

HOME THEATER SPEAKERS

Model **EF30**
SERIES



EMP
Tek

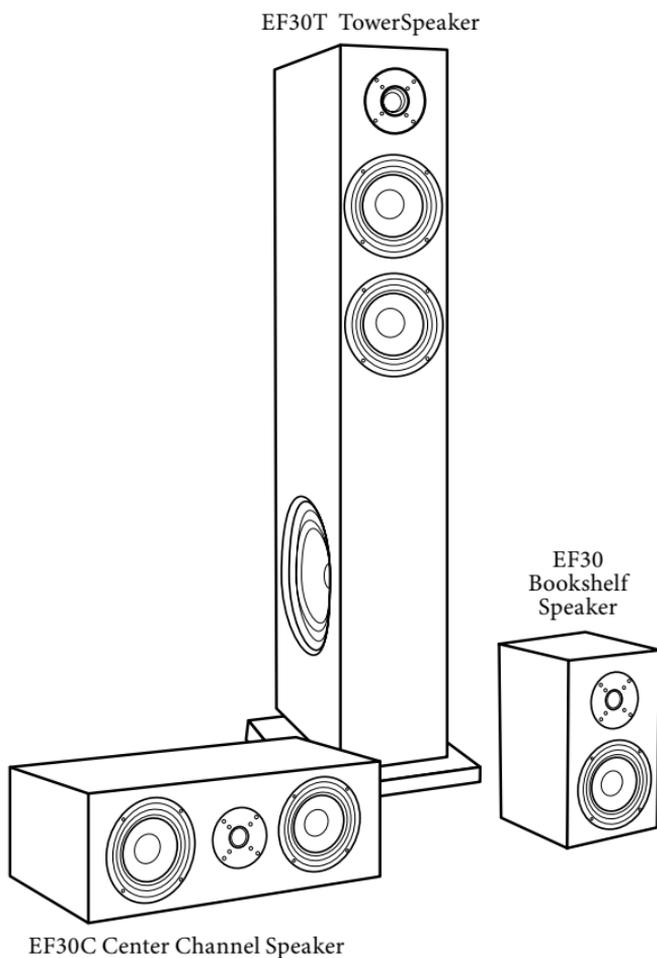
OWNER'S MANUAL

Introduction

Congratulations on your purchase of EMP Tek speakers! Your speakers are the result of many years of research and development.

This manual contains setup recommendations and specifications for the EF30, EF30C and EF30T speakers. It is highly recommended you thoroughly read through the material contained in this manual before connecting your speakers. This will ensure you have an understanding of how to properly setup, operate and maintain your speakers for optimum performance and maximum enjoyment.

EF30 Series Speakers



Break In Period

Allow several hours of listening time for your speakers to adequately break-in. During this period, the driver suspensions will loosen, the result will be an increase in bass, improved definition, and increased clarity and detail.

Care and Cleaning

To maintain the speaker's high quality appearance, it is recommended you regularly use a dry or slightly-damp soft cloth to keep the exterior of your speakers free from dust, lint or dirt. To clean dust from the grille, use a vacuum with a brush attachment and gently brush the surface of the grille.

Features

At the heart of the EMP Tek EF30 Series speaker system is a fiberglass cone bass/mid-range driver (speaker). The fiberglass cone resists flexing better than typical speaker cone materials, thereby providing highly articulate and accurate reproduction of the audio signal. The stiffness and lightweight characteristics of fiberglass, combined with the driver's large motor structure, give the drivers high excursion capability. This high excursion capability prevents compression or distortion of the audio signal, which leads to higher overall sound quality. The smaller drivers and tweeters in select EF30 speaker system are video shielded to cancel any stray magnetic fields which may cause interference with video equipment such as CRT televisions.

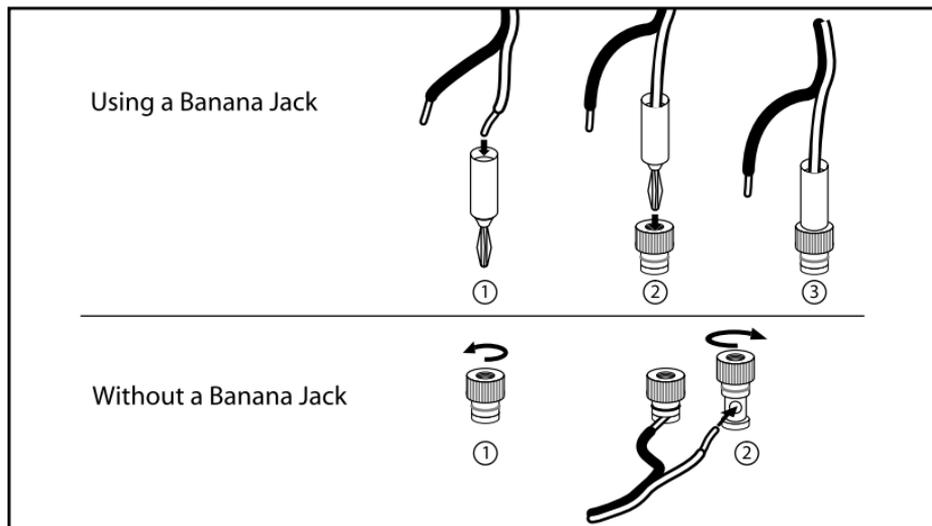
A high quality soft dome tweeter is used for high frequencies in the EF30 Series. Higher power handling is achieved through the use of magnetic liquid cooling in the tweeter. To protect the tweeter against being over driven, a Polyswitch (a DC current limiting device) is incorporated in the crossover network. Each EF30 Series model features an extensive crossover network. The use of these high quality crossover networks allows each speaker to operate at its optimal performance. Steep acoustic crossover slopes are used to integrate the drivers; the use of steep crossover slopes allow higher power handling, minimizes driver interaction irregularities, and maximizes the ability of each driver in their respective band of frequencies. Large 5-way binding posts ensure a good, solid electrical connection to these crossover networks.

