Safety instructions

1. All safety instructions, warnings and operating instructions must be read first.
2. All warnings on the equipment must be heeded.
3. The operating instructions must be followed.
4. Keep the operating instructions for future reference.
5. The equipment may never be used in the immediate vicinity of water; make sure that water and damp cannot get into the equipment.
6. The equipment may only be installed or fitted in accordance with the manufacturers recommendations.
7. The equipment must be installed or fitted such that good ventilation is not obstructed in any way.
8. The equipment may never be installed in the immediate vicinity of sources of heat, such as parts of heating units, boilers, and other equipment that generates heat (including amplifiers).
9. Connect the equipment to a power supply of the correct voltage, using only the cables recommended by the manufacturer, as specified in the operating instructions and/or shown on the connection side of the equipment.
10. The equipment may only be connected to a legally approved earthed mains power supply.
11. The power cable or power cord must be positioned such that it cannot be walked on in normal use, and objects that might damage the cable or cord cannot be placed on it or against it. Special attention must be paid to the point at which the cable is attached to the equipment and where the cable is connected to the power supply.
12. Ensure that foreign objects and liquids cannot get into the equipment.
13. The equipment must be cleaned using the method recommended by the manufacturer.
14. If the equipment is not being used for a prolonged period, the power cable or power cord should be disconnected from the power supply.
15. In all cases where there is a risk, following an incident, that the equipment could be unsafe, such as:
   • if the power cable or power cord has been damaged
   • if foreign objects or liquids (including water) have entered the equipment
   • if the equipment has suffered a fall or the casing has been damaged
   • if a change in the performance of the equipment is noticed
   Appropriately qualified technical staff must check it.
16. The user may not carry out any work on the equipment other than that specified in the operating instructions.
Introduction

The DATEQ XTC II is a battle mixer with some unique additional functions.

The XTC II has five channels: four fader channels, and one separate microphone channel.

Various sources like CD-players, computers and turn-tables can be connected to the fader channels.

The XTC II has four 60mm ALPS faders to make very fast mixes. All faders are VCA-controlled.

The tone-controls are tuned for the DJ: sparkling high, a clear mid and a groovy bass. All frequency bands have a range from -32dB to +8dB. This makes it possible to attenuate certain frequencies almost completely.

Besides the equalisers, two filter-banks are included. Some very spectacular effects can be created with these filters. The two filters can be linked to make some very astonishing mixes!

Furthermore the XTC II is equipped with a digital routing circuitry. This digital router makes it possible to connect an effect processor in a very flexible way.

The dual headphones connector has a split-function to listen to the mix and the CUE signal simultaneously.

The master outputs are on cinch and on balanced XLR connectors.

Optional 19-inch brackets are available to make it possible to mount the XTC II into a 19-inch rack. Contact your dealer to obtain the brackets.

Product support

If you have any questions about the DATEQ XTC II or any other DATEQ products please contact:

DATEQ Audio Technologies
De Paal 37
1351 JG Almere
The Netherlands

Phone: +31 36 5472222
Fax: +31 36 5317776

Internet: www.dateq.nl
E-mail: info@dateq.nl
DATEQ XTC II: A new version of the XTC a standard in the battle scene

The new DATEQ XTC II is the perfect tool for the every DJ. Multifunctional, but still easy-to-use. This manual reveals all it's characteristics and secrets....
Installation

The DATEQ XTC II can be mounted into a table, but it can also be used stand-alone. Optionally, 19-inch brackets are available to mount the XTC II into a 19-inch rack. Don't forget to leave some space for the connectors at the back of the XTC II.

The measurements can be found in the drawings below.
Connecting the XTC II

All connections can be made at the rear and the front of the XTC II. Below we will explain the function of the connectors.

### Connecting

**Master left/ right**
The electronically balanced XLR outputs guarantee a perfect audio quality, even with long cable runs. The same signal is available at the unbalanced cinch connectors.

**Monitor output**
The electronically balanced XLR outputs guarantee a perfect audio quality, even with long cable runs. The same signal is available at the unbalanced cinch connectors. This output can be used to connect a monitor amplifier. This output has the same mix as the master outputs, but it has its own volume control. Internal jumper settings make it possible to eliminate the microphone signal from the monitor outputs. This prevents an acoustical feedback.

**Record output**
A recorder, for example a computer, can be connected to this output. The record output has the same signal as the master outputs, without a volume control.

