Designed, Manufactured and Supported in the USA

VIKING PRODUCT MANUAL
COMMUNICATION & SECURITY SOLUTIONS

DLE-300
Advanced Line Simulator
November 2, 2017

Advanced Line Simulator for Communication, High Speed Data, Caller ID and Classroom Training

The **DLE-300** advanced Line Simulator provides sales people, technicians, engineers, etc. with a cost effective, easy to use method of conducting on-site demonstrations or diagnostics, eliminating the need to locate phone lines and disrupt the customer's phone service.

The Line Simulator provides two way communication between standard analog telecom products such as modems, fax machines, Key Systems, PABX's as well as standard telephones.

The **DLE-300** Line Simulator produces standard or distinctive AC ringing, DC talk battery, caller ID data, precise dial tone, ring back, busy, SIT, reorder tone, and provides CPC on disconnect.

Features

- Supports all high speed data

- Produces name and number caller ID data

- Audio input/output for recording voice prompts

- 40V DC talk battery

- Precise call progress tones (dial tone,ringback, busy and reorder)

- Produces special interrupt tones

- Standard and distinctive 20 Hz AC ringing

- Provides CPC breaks after disconnect

- Touch Tone detection

- Ringdown mode (no Touch Tones required)

- 911 trainer mode for classroom training

www.VikingElectronics.com
Information: 715-386-8861

Applications

- Point-to-point communications between phones, fax machines, and high speed modems without dedicated telephone lines
- Programming and recording voice products such as voice mail systems, etc.
- Intersystem TIE lines
- Courtesy and/or emergency phones
- Demonstrating telecom equipment at trade shows, meetings, etc.
- Diagnosing phone line dependent equipment with precise characteristics
- 911 trainer for schools and businesses

Specifications

Power: 120V AC/13.8V AC 1.25A, UL listed adapter provided
Dimensions: 5" x 5" x 1.5" (127mm x 127mm x 25mm)
Shipping Weight: 2 lbs (.9 kg)
Environmental: 32° F to 90° F (0° C to 32° C) with 5% to 95% non-condensing humidity
Ringer Output: 6.0 REN load
Talk Battery: 40V DC
Loop Length: 2.6 mi (4.2 km) maximum - 24 AWG twisted pair
Maximum Data Speed: Unlimited
CPC Generation Time: 2 seconds
**Connections:** (2) RJ11 jacks, (1) 3.5mm (1/8") audio jack

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.*
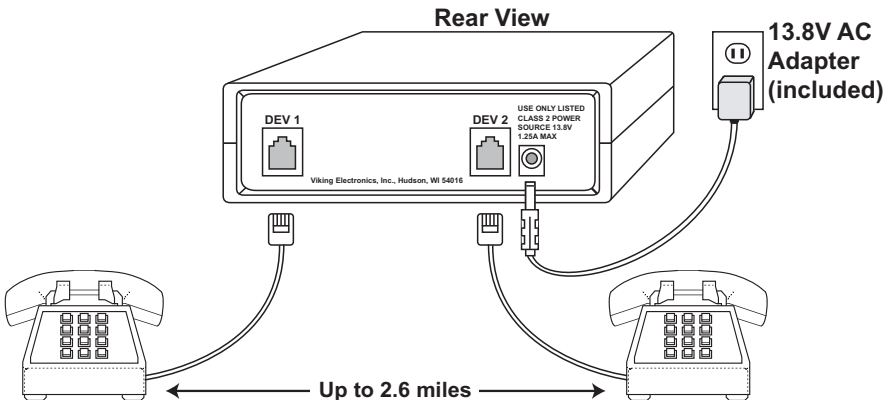
A. Demonstrations and Classroom Training

