

# OPERATORS MANUAL 

Klark Teknik Group,<br>Klark Teknik Building,<br>Walter Nash Road,<br>Kidderminster.<br>Worcestershire.<br>DY11 7HJ.<br>England.<br>Tel:+44 (0) 1562741515<br>Fax:+44 (0) 1562745371<br>Email: pro_audio_group@compuserve.com<br>Website: midasconsoles.com

## IMPORTANT SAFETY INSTRUCTIONS

WARNING: to reduce the risk of fire or electric shock. DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
AVIS: RISOUÉ de choc electrioue. ne pas ouvrir.


The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintance (servicing) instructions in the literature accompanying the appliance.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water. Do not expose this apparatus to dripping or splashing and ensure that no objects filled with liquids, such as vases, ase placed on this apparatus.
6. Clean only with a dry cloth.
7. Do not block any of the ventilation openings. Install in accordance with the manufactures instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
9. Only use attachments/accessories specified by the manufacturer.
10. Refer all servicing to qualified service personnel. Servicing is required when the apparatus (including amplifiers) has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
11. To completely disconnect mains power from this apparatus, the power supply cord must be unplugged.

## For US and CANADA only:

Do not defeat the safety purpose of the grounding-type plug. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrican for replacement of the absolete outlet.

## IMPORTANT SERVICE INSTRUCTIONS

CAUTION: These servicing instructions are for use by qualified personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the Operating
Instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

1. Security regulations as stated in the EN 60065 (VDE 0860) and the CSA E65-94 have to be obeyed when servicing the appliance.
2. Use of a mains separator transformer is mandatory during maintenance while the appliance is opened, needs to be operated and is connected to the mains
3. Switch off the power before retrofitting any extensions, changing the mains voltage or the output voltage.
4. The minimum distance between parts carrying mains voltage and any accessible metal piece (metal enclosure), respectively between the mains poles has to be 3 mm and needs to be minded at all times. The minimum distance between parts carrying mains voltage and any switches or breakers that are not connected to the mains (secondary parts) has to be 6 mm and needs to be minded at all times.
5. Replacing special components that are marked in the circuit diagram using the security symbol (Note) is only permissible when using original parts.
6. Altering the circuitry without prior consent or advice is not legitimate.
7. Any work security regulations that are applicable at the location where the appliance is being serviced have to be strictly obeyed. This applies also to any regulations about the work place itself.
8. All instructions concerning the handling of MOS - circuits have to be observed.

## Note:



## VENICE CONNECTORS

VENICE 160


VENICE 240


VENICE 320


Input / Output XLR
Pin 1: Ground
Pin 2: Hot
Pin 3: Cold.



Lamp out
Pin 1: Chassis
Pin 2: n.c.
Pin 3: Ground
Pin 4: +12 V

## Insert

Tip: Send
Ring: Return Sleeve: Ground

## Input / Output

Tip: Hot
Ring: Cold
Sleeve: Ground

Tape IN / OUT


External Power Supply



## ATTENTION!

The following special limitations apply to the console and must be observed in order to maintain safety and electromagnetic compatibility performance:

## POWER CONNECTION

The console should only be operated with the power supply connected to ground via its mains supply connector.

## AUDIO CONNECTIONS

The console should only be operated with high quality screened twisted pair audio cables. All connector shells should be of metal construction so that they provide a screen when they are plugged into the console. All JACK connector shells should be connected to the cable screen. All XLR connectors should have pin 1 connected to the cable screen.

## ELECTRIC FIELDS

If the console is operated in an electromagnetic field that is amplitude modulated by an audio frequency signal, the signal to noise ratio may be degraded. Degradation of up to 60 dB may be experienced under extreme conditions ( $3 \mathrm{~V} / \mathrm{m}, 90 \%$ modulation).

## INSTALLATION

There are a number of points to consider when installing a mixing console. Many of these points will have been addressed before the console is even unpacked but it is worth repeating them.

## POSITION

The console should be located in a convenient space commensurate with the use to which the console is being put. Ideally a cool area is preferred not in close proximity to power distribution equipment or other potential sources of interference. Provision should be made for some flat surface surrounding the console to prevent people using it as a table top.

## INTERNAL POWER SUPPLY

The console is equipped with an internal power supply. It must be set for the appropriate line voltage and pluged in to the mains outlet using the supplied cable.

