



PROFESSIONAL AUDIO

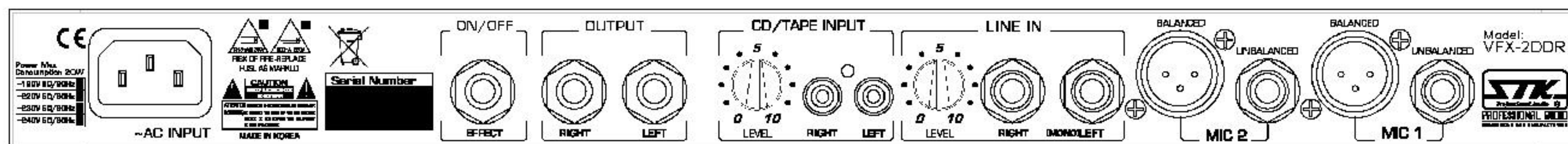
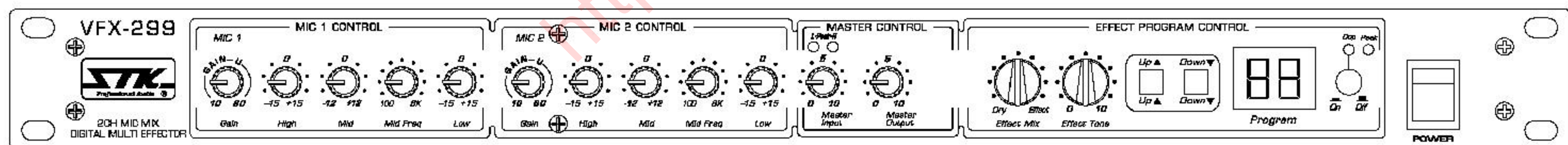
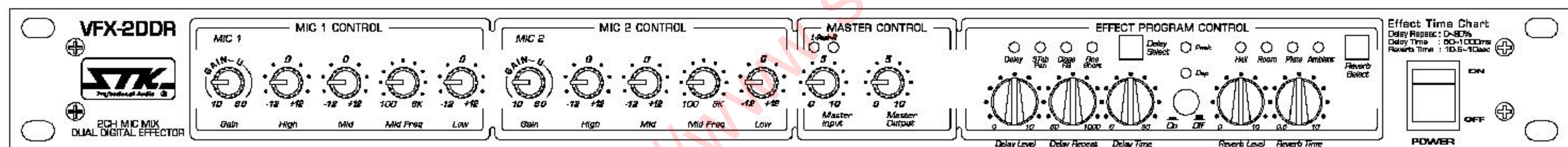
ENGINEERING AND MANUFACTURING

VFX-2DDR / VFX-299

2CH MIC Mix Multi Effector

OWNER'S MANUAL

ENGLISH





PROFESSIONAL AUDIO

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VFX-2DDR / VFX-299

2CH MIC Mix Multi Effector

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I Introduction

Thank you for purchasing the VFX-series master effects processor.
To take full advantage of the VFX-series functions, and to enjoy long and trouble-free use,
please read this owner's manual carefully.

II Important Safety Instructions

1. **Read Instructions**– All the safety and operating instructions should be read before the appliance is operated.
2. **Retain Instructions**– The safety and operating instructions should be retained for future reference.
3. **Heed Warnings**– All warnings on this appliance and in the operating instructions should be adhered to.
4. **Follow Instructions**– All instructions should be followed.
5. **Water and Moisture**– This appliance should not be used near water– for example, near a bathtub, sink, laundry tub, in a wet basement, near a swimming pool, etc.
6. **Heat**– This appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
7. **Power Sources**– This appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. For appliances intended to operate from battery power, or other sources, refer to the operating instructions.
8. **Polarization**– If the appliance is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other), this plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
9. **Grounding**– If the appliance is equipped with a 3-wire grounding-type plug, a plug having a third (grounding) pin, this plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
10. **Power Cord Protection**– Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
11. **Damage Requiring Service**– Unplug this appliance from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the power-supply cord or plug is damaged.
 - b. If liquid has been spilled, or objects have fallen into the appliance.
 - c. If the appliance has been exposed to rain or water.
 - d. If the appliance does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the appliance to its normal operation.
 - e. If the appliance has been dropped or the cabinet has been damaged.
 - f. When the appliance exhibits a distinct change in performance–this indicates a need for service.
12. **Servicing**– Do not attempt to service this appliance yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