The **DLE-300** is ideal for on-site product trainings at trade shows and perspective customer sites. It can also be configured as a 911 trainer for classrooms, etc.
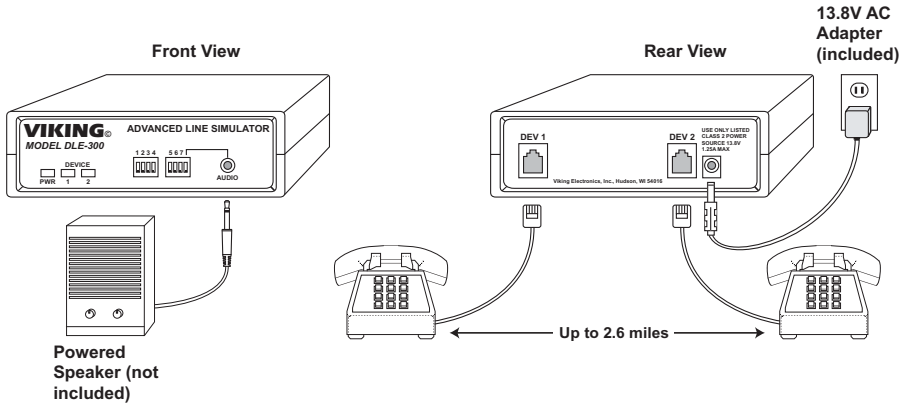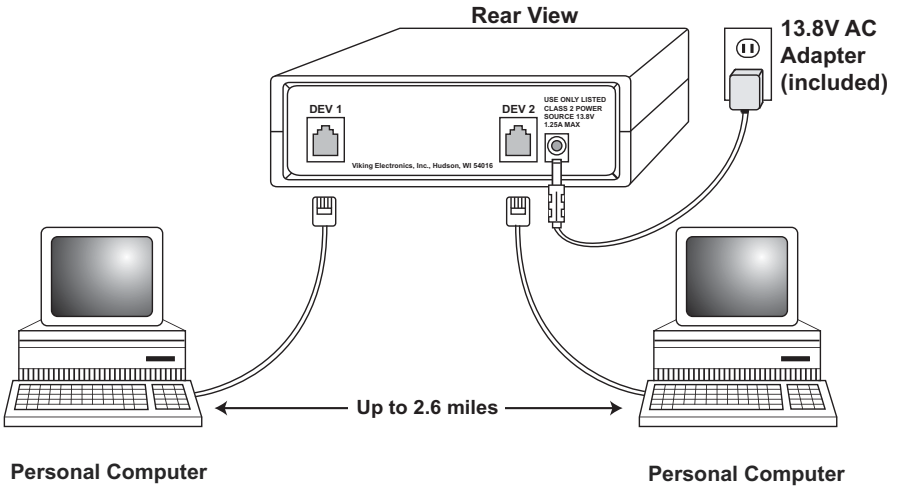

B. Point to Point Communication

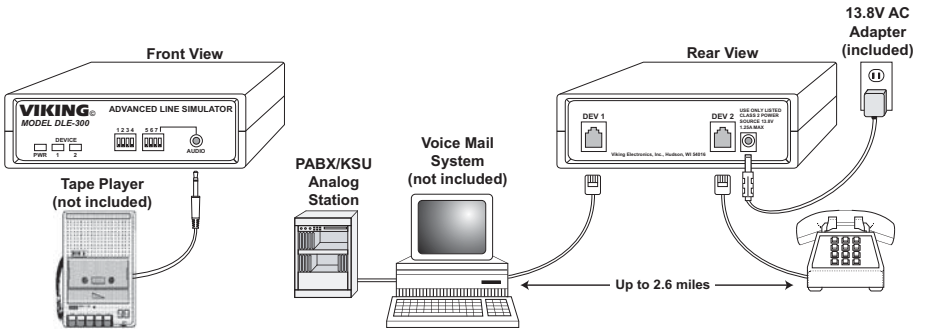The **DLE-300** can be configured as a ringdown circuit for instantaneous point to point telephone communications.

