VIKING©

Telecommunication Peripheral Products

Technical Practice

DVA-1002
Two-Port Digital Voice Announcer
September 1, 1998

Two-Port Digital Voice Announcer

The **DVA-1002** is a two-port digital voice announcer designed for ACD/UCD, hotel/motel wake-up, retail, commercial, industrial, governmental and other high-usage announce-only applications. It can be configured to play two distinct messages as long as they are not accessed at the same time.

The **DVA-1002** will increase call handling capacity by answering calls on demand or during the first ring, automatically adjusting the announcement length to ensure fast call processing and provide instant rewind for the next announcement.

The **DVA-1002** uses solid state memory and is virtually maintenance free. There are no moving parts, tapes to replace or tape heads to clean.

http://www.VikingElectronics.com

E-mail...Sales@VikingElectronics.com

Features

- Compatible with virtually any C.O. line or analog PABX/KSU station
- Record and review announcements using a standard handset
- Announcements may be downloaded from a tape player
- LED record level and usage indicator for consistently high-quality recordings
- Two ports for one or two announcements
- Provides an economical replacement for drum machines
- Includes both “Ring Trip” and 4-wire E & M interfaces
- Two hours of rechargeable battery back-up included
- 32 seconds of record time

Sales...(715) 386 - 8861

Made in the U.S.A.

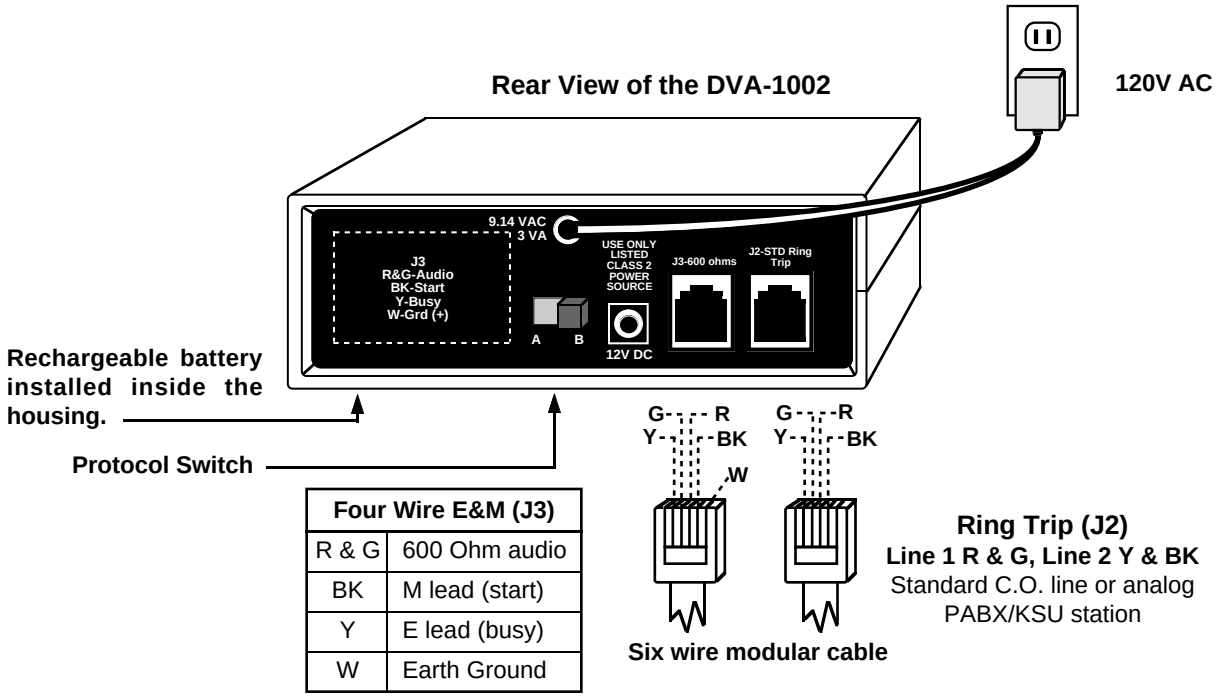
Applications

- ACD/UCD announcements
- Intercept announcement
- Announce-only applications
- School closings
- Ski reports
- Night answer
- Wake-up calls
- Bank rates/commodity prices
- Any application where information must be repeated continuously and may require frequent updating
- Replace existing tape and drum recorders

