 Names and Phone Numbers for each one.

Note: Name, Address and Notes are not used by the **K-6000-DVA** and are only stored in the database for the convenience of the user. If the database is lost and a Download is performed, Name will only show "Name 1" and Address and Notes will be blank.



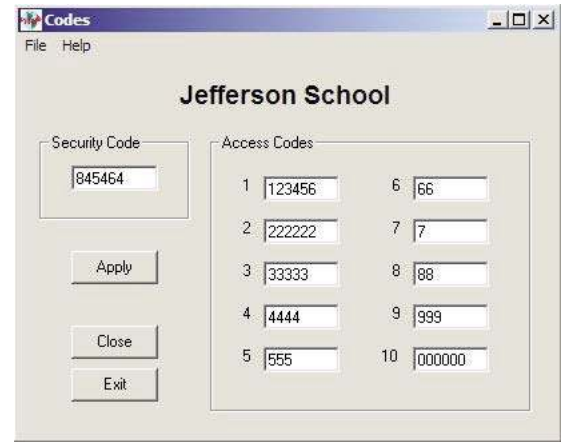
To view and set the individual parameters for each **K-6000-DVA** unit, use the Global selection under the Tools pull down. This screen allows the user to set the Start, Busy, Ring, and Ring No Answer delays for all calls made by that unit. Setting the unit up as a Slave unit is also done in this screen.



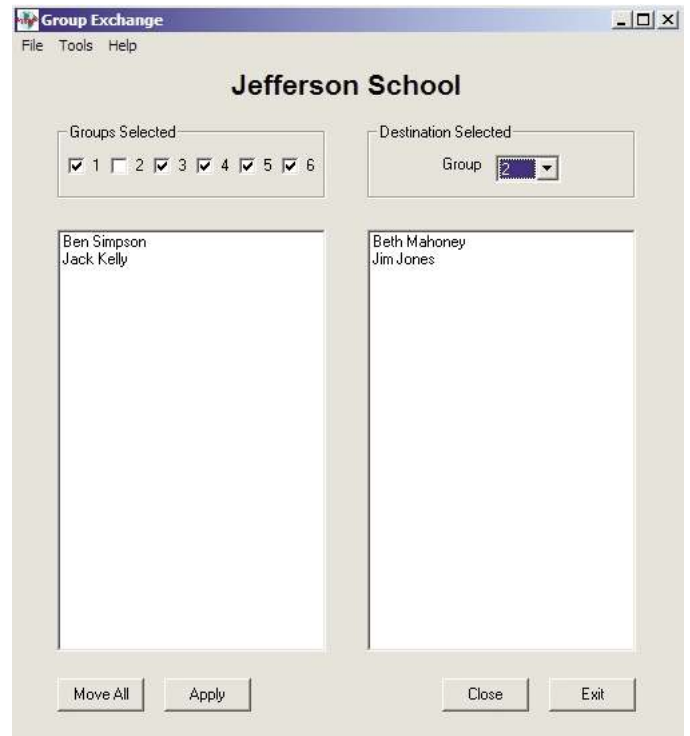
To view and set the parameters for each Group within a **K-6000-DVA** unit, use the Group Data selection under the Tools pull down. This screen allows the user to set the Message number, Message Repeat Limit, Dialing Prefix, Ring Time, Confirmation Number and Recall Limit for all phone numbers assigned to that Group. Each Group can also be set up as a Master Group in this screen.



To view and set the Security Code, and the ten Access Codes within each **K-6000-DVA**, use the Codes selection under the Tools pull down.

