

# graphite one. cost-efficient on-air console.



reliable and cost-efficient



**GRAPHITE ONE** on-air consoles are available in two versions: The **GRAPHITE ONE-11** which offers 11 inputs, 3 main buses and 5 outputs and the **GRAPHITE ONE-21** console equipped with 21 inputs (including an optional interface card with 4 AES inputs), 4 main buses and 9 outputs. Both consoles can be controlled by either 6 or 12 fader positions – each fitted with A/B channel switch – and offer a sophisticated monitoring and talk-back unit. In addition, each microphone and telephone channel is fitted with parametric three-band equalizers as well as dynamics with limiter, compressor and expander. To fulfill our customers' "ready-to-use" product requirements,

**GRAPHITE ONE** consoles come with an integrated mix-minus matrix which can be configured using the **GRAPHITE Setup Tool (GST)**. Each fader strip can be configured with controls for either internal functions such as automatic channel activation or for external devices via the integrated 24 GPI I/Os.

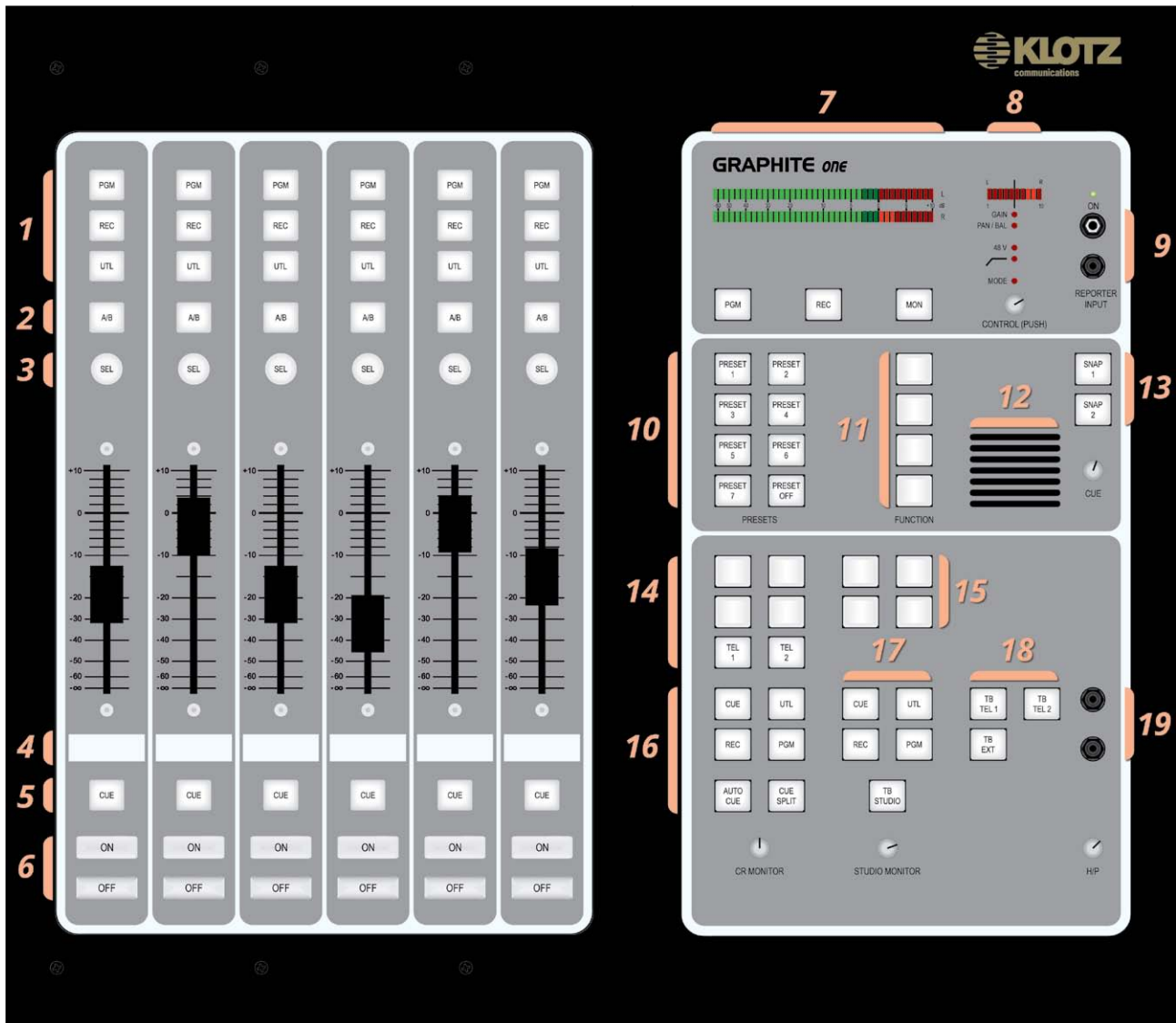
Up to 7 presets can be stored and 4 free configurable function keys allow for easy control of frequently used operations.

**GRAPHITE ONE** consoles are ready to use as soon as you have connected power, sources and outputs. No time-consuming system set-ups are necessary before you can use your **GRAPHITE ONE** console hence you still can program lots of your own settings if you wish.