**Sub output**
A extra amplifier for Bass-speakers can be connected to this output. The record output has the same signal as the master outputs.

**FX Effect insert send**
Connection to input external effect-device. When on a channel FX is chosen it pre-fader signal is available here.

**FX Effect insert return**
Connection from output external effect-device. When on a channel FX is chosen the connected return signal will be available on its fader.

**Line/ line 1/ line 2**
Connection for audio sources at line-level, like CD-players, computers, MD-players, DVD-players etc.

**Phono**
Connection for turn-tables. The turntable can be earthed with the earth connectors at the rear.

**Microphone**
Input for a dynamical microphone.

**Gain**
Microphone pre-gain setting.

**Phones**
Output for headphones.
### Left/ right master outputs (XLR 3-pin male)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Audio ground</td>
<td>GND</td>
</tr>
<tr>
<td>2</td>
<td>Audio +</td>
<td>Output</td>
</tr>
<tr>
<td>3</td>
<td>Audio -</td>
<td>Output</td>
</tr>
</tbody>
</table>

### Master/ monitor/ record/ effect(FX)- send outputs (cinch)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tip</td>
<td>Audio +</td>
<td>Output</td>
</tr>
<tr>
<td>Shield</td>
<td>Audio ground</td>
<td>GND</td>
</tr>
</tbody>
</table>

### Sub out (6.3mm jack)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tip</td>
<td>Audio mono</td>
<td>Output</td>
</tr>
<tr>
<td>Ring</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Shield</td>
<td>Audio ground</td>
<td>GND</td>
</tr>
</tbody>
</table>

### Effect Effect(FX)- return/ line/ line 1/ line 2/ phono inputs (cinch)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tip</td>
<td>Audio +</td>
<td>Input</td>
</tr>
<tr>
<td>Shield</td>
<td>Audio ground</td>
<td>GND</td>
</tr>
</tbody>
</table>

### Chain in (6.3mm jack)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tip</td>
<td>Audio left</td>
<td>Input</td>
</tr>
<tr>
<td>Ring</td>
<td>Audio right</td>
<td>Input</td>
</tr>
<tr>
<td>Shield</td>
<td>Audio ground</td>
<td>GND</td>
</tr>
</tbody>
</table>

### Microphone input (XLR 3-pin female)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Audio ground</td>
<td>GND</td>
</tr>
<tr>
<td>2</td>
<td>Audio +</td>
<td>Input</td>
</tr>
<tr>
<td>3</td>
<td>Audio -</td>
<td>Input</td>
</tr>
</tbody>
</table>

### Phones output (6.3mm jack)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tip</td>
<td>Audio links</td>
<td>Output</td>
</tr>
<tr>
<td>Ring</td>
<td>Audio rechts</td>
<td>Output</td>
</tr>
<tr>
<td>Shield</td>
<td>Audio ground</td>
<td>GND</td>
</tr>
</tbody>
</table>
Operation

Microphone channel
Besides the four fader channels the XTC II is equipped with an extra microphone channel. This DJ channel uses a volume potmeter (LVL) instead of a fader.

The microphone input comes with a (low-voltage) phantome supply, controlled by an internal jumpersetting.

To prevent from an acoustical feedback it is possible to filter out the microphones signal (Cleanfeed) from the monitor speakers. This controlled by internal jumpersettings.

Both a microphone and a line-source can be connected to the back as well as the front and selected with the input source selector (top button).

This channel has a 3-way tone control. All the equalisers have a +/- 15dB range.

The overload detector (OVL) for input and pre-fader is situated on the front-panel.

Pre-fade listening is controlled by the CUE-switch.

Fader channels

The XTC II has four identical fader channels. The first three can be connected to a stereo line source, and a turntable. The fourth channel can be connected to two stereo line sources. The source can be selected with the input-source selectors (top switch) The three phono-level channels can be changed to line-level by internal jumper settings.

The three-way tone control ranges from -32dB ... +8dB. This means that certain frequencies will be almost completely suppressed when the equaliser is set to a minimum.

With the FX effect button it is possible to route a channel very quickly to the connected effect device. Pushing the effect button sends the pre-fader signal to the effect unit. The processed signal (so with the effect) becomes available at the channels fader and can be added to the mix.

If the effect return signal is NOT present the XTC II ’s own send signal is being used instead, shown by a blinking FX indicator.

