



**MODULARM**

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**KITCHEN BRAINS®**

# INSTALLATION & INSTRUCTION GUIDE

## Autodialer



Save the instructions  
for future reference.  
[www.KitchenBrains.com](http://www.KitchenBrains.com)

24/7 Toll-Free Technical Support  
**1-800-243-9271**  
(from the U.S., Canada and the Caribbean)

## PROGRAMMING THE DIALER

**IMPORTANT: Before operating the AVD-45b, make sure wiring is correct and power is set within specified limits. Recording and data recall can be performed without connection to a telephone line. We strongly recommend that final testing be performed under simulated alarm conditions, and that confirmation of transmission be obtained from the numbers dialed.**

Model AVD-45b stores and dials up to 4 telephone numbers and/or pager numbers. Each number may contain up to 28 digits, including a maximum of 10 "pause" segments (a pause is 2 seconds long and counts as a digit) and an optional "pound" toner tone for pager dialing.

Once a connection is made, the dialer will deliver a recorded voice message of up to 16 seconds or a numeric code for pager messaging. The dialer will repeat the voice message two times per call, to ensure that a full message is delivered. If the phone number is busy or not answered within 8 rings, the AVD-45b will automatically dial the next programmed number.

Assuming an uninterrupted alarm (a minimum 7 minutes if programmed in continuous mode), the dialer will go through the numbers a second time, and call in an attempt to deliver the message twice to each programmed number. If any numbers are busy or unanswered, the dialer will continue calling (up to 10 times per programmed number) in an attempt to deliver the voice message or until the alarm condition is terminated. In the TEST mode only, the respective location numbers and telephone numbers will appear in the LCD to show the calls are in process.

**NOTE: If any numbers are used for alpha/voice pager designations that require operator assistance, the pager service should be notified, to ensure proper interpretation of the message.**

### How to store phone numbers

Follow these directions to store up to 4 telephone numbers in the dialer's memory. Please remember that local ordinances may prohibit automatic dialing of police, fire departments and other emergency agencies.

The AVD-45b will call up to 4 numbers. This can be any combination of regular telephones, cellular telephones or pagers. The 4 numbers being called will be stored in locations 1-4. Any of locations 1-4 can store up to 28 digits and dial a telephone or pager. If dialing less than 4 numbers, simply leave the latter location(s) empty and the unit will automatically skip them.

### To program telephone numbers

1. Supply power to the AVD-45b.
2. The AVD-45b has four modes (PROGRAM, TEST, OPERATE, and OFF) indicated in the upper part of the LCD. Make sure the unit is in the "PROGRAM" mode. If it is not, press the MODE ("M") button to change modes.

### To store "voice" telephone numbers in memory locations 1 through 4 (see p. 3 for pagers)

1. At the "PROGRAM: NUMBERS" prompt, press "1" (YES).
2. Press all digits of the first number to be dialed. Check the LCD while programming to make sure the correct numbers are pressed.
3. After inputting the entire phone number (1 + area code if needed), press the PROGRAM/PAUSE ("P") button (momentarily), then the "1" key. This will store the number in location 1.
4. Repeat step 1, then press all the digits for the second number to be dialed. Check the LCD, press the PROGRAM/PAUSE ("P") button (momentarily), then the "2" key. This will store the number in location 2.
5. Repeat the process, if needed, for locations 3 and 4.

**NOTE:** Pauses are only used when dialing a pager, in which case during the OPERATE mode the stored voice message will not be played.

#### Example 1: Store telephone number 1-800-555-1212 in Location 1.

Press: Program/Pause  
(Press momentarily)

1 8 0 0 5 5 5 1 2 1 2 P 1

#### Example 2: Store pager number 555-1212 in Location 2.

Press: Program/Pause  
(Press momentarily)

5 5 5 1 2 1 2 P 2

Follow the steps above to store the desired numbers in Memory Locations 3 and 4.

**NOTE:** If you enter the wrong number or wish to change a programmed number, press the MODE ("M") button until "PROGRAM: NUMBERS" prompt appears, enter "1" (YES) and enter the number then the location (see example 1 or 2 above).



5. Press "1" (ON) for a 20 second Entry delay (This provides a 20 second entrance delay, after any exit delay time has elapsed, before the unit will react to a sensor trip, allowing time to shut off).
6. Press "2" (OFF) for no Entry delay (This will allow the unit to react immediately to a sensor trip, after any exit delay has elapsed).

