"STYLYX"

USER MANUAL

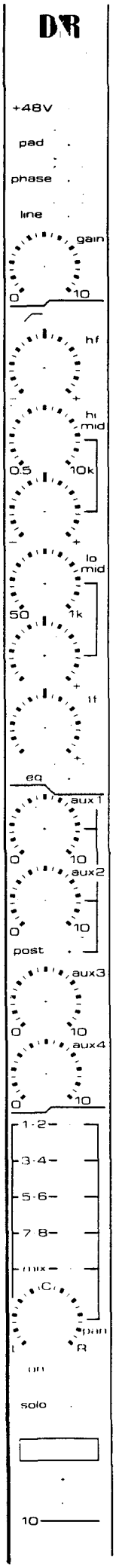
1. INTRODUCTION

The D&R STYLYX is an extremely compact and easy to handle mixing console which incorporates all necessary facilities for recording and public address.
It uses a split design system, which makes it possible to create subgroups.
The STYLYX has facilities for musicians and producers that work at home and in life situations in a midi based environment. It's a complete modular system.

To become familiar with all the facilities of the STYLYX we advise you to read this manual very carefully. It will give you important information about operating, installation and service.

D&R Electronica B.V.

MONO/MIC LINE MODULE STYLYX



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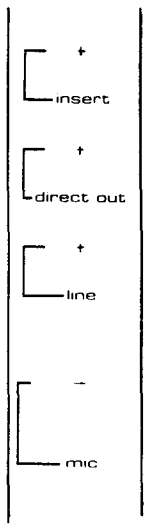

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2 STYLYX MONO MODULE

The channel can operate in either the microphone or line input modes.
The microphone input is an electronically balanced, transformerless design. The input-impedance is greater than 2 Kohms, which will not cause any loading effects on today's studio microphones.

The balanced line level input which is also to be used as effect and tape return has an input impedance greater than 10 Kohms, which is high enough to interface with all available peripheral equipment.

2.a +48 VOLT

The +48 Volt switch is there to feed condensor microphones and Direct Injection boxes (if they have that facility). When using other microphones such as dynamic and electric ones, the phantom power supply should not be switched on.

NOTE: If phantom power is switched on or off when the microphone input channel is active, a "click" or "thump" will be heard. This is because you are interrupting a standing DC voltage directly on the Mic input socket. Similarly, switching from MIC to LINE whilst phantom power is switched on, will have the same result for the same reason. This is not a fault.

2.b PAD

Pushing the pad switch inserts a 20dB attenuation into the input of the microphone amp. This could be necessary when modern capacitor microphones are to be used in close proximity to musical instruments. Even D.I. boxes are capable of providing high level signals.
The pad switch also raises the input impedance providing a balanced line input when the need arises.

2.c. PHASE

The phase reverse switch changes the wiring of the mic input only. In most cases it is the mic signal that's out of phase with another source.

2.d. MIC/LINE

The line input is selected by pushing the line button. The mic input gain is reduced to minimum gain to avoid crosstalk between mic and line inputs with increasing gain.

2.e MIC/LINE GAIN

The microphone input can be varied between +20dB and -55dB of gain. The pad of -20dB increases the control range to 55dB.The line input gain can be varied between -20dB and +20dB.
Both the mic and line amplifiers have their own balanced input connectors. The mic amp is balanced on XLR. (1 is earth, 2 is hot in phase and 3 is cold out of phase)
The line amp is balanced too on a stereo jack. Tip is hot, ring is cold and shield is earth. When you yse this input unbalanced, you should always use a mono jack, for a maximum input stage performance.

3. EQUALIZER SECTION

The equalizer section of the STYLYX stands out by its very effective design. It allows 4 sections of control over the entire audio spectrum, with the addition of a high pass filter section.

3.a HIGH PASS FILTER

The high pass filter is switched in and out of the signal path by its associated pushbutton. The roll off of 12 dB at 100 Hz ensures a very musically sounding effect.

Note: If the eq is switched off, the high pass filter will be switched off too.

3.b. HIGH

16dB of boost or cut is available at 12kHz, with a shelving curve, which means that when the desired amount of boost or cut is reached the curve shelves from that frequency on.

4. HI-MID SECTION

4.a FREQUENCY

This control selects the centre-frequency of the Hi-Mid section. It range from 500Hz to 10kHz.

4.b. HI-MID

This control has a range of + and -16dB with a "bell" curve. Having reached its maximum/minimum at the selected frequency the amplitude response returns to unity gain on either side of that selected frequency.
A plot from that response shows a bell shape. The bandwidth of that bell curve is fixed at 1,5.

5. LO-MID SECTION

5.a FREQUENCY

This control selects the centre-frequency of the mid 2 band. It ranges from 50Hz to 1kHz.

5.b LO-MID

This control is exactly doing the same as the Hi-mid control but now for the selected frequencies by the Lo-mid frequency control.

6. L.F. CONTROL

The low control has a shelving characteristic just like the high control.
16dB of boost or cut is available at 60Hz.

7. EQ-ON

The equalizer section can be switched in or out for comparing equalized and non equalized signals.
Note: Also the high pass filter will be switched in and out!

8. AUXILIARY SECTION

There are 4 AUX sends controls available in total. This seems quite a bit, but to days extensive signal processing requires a lot of AUX sends.

8.a AUX SENDS 1 AND 2

Auxiliary sends 1 and 2 are normally pre-fader but can be switched post-fader if desired. They are intended to be used as stereo foldback sends during recording/public address setups and switched pastured during remix sessions. The AUX sends are wired post equalizer, post insertion point and post channel mute switch.

The STYLYX has provision for automating it's channel fader position by the C-Mix fader automation system. If the C-Mix system is activated, these AUX sends are wired to post equalizer, post insertion point and pre channel mute switch, due to the fact that C-Mix cannot automate the AUX sends, when they are wired pre-eq or pre-fade.

The AUX sends 1 and 2 can also be set pre equalizer by jumpersettings on the p.c.b. see jumper setting page mic/line module.

8.b AUX SEND 3 AND 4

AUX send 3 is normally post-fader wired on the P.C.B. but this can be changed easily on the P.C.B. by rerouting the associated jumpersettings.
(See jumper setting instruction page for mic/line module in this manual).
If C-Mix is installed and activated, read also section 5.a.b.c.

9. ROUTING SECTION

The channel input signal can be routed to any or all of the 8 subgroups and the stereo mix, by selecting the relevant routing push-button.

10. THE PAN-POT

This control (with a 4,5 dB loss at its centre point) pans the signal between the odd and even subgroups as well as the left and right master buss, when selected.

11. CHANNEL STATUS SECTION

11.a The channel on switch is indicated by a green led. When a channel is muted all auxiliary sends are also muted, with the exception of the signal to the insert jack.
If C-Mix is installed and activated, read also section 5.a.b.c.
The on switch does not affect the p.f.l. signal coming from the channel (if this mode is selected in the master section).

12. SOLO/PEAK

The channel solo switch monitors, according to the eq. switch setting on the channel, the pre-eq signal or post-eq signal and the post insertion point. A solo warning led in the master indicates together with the channel solo led that at least one channel solo switch is activated.
The channel led has a dual purpose. It also indicates signal levels above +17dB (overload) occurring in the channel, when not activated by its solo push button.
In that case you will monitor the signal level in the channel by the led metering on the master.

13. CHANNEL FADER

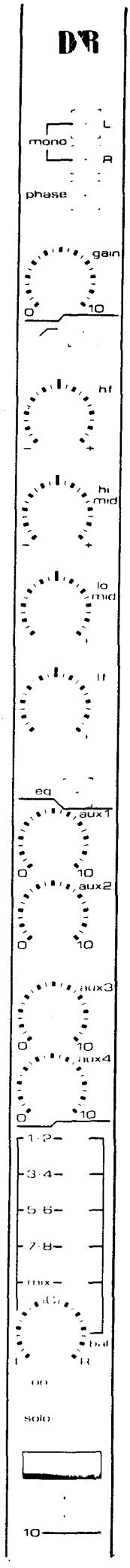
The channel fader has a slide length of 100 mm and is manufactured to give an exceptionally smooth feel in operation.
The STYLYX has provision for automating it's volume control by the C-Mix fader automation system.

