The DVA-3003 is a professional and cost-effective three channel digital voice announcer specifically designed for ACD/UCD, hotel-motel wake up, auto attendant, intercept, night message, information applications and other announcement functions.

The DVA-3003 will increase call handling capacity by answering on demand or during the first ring, automatically adjusting the announce cycle to the message length, disconnecting on C.P.C. and providing instant “rewind” for the next caller.

The DVA-3003 is factory installed with 1 minute of record time per channel and may be expanded to 4 minutes per channel using the ERAM-60 one minute memory expansion kits. In applications where a single, longer message is required, the DVA-3003 can also be configured as a single channel 3 to 12 minute announcer.

http://www.VikingElectronics.com

Features

- Record time expandable from 1 to 4 minutes per channel
- Configurable as a 3-12 minute 1 channel announcer
- Record and review announcements both locally and remotely
- Tape jack to load prerecorded announcements from a tape player
- Record 1, 2, or all 3 channels simultaneously
- Programmable ring delay for each channel
- Detects C.P.C. signal and disconnects
- Callers may be transferred after announcement
- Messages stored in Non-volatile memory (no batteries required)
- Recognizes handshake signals from virtually any PABX, Centrex or C.O.
- Provides both “Ring Trip” and 4 wire “E & M” interface
- Recording volume level LED indicator for consistently high-quality recordings
- One year warranty

Applications

Repetitive Announcing for:

- School closings
- Wake-up calls
- Movie theaters
- Ski reports
- ACD/UCD or any announce only application where a message is repeated continuously and may require frequent updating.
- College events and schedules
- Bank rates/commodity prices
- Help desks
- Night Message

Specifications

Power: 120V AC/12V DC 500mA UL listed adapter provided or power from 48V DC 0.1 A maximum
Dimensions: 480mm x 200mm x 45mm (19” x 8” x 1.75”)
Shipping Weight: 3 Kg (7lbs)
Environmental: 0° to 32° C (32° to 90° F) with 5% to 95% non-condensing humidity
Message Length: 1 minute/channel, field expandable to 2, 3, or 4 minutes/channel using model ERAM-60 memory kits in (1) minute increments
Sampling Rate: 64 Kbps (equivalent)
Connections: Standard ring-trip with adjustable ring delay, 4-wire E & M with 600 ohm audio and switch selectable protocol
Installation

A. 120V AC Operation

The DVA-3003 is provided with a 120VAC U.L. listed adaptor with a 12VDC 500mA output. The DVA-3003 requires a 24 hour unswitched 115VAC outlet. To protect the internal electronics, the installation of a surge protector is recommended.

B. 48VDC Operation

Connect -48VDC and Earth Ground to the terminal block as shown below. Nominal current draw is less than 100mA. If a power supply protection fuse is used in series with the -48V supply, a 500mA slow blow fuse is recommended. The initial start up current can surge as high as 600-700mA.

Programming

A. Standard Ring Trip Interface (Two Wire)

Any ringing C.O./PABX line will be answered, given an announcement and released. The DVA-3003 is then immediately ready to answer the next incoming call. Set the front panel DIP switches to RING TRIP for each channel using “Ring Trip” Interface, then momentarily disconnect power. *

B. Continuous Play 4 Wire E & M Interface

Set the front panel DIP switches to E & M for each channel using E & M Interface. Set “E & M protocols” DIP switches to “A” (DIP switches 5 and 6 off). Invert the START signal (DIP switch 7 on). *Momentarily disconnect the power. The announcement will be repeated continuously on pins 3 and 4 (600 ohm output).

C. 600 Ohm 4 Wire E & M Protocols

First set the front panel DIP switches to E & M for each channel using E & M Interface, then momentarily disconnect power.* Four different protocols are now switch selectable for changing E & M timing, plus the ability to invert the START and/or BUSY signals.

