

[X]

Manual

**XETEC**<sup>®</sup>

design group

Modular

Speaker

System

# XETEC® Modular Speaker System

## **Congratulations!**

You have chosen one of **XETEC**'s most sophisticated products. Your choice will be rewarded. We have developed a high performance speaker system with many optional adjustments that allow you to choose your personal and individual sound character. Experiments are strictly allowed! In order to enjoy the **XETEC** Modular Speaker System at its best, you should carefully read this manual.

**XETEC. A new experience....**

## **The XETEC Modular Speaker System:**

The innovative and unique **XETEC Modular Speaker System** allows a variety of combinations of three different tweeters with three different woofers to form high performance 2-way component speaker systems according to your personal requirements.

Each of the tweeter pairs **T-20**, **T-26** or **T-28** comes with a pair of the crossover „**XETEC X-2**“ and can be completed with one of the woofers which are shipped in pairs separately and without the x-over to form your individual speaker set. Any woofer of the „**Gravity**“ series matches each tweeter. With the **XETEC** Modular Speaker System, you can live your creativity without any limits!

**XETEC** offers 3 woofers of the „Gravity“ line, the G-6, G-5 and G-4.

A high quality 10 cm coax speaker is also available, the „G-4CX“. This set contains a pair of x-overs especially built for this coax speaker..



## Future proof

Within the **XETEC Modular Speaker System** you can upgrade or change components any time you like or whenever a change is required. Simply chose new **XETEC** woofers or tweeters and adjust the x-over accordingly.

Even if new technologies are available, you can follow and replace your existing components easily. All that enables you to use your personal **XETEC Modular Speaker System** in your next car.

**You may change your car from time to time, but not your speakers any more...**

## Special features XETEC X-2:

The X-2 is different from all other speaker x-overs due to the various options of adjustments and adaptation of a variety of tweeters and woofers. That offers new possibilities to form your personal speaker system as well as individual sound performance.

For more info please check "**Options**" and "**Tech Tips**".

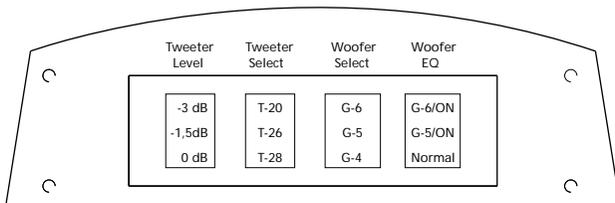
## Basic adjustments:

These standard adjustments are based on the requirements for a most linear response under optimal installation conditions.

Since every car model has it's own influence on the sound performance of speaker systems, individual adjustments may be required.

**XETEC X-2 is prepared for that!**





Jumper Settings XETEC X-2

For instant success, simply chose the jumper adjustments according to Fig.1. This provides a good average adjustment. For further fine-tuning, lease check the "config-card" that comes with your x-over or the chapter "options".

**Tweeter Level** Level adjust for the tweeter.  
Options: 0dB / -1,5dB / -3dB  
Factory setting: 0dB.

**Tweeter Select** Chose your tweeter type.  
Options: T-20 / T-26 / T-28

**Woofer Select** Select your woofer type.  
Options: G-6, G-5, G-4

**Woofer EQ** This adjustment sets the equalizer function for particular woofer models.  
Option: "G-6/ ON", "G-5 / ON", and "Normal" (=no equalizing).

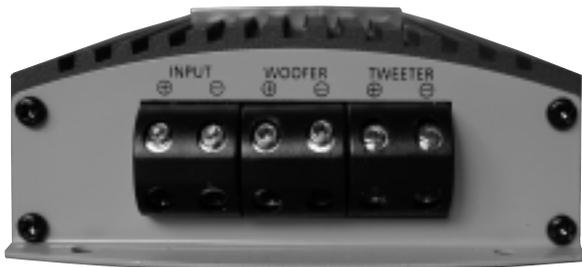
## Input and speaker Terminals

**Input** x-over input from amplifier

**Woofers** terminal for the woofer

**Tweeter** terminal for the tweeter

Only high quality components are used in **XETEC** products to ensure optimal performance and sound quality.



## Options:

The following table shows possible adjustments that are different from the standard setup. They allow you to create an individual sound character.

1. **NEUTRAL** (Jazz, Classical, Audiophile) :

Tweeter Level set to „0dB“ or “ -1,5dB”. Natural, realistic sound character with high detail and good neutrality. Our preferred adjustment.

2. **POWERFUL** (Pop, Tekkno):

Woofer-EQ generally set to “Normal”, Tweeter Level “0dB”. Powerful, dynamic sound character. If T-26 is used the „tweeter select“ adjustment „T-20“ may be tried. This leads to an increase of tweeter level by 1,5dB.

