

How to connect two Emitters together with digital link

Operating 2 or more Emitters in Master / Slave mode

2 or more Emitters can be operated as master/ slave with a digital remote connection.

The Emitter has the option to link two or more Emitters together. One Emitter (the master) is giving operation signals to other Emitters (Slave) that are following this signals and operates the ON/ OFF, the volume, the balance and input switch of the Slave amp.

To use these option the Emitters need the digital remote connector plugs that is an extra.

This mode can be used for several purpose: for Bi-amping, for active operation of specially prepared loudspeaker and for home cinema.

For Bi-Amping it has sonic advantages to use two amps near by the loudspeakers with short cables.

For Active loudspeakers it has sonic advantages when the volume is regulated after the crossover.

Normally the level is regulated with a preamplifier- the going through the crossover, and then into 2 stereo amplifiers with fixed gain.

In the solution with two or more Emitters in Master/ Slave mode the full level signal is fed into the crossover, and then also with full level into the Emitters- the volume is set in the amplifiers !

So the volume control is attenuating both Emitters- the crossover has full signal and so has a better signal to noise ratio and more precision !

By this solution you don't have the distortions and noises of the crossover in the music, and the gain of the Emitter is only set as high as necessary.

To avoid long cables between the amps it is better to have two separate Crossovers- one for each channel !

I am sure that this will have an even better sound- than the first solution caused by the short cables and the fact that the crossover has full level signal.

This digital link is prepared in every Emitter- but the connections are only installed at request.

Also it is necessary to activate the mode by Dip- switches.

Setting the configuration of the Emitter

The display board is mounted behind the front panel of your Emitter. This is connected with a ribbon cable to the supplementary board plugged onto the main PCB board. On this supplementary board there are two **8 pole Dip switches** for the **basic configuration**.

For the adjustment the cover plate shall be removed. For this purpose please loosen the side screws between the cooling fins of the front and back panels.

DIP- switch left side

- Switch 1 ON Active equipment masters (controlling amplifier)
- Switch 2 ON Active equipment slaves (controlled amplifier)
- Switch 3 ON Active equipment, if no balance should be set up, normal mode no RC 5 address code 16
- Switch 4 ON Active equipment, if no input selector should be set up at the slave, else only meridian codes
- Switch 5 ON Active equipment, announcing signals at slave, count in the case of master, normally monitor instead of tape input
- Switch 6 ON In the case of Overload or Offset, mains power supply immediately interrupting
- Switch 7 ON Do not switch Off in the case of short circuit
- Switch 8 ON Record selector is available, no address code 17 (Tuner)

DIP- switch right side

- Switch 1 ON second loudspeaker output is built in
- Switch 2 ON Headphones output is built in
- Switch 3 ON Both outputs are switched together, for Bi-wiring or double relay
- Switch 4 ON Level adjust onto loudspeaker instead of inputs for loudspeaker comparison "Stereo"
- Switch 5 ON Energy saving circuit is not built in
- Switch 6 ON Operation only in energy saving mode
- Switch 7 ON shows remote control signals
- Switch 8 ON it switches to monitor after switching from "OFF" to "STANDBY"

That Dip switches are adjusted in accordance with equipment of your device in the factory. However, you can modify the settings in accordance with your wishes. To store the new settings please switch OFF the amplifier for at least five seconds.

Bi-amping : you may use one amp for the left and one amp for the right side- so you have the advantage of short cables.

You connect mid/high range to the right channel and the Bass section to the left channel. The signals from the source are fed in the normal inputs at the right channel and the left channels is supplied via the tape out to its direct input. So when you change the input- the slave does the same and changes also the signal source.

Active operation with loudspeakers prepared for active operation :

You may use one amp for the left and one amp for the right side- so you have the advantage of short cables.

The signals from the sources are fed in the normal inputs at the right channel.

The signal for the active crossover input is take out of the right channel tape output.

The crossover output for middle/high frequency is connected to the Tape input (only for models with tape relays) or a special direct input of the right channel.

The crossover output for low frequency is connected to the direct input of the right channel.

The loudspeakers mid/high range are connected to the right channel and the Bass section to the left channel.

The volume difference between mid/ high and low frequency may be adjusted at the crossover. Please set one of the outputs to maximum Level for low losses.

Or it can be adjusted with the balance function of the Emitter, that is now giving out different levels for mid/ high and low frequencies.

Active operation with two sets of passive subwoofers :

You may use one amp for the left and one amp for the right side- so you have the advantage of short cables.

The signals from the sources are fed in the normal inputs at the right channel.

The signal for the active subwoofer crossover input is taken out of the right channel tape output.

The crossover output for middle/high frequency is connected to the Tape input (only for models with tape relays) or a special direct input of the right channel.

The crossover output for low frequency is connected to the direct input of the right channel.

The normal loudspeakers are connected to the right channel and the subwoofer section to the left channel.

The volume difference between mid/ high and low frequency may be adjusted at the crossover.

Please set one of the outputs to maximum Level for low losses.

Or it can be adjusted with the balance function of the Emitter, that is now giving out different levels for mid/ high and low frequencies.

Connecting 2 or more Emitters for Home Cinema.

It has many sonic advantages to use the volume controls of the Emitters instead of the ones in the surround preamplifier- like better signal to noise ratio- better damping, lower distortions etc.

The output signal of your surround preamp should be connected to the direct input of Emitters.

Use the corresponding channels of the Emitters for the corresponding loudspeaker.

Then connect the Emitters together with the digital out – and inputs.

The Emitter has nothing built in series for bridged operation, but that is available on request.

You need a Balanced signal what is fed into a Mono XLR Input for each amp and you need a digital output at the master and a digital Input at the slave amp.

Read more in the attached info.

At already existing models it is not so easy, the installation of the parts afterwards is complex or they have to be sent back to us.

This extra parts are installed only on request, and only a few customers use it that way !

But for now you may try to feed the balanced signal positive part into left channel and the negative into the right channel.

You may use a cable with XLR at the source side and 2x RCA at the sink side.

Then you have to connect the loudspeaker between left channel red binding post as plus and right channel red output binding post as minus.

This works with all amplifiers, not only the Emitter !

You may adjust the level at both amp the same value.

*But who really need 2x 1000 Watts into 8 ohms to drive a loudspeaker ?-
you may better try bi-amping instead, that may sound better.*

Bridging the Emitter to get about 4x output power

In bridged mode one channel is working positive the other negative- that gives double voltage- double current means quadruple power output.

The loudspeaker has to be connected between the red terminals of left and right channel - the channel with the positive signal is plus, the channel with the negative signal minus.

For bridging you need a balanced signal- This can be done with an inverter where you feed the other channel (The inverter has to be in very good quality) or just using a balanced signal- what is much simpler.

This can be done with a special cable from XLR into 2x RCA with the positive signal into the left and the negative signal into right channel.

Or at a new amp we may install a mono XLR.

You just have to use one MONO XLR input or such a split cable to connect it with the normal RCA inputs. for every input- you want to use as bridged.

The input switch and the volume control can be used for regulating the volume.
No preamp is needed.

The digital link is used to control it as master and slave !