Front Panel DIP Switches

Rear Panel E $ M Protocols DIP Switches

* A momentary power down allows the DVA-3003 to read the new DIP switch settings.
D. 600 Ohm 4 Wire E & M Protocol Timing Specifications

1. “ON DEMAND”. Set DIP switches to protocol “A” (SW 5 and SW 6 - OFF).

   Contact from PABX
   - GND screw terminal or pin 6 on DVA-3003
   - Busy output from DVA-3003

   Earth GND

   Pin 5
   - Start
   - Idle/open → 250msec. min.
   - Pin 2
   - Idle/closed → 250msec. max.
   - In Use
   - Announcement Duration
   - GND (+)
     - M Lead (START) → Open
   - GND (+)
     - E Lead (BUSY) → Open

2. TYPE 5 E & M, WINK START. Set dip switches to protocol “B” (SW 5 - OFF, SW 6 - ON).

   Contact from PABX
   - GND screw terminal or pin 6 on DVA-3003
   - Busy output from DVA-3003

   Earth GND

   Pin 5
   - Start (M)
   - Idle/open → 250msec. min.
   - Pin 2
   - Wink (E)
   - Idle/closed
   - Announcement Duration
   - GND (+)
     - M Lead (START) → Open
   - GND (+)
     - E Lead (BUSY) → Open

   B O M* B O M* B O M* B O M*

3. DRUM RECORDER REPLACEMENT. Set dip switches to protocol “A” (SW 5 and SW 6 - OFF).

   Contact from PABX
   - GND screw terminal or pin 6 on DVA-3003
   - Busy output from DVA-3003

   Earth GND

   Pin 5
   - Start
   - Announcement
   - GND (+)
     - M Lead (START) (Connected to earth GND)
   - Announcement
   - GND (+)
     - E Lead (BUSY) → Open

   B O M* B O M* B O M* B O M*

4. SINGLE PLAY ON DEMAND. Set dip switches to protocol “C” (SW 5 - ON, SW 6 - OFF).

   Contact from PABX
   - GND screw terminal or pin 6 on DVA-3003
   - Busy output from DVA-3003

   Earth GND

   Pin 5
   - Start
   - Announcement
   - GND (+)
     - M Lead (START) → Open
   - Announcement
   - GND (+)
     - E Lead (BUSY) → Open

