

MTX HT520BDP INSTALLATION GUIDE

MTX HT520BDP speakers feature a full range bipole or dipole set-up, that either fire in phase (bipole) or out of phase (dipole). Dipole/bipole speakers take advantage of reflected sound to create a wide soundfield and they provide greater speaker placement flexibility. For this reason MTX HT520BDP speakers have a dipole/bipole switch which lets you choose the mode in which they operate.

Although the electrical phase in bi-poles and di-poles is different, the basic construction of bi-poles and di-poles is very similar. A brief description of phase; specifically being in phase and out of phase. In a general sense, something is in phase if it acts in the same pattern and time session as something else, and out of phase when it does not. Because controlling the way sound waves interact with each other is a key component of home theater, it is important to deal with the concept of phase. Bi-pole and di-pole speakers are designed specifically to help contribute to your surround sound field.

In a Dipolar speaker, the two sets of speakers are out-of-phase with each other, while the drivers on one side are pushing the opposite side is pulling. The result is that there is a reduced sound zone in the area along the 90-degree axis of the speaker. When properly set up, a pair of di-pole speakers used as surround speakers will provide very dynamic, enveloping rear effects. This allows you to listen without being able to pinpoint the location of the speakers themselves. Ideal placement would include positioning the speakers "in-line" with the preferred listening position. (See Diagram A)

In a Bipolar speaker, the two sets of drivers are in-phase with one another - both sides push air at the same time. The result is greater sound output than from a di-pole configuration. A bipolar speaker is more likely to replicate a 360° soundfield throughout the room, and works well if you need to position your surround speakers behind your listening position. (See Diagram B/C)

Ideally, both bi-pole and di-pole speakers work best when mounted on the sides of the listening position and use reflected sound off of the walls to produce their effects. It is recommended that once you have installed your speakers, you try both modes of operation to see which best suits your listening space and preferences. As shown in the diagrams, the diffuse sound of di-pole/bi-pole speakers can help to alleviate the need for exact placement of surround speakers in a home theater system. Film soundtracks are designed for this type of playback system.

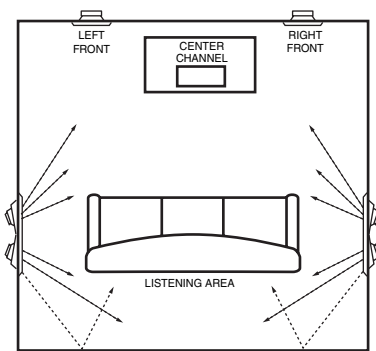


Diagram A

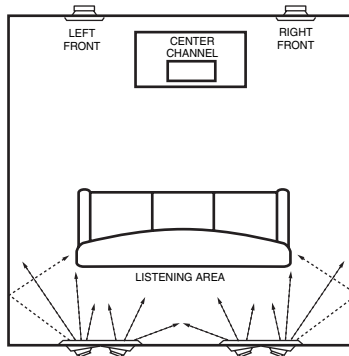


Diagram B

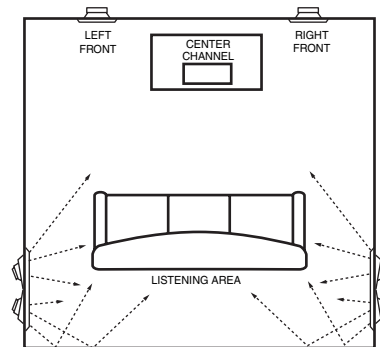


Diagram C