Regardless if you decide for the **GRAPHITE ONE-11** or for the **GRAPHITE ONE-21**, you will see that **GRAPHITE ONE** is much more than just a useful and cost-efficient console for small and even mid-size radio stations: Because of its most recent electronic design combined with any feature a modern radio station console needs today owners of **GRAPHITE ONE** consoles enjoy a future proof hence reliable and easy to operate professional on-air console.



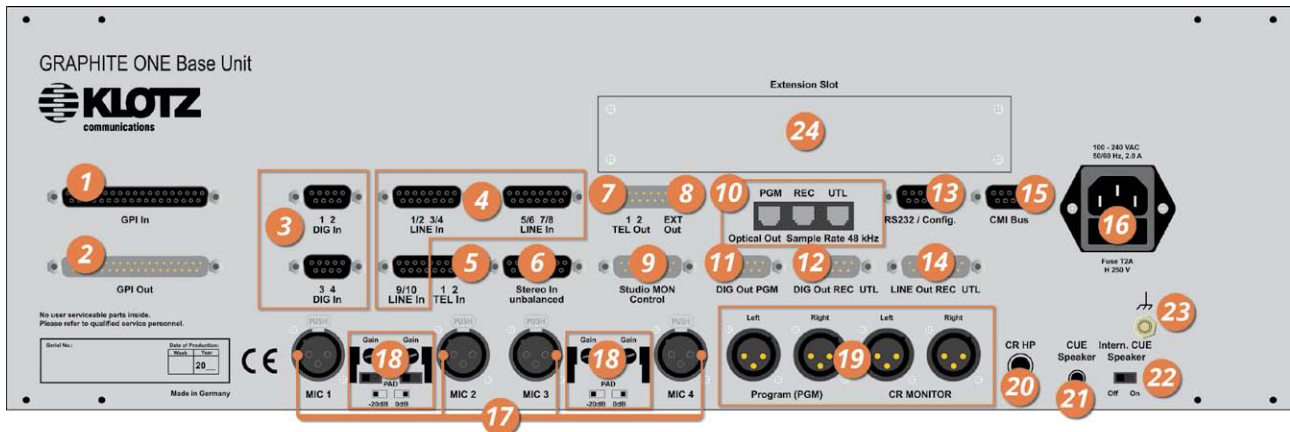
Top View GRAPHITE ONE



- 1 Output buses REC, UTL, PRG
- 2 A/B buttons for source switching
- 3 Input channel select
- 4 Labels for channel names
- 5 CUE bus
- 6 On-Off buttons
- 7 Stereo level meter
- 8 GAIN, PAN, 48V, Roll-Off filter indicator
- 9 Reporter Input
- 10 DSP Preset keys

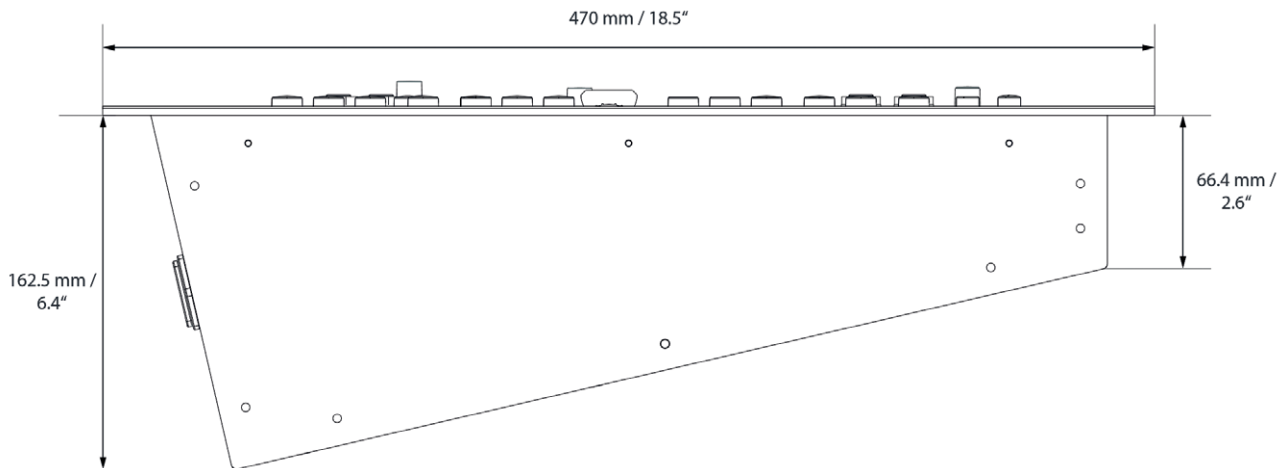
- 11 Function keys
- 12 CUE speaker
- 13 Snapshot keys
- 14 External Source select for control room monitor
- 15 External Source select for studio monitor
- 16 Control Room monitor controls
- 17 Studio monitor controls
- 18 Talkback controls
- 19 Headphone