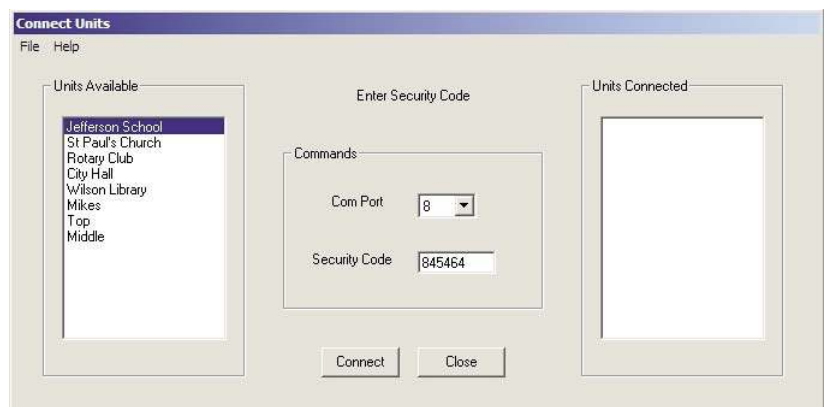


The Group Exchange screen offers a way to quickly change the group assignments of a large number of entries. From the Main screen, click on the Tools pull down and select "Group Exchange". The left side list displays all the names that are selected by the "Groups Selected" check boxes. By clicking on the check boxes, the number of entries for each group or any combination of groups can be viewed. To move the names to a new group, click on the new group number in the "Destination Selected" group box. Now click on each name to transfer in the left side list. As each name is clicked on, that name is transferred to the Destination box. Be sure to click on Apply after all transfers are made to temporarily save your changes until the changes can be made permanent in the Main screen.

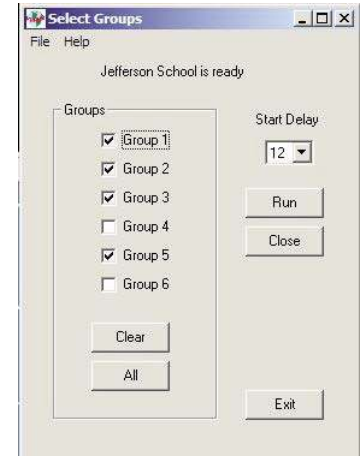
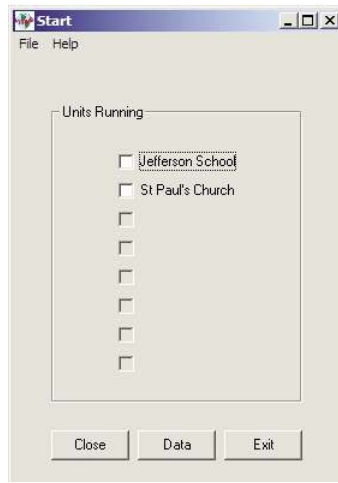


The Group Exchange screen also allows you to rearrange the order in which the names are called within a group (names are normally called in the order in which they were entered on the main screen). On the Group Exchange screen, select the group you would like to rearrange and set the destination to the same group number. Click on each name on the left side in the new order you would like them to be called. As each name is clicked on, the name is transferred to the destination side in your new order. Click on Apply when finished and Save on the Main screen.

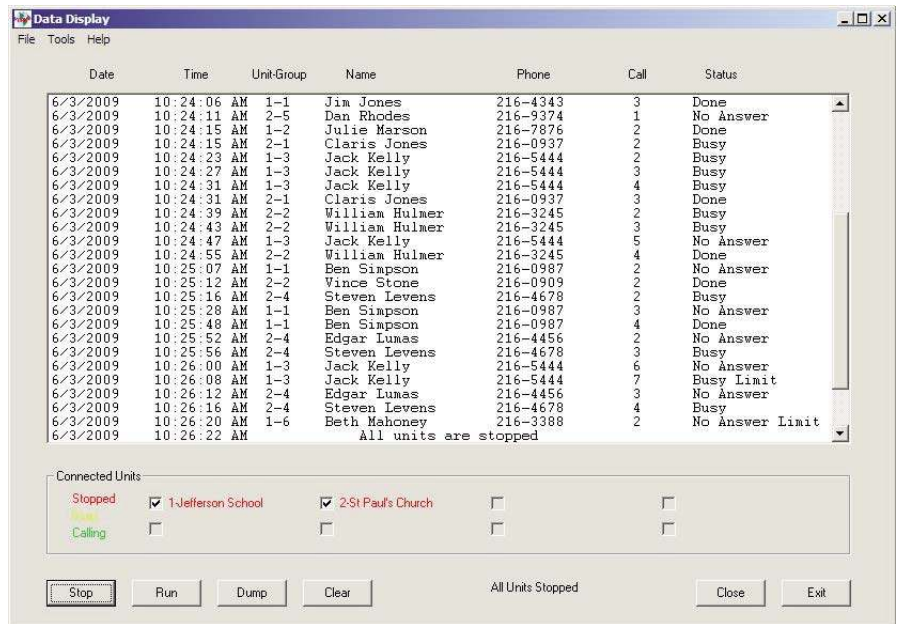
After all the information is entered, each **K-6000-DVA** must be loaded. Click on the Connect button on the Main screen to display the screen for selecting which **K-6000-DVA**'s to connect to. The **K-6000-DVA** software can handle up to eight **K-6000-DVA**'s connected at the same time.



