## **LIMITED 2-YEAR WARRANTY** (LTM-1.0 Only)

SpeakerCraft Inc. warrants to the original retail purchaser **only** that this SpeakerCraft product will be free from defects in materials and workmanship for a period of two years, provided the speaker was purchased from a SpeakerCraft Authorized Dealer.

Defective products must be shipped, together with proof of purchase, prepaid insured to the SpeakerCraft Authorized Dealer from whom they were purchased, or to the SpeakerCraft factory at the address listed on this installation instruction manual. Freight collect shipments will be refused. It is preferable to ship this product in the original shipping container to lessen the chance of transit damage. In any case, the risk or loss or damage in transit is to be borne by the purchaser. If, upon examination at the Factory or SpeakerCraft Authorized Dealer, it is determined that the unit was defective in materials or workmanship at any time during this warranty period, SpeakerCraft or the SpeakerCraft Authorized Dealer will, at its option, repair or replace this product at no additional charge, except as set forth below. If this model is no longer available and can not be repaired effectively, SpeakerCraft, at its sole option may replace the unit with a current model of equal or greater value. In some cases where a new model is substituted, a modification to the mounting surface may be required. If mounting surface modification is required, SpeakerCraft assumes no responsibility or liability for such modification. All replaced parts and product become the property of SpeakerCraft Inc. Products replaced or repaired under this warranty will be returned to the original retail purchaser, within a reasonable time, freight prepaid.

This Warranty does not include service or parts to repair damage caused by accident, disaster, misuse, abuse, negligence, inadequate packing or shipping procedures, commercial use, voltage inputs in excess of the rated maximum of the unit, or service, repair or modification of the product which has not been authorized or approved by SpeakerCraft. This Warranty also excludes normal cosmetic deterioration caused by environmental conditions. This Warranty will be void if the Serial Number on the product has been removed, tampered with or defaced.

This Warranty is in lieu of all other expressed warranties. If the product is defective in materials or workmanship as warranted above, the purchaser's sole remedy shall be repair or replacement as provided above. In no event will SpeakerCraft be liable for any incidental or consequential damages arising out of the use or inability to use the product, even if SpeakerCraft Inc. or a SpeakerCraft Inc. Authorized Dealer has been advised of the possibility of such damages, or for any claim by any other party. Some states do not allow the exclusion or limitation of consequential damages, so the above limitation and exclusion may not apply.

All implied warranties on the product are limited to the duration of this expressed Warranty. Some states do not allow limitation on the length of an implied warranty. If the original retail purchaser resides in such a state, this limitation does not apply.

SpeakerCraft offers a variety of accessories to make your installation of these speakers and other SpeakerCraft products easy, economical, and professional. Contact your authorized SpeakerCraft Dealer for more information.

For technical inquires, please call 1-800-448-0976 or e-mail us at techsupport@speakercraft.com. We are available to assist you every weekday, except holidays, between the hours of 7:00 a.m. and 5:00 p.m. PST.

940 Columbia Avenue, Riverside, CA 92507
(800) 448-0976 Fax (951) 787-8747
www.speakercraft.com

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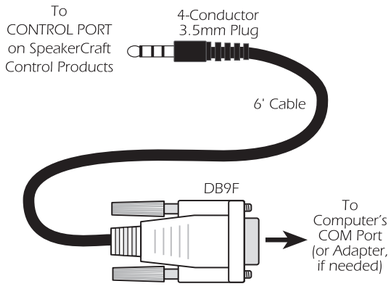
# INSTALLATION INSTRUCTIONS

# LTM-1.0 / EZ-TOOLS

## Learning / Test Module with Programming Software

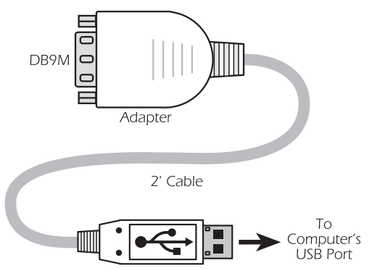
Please refer to Figure 1 to familiarize yourself with the components of this kit. The following are basic descriptions for each. Detailed instructions for both the LTM-1.0 module and EZ-Tools software can be found either in the "EZ-Pad System Instructions" PDF on the EZ-Tools CD ROM or in the printed version that comes packed with the EZC-1.0 EZ-Pad Controller.

