# integra. most innovative

digital networking console.







## fully networking console – up to 640 inputs and 640 outputs

The **Integra** radio console offers highest flexibility for operators combined with top-level audio quality.

**Integra** radio consoles can either be installed as standalone consoles or as networking consoles with access to all inputs and outputs within a radio center.

The consoles come with an external audio and digital signal processing frame which is connected to the console surface by an Ethernet connection to control all audio sources and destinations within the network.

**Integra** consoles offer either TCP/IP Ethernet protocols or IPX/SPX Ethernet protocols in order to connect **Integra** consoles to existing VADIS networks.

## Integrated audio interface unit in the console frame

A unique feature is the option to install a break-in / break-out unit within the console frame. The interface unit is fitted with 8 audio input channels which can be configured either as stereo or mono inputs and outputs.

The interface unit uses a Dante protocol-based Ethernet connection to the main frame which can be located in the main control room (MCR).

This solution saves rack space within the studio and prevents the operating zone from being heated up.

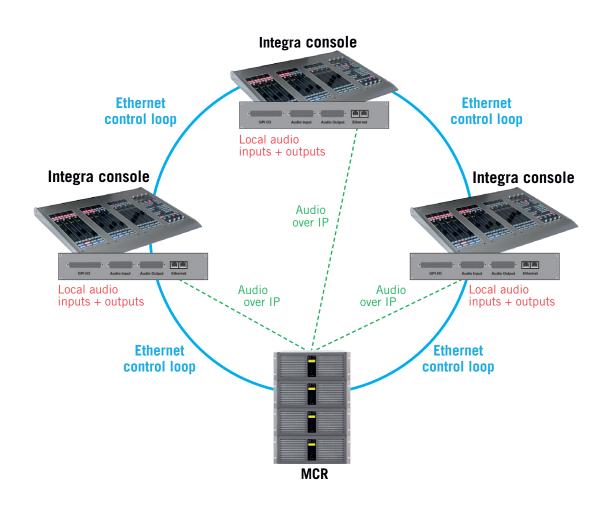
Local microphones and other sources can now be connected directly to the console and studio monitor and headphone amplifier do not require any additional harness.

## Available from 8 to 32 faders – up to 640 input and 640 output channels

**Integra** consoles are available from 8 faders up to 32 faders in either a desktop version or drop-in frame, and can be arranged as in-line consoles or split consoles to offer desk top work space in between.

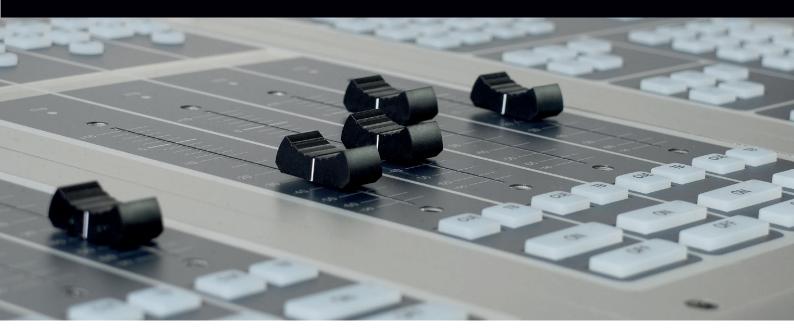
The consoles can be equipped with interface cards for up to 640 input and 640 output channels.

An internal router completes the state-of-the-art feature set.



# comfortable user interface – easy to configure





#### Comfortable graphical user interface (GUI)

The **Integra** graphical user interface identifies automatically all control modules, audio and DSP frames as well as all interface cards within the audio network.

The highly comfortable GUI eliminates the manual setting of IP addresses or any other time-consuming configuration setups – everything happens automatically and without any intervention by the user.

The GUI allows setting a wide variety of control functions including fader start/stop, bus routings, N-1 settings, and advanced programming of macro buttons to execute a series of workflow commands combined with GPI/O controls.