Specifications

Power: 120V AC/13.8VAC 1.25 UL listed adapter provided
Dimensions: 127mm x 127mm x 38mm (5” x 5” x 1.5”)
Shipping Weight: 1.13 kg (2.5 lbs)
Environmental: 0°C to 32°C (20°F to 90°F) with 5% to 95% non-condensing humidity
Battery Back-up: 9V DC NiCad, 2 hours of memory (included)
Message Length: 32 seconds
Sampling Rate: 32k
Connections: (1) RJ11, (1) 4-wire E&M RJ14, (1) 3.5mm (1/8”) audio jack, (1) handset jack

Installation



Four Wire E&M (J3)	
R & G	600 Ohm audio
BK	M lead (start)
Y	E lead (busy)
W	Earth Ground

Wire the **DVA-1002** with either or both the 4 wire E&M jack and/or the 2 wire ring trip jack as shown above. When using the 4 wire E&M, the ring trip interface may be used for remote programming. The E&M functions will resume when programming is finished.

Note: *The **DVA-500A** requires a 24 hour unswitched 115V AC outlet. To protect the internal electronics, the installation of a surge protector is recommended.*

Battery Back-Up

The **DVA-1002** is equipped with a rechargeable NiCad battery that will maintain the memory for up to 2 hours during a power failure. The **DVA-1002** must be powered for 48 hours to fully charge the battery.

Warning: *Only use NiCad rechargeable batteries. Serious damage may be caused by trying to charge a non-rechargeable battery.*

Programming

A. Standard Ring Trip 2 Wire

Use **J2** only. Set protocol switch to "**A**." Any ringing C.O. line or analog PABX/KSU station will be answered, given a message, released and immediately be available for the next ring.

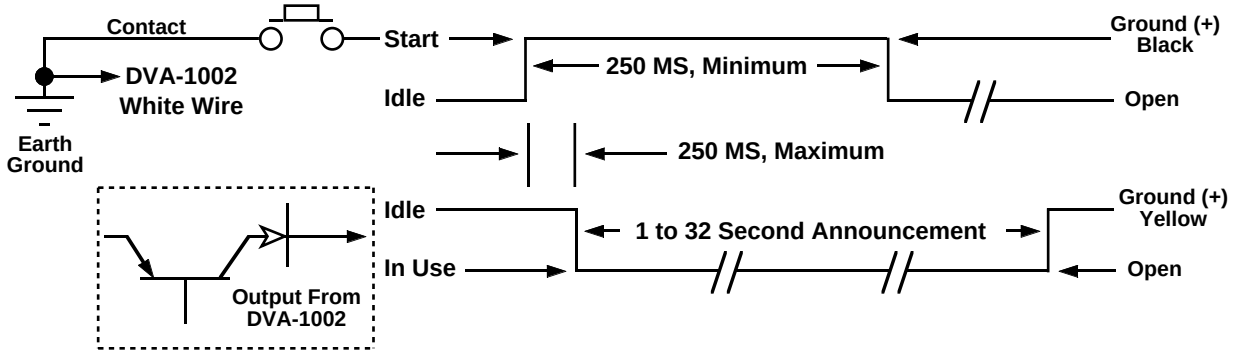
B. Continuous Play

Use **J3** only. Set protocol switch to "**A**." Connect **Y** to **BK**. The announcement will be repeated continuously on **R&G** 660 Ohm output.

C. 600 Ohm 4 Wire E & M Protocols

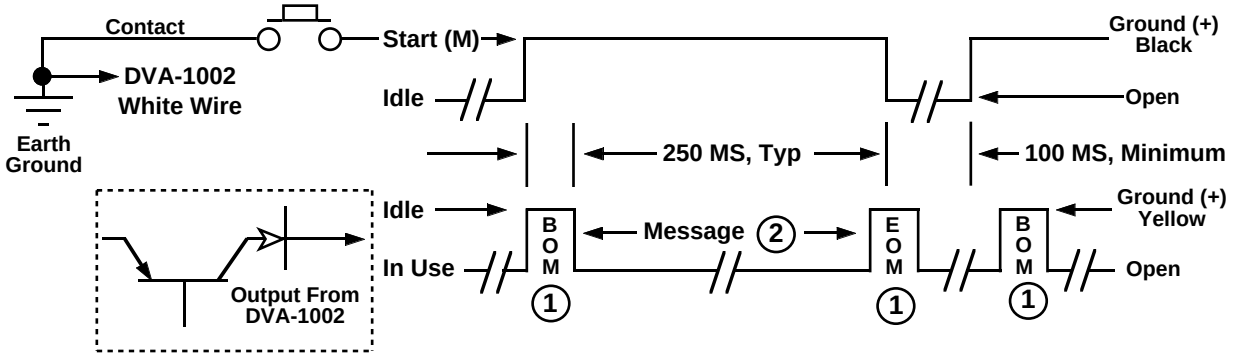
1. "On Demand"

