

User Guide for the Event Pager / Dialer

Version 1.1

DM Engineering
2174 Chandler St.
Camarillo, CA 93010
805-987-7881 800-249-0487
www.DMEngineering.com

Theory of Operation

The Event Pager Dialer is a microprocessor based device that senses an event occurrence by the “making” of a normally open contact or a logic low applied to either of its two inputs. If either of the 2 inputs is activated, the Event Pager-Dialer will automatically dial a pre-programmed telephone or pager number and send a series of preprogrammed numeric digits to identify the particular input that has been activated. If the “chain” feature is used, the Event Pager/Dialer will automatically dial a second programmed number and execute the preprogrammed code for that channel. The number dialed may be a repeat of the first number if programmed so. Power indication is indicated by a green LED, which turns amber during dialing and paging sequences. Programming is accomplished using the “HyperTerminal” program supplied with Microsoft Windows 95, 98, 2000 and XP. Memory for the programmed codes is saved in non-volatile e²prom. Power for the device is supplied by a “wall wart” power supply and battery back-up is provided to assure operation if the power fails.

Connections

1. Phone Line...A standard RJ11 phone line connection is made with the supplied cable.
2. Power input...Connect the “wall wart” 9-12-volt DC connector to the power input jack on the unit. Plug the “wall wart” into a convenient 117VAC outlet.
3. Battery back up...Remove the rear battery compartment door by pressing down and outward on the latch. Locate the battery that was shipped with the unit and remove the protective terminal cover from the battery. Connect the battery to the snap on battery connector in the compartment and replace the door.
4. Programming input...A DB9 female connector is provided for interface with a computer serial port using the supplied DB9 M-F serial cable. See Programming instructions.
5. Chain connector...By placing the supplied red shorting jumper across the 2 pins on the chaining circuit, the device will automatically dial both numbers and send both codes programmed into the device in the same sequence that the particular inputs were activated.
6. Activation inputs...The two “input” and “common” screw connectors may be used for any contact closure or logic low application the user desires, and will activate the unit by sending the phone numbers and codes programmed into memory for that particular input. There are internal pull-up resistors to +5VDC on each input.

Setup and programming

1. Connect the DB-9 cable to the computer serial port of your choice using the supplied cable.

2. Disconnect all alarm inputs, telephone cable and 9V battery from the Pager-Dialer if connected.
3. Connect the AC power adapter to the power input jack of the Pager-Dialer and connect the power adapter to the wall socket.
4. Power up your computer and using Microsoft Windows™. On the desktop go to **Start, Programs, Accessories, Communications, HyperTerminal**. Select **HyperTerminal** and enter whatever name that you desire and select an icon at the prompt to record the programming sequence for this device. Click **OK**.
5. In the **Connect To** dropdown box click on **Connect Using or Direct to COM 1** (or **COM 2**), indicating whichever serial port you are connecting to. Click **OK**.
6. In the **Com Configure or Properties / Port Settings** window, set the **Bits per second** to **9600**, the **Data bits** to **8**, the **Parity** to **None**, the **Stop bits** to **1**, and **Flow control** to **None**. Click **Apply and OK** to close the **Com Properties** window.
7. Click **File, Settings or Properties**. Click on the **Settings** tab, then the **ASCII Setup** box. Check **Echo typed characters locally** and **Append line feeds to incoming line ends**. Check **OK** twice. Leave any other checked boxes as they are.
8. You are now in **Terminal** mode. **Turn the Caps Lock on your keyboard on.**
9. Type **D1** and then type the phone or pager number to dial for the first alert input port, followed by **Enter**. Your entries will NOT echo on the terminal screen. Do not put any spaces, dots or dashes or other characters in the string. Valid characters are 0 through 9, *, #, and W. A "W" will insert a 2.5 second delay between dialed characters and is considered a character in itself. A maximum of 15 characters are allowed for phone numbers and 15 characters maximum for alert codes for each input.
10. After entering the phone number press a down arrow key to start a new line. ? may appear on a line and the cursor will be on a new line. Now type **D1** followed by **Enter**. The terminal screen should now verify your input by displaying the phone or pager number entered. If you make an error at any time just press **Enter** to exit the inputting string and retype the **D1** or the appropriate programming command followed by **Enter** again to reprogram. This is true for any of the programming strings to follow.
11. Type **P1** followed by **Enter**, and type the code you want to use for the pager display or telephone audible. **It is mandatory that the last character in a pager alert code be the # symbol of the paging function will not work.** Telephone audible tones may end with any character.
12. After entering the programming code press a down arrow key to start a new line. ? may appear on a line and the cursor will be on a new line. Type **P1** and enter to verify the alert code you entered.
13. Repeat steps 9-12 for the 2nd alert input pager or telephone number and code number, using **D2** and **P2** instead of D1 and P1 to program this input.

14. Your programming setup is now complete. Disconnect the Power and programming cable from the Pager-Dialer, and shut down HyperTerminal on your computer. You will be prompted to save the session and it is advisable to do so in the event you wish to reprogram the device without having to retype all of the setup information
15. If you wish to have both alert inputs dial both programmed numbers in case either or both inputs are activated, place the red "**Chain**" jumper on both terminals where provided. To have each alert input dial separately without transmission with the other programmed information, remove or place the "**Chain**" jumper only on one terminal.
16. You may now reconnect the alert input connection(s), DC power cable, telephone modular cable and back-up battery to the Pager-Dialer. Remember that the back-up battery is in use whenever the external power connection is removed or whenever there is no AC power from the wall to the power adapter. If the unit is not in use, **disconnect the back-up battery.**

Operation and test

To test the Event Pager-Dialer, simply momentarily short either input terminal to the common terminal. The power LED should switch from green to amber to signify proper operation of the unit, and the pre-programmed sequence for that input will be executed. To test the battery back-up operation, simply disconnect the external DC power. The unit should continue to function normally. That's it... The Event Pager-Dialer is ready to monitor your inputs.

Specifications

- Activation input: N.O. Contact closure or logic zero (+5VDC pull ups internal) between input and common screw terminals.
- Output: DTMF supplied by an RJ11 modular connector.
- Programming: Serial connection, DB-9F (interconnect cable supplied) using "HyperTerminal" application program as supplied with Microsoft Windows or equivalent communications program.
- Power Requirements: Supplied adapter, 115 VAC to 9-12 VDC, 100-500 ma.
- Battery Back-up Requirements: 9 VDC alkaline battery, NEDA 1604A (supplied)
- Size: 5.1 x 5.3 x 1.7
- Shipping Weight: Approximately 2 lbs.