Pre-fade listening is controlled by the CUE-switch. This will feed the channel pre-fade or effect return signal depending on the FX button.

Just above the fader there are indicators for cross fader routing and source signal presence.

Note: for all jumper settings see the Setup chapter.
**Master section**

The XTC II master section holds a 2x30 segmented VU-meter showing the master mix or cue level accurately.

The master volume control can adjust the master-mix volume. The balance adjusts the master left-right balance.

The monitor control adjusts the volume of the monitor speakers. This is completely independent of the master volume and balance settings.

The Phones control adjusts the volume for the headphones. The SPLIT button controls the split button, its status shown by the front indicator.

Split ON means that the left channel holds the mono Cue signal and the right channel the mono Master signal, audible on the headphones as well as visible on the VU-meter.

Split OFF means that both the left and right channel hold the Cue signal, audible on the headphones as well as visible on the VU-meter.

The headphone signal is available on the top as well as the front connector.

---

**Cross fader**

The Cross(X) fader function can be routed to any fader channel and can be disabled by means of the Setup-Xfader button.

Channel 2 and 3 can be routed to the left (A) side and channel 4 and 5 can be routed to the right (B) side of the cross fader. (see the Setup chapter).

The X-fader has a fully adjustable curve, with which the operational range can be trimmed from super short (5mm) to full fader-lenght and everything in between, controlled by the red CURVE trimpot.
Software setup

Because the XTC II is a digitally controlled mixer it is possible to adjust some user settings. Before settings can be adjusted, the setup-mode has to be accessed.

In order to activate the setup-mode the setup-button has to be pressed together with the to be adjusted setting. The LED besides the setup-button will light-up solid.

Some LEDs on the front will light up, or start to blink. These LEDs indicate the functions that can be adjusted, and their status (enabled or disabled). A blinking LED means that the function is disabled; a solid LED means that a function is enabled. Releasing of the setup-button will end the setup-mode and the settings will be stored.

<table>
<thead>
<tr>
<th>LEDs</th>
<th>Possible status</th>
<th>Adjust with</th>
<th>Setting description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crossfader routing: A-1, A-2, B-3, B-4</td>
<td>Solid/ blink</td>
<td>CUE-1,2,3,4 button</td>
<td>Solid: active routing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Blink: No routing for this channel</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>All 4 blink: Crossfader is disabled</td>
</tr>
<tr>
<td>Limiter FX-1</td>
<td>Solid/ blink/ Off</td>
<td>FX-1 button</td>
<td>Solid: The limiter is enabled.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Blink: The limiter is disabled</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Off: The limiter is enabled by hardware,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>and cannot be disabled in setup-mode</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Limiter-lock).</td>
</tr>
</tbody>
</table>

Limiter

The XTC II has a build-in limiter. As soon as the output level of the console crosses the +6dB threshold, the limiter will respond with slowly decreasing the level. This way a good quality and dynamics of the audio signal will be guaranteed for a longer period, and the connected apparatuses will be protected against overload conditions.

The limiter can be enabled and disabled in setup-mode. However it is also possible to apply an internal hardware link by which the Limiter can no-longer be disabled (Limiter-lock).
Jumper settings

!! To be able to reach the internal jumpers the AC-cord has to be disconnected from the mains first. Then the 8 torx screws of the front panel can be unscrewed and the front panel can be flipped open gently.

MIC Phantom voltage

Inside left, at the back, on the top board the Mic-Phantom jumper is situated. This controls the phantom voltage:

ON is top position,
OFF is the bottom position.

Phono / Line select

Inside, at the back, on the bottom board the Phono/line jumpers are situated. These control the input sensitivity of channel 2, 3 and 4:

LINE is the top position,
PHONO is the bottom position.

DJ Cleanfeed

On the VCA-board mounted at the back of the Main-board (front) the Cleanfeed DJ jumpers are situated. These jumpers control the DJ signal to be filtered out of the monitor ON, or not OFF:

CF-OFF is the right position (2x),
CF-ON is the left position (2x).

Limiter lock

At the back of the Main-board (front) under the VU-meter the limiter-lock option named “Lock” is situated. The 2 pins “ON” control this option:

ON is linked,
OFF is open.