C. High Speed Data Communication

The **DLE-300** will support the data speeds of your supporting peripherals.

Rear View

13.8V AC Adapter (included)

DEV 1   DEV 2   USE ONLY LISTED CLASS 2 POWER SOURCE 13.8V 1.25A MAX

Viking Electronics, Inc., Hudson, WI 54016

← Up to 2.6 miles →

Personal Computer

Personal Computer

D. Programming and Recording Voice Mail Systems and Other Voice Products

The **DLE-300** can be configured as a ringdown circuit for instantaneous point to point telephone communications.

13.8V AC Adapter (included)

Front View

Rear View

VIKING® ADVANCED LINE SIMULATOR
MODEL DLE-300
DEVICE
PWR   1   2
1 2 3 4   5 6 7
AUDIO

DEV 1   DEV 2   USE ONLY LISTED CLASS 2 POWER SOURCE 13.8V 1.25A MAX

Viking Electronics, Inc., Hudson, WI 54016

Voice Mail System (not included)

PABX/KSU Analog Station

Tape Player (not included)

← Up to 2.6 miles →

A. External DIP Switch Programming

1. Ring Candence

Switch 1	Switch 2	Description
OFF	OFF	Normal (2 seconds on, 4 seconds off)
ON	OFF	Short - long - short
OFF	ON	Short - short - long
ON	ON	Long - long

2. Tones

Switch	Position	Description
3	OFF	Standard dial tone
3	ON	Stutter dial tone
4	OFF	Disables special call progress tones
4	ON	Enables special call progress tones

3. Modes of Operation

| Switch	Position	Description
5	OFF	Disables 911 mode
5	ON	Enables 911 mode
6	OFF	Disables ring down mode
6	ON	Enables ring down mode
7	OFF	2 second dial tone before ring (ring down mode)
7	ON	No dial tone before ringing (ring down mode)
8	OFF	High speed data communication
8	ON	Enables the AUDIO jack
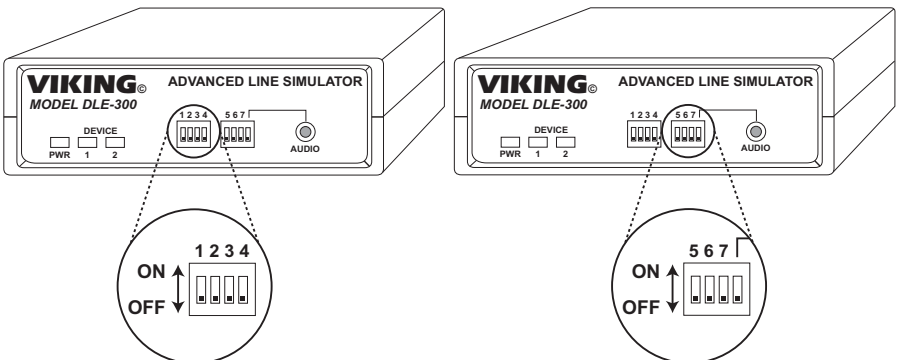
B. Internal DIP Switch Programming

Switch	Position	Description
1	OFF	Disables CPC signal
1	ON	* Enables CPC signal
2	OFF	Disables "Caller ID" data
2	ON	* Enables "Caller ID" data
3	OFF	Disables maximum ring count
3	ON	* Enables maximum ring count
4	OFF	10 seconds of dialtone when other phone hangs up
4	ON	* 10 seconds of fast busy tone when other phone hangs up

Switch 5	Switch 6	Description
OFF	ON	Audio volume between ports is attenuated by 9dB
ON	OFF	* Device ports are connected with no attenuation