3. **RELAXED** (Easy-Listening):

Tweeter Level set to “-3dB”. Warm and relaxed sound character, though detailed and dynamic.

**XETEC** recommends the following highpass frequency adjustments at your amplifiers::

16cm front speakers : Highpass      80-100Hz

13cm front speakers : Highpass      100-140Hz

10cm front speakers : Highpass      140-200Hz

16cm rear speakers : Highpass      100-120Hz

13cm rear speakers : Highpass      120-150Hz

10cm rear speakers : Highpass      160-200Hz



## Tech-Tips:

### 1.) Special installation locations need special care

The **XETEC X-2** is prepared:

If the woofers are installed in locations far away from the tweeter position and at the bottom of the door, the woofer EQ adjustment may be set to "Normal" in order to compensate for the loss of midrange energy.

### 2.) XETEC carEQ®

Even better...

**XETEC carEQ®** is a unique equalization system for your car. Model by model we take measurements of the car's individual "acoustic-fingerprint" to be compensated. This allows a specific correction of the acoustical environment. This carEQ® module can be used with any of the **XETEC "GRAVITY"** series multi-channel amplifier, as well as the **XETEC F.A.C.T. F-3** Active crossover and the **XETEC "USC"**, the Universal Signal Converter . Just plug and play. Please check the availability for your car model at [www.xetec.de](http://www.xetec.de)

### 3.) 3-Way Systems:

Due to the **XETEC** modular system, 3-way systems can be formed easily. Just combine your 2-way system with additional woofers for midbass support . Filtering is provided by the bandpass function of your amplifier then.

Using the G-4CX with another pair or two of G-6 or G-5 allows you to install a very powerful 3-way system.

## Technical data XETEC Modular Speaker System:

<b>Woofers Model</b>	<b>G-6</b>	<b>G-5</b>	<b>G-4</b>	<b>G-4CX</b>
Impedance (Ohm):	4	4	4	4
Power Handling (Watt)	120	100	80	80
Peak Power (Watt):	150	120	100	100
SPL (dB/1W/1m):	90	88	86	86
Lowest frequency (Hz):	45	65	100	100

<b>Tweeter Model</b>	<b>T-20</b>	<b>T-26</b>	<b>T-28</b>
Frequency range:	3,8-20kHz	2,8-26kHz	1-28kHz
Res.Freq. (kHz):	2,2	1,3	0,6
Power Handling (Watt max.):	50	60	120
Impedance (Ohm):	4	4	4

Only with **XETEC** X-2 crossover!

## **X-2 speaker crossover:**

---

X-over frequency: Depends on the speaker selection, from 2.8 KHz to 4.1 KHz  
Tweeter level select : 0dB / -1,5dB / -3dB  
Warranty period : 2 years

## **GRAVITY Woofer Parameters:**

---

<b>Parameters</b>	<b>GRAVITY G-6</b>	<b>GRAVITY G-5</b>	<b>GRAVITY G-4</b>	<b>GRAVITY G-4CX</b>
Fs (Hz)	48,10	71,6	138,10	131,15
Qms	5,10	2,82	3,02	2,94
Qes	0,50	0,62	0,91	0,89
Qts	0,46	0,51	0,70	0,68
BL	5,01	4,10	3,81	3,72
Rdc (Ohm)	3,47	3,10	3,06	3,19
Md (g)	11,96	7,52	4,99	4,68
Vas (Liter)	22,85	5,50	0,90	1,07
Le (mH)	0,48	0,42	0,34	0,36
Sd (cm <sup>2</sup> )	133,0	77,0	49,0	49,0

## Installation

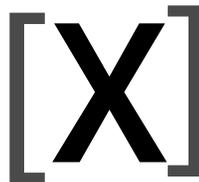
- For optimal safety, the product must be fixed to the vehicle. Please use the screws of the installation set.
- Do not drill holes into parts of the vehicle at locations where you do not know what is behind. Please check first, if there are fuel pipes or cables.
- Always make sure to install signal cables far away from power cables to avoid interference and alternator noise.
- Do not bend the speaker housings and baskets !
- Use only high-quality amplifiers with suitable power rating !

**Please also check the correct polarity when while connecting your speakers. Reversed polarity leads to poor sound quality.**

### **WARNING:**

**XETEC** loudspeakers can produce very high sound pressure levels, that may distract from traffic or cause hearing defects when played long time at high level. **XETEC** does not take any responsibility. So, always be careful with the volume adjustment.





**XETEC design group GmbH**

Lengericher Landstrasse 30

D-49078 Osnabrück

phone +49 / 5 41 / 750 45 - 0

fax +49 / 5 41 / 750 45-45

email: [info@xetec.de](mailto:info@xetec.de)

internet: [www.xetec.de](http://www.xetec.de)



**XETEC<sup>®</sup>**

designgroup