The EF Series cabinets are constructed of ¾-inch MDF because of its inert properties, thereby preventing sound coloration due to cabinet diffraction. The thickness of the front baffles also prevents excess acoustic radiation.

Attaching Speaker Wires

When using a banana jack to attach speaker wires to the binding post terminals, insert the speaker wire into the banana jack. Next insert the banana jack into the binding posts. When using a banana jack to attach speaker wires to the binding post terminals, remove the black and red plastic protective inserts from the terminals. To do this, loosen the binding nut from the terminal by turning the nut counterclockwise until the nut is completely removed from the terminal. Remove the plastic inserts by pulling them straight out, then replace the nut to the terminal and turn clockwise. Insert the banana jack into the hole provided in the top of the terminal, and then continue to tighten the nut until secure. Repeat for the other speaker wire(s) as necessary.

If not using a banana jack, simply loosen the binding nut to allow the hole in the side of the terminal to become exposed. Strip $\frac{1}{4}$ -inch of the insulation from the end of the speaker wire and insert the exposed wire end into the now exposed hole in the side of the terminal. Tighten the binding nut by turning the nut clockwise until the speaker wire is secured. Repeat for the other speaker wire(s) as necessary.



System Setup

In order to obtain the best possible sound from your speaker system, it is important to determine where the speakers will sound best in your listening room. Sound reflections from the floor, ceiling and side walls influence the balance, imaging and overall sonic quality at the listening position. Experiment with speaker placement to determine which location offers the best overall sound. As a general guide, use the room layout diagram and the following the descriptions when setting up a home theater system. Some speakers shown in the diagram may not always be applicable to your individual system.

Front Main Left and Right Speakers

As a starting point, place your left and right EMP Tek EF30T tower speakers at least 15 inches from the wall and 7 feet apart from each other. The distance from the listening position to each speaker should be close to the distance that separates the two main speakers. Angling the speakers inward towards the listening position may give a more spacious and realistic sound stage.

Center Channel Speaker

The EMP Tek EF30C Center Channel Speaker should be centered between both left and right main speakers. Often this positioning dictates placing the speaker either directly above or below a television monitor. Since the EF30C is video shielded, the center speaker may be placed in close proximity to a television without cause for concern. The EF30C center channel speaker may be placed in a horizontal (lying down) or vertical (standing) position.