Switch	Position	Description
7	OFF	* Two-way ringdown
7	ON	One-way ringdown: device 1 to device 2 only
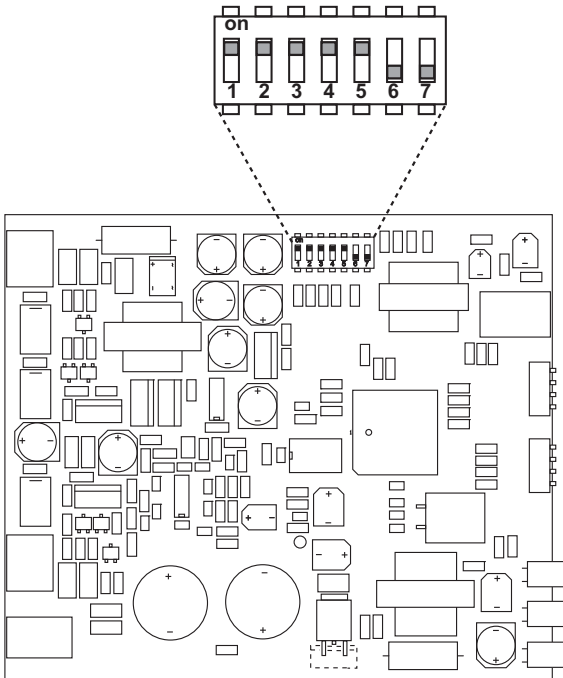
A. Normal Operation (all DIP switches OFF)

An off hook device is given dial tone. Any Touch Tone will break dial tone and two and a half seconds after a phone number is dialed, the **DLE-300** will ring the opposite port up to 10 times. Caller ID information is sent after the first ring. When the other device answers, the call is connected. The unit provides a CPC break and 10 seconds of reorder tones when either device hangs up.

B. Ring Down Mode (DIP switch 6 ON)

In this mode, the **DLE-300** does not require Touch Tones to be dialed to ring the other telephone device. An off hook condition on either port will trigger 2 seconds of dial tone and the opposite port will begin ringing. No caller ID data is sent. ***Note:*** *To eliminate dial tone, set DIP switch **7** to **ON**.*

C. Special Call Progress Tones (DIP switch 4 ON)

In this mode, the **DLE-300** may be activated to provide busy, reorder, S.I.T., dial tone and special continuous test tone. The tones are keyed off of the last digit dialed (see the chart to the right).

Last Digit Dialed	Special Call Progress Tones
1	Busy
2	Reorder
3	S.I.T (Special Interrupt Tone)
4	1004 Hz@-20dBm Test Tone
5	Silence
6	Dial tone
7	Standard ringback
8	Standard ringback
9	Standard ringback
0	Standard ringback

Example: 5 5 5 - 1 2 3 4

D. Caller ID

Multi-message caller ID data is sent after the first ring. The information sent is keyed off of the second to last digit dialed (see the chart to the right).

Second to Last Digit Dialed	Caller ID Data Sent
1	715-386-8861, Viking Electron
2	Number withheld, Viking Electron
3	Number unavailable, Viking Electron
4	715-386-8666, name withheld
5	715-386-8666, name unavailable
6	Number and name withheld
7	Number and name unavailable
8	No data sent
9	No data sent
0	No data sent

E. 911 Mode (DIP switch 5 ON, DIP switch 6 OFF)

The **DLE-300** features a 911 mode for classroom training, etc. In this mode, the **DLE-300** will only allow calls to ring that have dialed 911. Any other number dialed will receive a busy signal. While in 911 mode, "911 Emergency" will be sent as the caller ID data whenever 911 is dialed.

F. Audio Jack (DIP switch 8 ON)

A 3.5mm (1/8") audio jack is provided for an audio connection to the simulated lines. This is ideal for recording voice prompts on voice mail systems, recording, or amplifying the voice path. This connection is bi-directional so audio may be uploaded or downloaded. ***Note:** Keep DIP switch **8 OFF** when the **AUDIO** jack is not required for the best standard operation.*

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

Our Technical Support is available for assistance Monday to Friday 8:00am - 5:00pm 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 Product Manual 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 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.

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