   B O M* B O M* B O M* B O M*


E. Using the DVA-3003 with Major PABX’s

<table>
<thead>
<tr>
<th>Set Front Panel DIP Switches to:</th>
<th>Protocol Dip Switches</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>Protocol A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>with inverted busy signal</td>
<td></td>
</tr>
<tr>
<td>ATT (Dimension, Horizon, etc.)</td>
<td>E&amp;M</td>
<td></td>
</tr>
<tr>
<td>4 Wire E &amp; M</td>
<td>ON 5 6 7 8 OFF</td>
<td>Use 4 Wire E &amp; M Interface. Connections: T &amp; R to pins 3 &amp; 4, M to pin 5, E to pin 2 and Earth Ground* to GND screw terminal.</td>
</tr>
<tr>
<td>ATT (System 75)</td>
<td>E&amp;M</td>
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<tr>
<td>4 Wire E &amp; M</td>
<td>ON 5 6 7 8 OFF</td>
<td>Use 4 Wire E &amp; M Interface and BUSY screw terminals. T &amp; R to pins 3 &amp; 4, SZ to pin 5, SZ1 to GND screw terminal, and S and S1 to BUSY screw terminals.</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>Interface Type</td>
<td>Protocol Details</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ATT (System 85) SN231 Circuit Pack</td>
<td>E&amp;M</td>
<td>Use 4 Wire E &amp; M Interface. Connections to T &amp; R pins 3 &amp; 4, S to pin 5, and AL to pin 2. Set option switches 1 &amp; 2 down and 3 up on the Circuit Pack.</td>
</tr>
<tr>
<td>GTE</td>
<td>E&amp;M</td>
<td>Use 4 Wire E &amp; M Interface. Connections: T &amp; R to pins 3 &amp; 4, M to pin 5. E to pin 2 and Frame Ground to GND screw terminal.</td>
</tr>
<tr>
<td>SIEMENS (40/80 Hybrid)</td>
<td>E&amp;M</td>
<td>Protocol A with inverted busy signal</td>
</tr>
<tr>
<td>Hitachi HCX 5000</td>
<td>E&amp;M</td>
<td>Protocol A with inverted busy signal</td>
</tr>
<tr>
<td>JISTEL (all models)</td>
<td>Ring Trip</td>
<td>Protocol switches are not functional in Ring Trip mode</td>
</tr>
<tr>
<td>MITTEL (all models)</td>
<td></td>
<td>Use Ring Trip Interface. Connect T &amp; R to pins 3 &amp; 4 of the CO/PABX line jack.</td>
</tr>
<tr>
<td>N.E.C. (2400)</td>
<td>E&amp;M</td>
<td>Protocol C</td>
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<tr>
<td>NORTHERN SL-1 QPC74 Ran Truck</td>
<td>E&amp;M</td>
<td>Protocol A</td>
</tr>
<tr>
<td>Northern SL-1 Universal trunk card</td>
<td>E&amp;M</td>
<td>Protocol A</td>
</tr>
<tr>
<td>Siemens (SATURN)</td>
<td>E&amp;M</td>
<td>Protocol A with inverted busy signal</td>
</tr>
<tr>
<td>Siemens (40/80 Hybrid)</td>
<td>E&amp;M</td>
<td>Protocol A with inverted busy signal</td>
</tr>
<tr>
<td>Siemens DBX</td>
<td>E&amp;M</td>
<td>Protocol C</td>
</tr>
<tr>
<td>StarTel</td>
<td>E&amp;M</td>
<td>Protocol A</td>
</tr>
<tr>
<td>Stromberg-Carlson CO Switch</td>
<td>E&amp;M</td>
<td>Protocol A with inverted busy signal</td>
</tr>
<tr>
<td>Stromberg-Carlson DBX</td>
<td>E&amp;M</td>
<td>Protocol C with inverted start and busy signals</td>
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<tr>
<td>TADARAN (All models)</td>
<td>Ring Trip</td>
<td>Protocol switches are not functional in Ring Trip mode</td>
</tr>
<tr>
<td>Toshiba (Perception)</td>
<td>Ring Trip</td>
<td>Protocol switches are not functional in Ring Trip mode</td>
</tr>
</tbody>
</table>

Note: *Earth Ground* is connected to the GND screw terminal.
To gain system access call (from a Touch Tone phone) the C.O. line or PABX extension connected to the DVA-3003’s channel 1 CO/PABX LINE port. When the unit answers, enter a *. When the recording stops, enter your six digit security code (factory set to 8,4,5,4,6,4,). Two beeps should then be heard, confirming the correct security code was entered. You are now in the remote recording mode. Follow the recording, monitoring, and programming steps in sections 3 - 5.

**Note:** Remove the handset and tape input plug from the DVA-3003 before remote recording.

**A. Local Recording**

1. **Recording Live**
   a. Press the REC/MON button until the REC/MON LED lights to select REC/MON mode.
   b. One, any two, or all three channels may be recorded at the same time. Select REC for the channels to be recorded. Select OFF for any channels not to be recorded.
   c. Connect a standard carbon handset to the handset jack.
   d. Momentarily press the START button and begin speaking into the handset.
   e. When finished, press the START button to stop recording.

2. **Recording from a Tape**
   a. Press the REC/MON button until the REC/MON LED lights to select REC/MON mode.
   b. One, any two, or all three channels may be recorded at the same time. Select REC for the channels to be recorded. Select OFF for any channels not to be recorded.
   c. Insert a 3.5mm (1/8”) phono plug cable into the TAPE IN jack.
   d. Adjust the tape player to the correct audio recording volume, play the recording from the tape player while watching the audio level LED. Increase or decrease the tape players volume until the LED flickers but is not mostly on or mostly off.
   e. When you are ready to record, momentarily press the START button and begin recording.
   f. When you are finished, press the START button to stop recording.