!! The front panel can now be closed gently and the 8 torx screws fastened. Then the AC-cord can be connected to the mains.
### Technical specifications

#### Microphone channel
- **MIC Input**: XLR-3 female; balanced
- **Signal level**: -50dB @ 600 ohm
- **Impedance**: 3kOhm
- **Input noise**: < -108dB
- **Headroom**: +36dB
- **Phantom voltage**: 15V

#### LINE Input
- **Signal level**: 0dB
- **Impedance**: 22kOhm
- **Input noise**: < -80dB

#### Other channels
- **Line/ line 1/ line 2**: Cinch
- **Signal level**: 0dB
- **Impedance**: 22kOhm
- **Input noise**: < -80dB

- **Phono**: Cinch
  - **Signal level**: -42dB
  - **Impedance**: 47kOhm/ 25pF
  - **Input noise**: < -80dB

#### Master
- **MASTER/ MONITOR/ RECORD/ AUX/ EFFECT SEND**: Cinch
  - **Signal level**: 0dB
  - **Impedance**: 330Ohm
- **MASTER/ MONITOR**: XLR-3 male; balanced
  - **Signal level**: +6dB
  - **Impedance**: 330Ohm
  - **Input noise**: < -80dB

- **EFFECT RETURN**: Cinch
  - **Signal level**: 0dB
  - **Impedance**: 22kOhm
  - **Input noise**: < -80dB

#### Tone control
- **MICROPHONE CHANNEL**: three-way tone control
  - **LOW**: +/- 15dB @ 150Hz
  - **MID**: +/- 15dB @ 1kHz
  - **HIGH**: +/- 15dB @ 6kHz
- **FADER CHANNEL**: three-way tone control
  - **LOW**: +/- 8dB @ 50Hz
  - **MID**: +/- 8dB @ 1kHz
  - **HIGH**: +/- 8dB @ 12kHz

#### Frequency response
- **Microphone to master**: 20Hz – 20kHz @ -3dB
- **Fader channels to master**: 5Hz – 40kHz @ -3dB

#### Distortion
- **THD+N**: 0.05% IEC-A nominal operation
- **IMD**: 0.08%
- **CROSSTALK**: >75dB @ 1kHz
- **NOISE**: < -80dB

#### Common
- **Power supply**: 100 – 250Vac/ 50 - 60Hz
- **Power consumption**: 25W
- **Lamp connector**: 12Vdc/ 3W
- **Front**: 320x354mm
- **Height**: 8HE
- **Depth**: 92mm
- **Weight**: 4.5kg

---

Dateq Audio Technologies B.V. reserves the right to amend specifications without notice
EG-VERKLARING VAN OVEREENSTEMMING acc.to art.10.1 EMC directive 89/336/EEC

Wij, DATEQ Audio Technologies b.v.
de Paal 37,
1351 JG ALMERE,
Nederland

verklaren, uitsluitend op onze verantwoordelijkheid, dat dit produkt

Type: XTC II Serienummers: 35-XXXX

waarop deze verklaring betrekking heeft, in overeenstemming is met de volgende geharmoniseerde Europese normen

EN 50081-1 en EN 50082-1

Volgens de bepalingen van de EMC-richtlijn 89/336/EEG, gewijzigd door de richtlijn 91/263/EEG, 92/31/EEG en 93/68/EEG.

Almere, 22 december 2007 J.H. Kloppenburg, Directeur

stempel: handtekening:
EC-DECLARATION OF CONFORMITY acc.to art.10.1 EMC directive 89/336/EEC

We, DATEQ Audio Technologies B.V.
de Paal 37
1351 JG ALMERE
THE NETHERLANDS

hereby declare, exclusively to our responsibility, that this product

**Type: XTC II**  **Serialnrs.: 35-XXXX**

to which this declaration applies, is in accordance with the following harmonized European norms

EN 50081-1 and EN 50082-1

According to the regulations of the EMC-directive 89/336/EEG, amended by directive 91/263/EEG, 92/31/EEG and 93/68/EEG.

Almere, December 22\textsuperscript{th}, 2007  J.H. Kloppenburg, managing director

stamp:  signaturen:
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LAND / COUNTRY / LAND / PAYS:

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MODEL / GERÄTE TYP / PRODUIT:

AANKOOPDATUM / PURCHASE DATE / KAUFDATUM / DATE D'ACHAT:

HANDTEKENING / SIGNATURE / UNTERSCHRIFT:

MODEL / GERÄTE TYP / PRODUIT:

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DATEQ B.V.
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The Netherlands / Niederlande / Pays Bas