14. CHANNEL IN/OUTPUTS

14.a This is the XLR input for balanced condensed or dynamic microphones. Pin 1 is earth, pin 2 is in phase (hot) and pin 3 is out of phase (cold).

14.b This is the line input, which is balanced. The tip is hot the ring is cold and the sleeve is wired to earth. This input has a sensitivity of - 20dB maximum to infinity. The input impedance of 22Kohm will not load any line output of tape recorders or signal processors.

STEREO MODULE STYLYX



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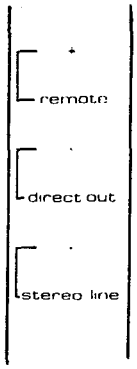

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14.c This is the output of the channel. The tip has a nominal level of -10dBV and the ring + 4dBu.
One of the two level outputs has to be left unconnected.
Never use a mono jackplug on this output.
The -10dBV is for semi pro equipment and the + 4dBu for pro equipment. The output signal is post channel fader.

14.d This is the channel insert (immediately preceding the channel fader). The tip is the return, while the ring is the send.
In/out level is 0dBu.

15. STYLYX STEREO MODULE

Switches and controls

16. INPUTSELECTOR:
The inputselector has a wide variety of possibilities. The upper switch (L), when activated, brings the incoming signal connected to the right (and left) (i.e. ring (and tip) of the jackplug) input to the left signal patch.
When both switches are activated at the same time, left and right signal paths are carrying the same mono sum signal. The right (R) switch brings the incoming signal connected to the left (and right) (i.e. tip (and ring) of the jackplug) to the right signal path.

17. PHASE:
Use this switch to reverse the phase of the left line input. This feature doesn't inverse the wiring, but inverses the audio signal. A good way to check for "out of phase" is to push the mono switch on the master section and listen real close to the mix. If you hear something that sounds strange or completely missing in your mix, push the phase switch on those channels suspected. If the sound returns or sounds better, that channel was out of phase with the others. If one of the mono input selectors is activated, it is possible that you will lose your signal on the AUX sends, which are summing the left and right signal paths, if you press the phase switch.
When both mono input selectors and the phase switch are activated, it even is possible to use the stereo module as a mono module with a balanced input, where the ring is in phase and the tip out of phase.

18. GAIN:
This is the single most important control on your console. When this control set properly, you can achieve the very best signal to noise ratio and get the most headroom needed for high quality recordings. After plugging in a signal push the solo switch just above the channel fader on the channel you're setting, with the channel fader off.

Turn the gain control clockwise until you see a "Ø" output level on the master meters. Now slide up the channel fader to "Ø". Remember, if the signal source gets louder or softer, you may have to go back and check this setting. The volume can also change if you boost or cut in the equalizer. Be sure the signal being miced stays the same volume when you start recording, or you'll need to go back and do all this again. Do this with every line input to achieve the high quality sound D&R products are known for.

12. **HIGH PASS**
This switch inserts a 12 dB rol-off high pass filter starting at 1ØØ Hz into both signal paths. It can be switched in and out into the circuit by its associated switch.

13.a. **HIGH:** Boost or cut 16dB at 12kHz shelving (boost or cut the same amount above 12kHz).

13.b. **HI MID:** Boost or cut 16dB bell curve at 5kHz with a width of 1.5 octaves.

13.c. **LOW MID:** Boost or cut 16dB bell curve sweepable at 25ØHz with a width of 1.5 octaves.

13.d. **LOW:** Boost or cut 16dB at 6Ø Hz shelving (boost or cut the same amount below 6Ø Hz).

13.e. **EQ:** Switches equalizer in or out of the circuit.
NOTE: This also affects the high pass filter. It overrides the high filter switch.

14.a. **AUX 1 AND 2:** Aux 1 and 2 are most commonly used for cue sends (stereo headphones). These aux sends can be set pre/post fader and/or eq by internal jumper settings.
If C-Mix is installed and activated, also read section 5.a.b.c.

14.b. **AUX 3 AND 4:** Can be used as effect sends or a separate mix for monitoring. These can be set pre/post fader and/or eq by internal jumper settings.

15.a **CHANNEL PAN:** Allows you to place the signal anywhere in the stereo image, feeding the mix buss or the subgroups.

15.b 1-2: Assignment switches to subgroups 1 & 2.
3-4: Assignment switches to subgroups 3 & 4.
5-6: Assignment switches to subgroups 5 & 6.
7-8: Assignment switches to subgroups 7 & 8.
max: Assignment switches to stereo mix buss.

16. The channel on switch is indicated by a green led. When a channel is muted all auxiliary sends are also muted, with the exception of the signal to the insert jack.
If C-Mix is installed and activated, read also section 5.a.b.c.
The on switch does not affect the p.f.l. signal coming from the channel (if this mode is selected in the master section).

17. SOLO
The channel solo switch monitors, according to the eq. switch setting on the channel, the pre-eq signal or post-eq signal and the post insertion point. A solo warning led in the master indicates together with the channel solo led that at least one channel solo switch is activated.
The channel led has a dual purpose. It also indicates signal levels above +17dB (overload) occurring in the channel, when not activated by its solo push button.
In that case you will monitor the signal level in the channel by the led metering on the master.

18. FADER:
The fader is a 100 mm smooth action stereo control. The P.C.B. has provision for a C-Mix fader automation package.

19. STYLYX STEREO MODULE CONNECTIONS

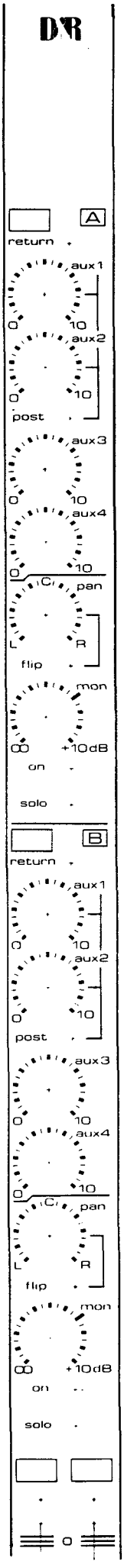
LINE INPUT	1/4" stereo jack	TIP RING SLEEVE	LEFT INPUT RIGHT INPUT SIGNAL GROUND
DIRECT OUTPUT	1/4" stereo jack	TIP RING SLEEVE The +4dBu levels can be changed to -10dBV, by the internal jumper setings.	Left at +4dBu Right at+4dBu SIGNAL GROUND
REMOTE	1/4" stereo jack	TIP RING SLEEVE	Normally closed Normally open Wiper contact

19.a LINE INPUT is used for plugging in the outputs of drum machines, samplers, keyboards, or any line level output.

19.b DIRECT OUTPUT is used as an output of the channel, which will get its signal from the post fader amplifier.

19.c REMOTE
This connector can be wired to a switch activated by the channelfader to start cartridge machines, tape decks, red light indicators and so on.

SUBMODULE STYLYX



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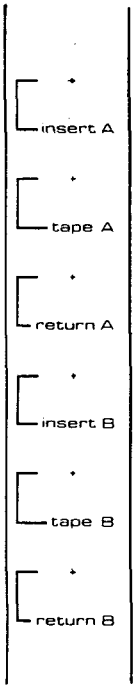

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20 SUBMODULE

20.a Tape/effects returns
This switch brings the signal connected to its jack input into the monitoring section of the sub module. This switch changes the monitor input from sub out to tape/effects return.

20.b AUX 1 AND 2
The AUX 1 and 2 controls are switchable from pre to post monitor by the "post" pushbutton.

20.c AUX 3 AND 4
The AUX 3 and 4 controls can be set internally to pre/post monitor by internal jumpersettings.

20.d PAN-POT
The Pan-pot with a center detent and a -4.5dB down at its centre position pans the signal between the left and right mix busses.

20.e FLIP
The "flip" pushbutton rearranges the signal flow in the monitor section. If the "flip" switch is in its up position, the pan-pot receives its signal from the monitor volume control. When the "flip switch" is down, the pan-pot receives its signal directly from the subgroup fader. An ideal set up for sound reinforcement.
The monitor pot at the same time is connected to the tape/effects return input jack which directly feeds the subgroup output buss. This feature allows you to use more input feeding the mix buss without using up any input modules as well as not having to give up any subgroups.