**B. Local Monitoring**

1. With the REC/MON mode selected, (see step a. above) place only one channel at a time into the PLAY mode and place the other two channels into the OFF mode.
2. Momentarily press the START button to start and stop the announcement.
3. Any or all of the announcements can be rerecorded if needed. Follow the “local recording” procedures listed above.

**C. Remote Recording and Programming**

**Note:** Remove the handset and tape input plug from the DVA-3003 before remote recording.

1. **Ring Trip Interface Mode**
   To gain system access call (from a Touch Tone phone) the C.O. line or PABX extension connected to the DVA-3003’s channel 1 CO/PABX LINE port. When the unit answers, enter a *. When the recording stops, enter your six digit security code (factory set to 8,4,5,4,6,4,). Two beeps should then be heard, confirming the correct security code was entered. You are now in the remote recording mode. Follow the recording, monitoring, and programming steps in sections 3 - 5.

2. **Four Wire E & M Interface Mode**
   To gain system access call (from a Touch Tone phone) the C.O. line or PABX extension connected to the DVA-3003’s PROGRAMMING PORT. The unit will answer and give two beeps. You are now in the remote recording mode. Follow the recording, monitoring, and programing steps in sections 3 - 5.

3. **Recording**
   One, two, or all three channels can be recorded at the same time. Enter 1 and/or 2 and/or 3 to select the channel(s) to be recorded, then enter a * to start and a # to stop recording.

4. **Monitoring**
   Enter * 4 to play back channel 1.
   Enter * 5 to play back channel 2.
   Enter * 6 to play back channel 3.
5. **Ring Delay** (Ring Trip Interface)  
   The ring delay is factory set to “Immediate Answer” (unit answers in less than one full ring). The ring delay can be programmed from “Immediate Answer” (0) to 9 rings. Example: If ring delay is set to 1, unit will answer after one full ring cycle.  
   Enter (0-9), #, 1, 1 to program ring delay for channel 1.  
   Enter (0-9), #, 1, 2 to program ring delay for channel 2.  
   Enter (0-9), #, 1, 3 to program ring delay for channel 3.  
   Enter (0-9), #, 1, 4 to program ring delay for programming port.

6. **E & M Timing**  
The Beginning Of Message and End Of Message pulse width is factory set to 600msec. This may be programmed.
   Enter (0-9), #, 1 to program E & M timing for channel 1.  
   Enter (0-9), #, 2 to program E & M timing for channel 2.  
   Enter (0-9), #, 3 to program E & M timing for channel 3.

7. **Transfer Phone Numbers**  
The transfer phone numbers are disabled from the factory. When a transfer phone number is programmed, the DVA-3003 will perform a hook switch flash transfer (dialing the programmed phone number after the channel announcement has been played). *Note: To disable the hook switch flash transfer for a channel, leave the 16 digit field blank.*  
   Enter up to 16 digits (1-9), #, 0, 1 to program a transfer phone number for channel 1.  
   Enter up to 16 digits (1-9), #, 0, 2 to program a transfer phone number for channel 2.  
   Enter up to 16 digits (1-9), #, 0, 3 to program a transfer phone number for channel 3.

8. **Message Repeat**  
Each channel has the ability to repeat the announcement up to 99 times before disconnecting or transferring an answered call. The factory default for the message repeat count is set to 01.  
   Enter 2 digits (01-99), #, 1, 1 to set the message repeat count for channel 1.  
   Enter 2 digits (01-99), #, 1, 2 to set the message repeat count for channel 2.  
   Enter 2 digits (01-99), #, 1, 3 to set the message repeat count for channel 3.

