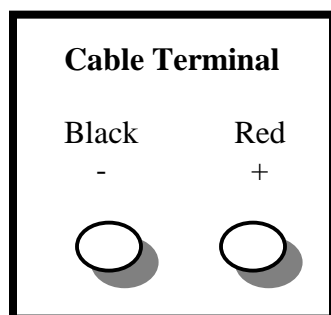


# How to connect your KIRKSAETER speaker to your system

Depending on the model there are different cable terminals for the cable connection between your speakers and the electronic equipment. In order to have a quality, long lasting connection, we use 14 carat gold plated brass terminals even on our smallest and least expensive bookshelf speaker. To begin, cut 12 mm off the cable insulation, turn the screw cap to the left, put the cable through the opened hole and fasten the screw cap. No insulation should be under the screw cap, upon completion. The gold covered brass terminals also accept banana plug connections.



## Standard Terminal

### CORRECT PHASING

is obtained when the red terminal of the amplifier is connected to the red terminal of the loudspeaker, likewise with the black terminals. If you are unsure of the connection, place the two speakers next to each other and reverse the cable on one speaker. Use the polarity that sounds fuller and that will be the one in phase.

### CABLES

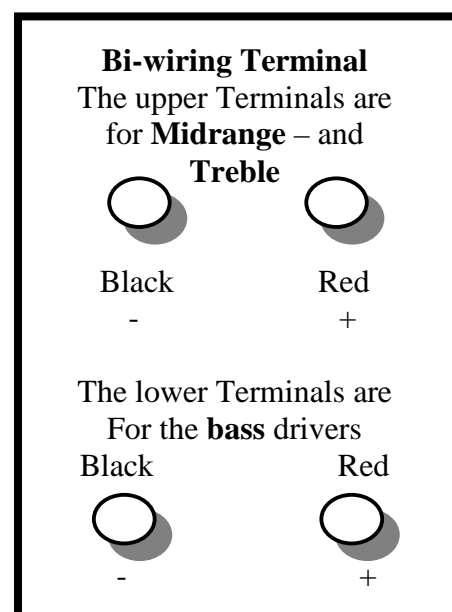
In recent years, cables have been a subject of great controversy and misunderstanding. However, if the amplifier speaker and cable system is understood you can choose proper cabling quite easily: The amplifier is tested to its usable power rating by connecting it to an 8-Ohm resistor, not a speaker! This impedance test is a very simple test. The Ohms or the impedance of speakers is mostly tested at a frequency of 1000 Hz. At other frequencies all speakers have other impedances or Ohms. The speaker and the cables, however, are a very complex unit that also consists of a capacitance and an inductance of a certain value that most amplifiers cannot handle. The amplifier must therefore get an additional stability through the use of a protection circuit. This enables it to handle the capacitance and inductance from the cables and speakers with fewer problems. An advanced protection circuit costs money and does not necessarily increase the power rating. Consumers mostly do not understand this, and

manufacturers save on this in their products. Simple protection circuits may get unstable and all of a sudden start to oscillate. The current now released damages the voice coils and the crossover. This damage is not usually covered under warranty. Commonly, the less the manufacturer invests in a good protection-circuit, the more sensitive a speaker becomes for good cables. We rate our speakers from 4 to 8 Ohms and they are constructed for use together with 4 and 8 Ohm rated amplifiers. When you select an amplifier, select the one that can handle more power at 4 Ohms than at 8 Ohms. This normally indicates that the amplifier handles more current, therefore it is more stable and causes fewer problems.

If you do not use the Bi-wiring feature use either a shorting clip between the upper and lower terminals or 3 inches of stripped wire on your cables. Start by putting one end through the lower terminal and through the upper hole. Fasten the screw caps.

### BI-WIRING

is a method that improves the cable connection and audio quality of the music. The bass contains music with a lot of current, but with fewer details than the treble, which requires little current, but is more intricate. The music pulses and corresponds to the current requirement. Therefore it is important that the pulsing of the current does not influence or modulate the pulsing of the music. Good wiring, like the *Silver Cable* used inside in our SILVERLINE series does exactly this – especially at high power. The lower terminal set is connected to the bass section, and the upper set to the midrange-treble. When using bi-wiring cables you are using two sets of cables with different sonic characteristics than the rear terminals, but they are connected together on the amplifier end. The idea is to use two power amplifiers – one with high current power for the bass and one with high power voltage for the high frequencies. These two double channels should be controlled from one preamplifier for more convenience.