20.f MONITOR
The monitor pot either follows the subgroup output or the tape return dependent upon the position of the "return" pushbutton switch. If the "splitbutton" is activated the monitor receives its signal only from the return input.

20.g ON
The on-switch with its associated led mutes the channel.

20.h **SOLO**

This switch brings either the subgroup output signal to the monitoring section or the subgroup monitor input. This is dependant upon the status of the return switch. The associated led also acts as a peak indicator. There are two identical sections in this module.

20.i **FADERS**

The two faders control the outputs of the two subgroups. Dependant upon the position into the frame, this can be subgroup 1/2, 3/4, 5/6 or 7/8. The P.C.B. has provision for a C-Mix fader automation package.

24. IN AND OUTPUTS

24.a **Patch points**

These are wired just ahead of the subgroup faders. The ring is the "send" and the tip the "return" both have a nominal level of 0dBu (775 mV).

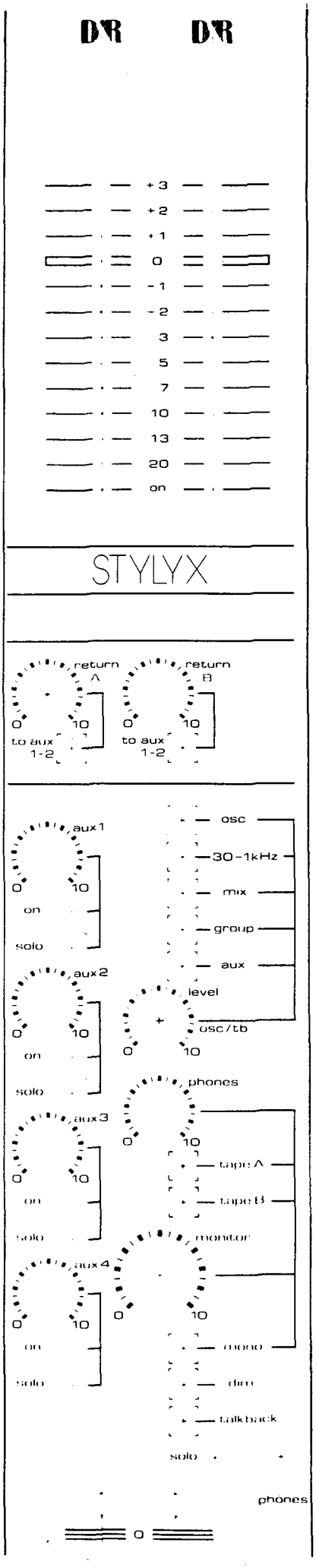
24.b **Tape A/B**

These stereo jacks both have +4dBu and -10dBV level in/outputs, changeable via jumper settings on the board.

24.c **Return A/B**

This stereo jack socket is the input for effect returns. They both have +4dBu and -10dBV level in one jack. The tip has the -10dBV sensitivity and the ring +4dBu.

MASTER MODULE STYLYX



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MASTER MODULE

The master module of the STYLYX contains all the electronics for the summing of the left/right signals, the aux signals, as well as the Control Room Monitor section.
The width of this module is 93 mm. (3 times the channel module, stereo module / blind panel / subgroup module).

1.a. POWER SUPPLY STATUS

The on leds on the ledbar indicate that power has been send to the STYLYX. +/- 18 Volt for the electronics and + 48 Volt for the phantom powering of condenser microphones and D.I. boxes.

1.b AUX RETURNS

The STYLYX has two stereo aux returns. One connected to the stereo L-mix buss and the other to the R-mix buss. A pushbutton switch can route the stereo aux return signal at the same time to the resp. AUX 1 and 2 busses. This is to provide cue effect signals to the master as well as the foldbacksystem (mostly AUX 1 and 2).

1.c AUXILIARY MASTERS 1-4

These 4 controls handle the outgoing levels to the 4 AUX outputs. Every output has an associated on and a pfl button to allow the signal to be muted and monitored. The on button can be computer controlled when necessary by the optional "automation module".
The solo led indicator is a dual functioning led. It also indicates overload in the AUX outputs.

1.d OSCILLATOR/TALKBACK SECTION

The STYLYX has a multifunctioning oscillator/talkback section. There is a choice out of 2 frequencies 30 Hz (for slate purposes, ideal to identify fast winding tapes) and 1 KHz for lining up output sections. The red osc. button activates the low distortion oscillator and the next red button below, gives a choice whether 30 Hz or 1KHz is necessary. The next three buttons are routing buttons to send the osc/t.b. signal to the mix busses, the group busses or/and the AUX 1 and 2 busses.
The level adjusts both the talkback and oscillator level. The talkback which has an xlr connector on the back is activated by the talkback button situated above the right master fader in the same module.

1.e MONITOR SECTION

This part of the STYLYX lets you monitor individual channels in mono or stereo, the master mix, the AUX outputs and two external stereo sources. (tape A, tape B)
It is this C.R.M. signal that is constantly monitored by the ledbar meters.

1.f TAPE A/B

These switches, when activated, connect external stereo inputs to the Control Room Monitor. These inputs are intended for your stereo master machines.
A - 10dBV and + 4dBu level choice is available on the p.c.b. (see jumper setting page).

1.g MONO

This button provides you with a mono compatibility check of the stereo signal. Summing the left/right monitor channels will not affect the main stereo output.

1.h MONITOR/C.R.M.

C.R.M. stands for Control Room Monitor. This control adjusts the outgoing signal to the main monitoring amplifier. This signal can be either the output of the solo system, the master left/right outputs or an external (2 track) signal. The nominal output is +4dBu.
The ledbarmeters are not affected by this control.

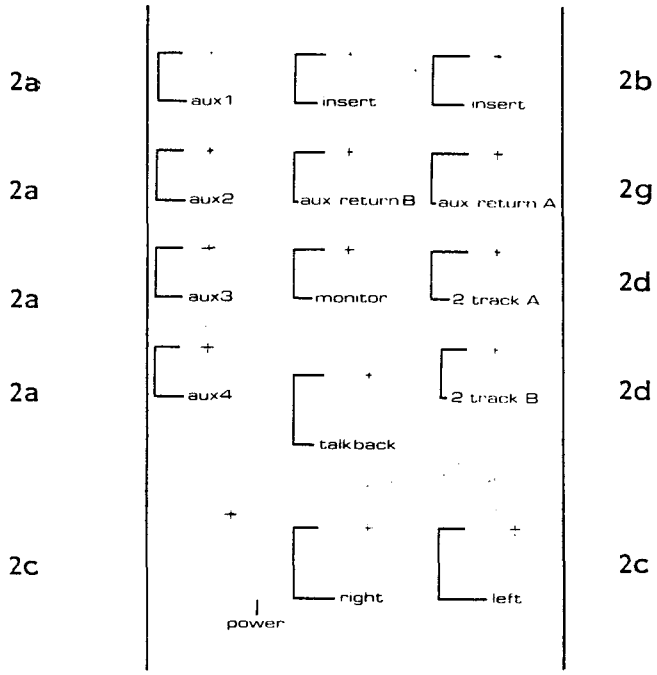
1.i PHONES

This stereo output, located on the front panel of the master module is a high power output for headphones with an impedance between 8 and 2000 ohms.
The level can be adjusted by the phones control independant from the monitor control.
Both phones and monitor (crm) outputs are fed from the same sources.

1.j DIM

This button only attenuates the monitor level by 20dB.

MASTER IN/OUTPUTS



Monitor = 2e

1.k TALKBACK SECTION

This switch routes the talkback to the mix/group/AUX 1 and 2 busses. At the same time it dims the C.R.M. output by 20dB to avoid feedback.

1.l SOLO/LED

If anywhere in the console a solo button is activated, this led lights. You hear the selected signal instead of the usual master mix at the phones and crm output. At the same time the selected signal is monitored at both ledbarmeters.