Once all the **K-6000-DVA**'s are connected, click on Close which brings you back to the Main screen. Now that the units are connected, you must send the Global, Group and Phone Number information. Highlight which **K-6000-DVA** you want to send data to in the K-6000 units box then click on Upload. After all units are updated, click on the Run button. The next two screens allow you to select which **K-6000-DVA** to start and which groups of that unit to start.

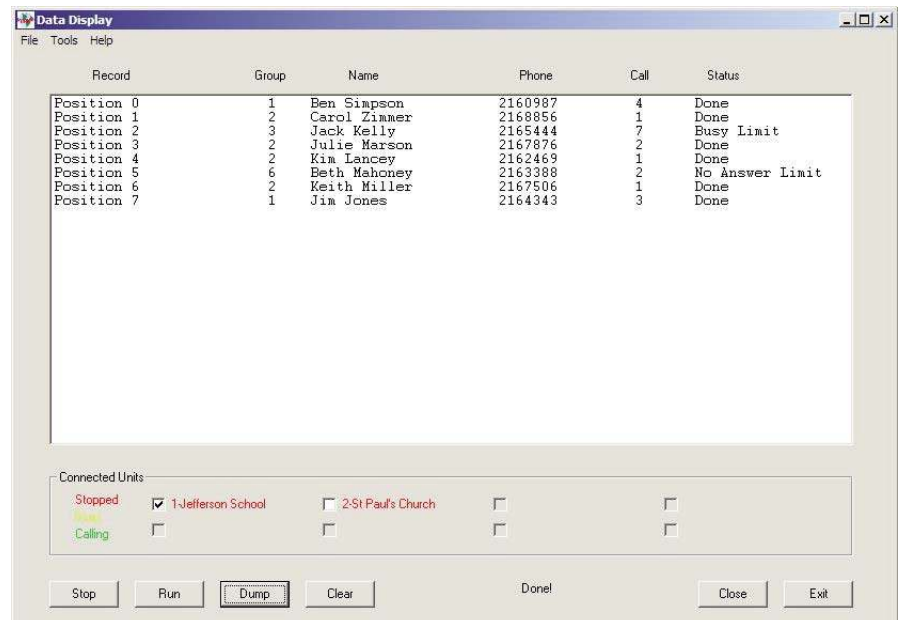


After the Groups are selected, clicking the Run button starts the calling process. The Data screen will appear which keeps a log of all calls being made on a real time basis.

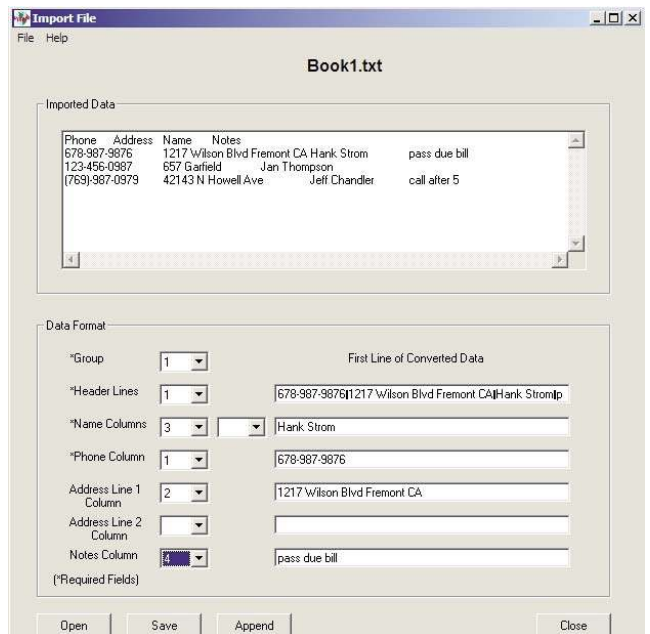


As long as the PC is connected to the **K-6000-DVA**, call logging information will appear on the screen. If a new PC connection is made to the **K-6000-DVA** after it has completed all its calls, the call status of each phone number can be retrieved by clicking on the Dump button.

Data Dump is only available when the **K-6000-DVA** is idle.



