

Two Way Phone Line Simulator Ideal for Ringdown Applications and Demos

The **DLE-200B** Line Simulator produces two way communication between standard telecom products such as modems, fax machines, Key Systems, PABX's and standard single line telephones. The Line Simulator can also provide sales people with a cost effective, easy to use method of conducting on site demonstrations, eliminating the need to locate phone lines and disrupt the customer's phone service.

The **DLE-200B** Line Simulator provides precise dialtone, DC talk battery and standard or distinctive ringing. The unit also provides a CPC break on hang up.



Features

- Compatible with fax machines and modem speeds up to 28.8 kbps
- Precise dial tone
- Switch selectable ring cadence
- Provides CPC breaks after hang-up on either port
- Switch selectable audio attenuation
- Can provide 2 seconds of precise dial tone before ringdown
- Provides ring back signal to calling device
- One or two way ring down capability
- Switch selectable ring count
- **Ringdown and dial tone off mode** (ideal for prison phone communications, etc.)
- 32VDC talk battery

Applications

- Dedicated point-to-point communications (ringdown circuits)
- Program telecom products without a phone line
- Connecting dictation equipment to Electronic Key Systems
- Intersystem TIE line
- Courtesy phones
- Demonstrating telecom equipment at tradeshow, meetings, etc.
- Connecting modems together
- Prison phone communications
- Programming PC based voice products

Specifications

Power: 120V AC/13.8V AC 1.25A, UL listed adapter provided
Power Supply Current Draw: 600mA maximum
Dimensions: 4.75" x 2.75" x 1.38" (120mm x 70mm x 35mm)
Shipping Weight: 1.59 lbs (.72 kg)
Environmental: 32° F to 90° F (0° C to 32° C) with 5% to 95% non-condensing humidity
Ringer Output: 2.0 REN load maximum
Talk Battery: 32V DC
Dial Tone Level: -20dBm with 600 ohm load
Loop Length: 2.6 miles (4.2 km) maximum - 24 AWG twisted pair
Maximum Data Speed: 28,800 bps
CPC Break Time: 2 seconds or 150 msec (selectable)
Connections: (2) RJ11 jacks

Installation and Applications

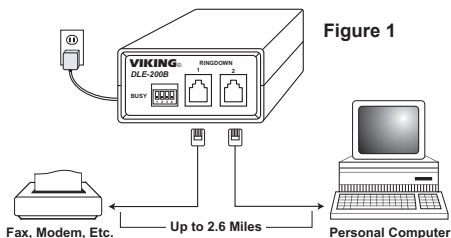
The **DLE-200B** is designed to initiate a call when either port goes off-hook. The port that comes off hook first will receive 2 seconds of dial tone. The other port will then begin ringing until answered (factory default programming). The “**BUSY**” LED will light when either device port is off-hook and will turn off during the duration of the CPC break and/or when both device ports are on-hook. **Note:** *Dial tone and/or ringdown can be disabled, see **Programming** sections A-C.* The following sections **A-G** show installation of various applications.

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.*

A. Demonstrations (Figure 1)

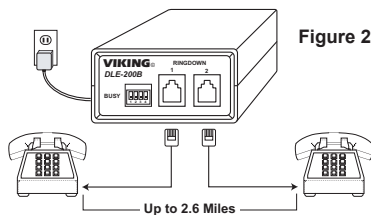
Easily demonstrate the features of fax machines, answering systems, feature phones, modems, key systems, or nearly any analog telecom device. The **DLE-200B** eliminates the need to locate phone lines and disrupt the phone service during demonstration. Demonstrations can be complete and comprehensive but non-disruptive.

