

Telecommunication Peripheral Products

# Technical Practice

**TMS-2**  
Two Line Call  
Sequencer

October 24, 1997

## Answer Customer Calls Promptly and Professionally, Even When You're on the Other Line

No matter how small your business, projecting the right image is important. Build your company's image with **Viking's** Two Line Call Sequencer.

In the day mode, the **TMS-2** answers calls on one line while you are busy or on the opposite line. After a professional greeting has been played, the **TMS-2** holds the caller for up to 15 minutes or until you are available to take the call. Music on hold can be provided from a radio or any other audio source. For a truly professional image, **Viking's** **DVA-2W** "promotion on hold announcer" may also be added (Fax Back Document 110).

In the night mode, the **TMS-2** allows your answering machine to answer either line. The LED indicator displays which mode is active (day or night) and which line is on hold. A volume adjustable beep and warble also indicate which line is on hold or ringing.



<http://www.VikingElectronics.com>

[E-mail...Sales@VikingElectronics.com](mailto:Sales@VikingElectronics.com)

### Features

- Remotely recordable
- Non volatile E<sup>2</sup> memory for recording and programming (no batteries required)
- Day and night mode operation
- Volume adjustable warble and "on hold" alert
- Disconnects on CPC or 15 minute "on hold" time out
- Programmable ring delay from 1 to 9
- Music or promotion on hold input
- Programmable security code
- Modular installation
- 1 year warranty

### Applications

- **Small Office/ Home Offices (SOHO)** where a professional image is important
- Customer service and technical support centers where it is important that all calls be answered in a timely fashion
- City desk and parts counters with limited personnel to cover incoming calls

### Specifications

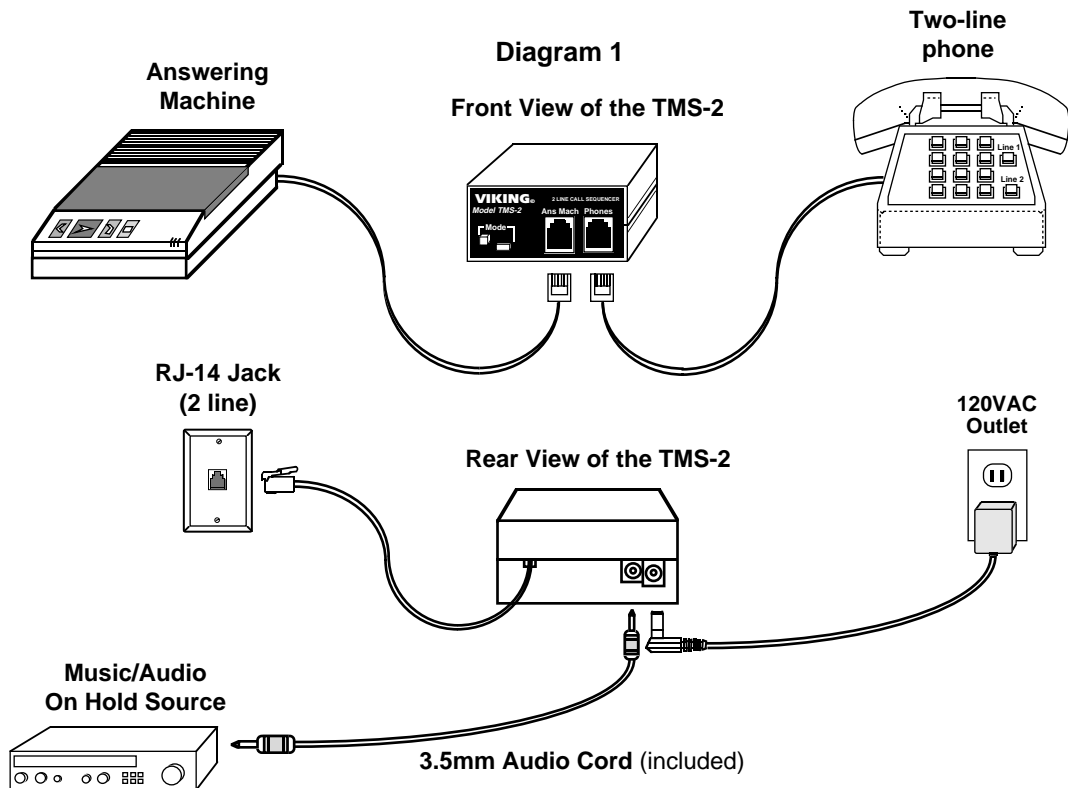
**Power:** 120V AC/12V DC 500mA UL listed adapter provided  
**Dimensions:** 120mm x 70mm x 35mm (4.75" x 2.75" x 1.38")  
**Shipping Weight:** .45 kg (1lb)  
**Environment:** 0° C to 32° C (32° F to 90° F) with 5% to 95% non-condensing humidity  
**Connections:** (1) RJ14 plug, (1) RJ14 jack, (1) RJ11 jack, (1) 3.5mm audio jack, (1) 3.5mm male to female audio cord  
**Sampling Rate:** 64 Kbps  
**Message Length:** 16 second maximum