The **K-6000-DVA** programming software can also accept data from an existing data base or spread sheet. Use the “Save As” feature of the spread sheet or data base software to save the file as a “tab delimited text file”. Once saved in this format, the **K-6000-DVA** can open the file and access the information. Click on “Open” to display a dialog box for locating the tab delimited file. Once opened, the first few lines of the file will be displayed in the “Imported Data” text box. Use the selection boxes in the “Data Format” box to select the required columns. The “Header Lines” box should be set to the number of lines at the beginning of the file to ignore. These lines are usually header information. Next select which columns in the original file contain the Name and the Phone Number. As the selection boxes on the left are changed, the data from the first line to be converted is shown in the right hand boxes. The three remaining selection boxes Address Line 1, Address Line 2 and Notes are optional and are for reference only. After the proper selections are made, click on “Save” which will bring up another dialog box for saving the converted file. Make sure that the extension of the new file is “.dat”. After closing this screen, the new file name will appear on the Main screen ‘K-6000 units’ list. To use the new data, you must click on this name in the box.



The information required to start the calling process after calling into the unit can be customized. By accessing the “Start Script” screen from the Main screen Tools pull down, the user can select which options will be made available to the caller. The factory default is to have all 4 selections enabled. If the “Access Code” box is unchecked, no access code will be required when the caller calls in. The K-6000-DVA will skip the access code message and go onto group selection. If the “Multiple Groups” box is unchecked, only 1 group can be selected to run and the unit will skip the “enter the next group” message*. If the “Start Delay” box is unchecked, the unit will skip the request for delay time and start the calling process immediately. If the “Live Recording” box is unchecked, the unit will skip the request to make a live recording. Each of these features can be enabled or disabled to stream line the activation process. **Note: User is allowed to dial “9” to start all groups.*



Operation

A. Standard Mode

1. Local Buttons

Once the **K-6000-DVA** is programmed, it is ready to start calling. Push buttons connected to the front terminal blocks allow the user to manually start the calling process. Each group can be started by pressing the corresponding button. If a button connected to the seventh input is pressed, all groups are started at once. To stop the calling process, press a button connected to input 8.

2. Remote Activation

The **K-6000-DVA** calling process can also be started by calling into the unit and entering an Access Code. Follow the voice prompts for entering which Groups to start, and the two-digit delay before starting in hours (“01” is a one hour delay). The last selection is whether or not to make a live recording. If a live recording is made, it will be played for all the groups being called. If no live message is made, the **K-6000-DVA** will play the appropriate pre-recorded message for the selected group. This actually gives the user 7 recordings to choose from. Remote activation can be customized on the start script screen as described above.

3. Calling Process

No matter how the calling sequence is started, the process is the same. The start delay timer is loaded when the calling sequence is started. The start delay times can range from 0 which is immediate to 20 hours. When this time is up, the **K-6000-DVA** will start calling the numbers associated with that Group. Group 1 is the highest priority and Group 6 is the lowest. The **K-6000-DVA** will search its data base for numbers in Group 1 first. If a number is called and the call is completed, the status is saved in non-volatile memory and the **K-6000-DVA** goes onto the next number. If the call is RNA or busy, the recall counter is incremented for that number and the status is once again saved. The RNA Delay timer or Busy Delay timer is also reset with each RNA or busy call.

The **K-6000-DVA** will continue calling the numbers in Group 1 until all the numbers for that Group are called at least once. It then moves onto Group 2 and repeats the process with Group 2. When Group 2 is done, it goes onto the rest of the Groups. The **K-6000-DVA** makes sure that it calls all numbers in all active Groups at least once before it goes onto recalling RNA or busy numbers. If there are no more “first time” numbers to call, the **K-6000-DVA** continues to scan the list of numbers checking if the group’s RNA or busy timer has expired. When the time is up, that group will be called.

This process will continue until all numbers have been called. Any time during the calling process, if a stop button closure is detected or a stop command comes through the PC interface, or an inbound call is made and a valid access code followed by “0” is entered, the calling sequence will be aborted.

4. Call Logging

As each call is completed, the **K-6000-DVA** captures the call status. If a PC is connected to the **K-6000-DVA** during calling, the information can be viewed on a real time basis. The PC application continuously polls the **K-6000-DVA** for status information. If available, it applies a time and date code stamp, stores it and displays it. This information can then be reviewed at a later time. If a PC is not connected to the **K-6000-DVA** during its calling sequence, each number's call status is saved in non-volatile memory and can be retrieved when a PC is connected to the unit through Dump on the Data Display screen. This information remains in the unit until the next calling sequence is started.