III Warranty Information

UNPACKING

As a part of our system of quality control, every STK product is carefully inspected before leaving the factory to insure flawless appearance. After unpacking, please inspect for any physical damage. Save the shipping carton and all packing materials, as they were carefully designed to reduce the possibility of transportation damage should the unit again require packing and shipping. In the event that damage has occurred, immediately notify your dealer so that a written claim to cover the damage can be initiated with the carrier. The right to any claim against a public carrier can be forfeited if the carrier is not promptly notified and if the shipping carton and packing materials are not available for inspection by the carrier. Save all packing materials until the claim has been settled.

STK LIMITED 1 YEAR WARRANTY

STK electronics are warranted to be free from defects in materials and workmanship under normal use for a period of 1 year from date of original purchase. During that period, STK will at its option, repair or replace materials at no charge if product has been delivered to STK by an STK dealer or STK Service Center together with the original sales receipt or other proof of purchase. Warranty excludes fuses, exterior finish, normal wear, failure due to abuse, or operation outside of specified ratings. Warranty applies to original purchaser only. This warranty gives you specifically rights which vary from state to state. For more information about warranty repair, please contact: **Customer Service Dept., STK Professional Audio.**

FOR YOUR RECORDS

All of us at STK thank you for your expression of confidence in STK products. The unit you have purchased is protected by a limited 1 year warranty. To establish the warranty, be sure to fill out and mail the warranty card attached to your product.

STK Customer Service Department
369-2 KURAERI YANGCHON-MYUN KIMPO-CITY KYOUNGGI-DO, KOREA.
TEL : +82-(0)31-981-1788 FAX : +82-(0)31-981-1784
E-mail : stkcom@stkpro.com
www.stkpro.com

For you own protection, fill out the information below for you own records.

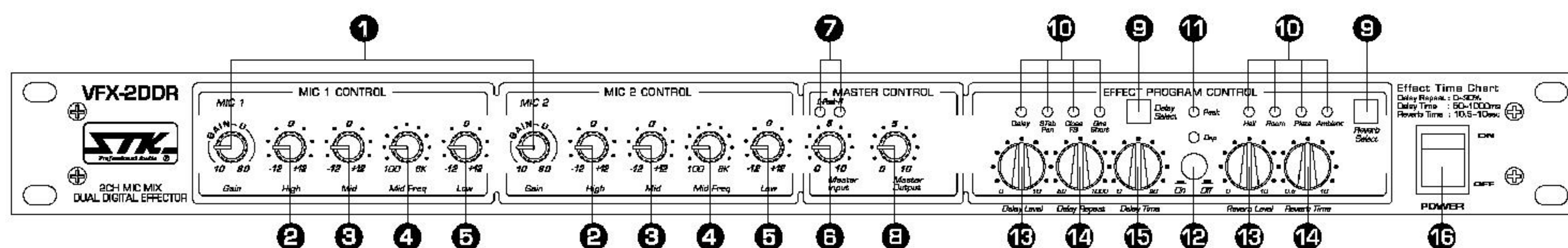
Model Number _____	Serial Number _____
Dealer _____	Date Of Purchase _____

Salesman _____	Phone _____
Other Information _____	

IV Panel Descriptions

VFX-2DDR

FRONT PANEL SECTION



1. Mic Level

Level adjusts the input sensitivity of the Mic inputs connected to MIC1 through MIC2.

If the signal originates through the XLR Jack, there will be 10dB of gain with the knob fully down, ramping to 50dB of gain fully up.

2. High Equalization

Provides ± 15 dB of shelving equalization control to boost or cut high frequency signals 12KHz and above. Affects three Microphone input signals.

3. Mid Equalization

Provides ± 12 dB of peak/dip equalization control to boost or cut midrange signal.

The frequency ranges are adjust by the setting of mid frequency control(4).

4. Mid Frequency Sweep

Adjust the frequency of mid range control(3) from 100Hz to 8kHz.

5. Low Equalization

Provides ± 15 dB of shelving equalization control to boost or cut low frequency signals 80Hz and below.

Affects three Microphone input signals.

6. Input Master Control

The Input Level controls the level of the signal being fed into the VFX-2DDR. The VFX-2DDR can operate with signal levels anywhere from Pro Audio gear to guitar level signals.

