

# Multiformat Video-Matrix Switcher



The Btouch Matrix is not only a simple Matrix!  
It also combines the possibility of changing format and resolution.

The following frame sizes are available:

Matrix 4 x 4



Matrix 72 x 72



Matrix 10 x 10

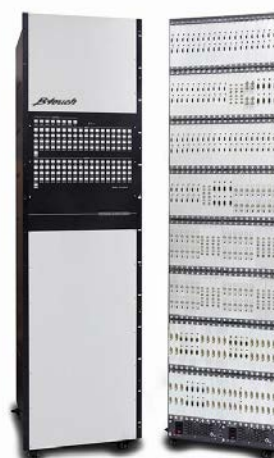


Matrix 144 x 144

Matrix 18 x 18



Matrix 36 x 36



All In- and Output Cards are freely combinable: e.g. HDMI in – SDI or CAT out  
The seamless Output Cards support free resolution change.  
FullHD, HDMI 1.4, 3D are supported.



## Input Cards

### DVI Input Card

- 2 x DVI input
- Resolution: 1920 x 1200 / 1080p
- Plug & Play

### HDMI Input Card

- 2 x HDMI in
- 2 x Stereo out
- Support: Audio 7.1, HDCP, HDMI 1.4, 3D
- Resolution: 1920 x 1200 / 1080p
- Plug & Play

### CAT Input Card

- 2 x CAT Input
- Support: DVI / HDMI / HDCP
- Resolution: 1920 x 1200 / 1080p
- Connect via CAT 6
- Plug & Play

### VGA Input Card

- 2 x VGA Input
- 2 x Stereo Input
- Resolution: 1920 x 1200
- Plug & Play

### Optical Fiber Input Card

- 2 x CAT in
- Resolution: 1920 x 1200 / 1080p
- 3.2 -core single mode fiber
- transmission distance up to 25 km is possible
- Plug & Play

### SDI Input Card

- 2 x HD/SD SDI Input
- Support: SMPTE- 259/292/424/425, seamless Output
- Plug & Play

## Output Cards

### SDI Output Card

- 2 x HD/SD SDI Output
- 2 x Audio analog out
- Support: SMPTE- 259/292/424/425, seamless Output
- Plug & Play

### DVI Output Card

- 2 x DVI Output
- Resolution 1920 x 1200 / 1080 p
- Plug & Play

### CAT Output Card

- 2 x CAT Output
- Support: DVI / HDMI / HDCP
- Resolution: 1920 x 1200 / 1080 p
- Connect with CAT 6, Using CAT 6 network cable, based on 1920 x 1200 / 1080p, transmission distance up to 100 m is possible
- Plug & Play

### Optical Fiber Output Card

- 2 x CAT out
- Resolution: 1920 x 1200 / 1080p
- 3.2 -core single mode fiber
- transmission distance up to 25 km is possible
- Plug & Play

### HDMI Output Card

- 2 x HDMI out
- 2 x Stereo out
- Support: Audio 7.1, HDCP, HDMI 1.4, 3D
- Resolution 1920 x 1200 / 1080p
- Plug & Play

### HDMI seamless Output Card

- 2 x HDMI out
- 2 x Stereo out
- Support: Audio 7.1, HDCP, HDMI 1.4, 3D, seamless Output
- Resolution
- 1920 x 1200 / 1080p
- Plug & Play



## Extender



### HDMI CAT Single Extender

- Resolution: 1920 x 1200 / 1080 p
- Using CAT 6 network cable type, based on 1920 x 1200 / 1080p, transmission distance up to 100 m is possible.



### HDMI Optical Fiber Extender

- Resolution: 1920 x 1200 / 1080p
- Supports: Automatic Identification Edit function
- Transmission distance up to 25 km easily possible



### VGA HDMI Converter

- Resolution: 1920 x 1200 / 1080p

## Amplifier



### BTA 44 4 channel DSP Power Amplifier

#### Outstanding Performance

- High power output: 4 x 800 W@4Ω or 2 x 1400W@8Ω (Bridge Mode)
- Two independent Switched-Mode Power Supplies with dual voltage auto selection
- Class D output stages with Efficiency up to 90% @ full load
- Full protection circuitry including Over-Current, Over/Under-Voltage, Output DC and Over-Temperature
- Four processed outputs for use in driving additional power amplifiers
- Excellent sonic performance with 24bit high end converters coupled with 48kHz sample rate
- 4 inputs, 4 outputs with full matrix mixing