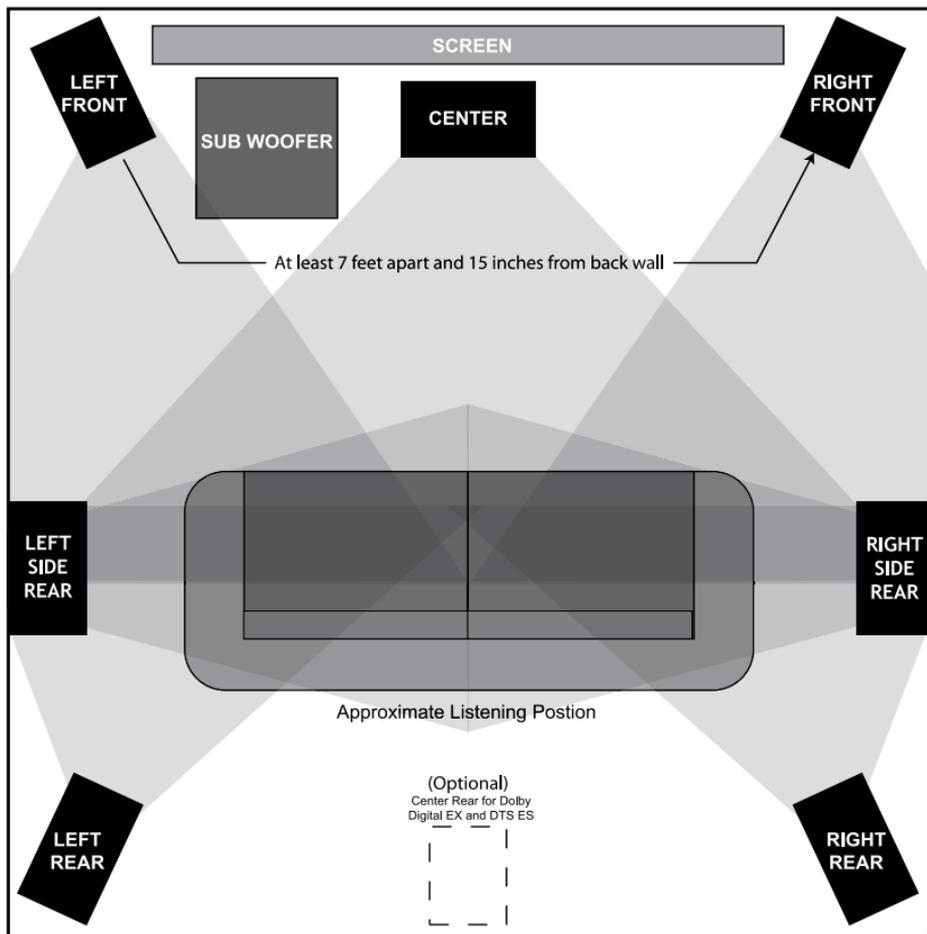
Rear Surround Channel Speakers

The TK-5C 2-way Bookshelf Speakers may be placed either above, behind or to the sides of the listening position. The listening position should be centered between the surround speakers. For best performance you may want to experiment with angling the surround speakers either towards or away from the listening position.

Subwoofer

Placement of the subwoofer will largely determine quality, quantity, and extension of the bass frequencies within your listening room. Bass frequencies are reinforced by close room boundaries. Placing the subwoofer in a corner will make the subwoofer sound louder and boost the very lowest frequencies. Placing the subwoofer away from walls will provide the least reinforcement, making the bass sound subjectively thinner than if the woofer were close to a wall. Good results can usually be obtained by placing a subwoofer along a wall 1-3 feet from a corner. Experiment with subwoofer placement and the sub-amplifier controls to achieve the proper bass balance.

System Setup (continued)



NOTE: There are several different surround formats available. Dolby Pro-Logic, Pro-Logic II, Dolby Digital and DTS generally have a 5 speaker plus subwoofer requirement. Dolby Digital EX and DTS ES add a center rear speaker. Please consult your audio/video professional to determine which system is best for you and how many speakers you will require.

Specifications

Model	EF30	EF30C	EF30T
Frequency Response:	60Hz – 20kHz ±3dB	60Hz – 20kHz ±3dB	45Hz – 20kHz ±3dB
Sensitivity:	86dB (2.83V@1m)	89dB (2.83V@1m)	87dB (2.83V@1m)
Recommended Power:	50-100 Watts	60-120 Watts	70-150 Watts
Woofers(s):	5¼" (133mm) Fiberglass	Dual 5¼" (133mm) Fiberglass	8" (203mm) Pulp Cone Subwoofer Dual 5¼" (133mm) Fiberglass
Tweeter:	1" (25mm) Poly Silk Dome	1" (25mm) Poly Silk Dome	1" (25mm) Poly Silk Dome
Impedance:	8 Ohms	8 Ohms	8 Ohms
Crossover Frequencies:	3000 Hz	3000 Hz	3000 Hz
Video Shielding:	Yes	Yes	Yes
Dimensions:	Width: 7¼" (184mm) Height: 12¾" (324mm) Depth: 8½" (216mm)	Width: 7¼" (184mm) Height: 20¾" (527mm) Depth: 8½" (216mm)	Width: 11" (279mm) Height: 42½" (1080mm) Depth: 13¾" (349mm)
Grille:	Black	Black	Black
Finish:	Black	Black	Black
Weight:	11 lbs. (4.99 kg)	17 lbs. (7.71 kg)	40 lbs. (18.14 kg)

Warranty

Engineered Music Products "EMP Tek" warrants the EF30, EF30C and EF30T speakers (the "Product") to be free from original manufacturing defects in materials and workmanship for five (5) years from date of purchase from an authorized EMP Tek dealer. This warranty extends only to the original consumer purchaser. EMP Tek does not warrant goods used in industrial applications. This warranty does not cover any expenses incurred in any removal or re-installation of the product.

If the product should prove defective within the warranty period, contact EMP Tek for a return authorization number prior to returning the product by prepaid delivery to EMP Tek, along with the original sales invoice or other proof of purchase, which establishes eligibility for warranty service. EMP Tek will, at its option, replace or repair the product free of charge and return the product by prepaid delivery. This warranty does not apply to any product which has been damaged, misused, altered, neglected or repaired by anyone other than an EMP Tek authorized service facility.

Any implied warranties including fitness for use and merchantability are limited in duration to the period of the express warranties set forth above, and no person is authorized to assume for EMP Tek any other liability in connection with the sale of the product. EMP Tek expressly disclaims liability for any incidental and consequential damages caused by the product or the result of failure of this product. The remedies provided under this warranty are exclusive and in lieu of all others.

This warranty gives specific legal rights. In addition, there may be other legal rights arising from the sale of the product, which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply in some areas.



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