2. MASTER IN/OUTPUTS

This part of the STYLYX provides all the connections with the external equipment, such as signal processors and power amps.

2.a AUXILIARY OUTPUTS

These 4 outputs allow connection to the foldback amps and/or signal processors.
The outgoing level is + 4dBu on tip. The ring is connected to earth.

2.b INSERTS

Two jacks are devoted to the master left/right insert. The level is 0dBu. The ring is send, the tip is return. These 2 inserts are provided to insert limiters or other devices into the stereo mix immediately before the master faders.

2.c Also located at the back, you will find the balanced master left/right outputs of the STYLYX. Signal level is + 4dBu.
The xlr outputs are fully balanced 2 is hot, 3 is cold and 1 is shield. If the outputs are used in an unbalanced environment, always connect pin 3 to earth, otherwise you will get a decrease of 6dB signal level on this output. The outputs can be set to -10dBV by jumper settings on the p.c.b. (see jumper settings pages)

2.d 2 TRACK A/B

These 2 jacks accept external stereo sources such as 2 track machines. The tip of the jack is the left input, the ring is the right input. The sensitivity can be changed from -10dBV to +4dBU on the p.c.b. by jumpers. The STYLYX easily interfaces with today's two-track master machines.

2.e C.R.M.

This is the stereo output of the Control Room Monitor, and is normally used for connecting it to your main amplifiers. Nominal level is around + 4dBu. Tip is left and ring is right. Do not load this output with 8 ohm headphones but only with 600 ohm ones and higher.

2.f POWER

The STYLYX is powered from an external heavy duty power supply. The supply voltages of +/- 18 Volt and + 48 Volt are fused in the power supply. The power supply is connected by way of a 5 pin XLR type of connector.

2.g AUX RETURNS

These jacks accept signals down from -10dBu in stereo (tip is left, ring is right) and will be fed to the master and or AUX busses.

OPERATION

INTRODUCTION:

The STYLYX is designed to be the perfect answer for a 2 to 16 track recording studio.
To get more familiar with the STYLYX we shall discuss the whole recording process and divide it into 4 basic sequences:

RECORD

Recording from microphone/line input on to the multitrack. This could be from one or more channels at the time.

MULTITRACK REPLAY (SYNC)

In this mode you listen to what has been recorded.

OVERDUBBING

This means listening to already recorded tracks and recording on spare tracks, until all tracks are filled up with music.

REMIX

Replaying of all recorded tracks together with signal processing reverb and all that is necessary to create the final mixdown.

RECORD MODE

This is the beginning of a session.
All input channels are placed in the mic mode by leaving the line/group switch in the up position. Phantom powering is applied if necessary. Eq. switch in the up position.
The signal flows through the fader and is available postfader, at the back of the channel, at the output.
The led bar reads the outgoing signal.

MONITORING

The recorded signal can be monitored in various ways. The STYLYX is a split console and therefore the multitrack will be connected in the subgroup modules. Every module can accept two tracks of the multitrack machine.
There is a choice out of two levels -10dBV or +4dBu.
The monitoring pots will bring the multitrack signal to the left/right mix busses.

As an option, the tape return jacks can also be wired to the last 4/8/16 channels of the input mic/line modules. These tape returns are normal fed to the line inputs. A situation necessary in remix.

The two track master machine will be connected between the left/right XLR outputs and tape A or B input.
The factory setting of the levels at the XLR outputs is +4dBU. If a master machine is connected to these output, you may find it necessary to change the jumpers setting at the p.c.b. to adjust the levels at the outputs or tape inputs, according to your tape machine levels.

MULTIPLE SOURCES ON ONE OR TWO TRACKS

When more than one microphone or line signal has to be recorded on a single track or in stereo on two tracks, a submix facility will be required.
This can be done easily on the STYLYX by way of the routing system.
Simply route to one of the 8 subgroups by pushing one or more of the channel routing switches.
The chosen subgroups will send the signal to the connected multitrack.

MICROPHONE GAIN

The amount of gain required depends on the type of microphone, the sound pressure level and the distance between the sound source and microphone.
A 20 dB pad can be inserted where levels are too high.

INSERT CHANNEL

If the dynamics are too high a compressor/limiter can be inserted in the channel or even in the subgroup insert, if a whole group signal has to be compressed. This all depends on the situation.

FOLDBACK/EFFECT SENDS

During recording it is essential that every one hears what's going on. Headphone mixes are usually derived from pre fader AUXILIARIES.
In the STYLYX AUX 1 and 2 are ideal for this purpose, especially while the talkback is routed to these busses.
The best way is to derive the AUX sends from subgroup channels. This set up is very useful for dubbing situations.

EFFECT SENDS

All unused AUX sends can be used to send signals to signal processors, such as reverb and delay. The AUX sends are usually post fader to always keep the right balance between untreated and treated signals.

EFFECT RETURN

To bring the effect on tape it has to be mixed with the original. Replay the effect in an unused channel and route it to the recording channel by the routing buttons. Also send the source original through the subgroup system.

MULTITRACK REPLAY/REMIX

This is already discussed in section 1 (record mode) but replaying is normally done through channels.

OVERDUBBING

Overdubbing is the process of building up a recording track by track, while listening to previously recorded tracks. Some channels will be in the microphone mode while others are replaying the multitrack .
The replaying tracks are monitored in the subgroup modules.
Headphone monitoring can be best mixed from the subgroup AUX 1 and 2 sends. Here a decision has to be made as to the source of the headphone mix. It can be derived from the input channel, subgroup channel or both. It is up to you.
From the input channel the musician will hear himself only, not the previous recorded signal on that track. A most convenient way of headphone mix today is as follows. Most of todays multitrack will give the input signal at its output when in recording.
Derive the headphone mix from the tape. As long as the tape is in the replay mode the musician will hear his previous recorded tracks and the moment the engineer goes into record he will hear himself life. This method saves the engineer from continually switching monitor sources.
By adding the AUX signal from the recording channel the musician will hear himself before the moment of recording too. As soon as the multitrack goes into recording a slight increase in the level will be heard. Not too bad, because the musician exactly knows that what he is doing will be recorded.

REMIX

Remix is the process of combining all recorded track together with extensive signal processing.
In the STYLYX all tape tracks are normalled to the line inputs of the last input channel. It is only necessary to switch the microphone inputs to line in the in/out channels. All incoming signals can be routed to the stereo master through the mix push-button. Subgroups can be made as desired in the same way as during recording.
The Aux sends 1 and 2 can be switched to post if necessary.

P.A. SET UP

The STYLYX is an ideal console for P.A.. It is so compact even with a lot of channels in use. In P.A. situations it is often desired to have permanent subgroups. This can be accomplished as follows.
Route to one or more subgroup channels and activate the "Split" button.
Now the summed subgroup signal is directly connected to the panpot, which is connected to the left/right mix busses. Now the tape return in the subgroup channels is available for effect return. This effect return signal is now routed via the monitor pot directly to the subgroup buss. In this situation the relation between original and effect will be maintained on all subgroup fadersettings.

CONNECTORS

MONO CHANNEL:

XLR input:	level	: -70 to -20dB
	pin 1	: signal ground.(screen)
	pin 2	: signal (in phase, hot)
	pin 3	: signal (out of phase, cold)
Line inputs:	level	: -20 to infinity
	tip	: signal (in phase, hot)
	ring	: signal (out of phase, cold)
	sleeve	: signal ground If this input is used in an unbalanced mode, always connect the ring to earth, or use a mono jack.
Direct outputs:	level	: -10dBV on tip + 4dBU on ring
	tip	: signal low (-10dBV).
	ring	: signal high (+4dBU).
	sleeve	: signal ground.
Insert:	level	: 0dBU
	tip	: signal input.
	ring	: signal output.
	sleeve	: signal ground.

STEREO CHANNEL

Line input:	level	: -30dB to infinity.
	tip	: signal (in phase)
	ring	: signal (out of phase)
	sleeve	: signal ground.
Direct output:	level	: +4dBu (can be set to -10dBV by jumper setting).
	tip	: signal left.
	ring	: signal right.
	sleeve	: signal ground.