**Sales...(715) 386-8861**

**Made in the U.S.A.**

# Installation

The **TMS-2** should be placed in a location that is readily accessible in order that the alert tones be heard. Connect the power adapter, line cords and audio source as shown in **Diagram 1** below.



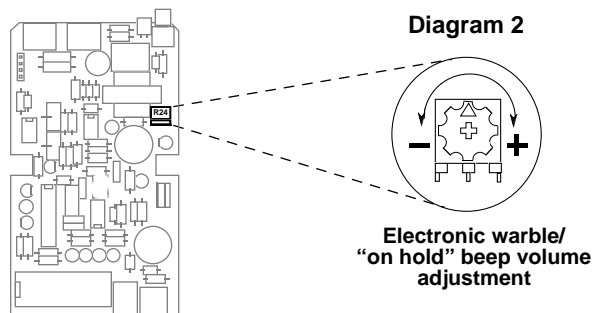
**Important:** A surge protector is recommended. The **TMS-2** is not protected from power line surges.

# Programming

**Note:** If more than 20 seconds elapse between Touch Tones, while in the "programming mode", the **TMS-2** will disconnect.

## A. Volume Control

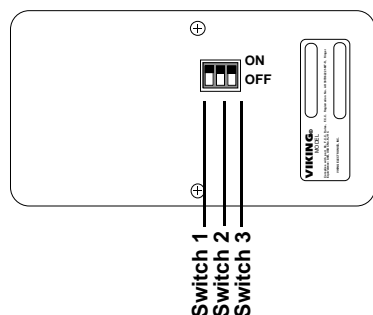
The electronic warble/"on hold" beep volume can be adjusted using an internal volume pot (see **Diagram 2**). To adjust the alert tone volume, follow steps 1 - 4 below.



**Important:** Electronic components are sensitive to static electricity. Personnel and the work area should be grounded before handling.

1. Disconnect the power and telco cables.
2. Remove the two screws on the bottom of the chassis and take off the cover.
3. Locate the volume pot (R24) as shown in **Diagram 2** and adjust as needed.
4. Replace the cover and cables when finished.

## B. Dip Switch Programming



Switch	ON	OFF
Switch 1	Normal Loop Current *	High Loop Current
Switch 2	Warble ON *	Warble OFF
Switch 3	Run Mode *	Learn Mode

\* Factory settings

**Important:** After changing dip switch settings, the **TMS-2** must be momentarily powered down for the settings to be registered.

### 1. Loop Current (Dip Switch 1 - ON (Normal)/OFF (High))

Dip switch 1 allows the **TMS-2** to work with varying telephone lines. If the **TMS-2** does not release a call placed on hold when answered, the loop current provided by your phone company is probably too high. To compensate for this, set dip switch 1 to the OFF position (see **Diagram 3**).

### 2. Warble Control (Dip Switch 2 - ON/OFF)

Dip switch 2 turns the internal electronic warble on and off.

### 3. Security Code Override (Dip Switch 3 - ON (Run)/OFF (Learn))

If the security code is not known, the **TMS-2** can still be programmed by setting dip switch 3 to the OFF position (see "**Security Code Programming**" below).

## C. Recording the Greeting Message (16 seconds maximum)

To record a personal greeting, call into the **TMS-2**. After the **TMS-2** answers, enter a Touch Tone **\***. When the greeting message stops, enter the six digit security code (see **Security Code Programming** below). Enter **\*1** to start recording. Enter any other Touch Tone to stop recording and **\*2** to playback the recording. The maximum record time is 16 seconds, so it is best to prepare a script before recording. To clear the recording, enter **\*3**.