## MAINS VOLTAGE SETTING

The console is shipped with a specified mains voltage setting (see rear panel marking). If the mains voltage is ever changed by the mains voltage selector at the bottom of the console, the mains fuse has to be changed as well to the rating matching the selected voltage on the label.


## ADDITIONAL EXTERNAL POWER SUPPLY FOR VENICE 240/320

The power supply should be located as far from the console as the connecting cable will allow. It should be set for the appropriate line voltage and plugged into the mains outlet using the supplied cable. The external power-supply overrides the internal supply after power on. The internal supply acts in this case as spare supply.

## THE CONSOLE AND THE EXTERNAL POWER SUPPLY SHOULD NEVER BE OPERATED WITH THE MAINS EARTH DISCONNECTED

Please note that the power supply contains LETHALVOLTAGES and that its rails can produce extremely large currents which could burn out equipment and wiring if shorted. All testing and servicing should ONLY be carried out by qualified engineers.

## CONTENTS

| Mono Input Channel | Page 6 |
| :--- | :--- |
| Stereo Input Channel | Page 10 |
| Groups | Page 15 |
| Effects | Page 16 |
| Monitor | Page 17 |
| AUXes | Page 18 |
| Master A/B Tape In | Page 19 |
| Talkback / Phones \& Speak | Page 20 |
| Display / Lamp / Phones | Page 21 |
| Block Diagrams | Page 62 |
| Specifications | Page 65 |
| Dimensions | Page 68 |
| Rack Mounting | Page 69 |



> MIDAS VENICE MONO INPUT CHANNEL

The Venice Mono Channel is equipped with an XLR input, which can be used for Mic or Line level signals up to +22 dBu . An additional $1 / 4$ inch jack socket, provides an input for line level signals, which require protection against accidental 48 volt connection. The Line input gives 20 dB of permanent attenuation to the input signal which will allow the connection of extreme high linelevel signals up to +42 dBu .

The HI PASS switch connects the the 80 Hz hi-pass-filter in the input channel signal path before the insert point and equaliser.

The HI MID control gives continuous adjustment of boost and cut from +15 dB to -15 dB with a 0 dB centre detent.

The LO MID control gives continuous adjustment of boost and cut from +15 dB to -15 dB with a 0 dB centre detent.

The BASS control gives continuous adjustment of boost and cut from +15 dB to -15 dB with a 0 dB centre detent. The bass equaliser acts on 80 Hz with a traditional MIDAS shelving response.


The +48 V led monitors if phantom power is assigned. The +48 V switch for each channel is placed on the rear-panel of the console. It connects +48 V phantom power to the XLR input connector. This is suitable for a condenser microphone or DI box.

The GAIN control gives continuous adjustment of the input amplifier gain from 0dB to +60 dB for the Mic input and -20 dB to +40 dB for the Line input.

The TREBLE control gives continuous adjustment of boost and cut from +15 dB to -15 dB with a OdB centre detent. The treble equaliser acts on 12 kHz with a traditional MIDAS shelving response.

The HI MID FREQ control gives continuous adjustment of the frequency range that the hi mid equaliser acts on from 400 Hz to 8 kHz with a 1 octave bandwith.

The LO MID FREQ control gives continuous adjustment of the frequency range that the lo mid equaliser acts on from 100 Hz to 2 kHz with a 1 octave bandwith.

The EQ switch connects the equaliser in the input channel signal path.

The FX controls give continuous adjustment of the post fader level sent from the input channel to the FX busses. The level adjustment is from +10 dB to off with 0 dB at the centre position of the rotary control.

The MON controls give continuous adjustment of the pre- fader and pre- equaliser signal sent from the input channel to the MON busses. The level adjustment is from +10 dB to off with 0 dB at the centre position of the rotary control.

The AUX controls give continuous adjustment of the level sent from the input channel to the AUX busses. The level adjustment is from +10 dB to off with 0 dB at the centre position of the rotary control.
AUX1 and 2 can be configured globally for pre- or post-fader operation by pressing the PRE/POST switch on the appropriate AUX-rail in the master section.


The PAN controls the channel placement within the master ste-reo- or group mix and has a constant power law. i.e. - 3 dB at the centre position and 0 dB or off at either extreme setting.