Note: *In fax/modem applications it may be necessary to reduce the volume level by setting **DIP switch 3** to the **ON** position (see **Programming**, section A). This may increase data speed and help eliminate data transmission errors. For modem speeds faster than 28.8 kps, use Viking model **DLE-300**, DOD 607.*



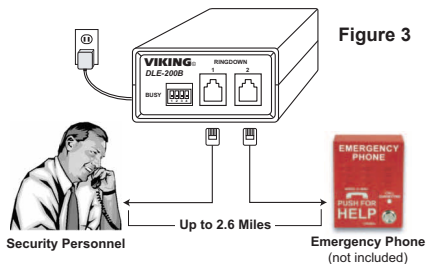
B. Ringdown Applications (Figure 2)

When used for ringdown applications, the **DLE-200B** eliminates the need for station circuits, phone systems or C.O. lines. This application is ideal for courtesy phones, infra and inter-office communications, warehouse and elevator phones.



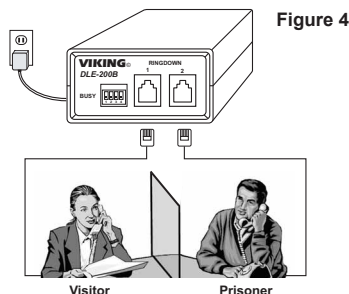
C. Emergency Applications (Figure 3)

When used with emergency phones, the **DLE-200B** saves the expense of dedicated phone lines. When the button on the emergency phone is pushed, the **DLE-200B** will provide ringing to a security phone. For more information on Viking Emergency Phones, see DOD 215.



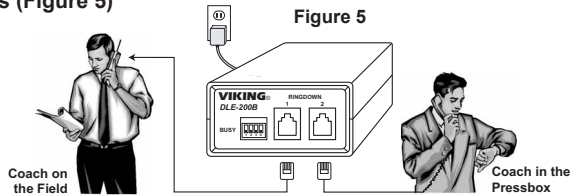
D. Prison Phone Applications (Figure 4)

For prison applications, the **DLE-200B** saves the need for dedicated phone lines. Prisoners can converse with visitors phone to phone without dial tone or ringing. **Note:** *Internal dipswitch 1 must be ON, enabling the ring down and dial tone off mode (see **Programming** section B).*



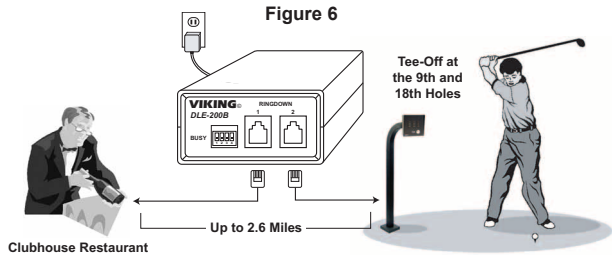
E. Press Box / Coaching Applications (Figure 5)

In professional sporting events, the teams have coaches on the field and coaches in the pressbox. A **DLE-200B** allows them phone to phone communication without having to install phone lines throughout a stadium.



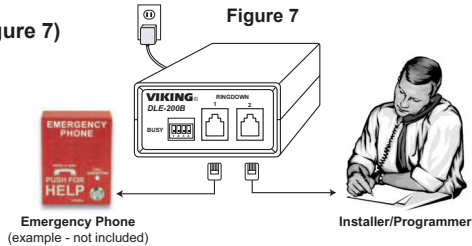
F. Golf Applications (Figure 6)

In this application, your food can be ready when you come in from golfing. A **Viking** handsfree phone installed on the 9th and 18th holes will allow golfers to call the clubhouse restaurant through a **DLE-200B**, and place an order. When finished golfing, their orders will be ready. Example at right: Viking model **E-10-EWP** (DOD 210) with optional **VE-5x5** backbox and **VE-GNP** (DOD 424) gooseneck pedestal.