**Important:** Once recording has been started, a Touch Tone must be entered to stop the recording.

## D. Security Code Programming (Factory setting = 845464 or V-I-K-I-N-G)

To change the security code, call into the **TMS-2**. After the **TMS-2** answers, enter a Touch Tone **\***. When the greeting message stops, enter the current six digit security code. Then enter the new six digit security code followed by **#22**.

If the security code is not known, place dip switch 3 in the OFF position(Learn Mode) and momentarily power down the **TMS-2**. The unit will now accept a **\*** and any six digits to enter the programming mode. Program your new security code as explained above. Move dip switch 3 back to the run (ON) position and momentarily power down the **TMS-2** again.

## E. Ring Delay Selection (Factory setting = 3)

To change the ring delay, call into the **TMS-2**. After the **TMS-2** answers, enter a Touch Tone **\***. When the greeting message stops, enter the six digit security code (see **Security Code Programming** above). Enter 01 - 09 followed by **#21** to program a ring delay of 1 - 9 rings.

**Note:** Select a ring delay that is less than the ring delay of your answering machine.

## F. Day/Night Mode

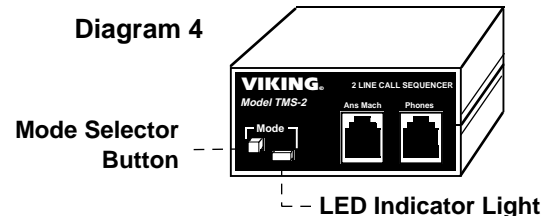
The mode selector button (See **Diagram 4**) toggles the **TMS-2** between the "Day" and "Night" mode.

### 1. Day Mode (LED Indicator - On Steady)

In the "Day" mode, the **TMS-2** will place incoming calls on hold after your personal greeting has been played.

### 2. Night Mode (LED Indicator - High/Low Flashing)

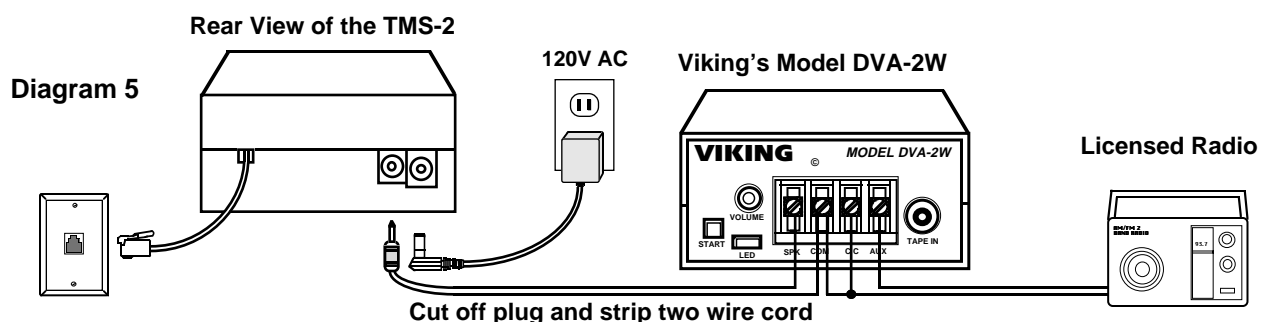
In the "Night" mode, the **TMS-2** will not answer calls, allowing your answering machine to process all calls.