9. **Changing Your Security Code**  
It is recommended that you change the security code from the “845464” factory setting to your own personal 6 digit number. To change the security code, enter your 6 digits _ _ _ _ _ _ plus #,4,7.  
   *Note: The security code can not include a * or #.

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**Operation**

After the DVA-3003’s announcements have been recorded and monitored, place the unit into the **ANNOUNCE** mode. Use DIP switches 1, 2, and 3 on the front panel to select **Ring Trip Interface** or **E & M** mode for channels 1, 2 and 3. These switches are only read when first powered up. Momentarily disconnect power after changing the DIP switches.

**A. Ring Trip Interface**  
A standard C.O. line or PABX extension should be connected to the **CO/PABX LINE** input jack for that channel. The DVA-3003 will answer after the programmed ring delay, play the announcement for the message repeat count, perform a hook switch flash transfer if a number is programmed, or disconnect. The **BUSY** screw terminals provide a contact closure during the announcement. If the caller hangs up during the announcement, the DVA-3003 will detect the C.P.C. signal (if present) and disconnect that line. It is now immediately ready for the next incoming call.

**B. 4 Wire E & M Interface:**  
The 600 OHM E & M jack provides a 600 ohm “Dry” output. Refer to the protocol timing specifications on page 3 and the PBX table on pages 4 and 5 for the control lead connections.

**Single Channel Mode**

The DVA-3003 may be configured as a single channel announcer with up to 12 minutes announcement time. In this mode of operation, channels 2 and 3 are disabled, and channel 1 utilizes the combined digital announcement memory time of all three channels. A stock DVA-3003 has a total of 3 minutes of single channel announcement memory. Viking model ERAM-60 memory expansion chips can be installed to extend the announcement memory to a total of 12 minutes. Each ERAM-60 chip will add one minute of announcement memory. To enable the single channel mode, set front panel SINGLE CHANNEL DIP switch to **ON**, then momentarily disconnect power.
If you have a problem with a Viking product, please contact Technical Support at (715) 386-8666

Our Technical Support Department is available for assistance weekdays between 8 a.m. and 5 p.m. 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).
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, Inc., 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 P.O. Box.
4. RA number on carton: In large printing, write the RA 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 Department 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 (RA) number will be issued. This number is valid for fifteen (15) calendar days from the date of issue.
3. After obtaining the RA number, return the approved equipment to your distributor, referencing the RA number. Your distributor will then replace the product on your account 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.

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.

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.

** SAVE THESE INSTRUCTIONS! **
**FCC REQUIREMENTS**

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

b) This equipment uses the USOC jack as described in the attached chart.

c) A plug and jack 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. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

d) The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs 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 RENs 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 RENs, contact the local telephone company. The REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX. The digits represented by # are the REN without a decimal point (e.g., 03 is a REN of 0.3).

e) If this equipment 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.

f) 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 necessary modifications to maintain uninterrupted service.

g) If trouble is experienced with this equipment, for repair or warranty information, please contact Viking Electronics, Inc., 1331 Industrial Street, Hudson, WI 54016  (715) 386-8666 (www.VikingElectronics.com). 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.

h) No user serviceable parts. Contact repair center for service.

i) Connection to party line service is subject to state tariffs.

j) If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this equipment does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or qualified installer.

**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.

**IC REQUIREMENTS**

**NOTICE:** The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user’s satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

**CAUTION:** Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

The Ringer Equivalence Number (REN) of this device is listed on the equipment label.

**NOTICE:** The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

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**MODULAR JACK CROSS REFERENCE CHART**

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<thead>
<tr>
<th>Viking Model Number</th>
<th>RJ-11C</th>
<th>RJ-11W</th>
<th>RJ-14C</th>
<th>RJ-21X</th>
<th>RJ-25C</th>
<th>RJ-45S</th>
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<td><em>ACA-1A</em></td>
<td>X</td>
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* 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.

ZF290290 Rev Z