#### Hot-swap of cards without system shut down

Failures within the system are immediately shown on the control screen and all cards and PSUs can be replaced while the system is in operation.

As no other system parts than the console and the audio/ DSP frame carry any IP address, cards and modules can be swapped without setting codes.

#### **Made in Germany**

**Integra** consoles are manufactured with highest possible German quality and serve as most reliable workhorse in any commercial, public and community radio station like all other KLOTZ branded products have done for over 35 years.

## Fader modules and monitor modules can be combined in any way

Only two different modules are necessary to set up any console with 4 to 32 fader strips. Combining the **Integra** 4 fader modules with the highly sophisticated monitor and telephone module, any mixing console layout can be configured. Fader modules and monitor modules can be mixed in any way.

The DX10 console controller houses the PSU and control PC for the console and sits between the console surface and the G2 audio engine. The unit is connected by a single CAT 5 cable with the console surface and also one CAT 5 cable to the G2 audio engine and router frame. It provides keyboard, video, and mouse interfaces and only one DX10 is needed per console regardless of the number of channels.



## modular design - from 8 to 32 faders

The **Integra** console uses traditional faders, knobs and push buttons for audio control giving full tactile feedback to the operators.

#### Audio control surface available from 4 to 32 faders

**Integra** consoles are fully modular. Any console layout required can be created combining either a two modules frame or a three modules frame with a main console frame (MCF) hosting the monitor module and one or two fader modules.

Those console frames can be mounted either in-line or can be installed in split mode using the **Integra** Split Kit. The maximum size of an **Integra** console has 32 faders and a monitor section.

#### Fully assignable fader channels

Any fader channel of the **Integra** console can be configured to control any audio source, bus and audio output located either on a local input and output frame or within the entire audio network.

With the **Integra** console, the configuration and setup of audio channels can be controlled by an external monitor, keyboard and mouse, which are to be connected to the rear side of the DX10 controller.

## All fader channels fitted with OLED are easily labeled and renamed

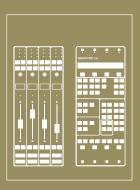
Channel names, sources and destinations, EQ and dynamics can be set using the **Integra** configuration tool. Presets of the console layout as well as monitor and telephone settings can easily be configured and stored by the qualified operator. The external monitor shows channel levels as well as all other sources and destinations available within the audio network and allows selecting any of those by authorized operators.

#### Integra consoles available from 8 to 32 faders

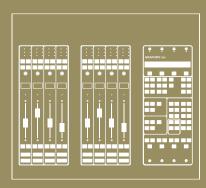
If more than 8 faders are required, **Integra** consoles can be expanded to a maximum of 32 faders by adding further console extension frames to the MCF.

#### Integra main console frame

for one monitor and one fader module

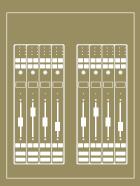


for one monitor and two fader

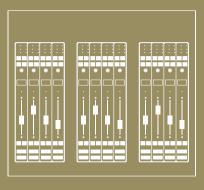


### Integra console extension frame

for two fader mod-



for three fader



## audio control surface



## The Integra fader module

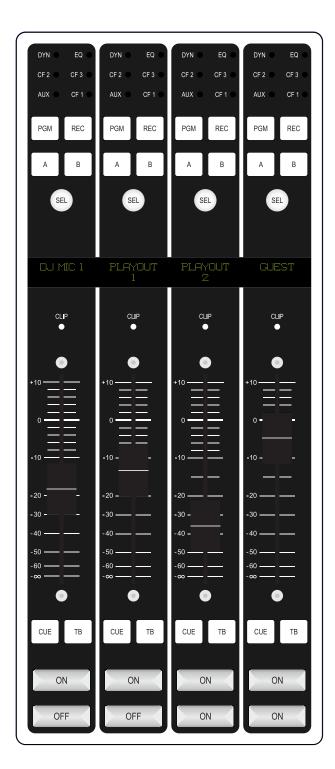
The **Integra** fader module can be mounted in both, the **Integra** MCF and the **Integra** extension unit. Programmable illuminated buttons allow assigning any available source to any fader channel – an ultra-bright OLED display on each fader module makes it easy for the operator to keep full overview.