Optional:

Remote connector	level	: maximum of 24 Volt 500 mA.
	tip	: changeover contact.
	ring	: connected to tip when fader high.
	sleeve	: connected to tip when fader down.

SUBGROUP MODULE

Return A/B	level	: -10dBV/+4dBu.
	tip	: signal -10dBV.
	ring	: signal +4dBU.
	sleeve	: signal ground.
Tape A/B in/out	level	: -10dBV/+4dBu dependent upon jumper settings.
	tip	: signal input.
	ring	: signal output.
	sleeve	: signal ground.
Patch point	level	: 0 dBu.
	tip	: return signal.
	ring	: send signal.
	sleeve	: signal ground.

MASTER MODULE

AUX returns:	level	: -10dBV
	tip	: signal left
	ring	: signal right
	sleeve	: signal ground
AUX outputs:	level	: +4dBu
	tip	: signal (in phase, hot)
	ring	: not connected
	sleeve	: signal ground
Inserts:	level	: 0dB
	tip	: return signal
	ring	: send signal
	sleeve	: signal ground
Master outputs left/right:		level : +4dBu (can be set to -10dBV by jumper setting) pin1 : ground pin2 : hot (in phase) pin3 : cold (out of phase) If the output is used in an unbalanced environment, always connect pin 3 to earth.
2 Track A/B:	level	: -10dBV (can be set to +4dBU by jumper settings)
	tip	: left
	ring	: right
	sleeve	: signal ground
C.R.M :	level	: +4dBU (1.22 Volt)
	tip	: left output
	ring	: right output
	sleeve	: ground

Power (XLR):	pin 1	: ground
	pin 2	: +18 Volt
	pin 3	: -18 Volt
	pin 4	: phantom (+4dBV)
	pin 5	: chassis ground
Talkback	level	: -70dBu - to -30dBu.
	pin1	: ground
	pin2	: hot in phase
	pin3	: ground.

INSTALLATION:

Applying Power:

Before switching on the power supply of the STYLYX check the mains voltage of the supply by looking at the sticker on the back of the 19" housing.
This should be 110 Volt for area's with voltages from 100 to 120 Volts and 220 Volts for area's with 220 to 240 Volt main voltages.
The main fuse should be 3.15 Amp, 20 mm Anti surge for 220 Volt, and 6.3 Amp, 20 mm Anti surge for 110 Volt area's.
Do not replace the fuse with any other type, as this could become a safety hazard, and will void the warranty.

INTERFACE LEVELS

The STYLYX is prepared for interfacing with all available equipment in its standard configuration see Connectors.
One point of attention has to made concerning the C.R.M. output. This output delivers a nominal +4dBU level which is sometimes too high for power amps rated at 300mV sensitivity for full output.
In those cases install an input attenuator at the power amps input to reduce this +4dBU level by approximately 12 dB.
Use a 2k2 series resistor and a 680 ohm shunt resistor across the amplifier input.

GENERAL WIRING PROCEDURES

To take full advantage of the excellent signal to noise ratio of the STYLYX it is necessary to carefully read this part of the manual.
Hum, radio frequency interference, buzzes, instability are often caused by improper wiring and inferior earthing systems. Sometimes the incoming mains earth is not adequate for studio earthing and a separate technical earth has to be made for all the audio equipment.
Your electricity supply company will give you all the details to avoid insufficient safety regulations.
There are some ground rules to be followed.
All signals in a studio are referenced to earth. This earth has to be clean and free of noise. A central point should be decided for the main earth point system and all earths should be started from this point.

The way your electricity company has daisy chained the earth in your situation is unsuitable for your studio. The best way is to run a separate earth wire from each outlet to the system starpoint earth. This is the safety earth and screen reference for all your equipment.
A separate wire from all the equipment racks to the starpoint is nice to have in cases where the earthing via mains plugs is not satisfying.
The starpoint should be located at the rear of the console or equipment rack.
Install separate "clean and dirty" mains outlets. The "clean" ones for audio equipment and the "dirty" ones for lighting, air-conditioning, freezers and so on.
Do not mix up these two sorts of outlets.
Mains born interference can be isolated by introducing an isolating transformer for the clean outlets earth the transformer directly to the technical earth or as close as possible to the incoming earth.
All equipment has to be located as far as possible from the incoming mains distribution boxes.
Unbalanced equipment may need to be isolated from the rack to avoid earth loops.

SETTING UP THE INITIAL WIRING

First connect the power supply of the STYLYX to the console. All faders must be down and the C.R.M. fully up.

a Connect the power amps to the C.R.M. outputs and check for any hum, buzz or interference. If this is allright proceed.

b Now the multitrack can be wired up. First the tape out to the line inputs and check noise/hum with every connected channel. It will built up a little of course.
Then connect the inputs of the multitrack to the channel outputs of the STYLYX.
Carefully listen to the noise/hum.

c Connect stereo tape recorders, studio monitors and all signal processors, one at the time and keep checking that your system stays clean. If note carefully check that there is no earth loop.

SHIELDING/EARTHING OF AUDIO EQUIPMENT

The screen of any audio connection should be connected at one end only. If not, earth loops and high frequency crosstalk will be the result. Connect the shield as a general rule to the signal source end. In high R.F. area's it is wise to earth the other end of the screen via a Ø.Ø1 uF capacitor. This will be a short circuit at high frequencies but not at low frequencies.

Typical shielding situations:

Output	Input	Screen (shield)
Unbalanced	Unbalanced	Source
Unbalanced	Balanced	Source
Unbalanced	Differential	Source
Balanced	Unbalanced	Destination
Balanced	Balanced	Source
Balanced	Differential	Destination
Differential	Unbalanced	Source
Differential	Balanced	Source
Differential	Differential	Source.

Balanced means transformer balanced, while differential is electronically balanced.
There are some cases which give better results in practise. Always connect one at the time and check.
Always use twin screened audio cables and connect both conductors at both ends, the shielding at one and. (except patch, cords, these earths are tied together in the console).
We know that this part is a difficult one but once properly installed and wired, the results will be clean and noise free.

FAULT FINDING

It is essential to study the signal flow chart carefully. Only in this way you can isolate problems in the STYLYX. By following the signal through in and output jacks its is possible to locate a fault. If a fault is located, inform your dealer or us and we will try to help you by advice if this will not help just return the channel or master to your dealer or the factory and we will be happy to repair it within 24 hours.
Many faults can be found by logical thinking and replacing integrated circuits, which is very easy they are all socketed.

REMOVING A MODULE

Switch off the power supply first.
In case a mono or stereo channel has to be removed it is not necessary to remove the metal number indicator strip placed behind the modules. It is always easier to remove a module when this strip is also removed, but not always necessary.

The "number strip" can be removed by unscrewing the two bolts on either side of the console hidden behind the caps placed in the sideparts of the console housing. When a ledbar is mounted this will be removed together with the numbering strip. The female connector of the ledbar is mounted in the metal housing. It is a sub D connector mounted below the module retaining screws in the chassis stabalizer section.
To remove a module, first untight the retaining screws, which will allow to carefully withdraw the module in an upwards direction. When the module is lifted, carefully disconnect its flatcable (In some channels there are two flatcables) and remove the module out of the chassis. Now extender cables can be connected (if ordered).
The master section can be lifted in the same way, but we .....to service the master section only by qualified personal. To replace a module, sometimes it is easier to unscrew nearby modules retaining screws. This will make replacing the modules easier.

NOTE: START with rightening the backscrew first.

SUMMARY

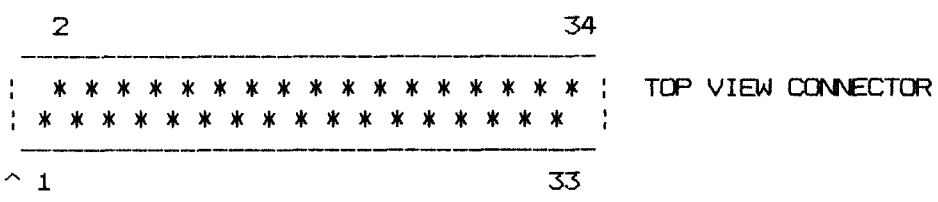
In this manual we have tried to give you an oversight of all the possibilities the STYLYX offers you. If there are questions left do not hesitate to contact us or your dealer.
With the STYLYX we are sure there is no limit to your creativity anymore.
We wish you many years of enjoyable music.