The MUTE switch mutes the input channel at all points after the insert send, including all auxiliary sends.

The SOLO switch sends the input channel signal to the PFL / mono-and AFL / stereo busses. If the switch is engaged, the mon $1 / 2$ meters are automatically used for solo metering.

The FADER gives continuous adjustment of the input channel level from +10 dB to off.



## MIDAS VENICE STEREO INPUT CHANNEL

The Venice stereo input channel is equipped with an XLR input which can be used for Mic or Line level signals up to +22 dBu . Two additional $1 / 4 \mathrm{inch}$ jack sockets, provide an input for Stereo- or Mono Line level signals up to +28 dBu . The stereo channel features the same hi-value microphone pre-amp as the mono channel. Because the stereo input channel uses independet circuits for Mic and Stereo Line, it is possible to have all inputs connected at the same time, without interference.

The LINE TRIM control gives continuous adjustment of the stereo input amplifier gain from 20 dB to +20 dB for the Stereo Line input.

The HI MID control gives continuous adjustment of boost and cut from +15 dB to -15 dB with a 0 dB centre detent. The HI MID equaliser acts on 3 kHz with a 1.4 octaves bandwith.

The BASS control gives continuous adjustment of boost and cut from +15 dB to -15 dB with a 0 dB centre detent. The bass equaliser acts on 80 Hz with a traditional MIDAS shelving response.


The +48 V switch for each channel is positioned at the rear panel of the console. It connects +48 V phantom power to the XLR input connector. This is suitable for a condenser microphone or DI box.

The MIC GAIN control gives continuous adjustment of the input amplifier gain from 0 dB to +60 dB for the Mic input.

The HI PASS switch connects the the 80 Hz hi-pass-filter in the input channel signal path right after the mic input amplifier.

The TREBLE control gives continuous adjustment of boost and cut from +15 dB to -15 dB with a 0 dB centre detent. The treble equaliser acts on 12 kHz with a traditional MIDAS shelving response.

The LO MID control gives continuous adjustment of boost and cut from +15 dB to -15 dB with a 0 dB centre detent. The LO MID equaliser acts on 300 Hz with a 1.4 octaves bandwith.

The EQ switch connects the equaliser in the input channel signal path.

The FX controls give continuous adjustment of the level sent from the input channel to the FX busses. The level adjustment is from +10 dB to off with 0 dB at the centre position of the rotary control. The FX controls are connected post-fader and send the mixed left/right signal to the FX busses.

The AUX controls give continuous adjustment of the mixed left/right signal level sent from the input channel to the AUX busses. The level adjustment is from +10 dB to off with 0 dB at the centre position of the rotary control. AUX 1 and 2 can be configured globally for pre- or postfader operation by pressing the PRE/POST switch on the appropriate AUX-rail in the master section.

The MUTE switch mutes the input channel at all points, including all auxiliary sends.


The MON controls give continuous adjustment of the level sent from the input channel to the MON busses. The level adjustment is from +10 dB to off with 0 dB at the centre position of the rotary control. The MON controls are connected pre fader, pre equaliser and send the mixed left/right signal to the MON busses.

The BAL (pan) control is used to balance the relative levels of the left and right channel signals that are sent to the masters or groups. The control has a constant power law, i.e. -3 dB at the centre position and +0 dB or off at either extreme setting. If the Stereo channel used as mono input, the BALANCE (pan) controls the channel placement within the master stereo- or group mix.

The SOLO switch sends the input channel signal to the PFL/ mono and AFL/ stereo busses. If the switch is engaged, the mon $1 / 2$ meters are automatically used for solo metering.


The SIGNAL (-16dBu) / PEAK $(+16 \mathrm{dBu})$ display monitors the peak signal level of the pre fader input channel.

The FADER gives continuous adjustment of the input channel level from +10 dB to off.

The MAS switch connects the post fader channel signal to the master stereo bus via the bal (pan) control.


MIDAS VENICE MASTER SECTION

The PAN controls the group placement within the master stereo-

The SOLO switch sends the group signal to the PFL / mono and AFL / stereo busses. If the switch is engaged the mon $1 / 2$ meters are automatically used for solo metering

The GROUP faders give continuous adjstment of the sub group output levels from +10 dB to off.
 mix and has a constant power law i. e. -3 dB at the centre position and 0 dB or off at either extreme setting.