**EZ-Tools**
- CD ROM -
Includes USB
Adapter Driver




**3.5mm Plug Transfer Cable**

**LTM-1.0**
Learn / Test Module




**USB / Serial Adapter Cable**

**Figure 1**
LTM-1.0 Kit Components

224682X1 • IMAGE 1

INSTR, NOTICE, LTM-1.0 KIT
LINEAR P/N: 224682x1
INK: BLACK
MATERIAL 70LB. GLOSS WHITE COATED PAPER
SIZE: 17.000" X 11.000" FOLD TO 8.500" x 11.000"
SCALE: 1-1
FOLDING: 1 FOLD VERTICAL, FINISH WITH LOGO SHOWING

## EZ-Tools

SpeakerCraft's EZ-Tools is a Windows®-based software program, which provides for the complete configuring and programming of EZ-Pad control systems. Some of its many features include: Key button choice and placement, single and multiple zone assignments, Command Library, IR learning and testing capability in conjunction with the EZC-1.0 or the LTM-1.0, single and macro command programming, status/power management, priority commands management, code length timing, delay settings, etc. As they become available, updates to the EZ-Tools software may be downloaded from the SpeakerCraft website at www.speakercraft.com.

Windows® is a registered trademark of Microsoft Corporation

## USB to 3.5mm Adapter Kit

The SpeakerCraft USB to 3.5mm Adapter Kit is designed to allow you to connect your PC to a variety of SpeakerCraft control products for programming purposes. Please refer to the USB to 3.5mm Adapter Kit Owner's Manual for detailed instructions.

## LTM-1.0 Learning / Test Module

The LTM-1.0 is primarily an installer's tool and serves as an IR learning, IR teaching and command test module when used in conjunction with EZ-Tools. It includes blaster emitters so that learning remotes, used in conjunction with the EZ-Pads, can be programmed with system commands. Also, special SpeakerCraft EZ-Codes are similarly taught so that keypad sources track automatically with sources selected by the remote. Please refer to Figure 2 to familiarize yourself with the LTM-1.0's features.

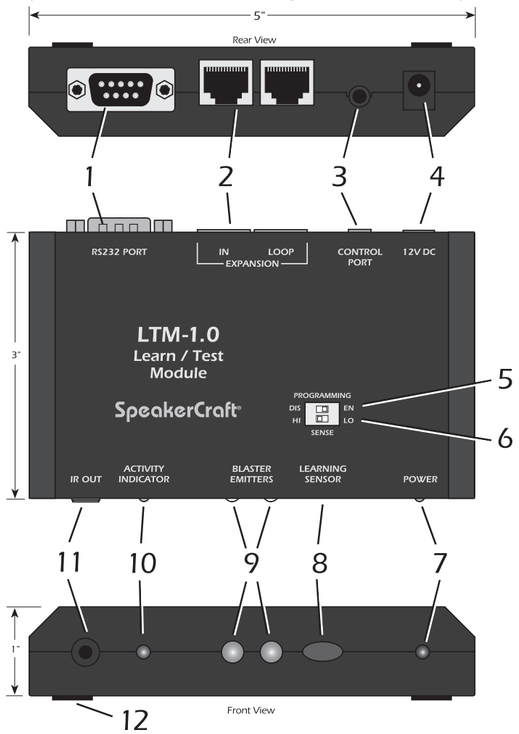



**Figure 2**
LTM-1.0 Features



1. **RS232 PORT –** DB9M jack allows RS232 commands to be tested with RS232 controlled system components.