Best regards,

D. de Rijk
president.

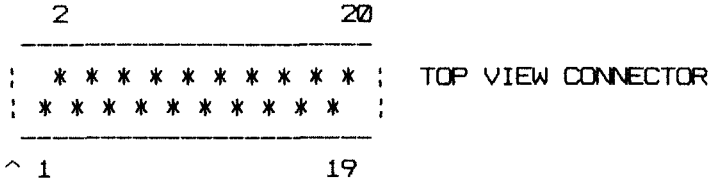
STYLYX MAIN-CONNECTOR date: 10-04-1988

pin nr.:	function:
1	digital ground
2	digital ground
3	- 18 V (for logic supplies)
4	+ 18 V (for logic supplies)
5	audio ground
6	ground logic
7	right master mixbuss
8	logic buss
9	left master mixbuss
10	solo mixbuss
11	sub 8 mixbuss
12	+ 18 V (for audio supply)
13	sub 7 mixbuss
14	+ V phantome (+48V)
15	sub 6 mixbuss
16	audio ground
17	sub 5 mixbuss
18	audio ground
19	sub 4 mixbuss
20	audio ground
21	sub 3 mixbuss
22	audio ground
23	sub 2 mixbuss
24	audio ground
25	sub 1 mixbuss
26	audio ground
27	aux 4 mixbuss
28	audio ground
29	aux 3 mixbuss
30	C-mix on/off (optional)
31	aux 2 mixbuss
32	chassis earth
33	aux 1 mixbuss
34	- 18 V (for audio supply)



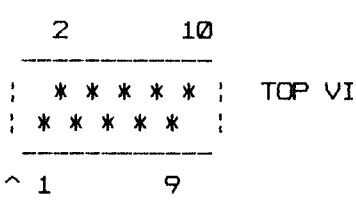
STYLYX AUX-INTERFACE CONNECTOR date: 10-04-1988

pin nr.:	function:	CONN 6 on PCB-5 <---> CONN 15 on PCB-4
1	aux-4 LED	
2	+ Vs1 supply (from PCB-5)	
3	aux-4 reset	
4	n.c.	
5	aux-4 set audio	
6	aux-3 LED	
7	aux-3 reset audio	
8	n.c.	
9	aux-3 set audio	
10	n.c.	
11	aux-1 LED	
12	n.c.	
13	aux-2 reset audio	
14	n.c.	
15	aux-2 set audio	
16	n.c.	
17	aux-1 set audio	
18	aux-1 reset audio	
19	- Vs1 supply (from PCB-5)	
20	aux-2 LED	



STYLYX AUX-AUDIO CONNECTOR date: 10-04-1988

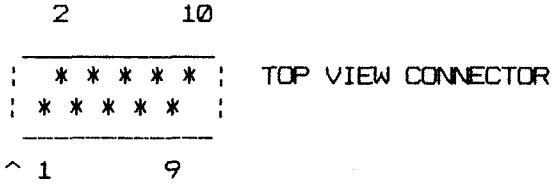
pin nr.:	function:	CONN 25 on PCB-5 <---> CONN 24 on PCB-4
1	ground shield (from PCB-4)	
2	aux-4 (slider)	
3	ground shield (from PCB-4)	
4	aux-3 (slider)	
5	ground shield (from PCB-4)	
6	aux-2 (slider)	
7	ground shield (from PCB-4)	
8	aux-1 (slider)	
9	ground shield (from PCB-4)	
10	+ Vs1 (from PCB-5)	



STYLYX LEFT-MASTER AUDIO CONNECTOR date: 10-04-19

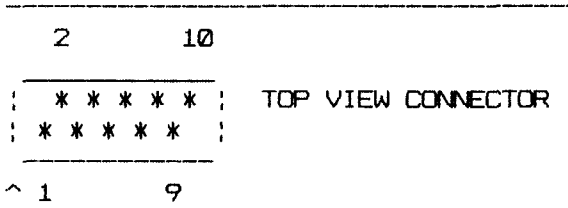
88

pin nr.:	function:	CONN 14 on PCB-4 <---> CONN 11 on PCB-6
1		L-LEDbar send (to PCB-4)
2		L-out (ØdBu)
3		two-track B right-input
4		ground shield (from PCB-4)
5		two-track B left-input
6		ground shield (from PCB-4)
7		two-track A right-input
8		ground shield (from PCB-4)
9		two-track A left-input
10		ground shield (from PCB-4)

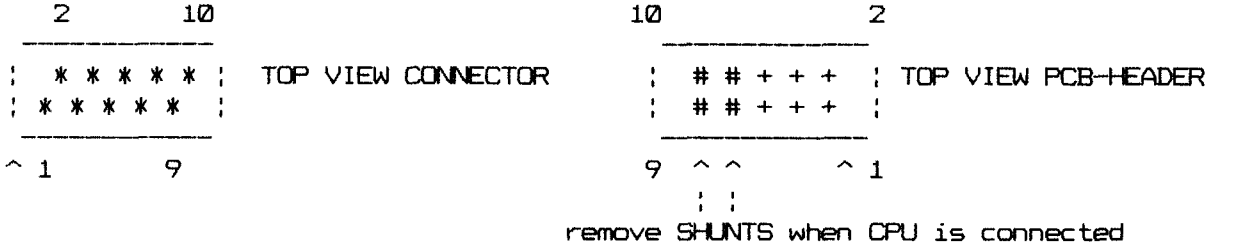


STYLYX CPU-REFERENCE CONN. date: 10-04-1988

pin nr.:	function:	CONN 5 on PCB-5 <---> on CPU module
1	+ 18 V	
2	+ 18 V	
3	+ 48 V (phantome)	
4	earth	
5	C-mix on/off	
6	earth	
7	chassis earth	
8	earth	
9	- 18 V	
10	- 18 V	

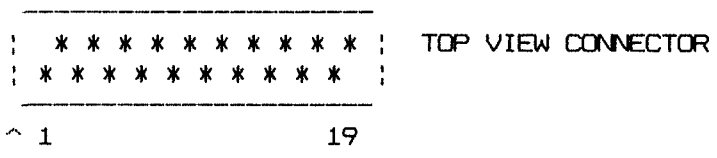


pin nr.:	function:	CONN 201 on CHANNEL, CONN 201-204 on master
1	LED (off)	
2	audio-sw (off)	
3	earth (CPU)	
4	switch-status	
5	inverted IRQ	
6	not wired	
7	LED (off)	
8	not wired (used for local-mode only)	
9	audio sw (off)	
10	not wired (used for local-mode only)	



STYLYX LED-BAR CONNECTOR date: 10-04-1988

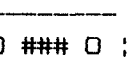
pin nr.:	function:	CONN 6 on PCB-3, CONN 9 on PCB-6, D-CONN chassis
1	+ 18 V	
2	ground logic	
3	L-master LEDfeed	
4	R-master LEDfeed	
5	tape return	3 LEDfeed
6	tape return	4 LEDfeed
7	tape return	7 LEDfeed
8	tape return	8 LEDfeed
9	tape return	11 LEDfeed
10	tape return	12 LEDfeed
11	tape return	15 LEDfeed
12	tape return	16 LEDfeed
13	tape return	1 LEDfeed
14	tape return	2 LEDfeed
15	tape return	5 LEDfeed
16	tape return	6 LEDfeed
17	tape return	9 LEDfeed
18	tape return	10 LEDfeed
19	tape return	13 LEDfeed
20	tape return	14 LEDfeed