**NOTE:** When using the AVD-45b with an alarm panel that already has Exit/Entry delays programmed, EXIT and ENTRY should be programmed for "OFF" unless an additional delay is needed.

7. Immediately after selecting Exit and Entry delays, the LCD displays input options; N.O./N.C. for either normally open or normally closed contact operation. Select by entering 1 or 2, depending on the type alarm contact used; select N.O. when input is shorted or N.C. when input opens during an alarm.
8. Next, select either 1(MOM) or 2(CONT) for momentary or continuous activation. **NOTE:** A momentary alarm must be 0.5 seconds or longer for the dialer to dial all numbers in sequence, including all attempts to re-dial. In the continuous mode the dialer stops dialing immediately when the input is restored to a non-alarm state. Therefore, an alarm condition in the CONT mode must last long enough (7 minutes or longer) to allow all numbers to be properly dialed.

### How to record an outgoing voice message

An outgoing message (OGM) of up to 16 seconds may be programmed into the AVD-45b. Once recorded, this message will be repeated during activation 2 times, in sequence (starting with Location 1), to each number designation. For best results, the OGM should be written down, practiced and timed before recording.

1. Press the "M" key until "PROGRAM: NUMBERS" appears in the LCD, then press "2" twice.
2. Press the "1" at the "PROGRAM: OGM" prompt.
3. Locate the microphone on the lower left corner of the AVD-45b. For best results when recording, speak about 12 inches from the microphone in a clear and normal voice.
4. Press "\*" key to initiate the recording process. "RECORDING" will appear in the LCD when recording. The "\*" key must be held down for the entire time of recording.
5. When the "\*" key is released the message will be stored. Once the 16 seconds have elapsed, "DONE" will appear in the LCD.

6. If you wish to change the OGM, repeat the preceding steps. The new OGM will automatically replace the previous message.

### To verify telephone numbers and OGM without phone line connection

Follow these directions to ensure the correct telephone numbers have been properly stored and the recorded message satisfactory.

1. Press the "M" key until "TEST: T-LINE" appears.
2. Press the "1" (YES). The LCD will display the T-LINE configuration.
3. Press the "1" (YES) at the "TEST: CHANNEL" prompt. The LCD will display the Delay configuration, then the number stored in Location 1 followed by either the OGM or pager code.
4. This process will be repeated for each stored Location. Any empty Location will be skipped.
5. Press the "M" key three times to return to the program mode.

### To verify telephone numbers and OGM without phone line connection

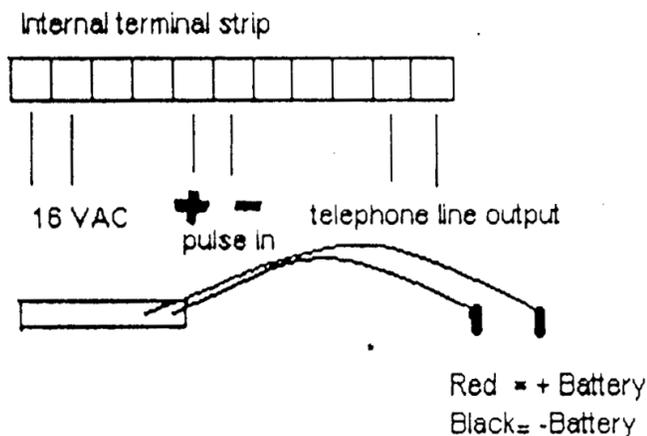
**NOTE:** A complete test should be performed in the "OPERATE" mode to ensure proper operation.

1. Before conducting an actual test under "OPERATE" mode, contact each of the designated emergency numbers (Locations 1 through 4) to advise people that you are conducting a test. After the test, verify that they received the message.
2. Apply power to the unit.
3. Press the "M" key until "OFF" appears in the LCD.
4. Connect the AVD-45b to an active phone line.
5. Make sure the sensor is in a non-alarm condition.
6. Press "M" until "OPERATE" appears in the LCD.
7. Trigger the sensor to simulate an alarm condition. If there are any delays programmed, the AVD-45b will wait until they elapse before activating and dialing.
8. The AVD-45b will sequentially dial the programmed Locations (1-4). If there is no number stored in a Location, it will be skipped. The OGM will be delivered when the AVD-45b receives an answer. (The OGM will not be played through the speaker). For pager numbers, the pager code will be transmitted instead of an OGM.
9. The AVD-45b will automatically go through the next programmed Location repeating the same process.