7. Peak LED(L/R)

This circuit has adequate headroom for normal application. If the signal applied to the Master Effect from the channel inputs is too high, the Master Effect peak LED glows red, indicating that you should reduce the Master input level of the channels to prevent distortion.

8. Output Master Control

The Output Level controls the volume of the signal from the output of the VFX-2DDR

The optimum level for this control is 3 o'clock, but it can be raised or lowered as necessary.

9. Effect Program Select(Delay/Reverb)

Determine the application program of desired effect sound. These key allow for the selection of the delay or reverb effect sounds.

Delay Select : 1. DELAY 2. 3 TAP PAN 3. CLOSS F.B 4. ONE SHORT

Reverb Select : 1. HALL, 2. ROOM 3. PLATE 4. AMBIENT

10. Program Display.

This indicator show the selected delay and reverb effect sound function.

11. Effect Peak Indicator

This indicator turn on the peak effect signals.

12. Effect on/off Switch with Indicator

This key serves for effect sound on and off. During DSP ON time, the display LED is light..

13. Effect Level Control (Delay/Reverb)

This level controls the each Delay and Reverb effect sound from Digital signal processor. .

14. Delay Repeat Adjust

This controls the Delay Repeat from 0 to 90 % range by Digital signal processor.

15. Delay and Reverb Time Adjust

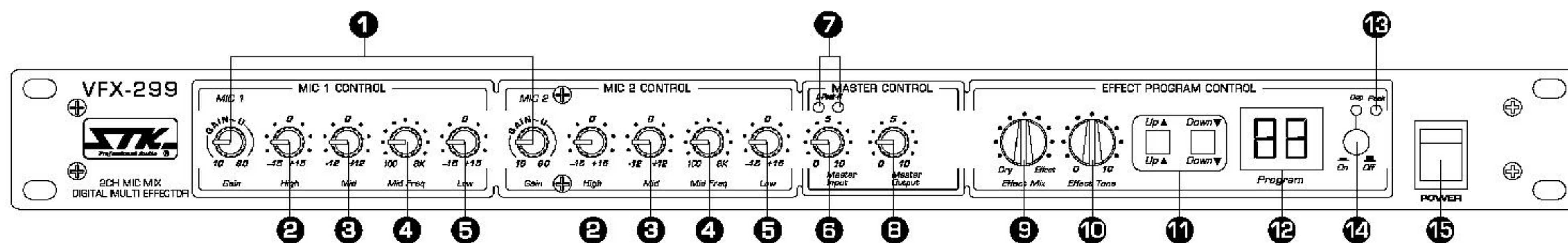
The Delay time is adjust from 50 msec to 1000 msec.

The Reverb time is adjust from 0.5 sec to 10 sec

16. Power Switch

This is main AC POWER SWITCH

FRONT PANEL SECTION



1. Mic Level

Level adjusts the input sensitivity of the Mic inputs connected to MIC1 through MIC2.

If the signal originates through the XLR Jack, there will be 10dB of gain with the knob fully down, ramping to 50dB of gain fully up.

2. High Equalization

Provides ± 15 dB of shelving equalization control to boost or cut high frequency signals 12KHz and above. Affects three Microphone input signals.

3. Mid Equalization

Provides ± 12 dB of peak/dip equalization control to boost or cut midrange signal.

The frequency ranges are adjust by the setting of mid frequency control(4).

4. Mid Frequency Sweep

Adjust the frequency of mid range control(3) from 100Hz to 8kHz.

5. Low Equalization

Provides ± 15 dB of shelving equalization control to boost or cut low frequency signals 80Hz and below. Affects three Microphone input signals.

6. Input Master Control

The Input Level controls the level of the signal being fed into the VFX-299. The VFX-299 can operate with signal level ls +4dBu anywhere from Pro Audio gear to guitar level signals.

7. Peak LED(L/R)

This circuit has adequate headroom for normal application. If the signal applied to the Master Effect from the channel inputs is too high, the Master Effect peak LED glows red, indicating that you should reduce the Master input level of the channels to prevent distortion.

8. Output Master Control

The Output Level controls the volume of the signal from the output of the VFX-299

The optimum level for this control is 3 o'clock, but it can be raised or lowered as necessary.