2. **EXPANSION Ports –** RJ45 jacks provide for the connection and testing of commands for future RS485 controlled products.

3. **CONTROL PORT –** 3.5mm 4-circuit phone jack is a serial port that provides several control functions. All command learning and testing functions are accomplished via this port, using EZ-Tools, in conjunction with the mating Transfer Cable (included). Firmware updates for the LTM-1.0 are also accomplished via this port. NOTE: You would normally connect the Transfer Cable to the DB9 COM Port on your computer. However, if your computer does not have a DB9 COM Port, use the USB / Serial Adapter and related software on the CD-ROM, included. When using a USB port, connect the USB / Serial Adapter and the Transfer Cable together.

4. **+12V DC REGULATED –** 2.1mm DC power jack powers the LTM-1.0. Use the SpeakerCraft PS-1.0 12VDC 200mA power supply (included).

5. **PROGRAMMING Switch –** The upper DIP switch DISables or ENables internal LTM-1.0 factory firmware updates. Leave this switch in the DIS position at all times, unless you are doing a firmware update. Such updates are accomplished via EZ-Tools through the CONTROL PORT (item #3) and ensure that improved functionality can always be accomplished in the field.

6. **SENSE Switch –** The lower DIP switch sets the sensitivity of the internal IR Learning Sensor. Normally, set it to the LO position. However, if the teaching remote has weak output, move it to the HI position.

7. **POWER –** Red LED indicates power supply is connected and system is active.

8. **LEARNING SENSOR Lens –** Internal IR sensor receives IR command data from external handheld remotes for learning purposes. Works with EZ-Tools for the learning and storage of IR commands that are not available in the internal command library. Point the "teaching" remote at this lens from a distance of about 1 to 4 inches when "learning" commands.

9. **BLASTER EMITTERS –** These high power emitters output IR commands for testing and "teaching" purposes. When testing commands, the controlled device(s) can be 30 feet or more away. When "teaching" commands into a learning remote, point the "learning" remote toward these emitters at a distance of about 1 to 4 inches. NOTE: These Blaster Emitters are automatically disabled whenever an emitter or any mating 3.5mm mini phone plug is inserted into the IR OUT jack (item # 11).

10. **ACTIVITY INDICATOR –** Green LED indicates IR learning mode activities. Also flashes during activation of internal command data.

11. **IR OUT –** 3.5mm 2-circuit mini phone jack will drive any of the SpeakerCraft or other compatible emitters at medium power levels for operational tests of IR commands. It will also drive one or more AT-1.0 Terminator blocks for fan-out to many emitters. NOTE: The Blaster Emitters (item # 9) are automatically disabled whenever a mating 3.5mm mini phone plug is inserted into this jack.

12. Non-Skid Foot Pads

**IMPORTANT NOTICE:** SpeakerCraft is constantly upgrading the performance of the LTM-1.0. Please make sure you have the latest firmware upgrade by going to www.speakercraft.com. Instructions for uploading the firmware and checking what version you have in the device can be found in the EZ-Pad System Instructions.

**NOTE:** Detailed instructions for both the LTM-1.0 module and EZ-Tools software can be found either in the "EZ-Pad System Instructions" PDF on the EZ-Tools CD ROM or in the printed version that comes packed with the EZC-1.0 EZ-Pad Controller. In addition, essentially the same instructions are included under the "Help" menu of EZ-Tools.

224682x1 • IMAGE 2

INSTR, NOTICE, LTM-1.0 KIT
LINEAR P/N: 224682x1
INK: BLACK
MATERIAL 70LB. GLOSS WHITE COATED PAPER
SIZE: 17.000" X 11.000" FOLD TO 8.500" x 11.000"
SCALE: 1-1
FOLDING: 1 FOLD VERTICAL, FINISH WITH LOGO SHOWING