Switching from one input to another or from one preset to another one can be done via a push button. All previous settings including level, DSP settings and GPI formats follow automatically once an audio input is selected. If a new channel with a different volume level is assigned to a fader strip fitted with non-motorized faders, the console will indicate the volume difference by flashing the ON button. This function allows for a cost-efficient solution to control as many channels with one single fader strip as required.

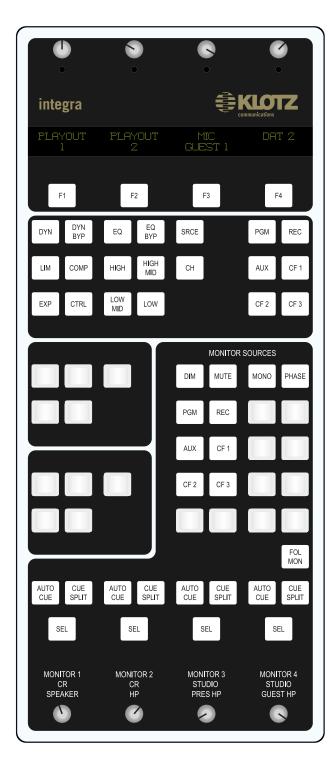
For highest comfort, professional motorized faders for full automation of input channels are available on request.

## The Integra fader module comes with

- 4 fader channels
- Professional 100 mm fader, a motorized version on request
- ON / OF / TB / SEL buttons
- 4 programmable buttons normally programmed as source A and B, PGM and REC bus select
- Status indication LEDs for secondary buses, EQ, DYN and channel overload
- Professional 100 mm fader
- Alphanumeric ultra-bright OLED displays with 2 lines and 16 characters each
- Illuminated, free lettered push buttons







#### The monitor/DSP/control module

The **Integra** monitor module is the control unit for all central operating functions and offers DSP control for all audio channels, a highly sophisticated monitor unit and telephone controls for up to 4 telephone lines. The **Integra** monitor module can be mounted at any location as well as in the **Integra** MCF or the **Integra** extension unit.

## The Integra monitor module offers

- Access to the DSP functions via 4 rotary encoders, each one associated with an ultra-bright OLED display
- Direct access to DSP functionality through dedicated buttons
- Central bus assign
- 10 assignable function buttons for
  - remote control purposes
  - macro programmed events
  - grouped function control, and much more ...
- 5 individual and freely assignable monitor channels
  - with up to 20 selectable monitor sources per channel
  - with integrated auto cue and cue split function
  - with freely programmable monitor functions
- 4 telephone bus buttons
  - with 2 pre-configured buttons for telephone lines
  - with 1 pre-configured button for CODEC
  - with 1 button for free configuration
- Backlit push buttons with custom labeling

## g2 audio engine and router frame





The **G2** audio engine and router frame for the **Integra** and **DC3** console family, offers 21 card slots for signal processing, audio interfaces and network cards.

The frame's 32 bit TDM bus guarantees simultaneous low latency and fast signal processing. The **G2** frame can be synchronized by several methods such as external frame synchronization, AES, and fiber optic guaranteeing highest possible audio quality.

Any interface card is automatically detected and manual setting of cards or single channels by entering IP addresses is not required.

A highly comfortable configuration tool guides the user to a fast set-up of even complex audio and control networks. Each frame is equipped with 8 general purpose interface inputs and outputs, which can be individually configured allowing for many different logic functions.