The MAS switch connects the post fader group signals to the stereo master bus via the pan control.


The SIGNAL (-16dBu) PEAK $(+16 \mathrm{dBu})$ display monitors the signal level of the group bus.

The FX SEND control gives continuous adjustment of the FX send output level from +10 dB to off with 0 dB at the centre position of the rotary control.

The 1-2 switch connects the post fader FX- return left signal to the group 1 bus and right signal to the group 2 bus.

The 3-4 switch connects the post fader FX- return left signal to the group 3 bus and right signal to the group 4 bus.

The MAS switch connects the post fader FX- return stereo signal to the stereo master bus.


The MON controls give continuous adjustment of the pre- fader signal sent from the FXreturn channel to the MON busses. The level adjustment is from +10 dB to off with 0 dB at the centre position of the rotary control.

The MUTE switch mutes the FXreturn at all pointes.

The SOLO switch sends the FXreturn signal to the PFL / mono and AFL / stereo busses. If the switch is engaged the mon $1 / 2$ meters are automatically used for solo metering

The FADER gives continous adjustment of the FX- return level from +10 dB to off.

The MUTE switch mutes the monitor send output signal.


The SOLO switch routes the monitor send signal to the PFL/ mono and AFL/ stereo busses. If the switch is engaged, the mon $1 / 2$ meters are automatically used for solo metering.

The MON SEND fader gives continuous adjustment of the monitor send signal from +10 dB to off.


The global AUX PRE/POST switch configures the aux bus either in pre- fader (mon) or post-fader (fx) operation. The LEDs next to the switch provide indication of status.


The SOLO switch routes the aux send signal to the PFL/ mono and AFL/ stereo busses. Whenever a solo switch is engaged the man $1 / 2$ display is automatically used for solo metering.

The MUTE switch mutes the aux send output signal. It does not affect the aux return.

The AUX RETURN control gives continuous adjustment of the stereo aux return level from +10 dB to off with 0 dB at the centre position of the rotary control. The aux return signals are directly routed to the $L / R$ master busses.


The MON controls give continuous adjustment of the level sent from the aux return to the MON busses. The level adjustment is from +10 dB to off with 0 dB at the centre position of the rotary control.

The TAPE inputs provide a feed from an unbalanced phono source to the stereo master busses or to phones and speakers outputs. The TAPE IN level control provides nominal adjustment from +20 dB to off with 0 dB at the centre position of the rotary control.

The MASTERS B rotary control gives continuous adjustment of the masters B (stereo/mono) output level from +10 dB to off with 0 dB at the centre position of the rotary control.

By the STEREO/MONO switch the Master B outputs can be configured in two modes. In STEREO mode the master b outputs are fed with the stereo left and right mix signals. In Mono mode they are fed with the summed left and right mix signal.

The MUTE switch mutes all signals sent to master and master b outputs. Only the Tape In signal to masters is not affected by the MUTE switch.


The MAS switch connects the TAPE IN signal to the master L/R busses right after the master mute switch. This allowes i. e. background music during a show, even when the master mute switch is engaged. The MAS switch should be off during recording via TAPE OUT.

The PRE/POST switch changes the signals sent to the masters $b$ outputs from pre master fader to post master fader.


The BAL control is used to balanced the relative levels of the left and right master signals that are sent to the masters outputs. The control has a constant power law, i. e. 0 dB at the centre position and +3 dB or off at either extreme setting.

The stereo Fader gives continous adjustment of the left and right mix levels from +10 dB to off.

The talkback LEVEL control gives continuous adjustment of the talkback signal from +50 dB to off. The talkback input accepts a maximum input level of +8 dBu .

The PHONES level control gives continuous adjustment of the level from +10 dB to off at the phones output $\mathrm{a} \& \mathrm{~b}$.

The SPEAKERS level control gives continuous adjustment of the signal at the speakers left and right output from +10 dB to off with 0 dB at the centre position of the rotary control.

The SOLO control adjusts the incoming solo level before sending it to the headphones and speaker outputs. The control range is -20 dB to +20 dB with 0 dB in centre position.


The non-latching MON switch connects the talkback mic to mon 1 and mon2 busses.

The non-latching AUX switch connects the talkback mic to aux 1 and aux2 pre-busses.

The non-latching GRP switch connects the talkback mic to all group busses.