## PULSE OUTPUT INSTALLATION INSTRUCTIONS

1. Mount panel in suitable location.
2. Connect phone lines to phone line terminals in dialer.
3. Connect "6VDC Pulse Output" from alarm to "Pulse In" terminals in dialer. Multiple alarms can be connected in parallel to the pulse input. Recommended wire gauge 18-22. **IMPORTANT!** Observe proper polarity! (- to - and + to +). It is recommended that if more than 3 pairs of pulse output wires are to be connected to the pulse input terminals that free points on the terminal strip are utilized and jumped to the appropriate pulse input connection to accommodate these extra pairs of wires.
4. Connect 16 VAC Transformer (provided) to 16 VAC terminals in dialer.
5. Plug transformer into wall and connect battery to black & red wires. (Red is "+")
6. Program dialer in accordance with above Manual.
7. Test Autodialer by activating the alarm

### AUTODIALER WIRING DIAGRAM

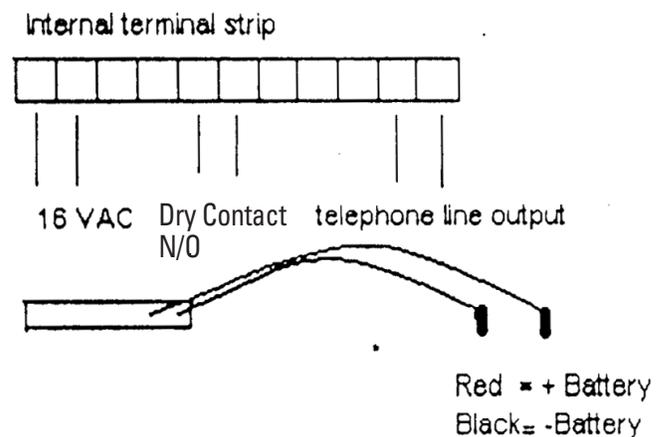


- \*16 VAC CONNECT TO PROVIDED TRANSFORMER
- \*PULSE IN CONNECT TO ALARM PULSE OUTPUT (Model 75 pulse output, grey= -, red= +)
- \*TELEPHONE LINE CONNECT AT TERMINAL STRIP TO CORRESPONDING WIRES
- \*12 VDC BATTERY CONNECT RED = +, BLACK = -

## DRY CONTACT INSTALLATION INSTRUCTIONS

1. Mount panel in suitable location.
2. Connect phone lines to phone line terminals in dialer.
3. Connect N/O dry contacts from alarm to N/O dry contacts from alarm terminals in dialer. Multiple alarms can be connected in parallel to the N/O dry contacts. Recommended wire gauge 18-22.
4. Connect 16 VAC Transformer (provided) to 16 VAC terminals in dialer.
5. Plug transformer into wall and connect battery to black & red wires (Red is "+").
6. Program dialer in accordance with the above Instruction Manual.
7. Test Autodialer by activating the alarm.

### AUTODIALER WIRING DIAGRAM FOR DRY CONTACT



- \*16 VAC CONNECT TO PROVIDED TRANSFORMER
- \*PULSE IN CONNECT TO ALARM PULSE OUTPUT (Model 75 pulse output, grey= -, red= +)
- \*TELEPHONE LINE CONNECT AT TERMINAL STRIP TO CORRESPONDING WIRES
- \*12 VDC BATTERY CONNECT RED = +, BLACK = -

## NOTES

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### WARRANTY

Kitchen Brains warrants that its products shall not fail to function in accordance with their specifications because of defects in material or workmanship, for the following warranty periods:

i. New Products: New Products consisting of microprocessor based controllers, timers, data-loggers or remote monitoring devices for 1 year from date of purchase.

ii. Sensors and Accessories: Sensors and accessories (consisting of probes, wireless sensors, hoses, relays, switches, mounting hardware or accessories) for 90 days from date of purchase.

For complete details consult [www.kitchenbrains.com/warranty](http://www.kitchenbrains.com/warranty)

### PATENTS

The products manufactured by Kitchen Brains are protected under one or more of the following U.S. Patents:

5,331,575	5,539,671	5,711,606	5,723,846
5,726,424	5,875,430	6,142,666	6,339,930
6,401,466	6,401,467	6,581,391	7,015,433
7,145,463	7,650,833	7,877,291	8,060,408

Plus foreign patents and patents pending. Plus licensed patent 5,973,297