G. Telco Product Programming Application (Figure 7)

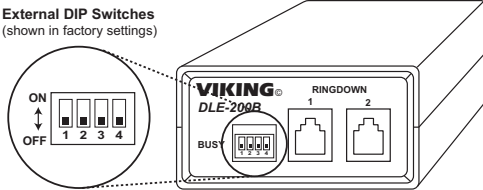
In this application, installers and system programmers can use a **DLE-200B** to access and program your telecom products without disrupting your phones. This is ideal for: security systems, security panels, phone systems, emergency phones, or any kind of telco/telecom product that is programmed via an analog phone line. For more information on Viking Emergency Phones, see DOD 215.



Programming

Several features can be selected by changing the external DIP switch settings on the front of the **DLE-200B**, or by changing the internal DIP switch settings. The **DLE-200B** is shipped in factory default programming for standard ringdown applications.

Important: The **DLE-200B** components are sensitive to static electricity. Personnel and the work area should be grounded before handling.



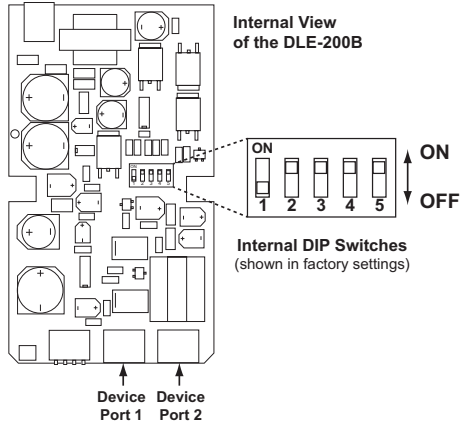
A. External DIP Switch Programming

Switch 1	Switch 2	Description
ON	ON	Long-Long (1 sec ON, 200ms OFF, 1 sec ON, 4 sec OFF)
OFF	ON	Short-Short-Long (500ms ON, 200ms OFF, 500ms ON, 200ms OFF, 1 sec ON, 4 sec OFF)
ON	OFF	Short-Long-Short (500ms ON, 200ms OFF, 1 sec ON, 200ms OFF, 500ms ON, 4 sec OFF)
OFF	OFF	2 seconds ON, 4 seconds OFF (factory default)

Switch	Position	Description
3	ON	Decreases audio volume 9 dB, may increase fax/modem connection speed, help stop data errors
3	OFF	Standard audio volume (factory default)
4	ON	Immediate ringdown mode (no dial tone before ringdown)
4	OFF	2 seconds of dial tone before ringdown (factory default)

B. Internal DIP Switch Programming

Switch	Position	Description
1	ON	Ring down and dial tone off
1	OFF	Ring down and dial tone enabled (factory default)
2	ON	Ring until answered (factory default)
2	OFF	Maximum ring count of 5
3	ON	Enables CPC break after hangup (factory default)
3	OFF	Eliminates the CPC break after hangup
4	ON	2 second CPC break time (factory default)
4	OFF	150ms CPC break
5	ON	Two-way ringdown (factory default)
5	OFF	One-way ringdown: Rings from device 1 to device 2 only



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 through Friday 8:00am - 5:00pm central time. Before you call, please:

1. Know the model number, the serial number and what software version you have (see serial label).
2. Have the Product Manual in front of you.
3. It is best if you are on site.

RETURNING PRODUCT FOR REPAIR

This 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 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. The original product boxes are not designed for shipping - an overpack box is required to prevent damage 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: 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 RA number on the outside of each carton being returned.

RETURNING PRODUCT FOR EXCHANGE

This 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 (RA) number will be issued. This number is valid for fourteen (14) calendar days from the date of issue.
3. After obtaining the RA number, return the approved equipment to your distributor. Please reference the RA number on the paperwork being shipped back with the unit(s), and also the outside of the shipping box. The original product boxes are not designed for shipping - an overpack box is required to prevent damage in transit. Once your distributor receives the package, they will replace the product over the counter at no charge. The distributor will then return the product to Viking using the same RA number.
4. The distributor will **NOT** exchange this product without first obtaining the RA number from you. If you haven't followed the steps listed in 1, 2 and 3 above, 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.

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.

Product Support: 715-386-8666

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