The non-latching MAS switch connects the talkback mic to left and right master busses.

The SOURCE switch controls whether the tape in or master signal is present at the headphones and control room speaker outputs, if no solo button is engaged.

If a solo button is engaged the PFL / AFL switch controls whether the mono pre fader listen or the stereo after fader listen signal is present at the headphones and control room speaker outputs.


The input for a TALKBACK Microphone is provided via a 3 pinfemale XLR connector. The +48 V Phantom power is permanently connected which is suitable for condenser microphones.

A convenient connection for two 12 V desk lamps is provided via the 4pin-female XLR connectors. The power rating 5 W is the maximum rating per output and may not be exceeded.

The $1 / 4$ inch jack sockets provide stereo outputs for two PHONES. Both outputs are controlled via the phones rotary control.

Whenever a solo button is engaged the SOLO led turns on and the mon $1 / 2$ metering is automatically used as solo meter.

In pfl-mode the mon 1 meter displays the signal level in dBu of the selected solo source at the pre-fader position.

In afl-mode the mon 1 (afl-1) and mon2 (afl-r) meters are active and display the signal levels in dBu in the stereo image at the after- fader position.


The MON meters display the post fader peak signal levels of the monitor outputs. Whenever a solo button is engaged the meter displays the peak signal levels of the selected pfl or afl solo source.

The MASTER meters monitor the peak signal levels of the master outputs left and right (post fader).

## BLOCK DIAGRAMS




FX-send, FX-return


Aux, Groups and Talkback


| MIDAS VENICE SERIESPERFORMANCESPECIFICATIONS |  |  |  |
| :---: | :---: | :---: | :---: |
| Features and Specifications | Venice 160 | Venice 240 | Venice 320 |
| Inputs (total) | 30 | 38 | 46 |
| Mono-Inputs (Mic/Line) with Inserts | 8 | 16 | 24 |
| Stereo-Line/Mono-Mic-Input Channels | 4/4 | 4/4 | 4/4 |
| Stereo-Effect-Returns (Line) | 4 | 4 | 4 |
| Stereo-Tape-Return (Line) |  | 1 left/right |  |
| Busses |  | 15 |  |
| Subgroups |  | 4 |  |
| Aux Pre-Fader (Monitor) |  | 2 |  |
| Aux Post-Fader (Effects) |  | 2 |  |
| Aux switchable Pre/Post-Fader |  | 2 |  |
| Master L/R |  | 2 |  |
| Mono-PFL |  | 1 |  |
| Stereo-AFL |  | 2 |  |
| Outputs |  |  |  |
| Subgroups (with Inserts) | 4 impedance balanced 1/4 inch jacks |  |  |
| Aux Pre-Fader (Monitor) | 2 XLR (balanced) |  |  |
| Aux Post-Fader (Effects) | 2 impedance balanced 1/4 inch jacks |  |  |
| Aux switchable Pre/Post-Fader | 2 XLR (balanced) |  |  |
| Master (with Inserts) | 2 XLR (balanced) |  |  |
| Master B Out | 2 XLR (balanced) |  |  |
| (switchable Mono/Stereo, pre-post Fader) |  |  |  |
| Tape Send (Recording) | 1 Stereo (Phono) |  |  |
| Direct Outputs (1/4 inch Jack) | 8 | 16 | 24 |
| Stereo-Headphones | 2 Stereo-1/4 inch jack |  |  |
| Stereo-Speakers | 2 impedance balanced 1/4 inch jacks |  |  |
| Size (mm/inch) |  |  |  |
| Width | 490 / 19.3" | 698 / 27.5" | 906 / 35.7" |
| Depth | 568 / 22.4" | 568 / 22.4" | 568 / 22.4" |
| Heights | 194 / 7.6" | 194 / 7.6" | 194 / 7.6" |
| Weight (kg/lbs) | 16,4/36.2 | 21,1/ 46.5 | 25,8 / 56.9 |
| Power Consumption | 75 W | 95 W | 120W |
| Mains Voltage | $110 \mathrm{~V} / 120 \mathrm{~V} / 220 \mathrm{~V} / 230 \mathrm{~V} / 240 \mathrm{~V}, 50-60 \mathrm{~Hz}$ |  |  |
| Additional Features |  |  |  |
| Connector for desk lamps | $2 \times 12 \mathrm{~V} / 5 \mathrm{~W}$ (4-Pin XLR) |  |  |
| 19"-rack-mounting-kit, | yes | - | - |
| rotatable connector panel | yes | - | - |
| External Power Supply (EPS 1200, not included) | - | yes | yes |
| Accesories | Dust Cover (included) |  |  |
|  | 12 V Desk Lamp (not included) |  |  |
|  | Input Transformer (not included) |  |  |