## Rear View GRAPHITE ONE



- |  |   |
|--|---|
| 1 GPI inputs   | 13 RS232 configuration inputs and outputs   |
| 2 GPI outputs  | 14 Line level REC and UTL bus outputs   |
| 3 Digital inputs   | 15 CMI bus inputs and outputs   |
| 4 Line signal inputs   | 16 Power connection   |
| 5 Mono telephone inputs  | 17 Analog balanced microphone inputs  |
| 6 Unbalanced stereo input signals  | 18 Gain control für microphone inputs   |
| 7 Analog mono highlevel telephone outputs                                  | 19 Balanced analog high-level signal outputs for PGM bus and control room monitor signals |
| 8 Analog mono highlevel outputs to external devices e.g. (intercom system) | 20 Control room headphones output   |
| 9 Studio monitor and headphones outputs and GPI inputs/outputs             | 21 External cue speaker output  |
| 10 Optical digital main bus outputs  | 22 Internal cue speaker toggle switch   |
| 11 Electrical digital PGM bus output                                       | 23 Ground bolt  |
| 12 Electrical digital REC and UTL bus outputs                              | 24 Extension slot for AES input extension module  |

## Side View GRAPHITE ONE



## Cut out dimensions

### Base unit

Width: 530 mm

Depth: 440 mm

### Expansion unit

Width: 310 mm

Depth: 440 mm

## Specifications GRAPHITE ONE

### Inputs

- 4 Microphone inputs
- 4 Digital inputs
- 4 Optional stereo inputs
- 5 Stereo line inputs
- 2 Telephone mono inputs
- 1 Unbalanced stereo input
- 1 Reporter stereo input

### Outputs

- 4 Output buses (CUE/PFL, PGM, UTL, REC)
- 2 Telephone outputs
- 1 Cue/Speaker output
- 1 Studio monitor output
- 1 Control room headphone output

# graphite one – technical specifications



Inputs	Microphone inputs	Line level inputs, balanced	Line level inputs, unbalanced
Input sensitivity range	-55 dBu to -17 dBu without pad, -35 dBu to 3 dBu with pad	24 dBu $\pm$ 0.1 dBu	6 dBu $\pm$ 0.1 dBu
Phantom power	48 V, switchable	-	-
Frequency response	$\pm$ 0.13 dB @ 1 kHz	$\pm$ 0.2 dB @ 1 kHz	$\pm$ 0.2 dB @ 1 kHz
High-pass filter	100 Hz, 12 dB/octave, switchable	-	-
Input impedance	2 k $\Omega$	24 k $\Omega$	24 k $\Omega$
A/D converter	24 bit	24 bit	24 bit
Dynamic range	99 dB @ sensitivity = -20 dBu, 20 Hz kHz - 22 kHz, A-weighted 88 dB @ sensitivity = -40 dBu, 20 Hz kHz - 22 kHz, A-weighted	102 dB @ 20 Hz - 22 kHz, A-weighted	102 dB @ 20 Hz - 22 kHz, A-weighted
THD + N	0.02% @ sensitivity = -40 dBu, input level = -41 dBu, 20 Hz - 22 kHz	0.003% @ -1dBFS input, 20 Hz - 22 kHz	0.003% @ -1dBFS input, 20 Hz - 22 kHz
Common mode rejection	80 dB @ 1 kHz	80 dB	80 dB
Crosstalk	> -90 dB @ 20 Hz - 22 kHz	> -90 dB @ 20 Hz - 22 kHz	-

Outputs	Analog outputs, balanced	Analog outputs, unbalanced	Headphone outputs
Output level	24 dBu $\pm$ 0.1 dBu	5 dBu $\pm$ 0.5 dBu	Maximum output level = 1.2 V min.
Frequency response	$\pm$ 0.3 dB	$\pm$ 0.3 dB @ 1 kHz	$\pm$ 1 dB @ 1 kHz
Output impedance	50 $\Omega$	-	-
D/A converter	24 bit	24 bit	24 bit
Dynamic range	103 dB @ 20 Hz kHz - 22 kHz, A-weighted	98 dB @ 20 Hz - 22 kHz, A-weighted	98 dB @ 20 Hz - 22 kHz, A-weighted
THD + N	0.002% @ sensitivity = -40 dBu, 20 Hz - 22 kHz, A-weighted	0.002% @ -1dBFS input, 20 Hz - 22 kHz	0.007% @ -1dBFS input, 20 Hz - 22 kHz
Common mode rejection	80 dB @ 1 kHz	80 dB	80 dB
Crosstalk	> -90 dB @ 20 Hz - 22 kHz	-	-

Digital interfaces	Digital inputs	Digital outputs
Type	AES, electrical and optical S/PDIF (Toslink)	5 dBu $\pm$ 0.5 dBu
SFC resolution	24 bit	-
Input sampling rate	32 kHz - 96 kHz	-
Input impedance	110 $\Omega$ @ AES3 input 75 $\Omega$ @ S/PDIF input	110 $\Omega$ @ AES3 input 75 $\Omega$ @ S/PDIF input
Dynamic range	128 dB	144 dB
THD + N	0.002 % max.	-

Specifications are subject to change without notice.



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