9. EFF MIX Control

The Mix Level controls the balance between the unaffected signal coming through the inputs and the effects being generated by the VFX-299. When the Mix is turned all the way to the left, the input signal will be sent straight to the output with no effects added. When the Mix is turned all the way to right, the effects will be sent to the outputs with the original input signal mixed in.

By keeping the Mix somewhere in the center, a blend of dry and wet signal can be achieved.

10. EFX Tone Control

The EFX tone controls the volume of the effect tone from the output of the DSP. The optimum level for this control is center, but it can be raised or lowered as necessary.

11. Effect Program Select

Determine the application program of desired effect sound. These key allow for the selection of the 99 different effect sounds.(Refer to Program Chart)

12. Program Display.

This indicator show the selected each effect sound number.

13. Effect Peak Indicator

This indicator turn on the peak effect signals.

14. Effect on/off Switch with Indicator

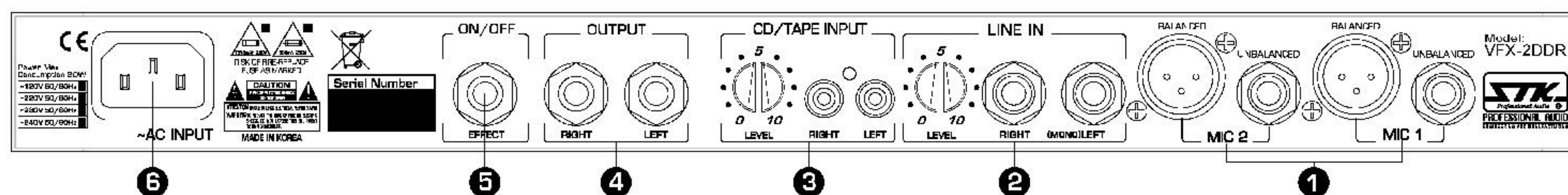
This key serves for effect sound on and off. During DSP ON time, the display LED is light.

15. Power Switch

This is main AC POWER SWITCH

Panel Descriptions

REAR PANEL SECTION(VFX-2DDR/VFX-299)



1. **Mic Input Jacks**
This input accepts a standard XLR or 1/4" TRS microphone connector .
2. **Right, Left(Mono) Input Jack AND Level Control**
These are 1/4 " phone jacks which connect to sources such as the effects sends of mixing consoles. For mono applications, use the Left (Mono) input. The Left (Mono) input jack is normalized to the Right jack.
This means that when nothing is plugged into the Right input jack, the signal present at the Left (Mono) input is routed to the Right as well.
3. **CD/Tape Input Jack AND Level Control**
This allows a CD Player, cassette deck or another music source to be attached via unbalanced RCA connections.
4. **Right, Left Output Jack**
These are 1/4 " phone jacks which connect to devices such as the effects returns on a mixing console or Power Amplifier Inputs. For mono applications, use the Left output.
5. **Effect On/Off**
The footswitch jack is a standard 1/4" size accommodating a monaural ON/OFF footswitch that enable/disable the internal effects.
6. **AC Input Connector**
For safety, All units are equipped with a three conducted AC line cord.
For replace AC FUSE, It must be use same type fuse as marked
(See page 13 specification for the correct value)