# Applications

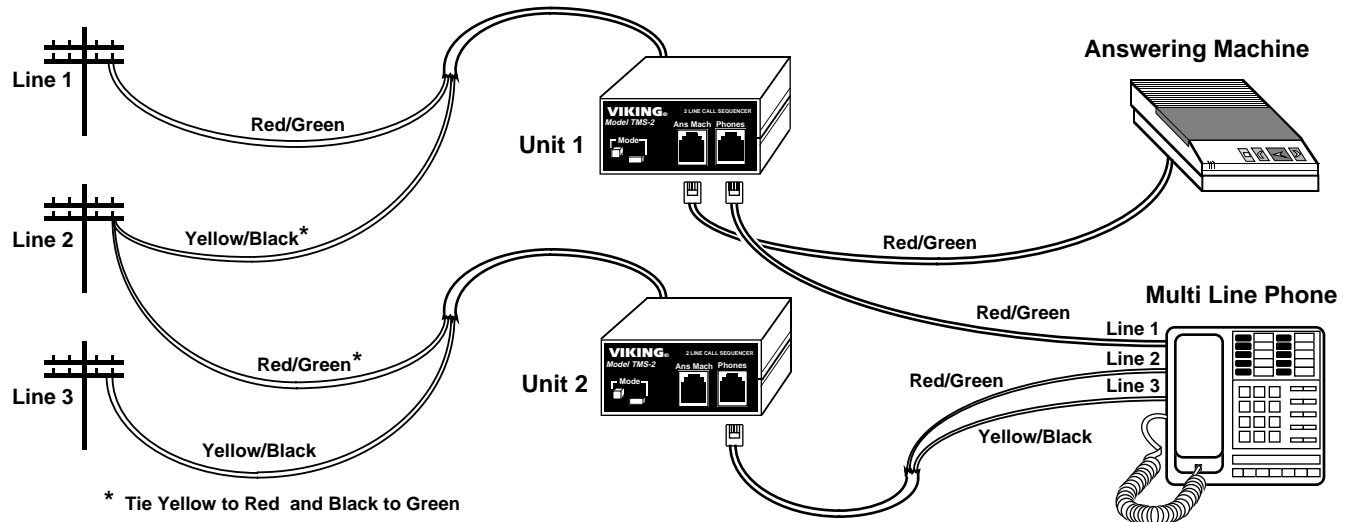
## A. Adding Professional Promotion On Hold

The **TMS-2** can also provide professional promotion on hold as well as music when used with a **Viking** model **DVA-2W** "Promotion On Hold" announcer. For more information, retrieve Fax Back Document 110.



## B. Using the TMS-2 with three phone lines

Answer back-up is possible for three incoming phone lines using a special configuration of two **TMS-2's**. The incoming lines must be configured as a hunt group. Set the ring delay on the first **TMS-2** lower than the second **TMS-2**.



As calls come in, they will hunt in sequence from line 1 to line 3. These calls must be answered in this sequence. If the calls are answered out of sequence, there is the possibility of a ring no answer or a forced manual answer. To eliminate the possibilities of a ring-no answer, three **TMS-2's** may be used.

**Note:** Dip switch 1 on unit 1 may have to be placed in the "OFF" position.

In the evening, switch both **TMS-2's** to the night mode and connect an answering machine to the first **TMS-2**. This will allow the first two lines to be directed to the answering machine.

## Operation

In the "Day" mode, the **TMS-2** monitors both lines for ringing. If an incoming call is not answered before the programmed ring delay, the **TMS-2** will answer the call. After the user recorded greeting is delivered, the call is placed on hold. This call can then be answered at your convenience (within 15 minutes). The greeting message is stored in non-volatile memory and will be retained even if power is removed from the unit. The greeting can be up to 16 seconds in length. If two calls are received simultaneously, the **TMS-2** will answer only the first call to meet the ring delay.

The **TMS-2** provides a single electronic warble for calls ringing on line 1 and a double warble for calls on line 2. An internal volume control can be used to set the volume level of both the electronic warble and the on hold beep tone (see **Programming** section A). In addition, the LED light will flash in cadence with the alert tones.

After the **TMS-2** has placed a call on hold, it provides a single or double beep every 15 seconds to indicate which line is holding. A single beep indicates that line 1 is on hold and a double beep indicates line 2 is on hold. Similarly, the LED light will flash in a single or double pattern indicating line 1 or line 2 is on hold.

A push button on the front of the **TMS-2** is used to select the operating mode (Day or Night). An LED light is also provided to indicate the mode and line activity (see **Programming** section F).

In the "Night" mode, the **TMS-2** will not answer the call, allowing your answering machine to answer either line. The LED flashes in a "High/Low" fashion to indicate the **TMS-2** is in the "Night" mode.

**Note:** The **TMS-2** can only process and hold one call at a time. The maximum hold time is 15 minutes.

**Product Support Line...(715) 386-8666**

**Fax Back Line...(715) 386-4345**

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