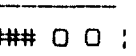
STYLYX-1A SHUNT SETTINGS

date: 10-04-1988

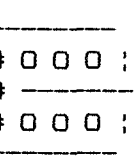
CONN 3 AUX1+2 standard: pre fader



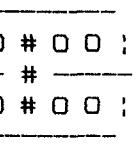
optional: pre equalizer



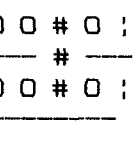
CONN 4+5 AUX3+4 standard: post fader



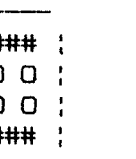
optional: pre equalizer



optional: pre fader

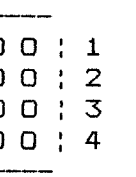


CONN 6 C-MIX standard: not in use

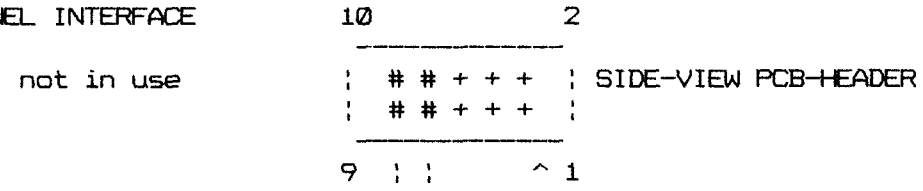


optional: in use

(no shunts)



CONN 201 CPU CHANNEL INTERFACE

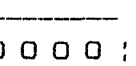


standard: not in use

optional: CPU in use

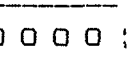
STYLYX-1A WIRING

CONN 2 MIC INPUT (XLR) colour



1	not wired	-	(black)
2	ground	1	(green)
3	out of phase	3	(red)
4	in phase	2	(blue)

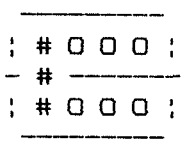
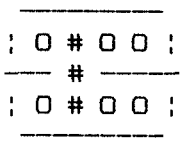
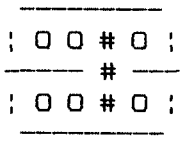
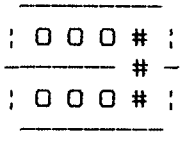
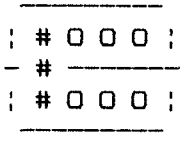
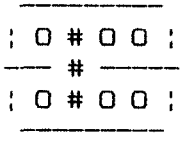
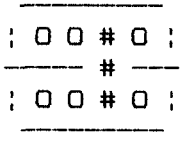
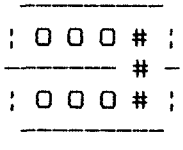
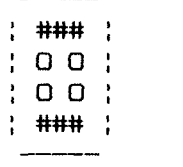
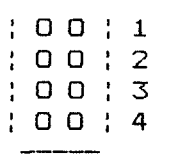
CONN 7 FADER CONN. (FADER) colour



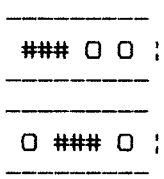
1	not wired	-	(black)
2	top	3	(green)
3	ground	1	(red)
4	slider	2	(blue)

STYLYX-2A SHUNT SETTINGS

date: 30-05-1988

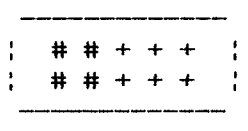
CONN 4	AUX1+2	optional: post fader	
		optional: switchable	
		standard: pre fader	
		optional: pre equalizer	
CONN 5	AUX3+4	standard: post fader	
		optional: switchable	
		optional: pre fader	
		optional: pre equalizer	
CONN 6+7	C-MIX	standard: not in use	
		optional: in use (no shunts)	

CONN 8+9 DIRECT OUT standard : + 4dBu



optional: -10dBV

CONN 201 CPU CHANNEL INTERFACE



SIDE-VIEW PCB-HEADER

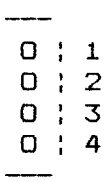
standard: not in use

optional: CPU in use remove 2 SHUNTS

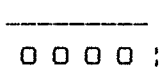
STYLYX-2A WIRING

CONN 2+3 FADER CONN. (FADER) colour

1	not wired	-	(black)	
2	top	3	(green)	
3	ground	1	(red)	
4	slider	2	(blue)	



CONN 10 REMOTE CONN. (SWITCH) color (JACK)



1	not wired	-	(black)	
2	break-contact	2	(green)	[sleeve]
3	make-contact	4	(red)	[ring]
4	P-contact	1	(blue)	[tip]

STYLYX-3A SHUNT SETTINGS

date: 25-04-1988

CONN 2 + 7 AUX 3 + 4

standard: post-fader

(2 x 1 shunt)

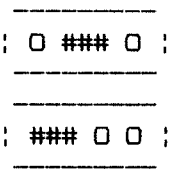
optional: pre equalizer

CONN 3 + 8 TAPE OUT

standard: -10 dBV

(1 shunt)

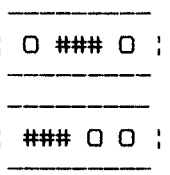
optional: + 4 dBu



CONN 4 + 9 TAPE IN

standard: -10 dBV

optional: + 4 dBu



CONN 5 SUBGROUP SELECT

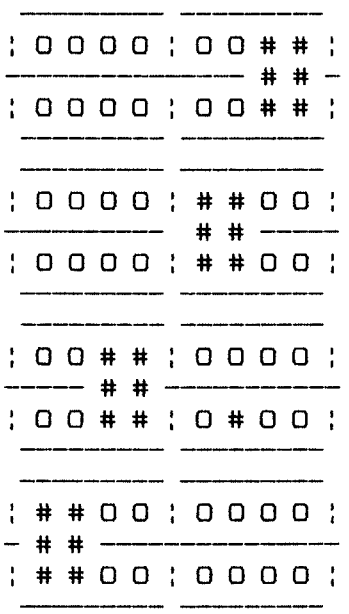
(2 shunts)

first module:

second module:

third module:

fourth module:



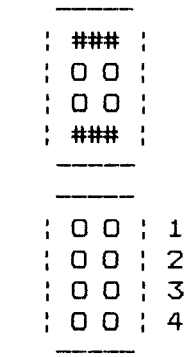
CONN 10+11 C-MIX

standard: not in use

(2 x 2 shunts)

optional: in use

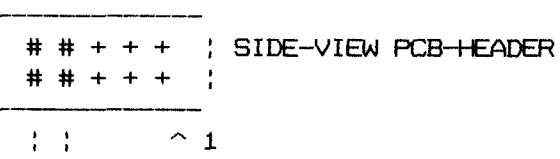
(no shunts)