#### Top-grade DSP Engine

- 5 band parametric equalization per input channel
- 7 band parametric equalization per output channel
- Each band can be switched to Bell, Low/High Shelving, Low/High-Pass, All-Pass, Band-Pass and Notch
- Low/High Shelving, Low/High-Pass, can be selected as 1st and 2nd order, variable Q response
- Crossover filters with slopes from 6dB/Octave up to 48dB/Octave including Butterworth, Bessel, Linkwitz-Riley
- Each output features a precision dynamic range controller composed of a Peak Limiter and a RMS Compressor with selectable ratio and variable knee
- Adjustable Delay time up to 850 ms for every input and output channel

#### Direct PC/Network Connection

- Front panel USB connector for direct PC communications
- Ethernet interfaces, RS485 connection for system setup, monitoring and control via manageable remote PC software

#### Control

- Front panel interactive LCD display for local access and configuration
- Front panel 7-LED level meter indicators per channel
- Simultaneous control up to 32 units via PC software
- Up to 60 storable user presets



## BTA 88 8 channel DSP Power Amplifier

### Outstanding Performance

- High power output: 8 x 250 W@4Ω or 4 x 500W@8Ω (Bridge Mode)
- Two Switched-Mode Power Supplies with active PFC and auto voltage sensing
- Class D - full bandwidth PWM modulator with ultra low distortion
- Full protection circuitry including Over-Current, Over/Under-Voltage, Output DC and Over-Temperature
- Eight processed outputs for use in driving additional power amplifiers
- Excellent sonic performance with 24bit high end converters coupled with 48kHz sample rate
- 8 Mic/Line inputs, 8 outputs with full matrix mixing

### Top-grade DSP Engine

- 3 band parametric equalization per input channel
- 5 band parametric equalization per output channel
- Each band can be switched to Peaking, Low/High Shelving with variable Q response
- Crossover filters with slopes from 6dB/Octave up to 24dB/Octave including Butterworth, Bessel, Linkwitz-Riley
- Gain Control, Noise Gate, Feedback Eliminator (Mic input only) per input channel
- Peak Limiter and RMS Compressor with selectable ratio and variable knee per output channel
- Automixing functions include NOM (number of Open Miss) attenuation and Gain Sharing algorithm
- Adjustable Delay time up to 380 ms for every input and output channel

### Direct PC/Network Connection

- Front panel USB connector for direct PC communications
- Ethernet interfaces, RS485 connection for system setup, monitoring and control via manageable remote PC software

### Control

- Front panel interactive LCD display for local access and configuration
- 4 digital input ports for additional 4 preset selections with priority configuration
- 4 digital output ports for triggering external devices



## BT 88T 8 in 8 out Digital Matrix Mixer

### Outstanding Performance

Excellent sonic performance with 24bit converters coupled with 48Khz sample rate

8 Mic/Line inputs, 8 outputs with full matrix mixing

### Top-grade DSP Engine

3 band parametric equalization and Low/High pass filters per input channel

5 band parametric equalization per output channel

Each band can be switched to Peaking, Low/High Shelving with variable Q response

Crossover filters with slopes from 6dB/Octave up to 24dB/Octave including Butterworth, Bessel, Linkwitz-Riley

Gain Control, Noise Gate, Feedback Eliminator (Mic input only) per input channel

Each output features a precision dynamic range controller composed of a Peak Limiter and a RMS Compressor with selectable ratio and variable knee

Adjustable Delay time up to 380 ms per output channel

### Direct PC/Network Connection

Front panel USB connector for direct PC communications

Ethernet interface, RS485 connection for system setup, monitoring and control via manageable remote PC software

### Control

Front panel interactive LCD display for local access and configuration

Front panel 6-LED status indicators per channel

4 digital input ports for additional 4 preset selections with priority configuration 4 digital output ports for triggering external devices

Simultaneous control up to 32 units via PC software

## BT 88 AT 8 in 8 out Digital Automatik Mixer

same as BT 88T

additional with automixing function



## BT 44T 4 in 4 out Digital Matrix Mixer

### Outstanding Performance

Excellent sonic performance with 24bit high end converters coupled with 48kHz sample rate

4 inputs, 4 outputs with full matrix mixing

### Top-grade DSP Engine

5 band parametric equalization per input channel

7 band parametric equalization per output channel

Each band can be switched to Bell, Low/High Shelving, as 1st and 2nd order

Crossover filters with slopes from 6dB/Octave up to 24dB/ Octave including Butterworth, Bessel, Linkwitz-Riley

Each output features a precision dynamic range controller composed of a Limiter working on RMS value of the limiter's input

Adjustable Delay time up to 850 ms for every input and output channel

Phase correction per output channel

### Direct PC/Network Connection

Rear panel USB connector for direct PC communications

RS485 connection for system setup, monitoring and control via fully manageable remote PC software

### Control:

Front panel interactive LCD display for local access and configuration

Front panel 7-LED level meter indicators per channel

Simultaneous control up to 32 units via PC software