5. Multiple Units

If there is a large number of Phone Numbers to call, and it needs to be done in a timely fashion, multiple **K-6000-DVA**'s may be required. The more phone lines with **K-6000-DVA**'s available, the faster the calling. Each **K-6000-DVA** can be programmed and activated individually or multiple units can be connected to one PC. The **K-6000-DVA** application is set up to handle up to eight **K-6000-DVA**'s all at once. Be sure that the PC has enough RS-232 ports and/or USB ports to cover the number of units being used.

6. Master / Slave Mode

A "Calling Tree" can be set up using the Master/Slave mode. One **K-6000-DVA** can be set up to call other slave **K-6000-DVA**'s. Each slave **K-6000-DVA** can call other slave **K-6000-DVA**'s and so on as long as there are available phone lines. In the Master/Slave mode, the normal voice prompt messages are replaced with high speed Touch Tone communications. Any of the six Groups available in the **K-6000-DVA** can be set up as a Master Group. This means that the Phone Numbers associated with that Group will be calling slave **K-6000-DVA**'s. It is important for those called units to be set up as Slaves in each of their Global settings for proper operation. Master **K-6000-DVA**'s can activate slave **K-6000-DVA**'s and make standard phone calls. Master and Slave **K-6000-DVA**'s can only activate other **K-6000-DVA**'s. Slave **K-6000-DVA**'s can only make standard phone calls.

When a **K-6000-DVA** Master Group has started calling, that same Group Number is passed to the Slave unit. The Slave then will only call Phone Numbers associated with that same Group Number. For instance, if Group 1 is configured as a Master Group, all the **K-6000-DVA**'s called within that Group will only call Group 1 Phone Numbers. The called units will also play the recording associated with Group 1. If a live recording is made at the Master unit, that same recording will be passed from Master to Slave all the way down to the final Phone Number. Keep in mind with each level of calling, there will be some loss of sound quality with the live recording. For this reason, if a live recording is required, do not have more than two levels of **K-6000-DVA** units and adjust the volume control on all **K-6000-DVA**'s to maximum. For best results, use the pre-recorded messages rather than making a live recording for units in the Master/Slave mode.

7. Answering Machine

When "Answering Machine" is selected in the Global screen, the **K-6000-DVA** will play a separate answering message when the call is received. After this message is played, the **K-6000-DVA** listens on the line for any audio. If no audio is present, it assumes a person answered the line and plays the group message. If audio is present, it will either hang up and mark the call as no answer if "Leave Message" is not checked or wait for the audio to stop and then play the group message if it is checked. The answering message can either be the canned message "The following message is being forwarded to you" or your own custom message in position 6. **Note:** *When using this mode, position 6 message is not available as a group message and Touch Tone confirmation should not be used.*

B. Record and Forward Mode

The **K-6000-DVA** Record and Forward mode is used to record a person's message, then call the people on the calling list and play back the message. This mode allows the user to make a custom answering message as well as special salutation and greeting messages. To enter this mode, click on tools in the Main screen and select "Global". On the Global screen, check the box marked "Record and Forward Mode".

Before running in this mode, the user must pre-record up to 3 messages. The answering message is not optional and must be made for proper operation. This message is in position 1 (see programming section) and can be up to 1 minute in length. This is the message that will be played when someone calls into the system (ie: "This is Joe's Auto Body. Please leave a message and someone will get right back to you.") The salutation message is played after the person makes their live recording. This message resides in position 2 and is optional. If no custom recording is made, the **K-6000-DVA** will use its default message: "Thank you for calling, good bye." The greeting message is played when the **K-6000-DVA** is calling the list of phone numbers and someone answers. This message resides in position 3 and is also optional. The default greeting message is: "The following message is being forwarded to you." Each of these 3 messages can be up to 1 minute in length.

The complete sequence is as follows: the person calls into the system and hears the answering message. The **K-6000-DVA** then plays a canned message: "After the beep, please record your message. When finished, press #." The person can then leave a message up to 4 minutes in length. When the **K-6000-DVA** hears the "#", it stops the recording and then plays the salutation message. The unit hangs up for 20 seconds and then starts calling all numbers in group 1 and plays the greeting message followed by the person's message upon answer. If you want the calling to stop after a completed call, check the "Stop on Answer" check box in the Global screen.

Once calling has been started, the dialing process can be stopped by calling the **K-6000-DVA** and dialing "#" after the two beeps, by sending a stop button closure (input 8), or by sending a stop command through the PC interface.

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