CONN 201+202 CPU CHANNEL INTERFACE

standard: not in use

optional: CPU in use



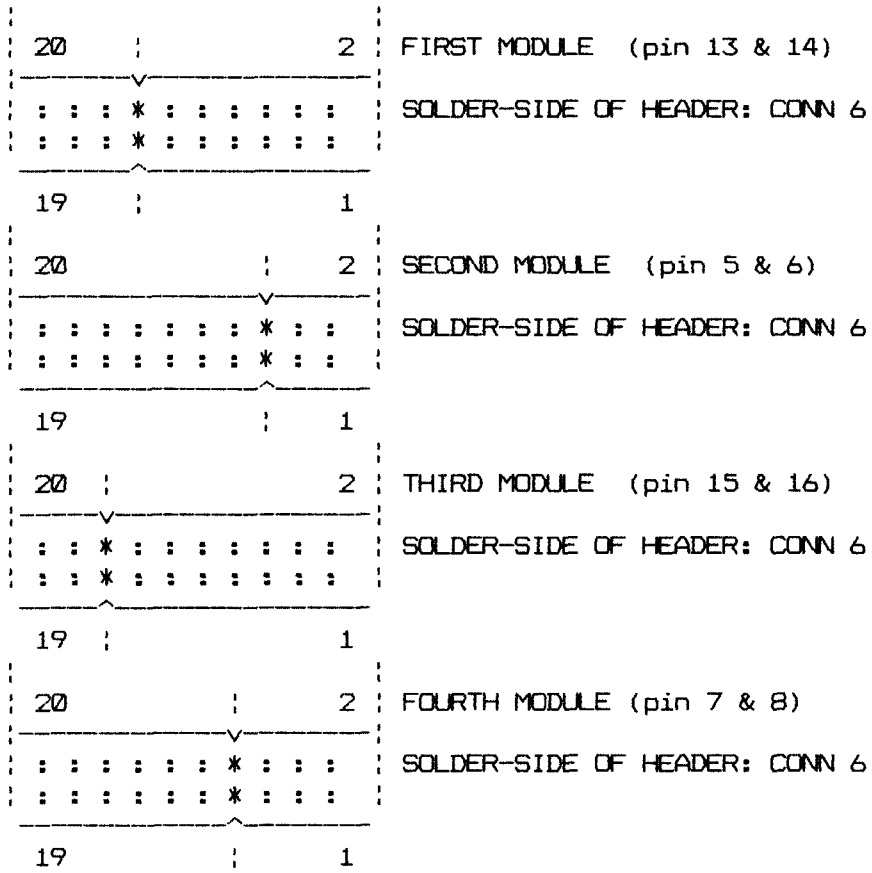
SIDE-VIEW PCB-HEADER

STYLYX-3A WIRING

CONN 12+13 FADER CONN. (FADER) colour

1	not wired	-	(black)	1
2	top	3	(green)	2
3	ground	1	(red)	3
4	slider	2	(blue)	4

CONN 6 LEDBAR CONNECTOR 20pins



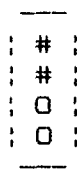
optional FIFTH MODULE : pin 17 & 18
optional SIXTH MODULE : pin 9 & 10
optional SEVENTH MODULE : pin 19 & 20
optional EIGHTH MODULE : pin 11 & 12

STYLYX-4A SHUNT SETTINGS

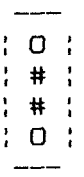
date: 10-04-1988

CONN 2 L-OUT standard: + 4 dBu

(1 shunt)

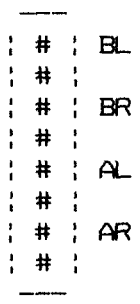


optional: -10 dBV
(1 shunt)

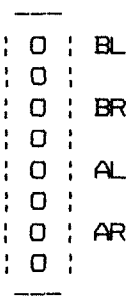


CONN 3 2-TRACK A/B standard: -10 dBV

(4 shunts)

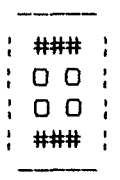


optional: + 4 dBu
(no shunts)

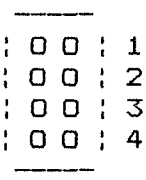


CONN 12 C-MIX standard: not in use

(2 shunts)



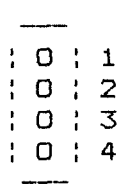
optional: in use
(no shunts)



STYLYX-4A WIRING

CONN 13 C-MIX ON

		colour
1	not connected	(black)
2	not connected	(green)
3	C-MIX on (+12V)	(red)
4	C-MIX ground	(blue)

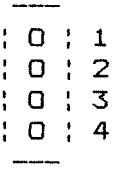


CONN 14 LEFT-MASTER AUDIO CONN. to PCB-6 10-pin to 10-pin connector

CONN 15 AUX-INTERFACE to PCB-5 20-pin to 20-pin connector

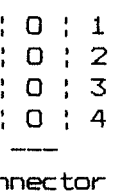
CONN 21 FADER CONN.

		(FADER)	colour
1	not wired	-	(black)
2	top	3	(green)
3	ground	1	(red)
4	slider	2	(blue)



CONN 22 LEFT OUTPUT (XLR)

			colour
1	not wired	-	(black)
2	ground	1	(green)
3	out of phase	3	(red)
4	in phase	2	(blue)



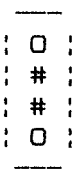
CONN 24 AUX AUDIO to PCB-5 10-pin to 10-pin connector

STYLYX-6A SHUNT SETTINGS

date: 10-04-1988

CONN 8 R-OUT standard: + 4 dBu

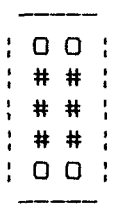
(1 shunt)

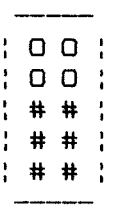


optional: -10 dBV
(1 shunt)

CONN 10 LEDBAR SELECT standard: L/R

(2 shunts)

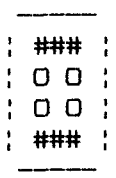


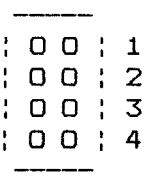


optional: SOLO
(2 shunts)

CONN 16 C-MIX standard: not in use

(2 shunts)



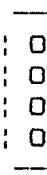


optional: in use
(no shunts)

STYLYX-6A WIRING

CONN 20 TALKBACK (XLR) colour

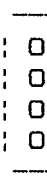
1	TALKBACK input	2	(blue)	4
2	ground	3	(red)	3
3	ground	1	(green)	2
4	not wired	-	(black)	1



CONN 11 LEFT-MASTER AUDIO CONN.to PCB-4 10-pin to 10-pin connector

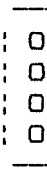
CONN 18 FADER CONN. (FADER) colour

1	not wired	-	(black)	1
2	top	3	(green)	2
3	ground	1	(red)	3
4	slider	2	(blue)	4



CONN 19 RIGHT OUT (XLR) colour

1	not wired	-	(black)	1
2	ground	1	(green)	2
3	out of phase	3	(red)	3
4	in phase	2	(blue)	4



product safety

This product is manufactured with the highest standards and is double checked in our quality control department for reliability in the "HIGH VOLTAGE" section.

CAUTION

- Never remove any panels, or open this equipment. No user servicable parts inside.
- Equipment power supply must be grounded at all times.
- Only use this product as described, in user manual or brochure.
- Do not operate this equipment in high humidity or expose it to water or other liquids.
- Check the AC power supply cableto assure secure contact.
- Have your equipment checked yearly by a qualified dealer service center.
- Hazardous electrical shock can be avoided by carefully following the above rules.

EXTRA CAUTION FOR LIVE SOUND

Ground all equipment using the ground pin in the AC power supply cable. Never remove this pin. Ground loops should be eliminated only by use of isolation transformers for all inputs and outputs. Replace any blown fuse with the same type and rating only after equipment has been disconnected from AC power. If problem persists, return equipment to **qualified service technician.**

Please carefully read the followig information

Especially in sound equipment on stage the fllowing information is essential to know. An electrical shock is caused by voltage and current, actually it is the current that causes the shock. In practise the higher the voltage the higher the current will be and the higher the shock.

But there is another thing to consider and it is resistance. When the resistance (in Ohms) is high between two poles, the current will be low and vica versa.

All three of these; voltage, current, and resistance are important in determining the effect of an electrical shock. **However, the severity of a sheck is primarily determined by the amount of current flowing through a person.h**

A person can feel a shock because the muscles in a body respond to electrical current and because the heart is a muscle it can affect, when the current is high enough. Current can also be fatal when it causes the chest muscles to contract and stop breathing.

At what potential is current dangereous. Well the first feeling of current is a tingle at 0.001 Amp of current. The current between 0.1 Amp and 0.2 Amp is fatal.

Imagine that your home fuses of 20 Amp can handle 200 times more current than is necessary to kill. How does resistance affect the shock a person feels. Atypical resistance between one hand to the other in "dry" condition could well over 100,000 Ohm. **If you are playing on stage your body is perspiring pofusely and your body resistance is lowered by more than 50%. This is a situation in which current can easily flow.** Current will flow when there is a difference in ground potential between equipment on stage and in the P.A. system.

Please do check if there is any potential between the housing of the mikes and the guitar/synth amps, which will be linked by your body on stage. Imagine, a guitar in your hand and your lips close to the mike! A ground potential difference of above 10 volts is not unusual, in improperly wired buildings it can possibly be as high as 240 volts. Allthough removing the ground wire sometimes cures a system hum, it will create a very hazardeous situation for the performing musician.

Always earth all your equipment by the grounding pin in your mains plug. Hum loops should only be cured by proper wiring and isolation input/output transformers.

Replace fuses always with the same type and rating after the equipment has been turned off and unplugged. If the fuse blows again you have an equipment failure, do not use it again and return it to your dealer for repair.

And last but not least Be carefull not to touch a person being shocked as you, yourself could also be shocked. Once removed from the shock, have someone send for medical help immediately.

Always keep the above mentioned information in mind when using electrically powered equipment.