#### 19" 4 RU rack mountable controller equipped with

- 21 slots for **G2** cards such as:
  - Audio over IP interface cards using Dante protocol
  - Fiber optic network
  - Digital and analog in-/outputs
  - Signal processing
  - MADI interface (optical)
- Built-in 8 x 8 GPI (expandable with external GPI box)
- Integrated fanless PSU





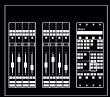
## examples of typical Integra consoles

## in-line assembly

4 faders and monitor section



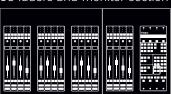
8 faders and monitor section



12 faders and monitor section



16 faders and monitor section



## split assembly

No splitting possible

No splitting possible









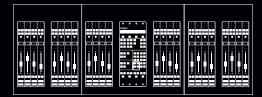


## in-line assembly

#### 20 faders and monitor section



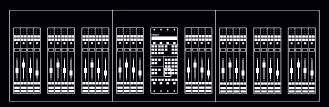
#### 24 faders and monitor section



## 28 faders and monitor section



#### 32 faders and monitor section



## split assembly

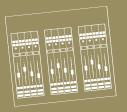








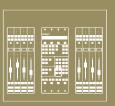
















## technical information

## **Basic mixing console**

Sizes	Number of faders	4/8/12/16/24/32	
	Fader modules	fitted with 100 mm non-motorized or 100 mm motorized faders	
	Monitor DSP Control module	1	
Buses	Stereo buses (PGM, REC, PFL, Cleanfeed 3, AUX)	5	
	Mono buses (Cleanfeed 1 and 2)	2	
Monitor outputs	Analog stereo monitor outputs	4	
DSP	DSP cards for: mixing, gain, level meter, 4-band parametric EQ, compressor, limiter, expander, sine tone generator	2	

## Audio engine and router frame

Controller	Number of slots for interface cards	s 21	
	GPI I/O	8/8	
	KVM inputs (keybord, video, mouse)	Yes	
	System clock	44.1 kHz / 48 kHz	
	Synchronization	internal crystal, wordclock, F/O clock, AES3	
Power Supply	Туре	single or redundant internal PSU	
	Voltage	110/230 VAC / 50/60 Hz	
	Consumption	100 W typ., 250 W max.	

## Input and output cards for audio engine and router frame

<u> </u>	
Analog	4 channel microphone card
	8 channel A/D input card
	8 channel D/A output card
Digital	8 channel AES/EBU input card
	8 channel AES/EBU output card



Options	Integra extension kit for a CAT5 cable distance of up to 200 m between console and audio engine	
	User Rights Management Software, allowing user specific access to determined functions	
Optical audio network accessories	2 x 64 channel bidirectional fiber optic card	
	Optical MADI card	

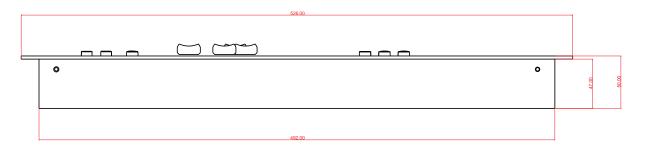
## **Dimensions Desktop Version**

Console frame	Width	Depth	
for 2 modules:	406 mm / 15.98"	585 mm / 23.03"	
for 3 modules:	601 mm / 23.66"	585 mm / 23.03"	
for 4 modules:	796 mm / 31.34"	585 mm / 23.03"	
Audio engine	19" / 4 RU rackmount		



## **Dimensions Flush-mount Version**

Console frame	Width	Depth	Mounting depth	Cutout dimensions
for 2 modules:	450 mm / 17.72"	505 mm / 19.89"	96 mm / 3.78"	W: 396 mm / 15.59" D: 465 mm / 18.31"
for 3 modules:	645 mm / 25.39"	505 mm / 19.89"	96 mm / 3.78"	W: 591 mm / 23.27" D: 465 mm / 18.31"
Audio engine	19" / 4 RU rackmount			



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