VFX-299 PROGRAM CHART

REVERBERATION EFFECTS(45)	ECHO/DELAY EFFECTS(24)	MODULATION EFFECTS(30)
01 Reverb Hall 2.0 sec.	KARAOKE 1	70 Chorus fast
02 Reverb Hall 2.5 sec.	38 DRV 1 155ms	71 Chorus & Echo fast/0.1s
03 Reverb Hall 3.0 sec.	39 DRV 1 175ms	72 Chorus & Room fast/1.0s
04 Reverb Hall 4.0 sec.	40 DRV 1 200ms	73 Chorus medium
05 Reverb Hall 5.0 sec.	41 DRV 1 220ms	74 Chorus & Echo med/0.2s
06 Reverb Hall 6.0 sec.	KARAOKE 2	75 Chorus & Hall med/2.0s
07 Reverb Hall 8.0 sec.	42 DRV 2 155ms	76 Chorus slow
08 Reverb Hall 10.0 sec.	43 DRV 2 175ms	77 Chorus & Echo slow/0.3s
09 Reverb Room 1.0 sec.	44 DRV 2 200ms	78 Chorus & Hall slow/4.0s
10 Reverb Room 1.5 sec.	45 DRV 2 220ms	79 Flanger fast
11 Reverb Room 2.0 sec.	46 Echo & Hall .25/2.5 sec.	80 Flanger & Echo fast/0.1s
12 Reverb Room 2.5 sec.	47 Echo & Hall .3/3.0 sec.	81 Flanger fast/1.0s
13 Reverb Room 3.0 sec.	48 Echo & Hall .35/3.5 sec.	82 Flanger medium
14 Reverb Room 4.0 sec.	49 Echo & Hall .4/4.0 sec.	83 Flanger & Echo med/0.2s
15 Reverb Plate 1.0 sec.	50 Echo & Hall .5/5.0 sec.	84 Flanger & Hall med/2.0s
16 Reverb Plate 1.5 sec.	KARAOKE 3	85 Flanger slow
17 Reverb Plate 2.0 sec.	51 ERV 100ms	86 Flanger & Echo slow/0.3s
18 Reverb Plate 2.5 sec.	52 ERV 125ms	87 Flanger & Hall slow/4.0s
19 Reverb Plate 3.0 sec.	53 ERV 200ms	88 Tremolo fast
20 Reverb Plate 4.0 sec.	54 ERV 250ms	89 Tremolo & Room fast/1.0s
21 Ambient 0.5 sec.	55 ERV 250ms	90 Tremolo medium
22 Ambient 0.7 sec.	56 ERV 300ms	91 Tremolo & Hall med/2.0s
23 Ambient 1.0 sec.	57 ERV 350ms	92 Tremolo slow
24 Ambient 1.3 sec.	58 FRV 400ms	93 Tremolo & Hall slow/4.0s
25 Ambient 1.6 sec.	59 ERV 500ms	94 Wah Wah fast
26 Gated Reverb 75 ms	60 ERV 650ms	95 Wah Wah & Room fast/1.0s
27 Gated Reverb 100 ms	61 ERV 800ms	96 Wah Wah medium
28 Gated Reverb 125 ms	62 Single Delay 50 ms	97 Wah Wah & Hall med/2.0s
29 Gated Reverb 150 ms	63 Single Delay 100 ms	98 Wah Wah slow
30 Gated Reverb 200 ms	64 Single Delay 150 ms	99 Wah Wah & Hall slow/4.0s
31 Gated Reverb 300 ms	65 Single Delay 200 ms	
32 Reverse Reverb 75 ms	66 Single Delay 250 ms	Note:Chorus,Flanger,Wah-Wah speed definition slow:0.5Hz/Medium:2.5Hz/Fast:5Hz Tremolo speed definition: slow: 0.65Hz/Medium:2.5Hz/Fast:5Hz
33 Reverse Reverb 100 ms	67 Single Delay 300 ms	
34 Reverse Reverb 125 ms	68 Single Delay 400 ms	
35 Reverse Reverb 150 ms	69 Single Delay 500 ms	
36 Reverse Reverb 200 ms		
37 Reverse Reverb 300 ms		

V Connecting Your System

CONNECTORS

Your signal processor uses several types of input and output connectors.

1. XLR Input jacks

Electronically balanced inputs accept a standard XLR male connector. Pin1=ground, pin2=hot or positive(+) and pin3=cold or negative (-) (see Figure 1). These connectors should be utilized for low impedance microphones. If you are using a high impedance microphone, it will likely have a cord with a 1/4" connector on it. In this case, it would be appropriate to plug such microphones into a line input, however performance, and gain may be lessened. For best performance we recommend you invest in one of the many higher quality, low impedance mics available on the market, or alternatively, purchase an impedance matching transformer from your dealer.