## Venice Technical Specifications

| Input Impedance | Mic | 2k Balanced |
| :---: | :---: | :---: |
|  | Line | 20k Balanced |
| Input Gain | Mic | Continuously variable from 0 dB to +60 dB |
|  | Line Mono Channel | Continuously variable from $-20 \mathrm{~dB} \text { to }+40 \mathrm{~dB}$ |
|  | Line Stereo Channel | Continuously variable from $-20 \mathrm{~dB} \text { to }+20 \mathrm{~dB}$ |
|  | Line Level Inputs | 0 dB |
| Maximum Input Level | Mic | $+22 \mathrm{dBu}$ |
|  | Line Level Inputs | $+22 \mathrm{dBu}$ |
|  | Line Mono Channel | $+42 \mathrm{dBu}$ |
|  | Line Stereo Channel | $+28 \mathrm{dBu}$ |
| CMR at 100 Hz | Mic (gain +40 dB ) | Typ. 75 dB |
| CMR at 1 kHz | Mic (gain +40 dB ) | $>85 \mathrm{~dB}$ |
|  | Line | $>45 \mathrm{~dB}$ |
| Frequency Response (20 to 20 kHz ) | Mic to Mix (gain +60 dB ) | +0 dB to -1 dB |
| Noise (20 to 20 kHz ) | Mic EIN ref. 150ohms (gain +60 dB ) | - 129 dBu |
| System Noise ( 20 to 20 kHz ) |  |  |
|  | Summing Noise (16 channels routed with faders down) | $-90 \mathrm{dBu}$ |
|  | Line to Mix Noise (16 channels routed at 0 dB , pan centre) | - 86 dBu |
| Distortion at 1 kHz | Mic to Insert (+ 30dB gain, +20 dBu output) | Typ 0.0007\% |
|  | Mic to Mix ( +30 dB gain, +20 dBu output) | $<0.009 \%$ |
| Crosstalk at 1 kHz | Channel to Channel | $<-80 \mathrm{~dB}$ |
|  | Mix to Mix | $<-80 \mathrm{~dB}$ |
|  | Channel to Mix | $<-80 \mathrm{~dB}$ |
|  | Fader Attenuation | $>100 \mathrm{~dB}$ |
|  | Switch Rejection | $>100 \mathrm{~dB}$ |
| Output Impedance | All Line Outputs Headphones | 75 Ohms Balanced Source To drive 32 ohms |
| Maximum Output Level | Master Outputs on XLR | $+25 \mathrm{dBu}$ |
|  | All other Outputs on XLR | $+22 \mathrm{dBu}$ |
|  | All Outputs on 1/4 inch jacks | $+22 \mathrm{dBu}$ |
|  | Headphones | $+22 \mathrm{dBu} / 600 \mathrm{ohms}$ |
| Nominal Signal Level | Mic | -60 dBu to 0 dBu |
|  | Line | 0 dBu |