# The loudspeaker and your listening room.

When you select your speakers it is important to look at your room as an extended resonance body of your speakers and as an *air pump* that must bring the air volume of your room to the same vibration as the speaker. The size of the speaker-air pump determines the efficiency with which the air of your room vibrates, especially at low frequencies. In a small room a good small speaker plays well, whereas in a large room it gets out of breath. Large speakers in a small room may sound obtrusive.

To obtain strong low frequencies some rules must be adhered to. Modern speaker cabinets demand a slim design. If placed in the middle of the room, the front waves of the lowest frequencies will partly be cancelled when they meet in the back of the room. This effect needs to be reduced, especially on Mini monitors where the small bass cone does not efficiently couple with the air. When you place the speaker near a wall, frequencies below 300 Hz get amplified and compensate partly for this loss. In a corner this effect is nearly doubled and you may get too much of a good thing. Column is designed to stand on the floor, but a slight amount of separation from a wall or corner is needed to avoid a *boomy* sound. If you have a neighbor below you, you may want to use a speaker stand or spikes and they will thank you. To find the best place for your speakers, just move them around the room and listen for what sounds best.

A room filled with furniture and textiles or many guests will absorb much of the higher tones. This may let the speaker sound *muddy*. In a room without textiles, the sound may get hard and hall-like. Adjusting the bass and treble controls of your amplifier can eliminate this effect. The dispersion of high frequencies throughout your room is very important to the sound quality of your room. To make this more understandable compare low frequencies with water, it just flows all over. The higher a frequency gets, the more it will disperse the sound as though it is a narrow beam of light. To get the light spread out to all places in the room you would not use spot lights and we do not recommend a beaming cone for high frequencies. We use a ball shaped dome that disperses the treble 160 degrees, even with our less expensive models. This way you lose a little bit of your audio, but you gain a wide dispersion of the highest frequencies all over and the music sounds much more natural and pleasant.

# Home Theater

The priority of sound in a Home Theater system is to be extremely realistic and to have a strong feeling of direction, without the loss of a very high sound quality found in a High End stereo system. Stereo has 2 channels, one for the left – and one for the right. In the Modern cinema, the sound is separated into many channels and recorded through a corresponding number of microphones and media – later fed to the many loudspeakers of the cinema. This results in a very realistic sound reproduction.

In a Home System, however, there is a limitation of how many speakers you can install in a listening room. The Basic Home Theater has 5 channels, 2 in the front, one in the center and 2 behind the listener. The Home Theater amplifier has a minimum of five independent amplifiers feeding five or more channels to obtain direct sound audibility. To get the right and left front speaker to flow as one sound together with the TV-picture, a Center Channel speaker is placed, either over or under the TV. Because loudspeaker magnets inflate the colors of the TV, the magnets of all our center speaker models are magnetically shielded. If you use the left and right front channel speaker near the TV you should keep a distance that does not affect the colors of the TV, normally 1 to 2 feet apart. To get surround sound a minimum of 2 additionally speakers are used behind the listener, called the rear speakers.

*Your Home Theater is as good as your loudspeakers.* While playing a movie with a lot of action, you'll be able to hear from exact directions. By using KIRKSAETER speakers you will improve your sound quality as well as discernable directions. Recognizable directions will improve the realism of your cinema system. We do not offer Home Theater speaker packages because KIRKSAETER speakers are so uniquely constructed, that any KIRKSAETER speaker produced during the last 20 years matches perfectly to any individual Home Theater system. You have the privilege of knowing that your present KIRKSAETER speakers are among the best on the market regardless of the attractive price. The secret behind this is advanced craftsmanship and the use of a silk dome – soft metal dome tweeters that have the same sound quality and therefore do not disturb each other. You are free to mix the PRISMA and the SILVERLINE speakers or any previous KIRKSAETER models like the famous MONITOR series for an optimum result.