2. 1/4" Phone Input Jacks

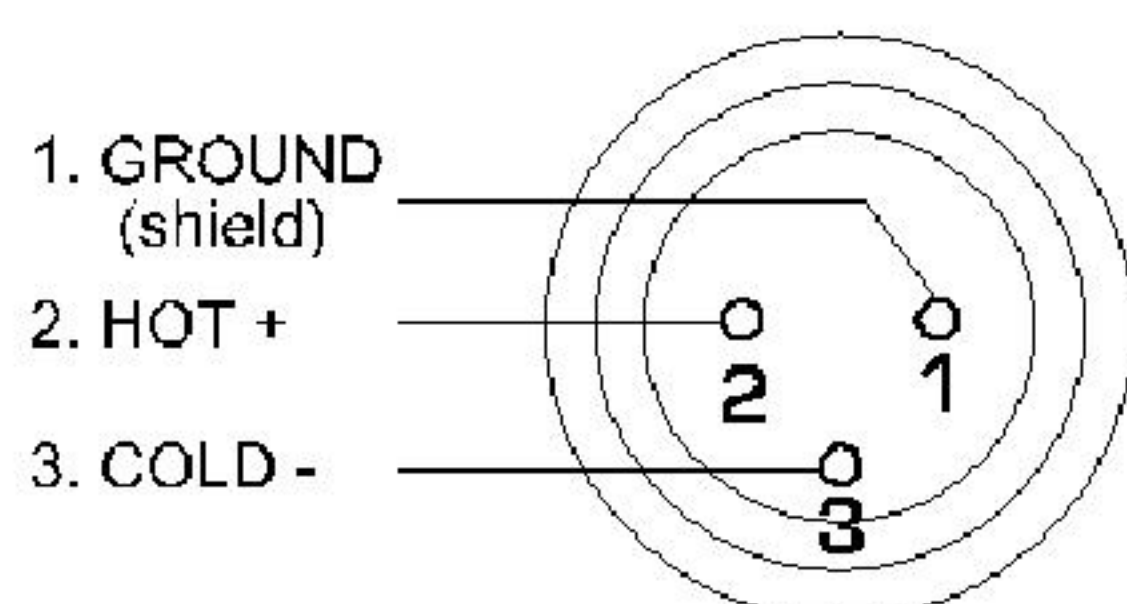
These tip / sleeve jacks accept an unbalanced line level signal using a normal male phone plug. (See Figure 1.)

3. RCA Phone Jacks

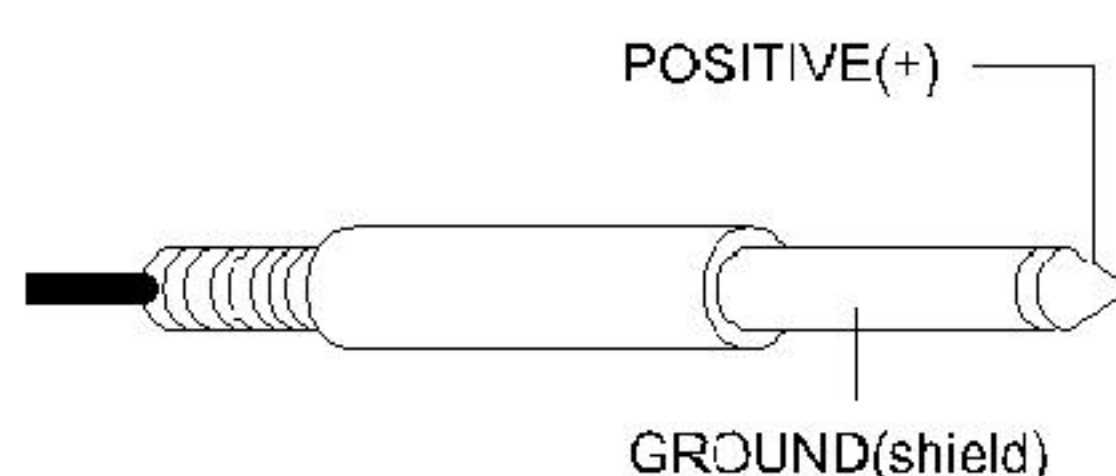
The RCA jacks accept unbalanced male pin connectors.

Figure-1

a. Female Three Pin Connector



b. Unbalanced 1/4" Connector



VI Connections & System Hookup

AC Power Hookup

The VFX-2DDR/VFX-299 comes with a power cord suitable for the voltage of the country it is shipped to (either 120V,60Hz or 230V, 50 or 60 Hz).