| Equaliser Mono Channel | Hi Pass Slope <br> Hi Pass Frequency <br> Treble Gain | $\begin{aligned} & 12 \mathrm{~dB} / \mathrm{Oct} \\ & 80 \mathrm{~Hz} \\ & \text { Continuously variable } \\ & +15 \mathrm{~dB} \text { to }-15 \mathrm{~dB} \\ & \text { Centre detent }=0 \mathrm{~dB} \end{aligned}$ |
| :---: | :---: | :---: |
|  | Treble Frequency Hi Mid Gain | $12 \mathrm{k}$ <br> Continuously variable +15 dB to -15 dB <br> Centre detent $=0 \mathrm{~dB}$ |
|  | Hi Mid Frequency | Continuously variable <br> Centre from 400 Hz to 8 k |
|  | Hi Mid Bandwidth | 1 Oct. ( $\mathrm{Q}=1.4$ ) |
|  | Lo Mid Gain | $\begin{aligned} & \text { Continuously variable } \\ & +15 \mathrm{~dB} \text { to }-15 \mathrm{~dB} \\ & \text { Centre detent }=0 \mathrm{~dB} \end{aligned}$ |
|  | Lo Mid Frequency | Continuously variable Centre from 100 Hz to 2 k |
|  | Lo Mid Bandwith | 1 Oct. ( $\mathrm{Q}=1.4$ ) |
|  | Bass Gain | $\begin{aligned} & \text { Continuously variable } \\ & +15 \mathrm{~dB} \text { to }-15 \mathrm{~dB} \\ & \text { Centre detent }=0 \mathrm{~dB} \end{aligned}$ |
|  | Bass Shelving Frequency | 80 Hz |
| Equaliser Stereo Channel | Hi Pass Slope | $12 \mathrm{~dB} / \mathrm{Oct}$ |
|  | Hi Pass Frequency | 80 Hz |
|  | Treble Gain | $\begin{aligned} & \text { Continuously variable } \\ & +15 \mathrm{~dB} \text { to }-15 \mathrm{~dB} \\ & \text { Centre detent }=0 \mathrm{~dB} \end{aligned}$ |
|  | Treble Frequency | 12k |
|  | Hi Mid Gain | $\begin{aligned} & \text { Continuously variable } \\ & +15 \mathrm{~dB} \text { to }-15 \mathrm{~dB} \\ & \text { Centre detent }=0 \mathrm{~dB} \end{aligned}$ |
|  | Hi Mid Frequency | 3 k |
|  | Hi Mid Bandwidth | 1.4 Oct. ( $\mathrm{Q}=1$ ) |
|  | Lo Mid Gain | $\begin{aligned} & \text { Continuously variable } \\ & +15 \mathrm{~dB} \text { to }-15 \mathrm{~dB} \\ & \text { Centre detent }=0 \mathrm{~dB} \end{aligned}$ |
|  | Lo Mid Frequency | 300 Hz |
|  | Lo Mid Bandwidth | 1.4 Oct. ( $\mathrm{Q}=1$ ) |
|  | Bass Gain | $\begin{aligned} & \text { Continuously variable } \\ & +15 \mathrm{~dB} \text { to }-15 \mathrm{~dB} \\ & \text { Centre detent }=0 \mathrm{~dB} \end{aligned}$ |
|  | Bass Shelving Frequency | 80 Hz |

## DIMENSIONS



VENICE $160=490 \mathrm{~mm} / 19$ 3"
VENICE $240=698 \mathrm{~mm} / 27.5 "$


## Modification for Venice 160 Rack Mounting

The Venice 160 comes with additonal rack mounting brackets. For modification you need a Torx screwdriver type T20 (fig.1) and Phillips screwdrivers type Ph1 (fig. 2) and type Ph2 (fig.3). To modify the Venice 160 for rack mounting follow these steps:

1. Disconnect the unit from mains by all means. Remove all cables (mains, audio, lamp, etc.).
2. Loosen the 16 screws shown in fig. 4 with the Torx screwdriver and remove the two plastic side covers and the armrest. Keep the side covers, the armrest and the screws for later use.

Attention: If you wish to rotate the connection panel in addition to the rack bracket mounting (fig. 6), perform steps $3-8$. If not, proceed directly to step 9 .
3. Turn the unit upside down and place it carefully on a smooth support.
4. Loosen the 8 screws fastening the cover sheet and the connection panel on the sides of the unit (fig. 5) with the Phillips screwdriver type Ph1.
5. Then dismount the connection panel with the 6 screws (fig. 5). Be careful not to unplug the cable connectors by mistake. Then remove the cover sheet via 3 further screws.
6. The cover sheet must be mounted with the angular side up, like shown in fig. 6. The connection panel is now mounted in such a way that the mains socket is left upwards on the unit (fig. 6).
7. The cover sheet and the connection panel are fastened additionally with 8 screws on the sides of the unit.
8. Turn the unit and place it with the control panel upside.
9. Finally the rack brackets are fastened with the screws contained in the mounting set (fig. 7) by using the Phillips screwdriver type Ph2.

Warning: Use only screws which were loosened during modification or such ones, which are contained in the mounting set.

fig. 4

fig. 5

fig. 6

fig. 7