Use **J3** only. Set protocol switch to "**A**."



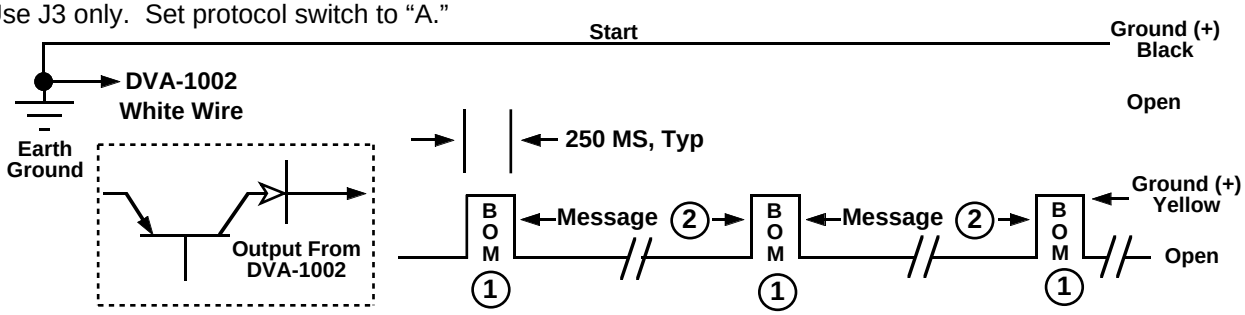
2. Type V E&M, Wink Start

Use J3 only. Set protocol switch to "B."



3. Drum Recorder Replacement

Use J3 only. Set protocol switch to "A."



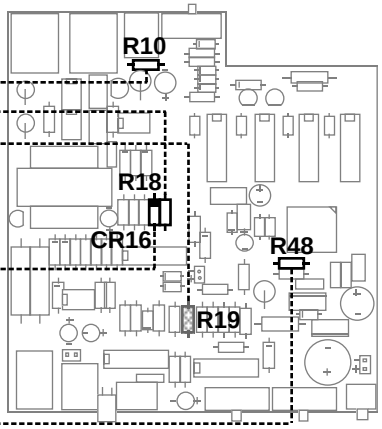
① **BOM**="Beginning of Message" pulse. ② The **DVA-1002** has 16 seconds of record time.
EOM="End of Message" pulse.

D. Using the DVA-1002 with Major PABX's

PABX Manufacturer	Protocol Switch	Notes
AT&T Dimension, System 85, 75 Horizon, Etc.	Position A	(See modifications below).
Harris (20-20)	Position B	Use J3. Connections: 1) T1 and R1 to green and red. 2) M to black. 3) E to Yellow 4) Earth ground* to white.
Jistel (all models)	Position A	Use J2. Connect T&R to green and red (STD Ring Trip)
Mitel (all models)	Position A	Use J2. Connect T&R to green and red (STD Ring Trip)
N.E.C. (2400)	Position B	Use J3. Connections: 1) T1 and R1 to green and red. 2) M to black. 3) Earth ground* to white. On the **DVA-1002** circuit board, cut one lead of diode CR16 (see the modifications below).
Northern (SL-1)	Position A	Use J3. Connections to QPC74 Ran Trunk circuit pack: 1) T&R to G&R. 2) CPO to Y. 3) S/MBO to Bk 4) Earth ground* to white. Set C34 switch as follows: 1) SW1.0-closed 2) SW2.0-closed 3) SW3.0-open 4) SW4.0-closed. Programming SL-1: the **DVA-1002** emulates a cook 201.
Rolm (all models)	Position A	Use J2. Connect T&R to green and red (STD Ring Trip)
Siemens (Saturn)	Position A or B	Use J3. Connections: 1) T1 and R1 to green and red 2) Earth ground* to both black and white. 3) EA lead to yellow. Program Saturn system message to be minimum of 2 seconds longer than the actual recording

** Earth ground is the positive of the PABX system battery.*

Circuit Board of the DVA-1002



1. Using the DVA-1002 with AT&T Dimension, System 85, 75 Horizon, Etc.

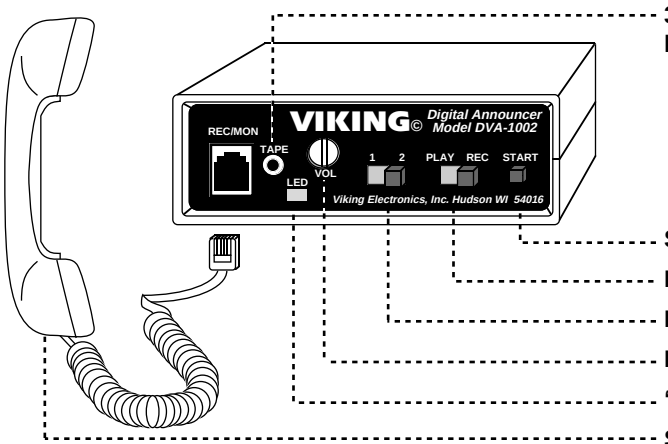
a. Clip one end of **R10** (as shown to the right).
b. Clip one end of **R18** (as shown to the right).
c. Install a 4.7K resistor in the vacant **R19** position (as shown to the right).

2. Using the DVA-1002 with an N.E.C. PABX

To use the **DVA-1002** with an N.E.C. PABX, clip one end of **CR16** (as shown to the right).

E. Increasing the Record Time

To change the record time from 32 seconds to 64 seconds, clip one end of **R48** (as shown to the right). ***Important:*** *This will cause the **DVA-1002** to record at **HALF** the original fidelity.*



3.5mm (1/8") audio jack permits down-loading the message from a tape player.

Start Button

Record/Play Selector

Port Selector

Playback Volume Adjustment

"In Use" and "Record Level" Indicator

Standard carbon handset to record and monitor
Note: *electrocet handsets will not work.*

F. Recording From a Carbon Handset

1. Place the **PLAY/REC** switch in the **REC** position.
2. Plug a standard carbon handset into the modular **REC/MON** jack.
3. Select the message you wish to record on the **Port Selector** switch (**1** or **2**).
4. Press and hold the **START** switch and begin speaking as if you were talking on the telephone.
5. When finished release the **START** switch.
6. Repeat steps 3 - 5 to record a second message.
7. Move the **PLAY/REC** switch to the **PLAY** position.

G. Recording From a Tape Player

1. Place the **PLAY/REC** switch in the **REC** position.
2. Insert a 3.5mm (1/8") audio jack into the **TAPE** jack.
3. Connect the other end of the cable assembly to the speaker, monitor, earphone, etc. jack of a standard cassette recorder.
4. Select the message you wish to record on the **Port Selector** switch (**1** or **2**)..
5. Adjust the audio level of the tape player by following **a-b**.
   a. Play the recording but do not push **START**.
   b. Adjust the cassette player volume so that the LED flickers but is not mostly on or off.
6. Press and hold the **START** switch for the duration of the recording.
7. When finished release the **START** switch.
8. Repeat steps 4 - 6 to record a second message.
9. Move the **PLAY/REC** switch to the **PLAY** position.

H. Monitoring From a Carbon Handset

1. Place the **PLAY/REC** switch in the **PLAY** position.
2. Plug a standard carbon handset into the modular **REC/MON** jack.
3. Position the **Port Selecto**r to the announcement you wish to monitor.
3. Press and hold the **START** switch for the duration of the announcement.
4. When finished release the **START** switch.

Note: *While playing or recording, the "LED" will display a steady light.*

Operation

With the **Port Selector** in position **1**, all incoming calls on line 1 (**R/G** of **J2**) will hear message 1. All incoming calls on line 2 (**Y/BK** of **J2**) will hear message 2.

Note: *Both messages cannot be accessed simultaneously.*

With the **Port Selector** in position **2**, all incoming calls will hear message 2.

Product Support Line...(715) 386-8666 ***Fax Back Line...(715) 386-4345***