Typical Applications

The analog audio inputs and outputs are typically used in one of three ways:

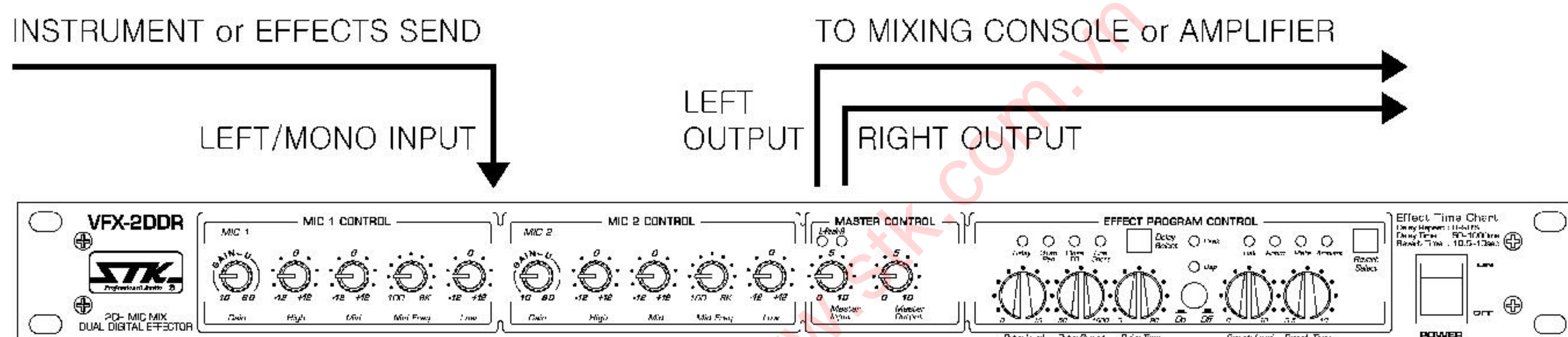
- from one or two effect/aux send outputs of a mixer, and out to the effect return inputs of the mixer; or,
- from a line-level instrument (like a guitar or keyboard with either a mono or stereo output), and out to an amplifier or mixer input; or,
- from the stereo buss outputs of a mixer to a mix-down tape machine or amplifier.

When used with a mono source, the VFX unit placed between the source and the mixer/amplifier.

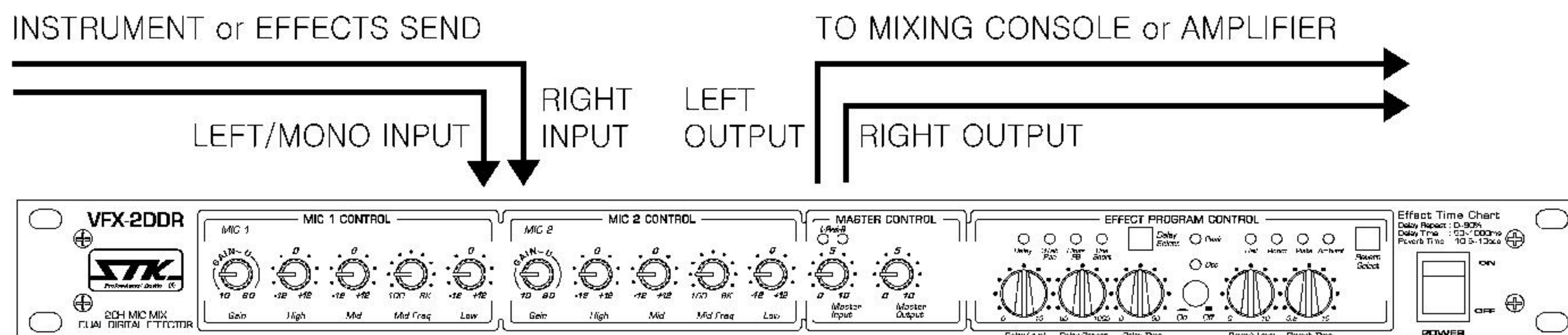
Although the source may be mono, both the LEFT/MONO and RIGHT outputs can be connected to the inputs of a mixer/amplifier if stereo processing effects are desired. If using the effect sends of a mixer, you have the advantage of sending any of the mixer's input channels to this unit Input(s), and have control over the level of each channel being sent. These applications are outlined and illustrated in detail on the following pages.

Interfacing Directly with Instruments

- **Mono In, Stereo Out.** While still using a mono input, you could connect two mono cords to the LEFT and RIGHT outputs of the stereo amplification system or two mixer inputs.



- **Dual Mono.** Connect two mono cords to the LEFT and RIGHT inputs from two mono sources, and two other mono cords from the LEFT and RIGHT outputs to a stereo amplification system or mixer inputs. This hookup allows discrete processing of the two channels, since some of the effects are discrete stereo to maintain stereo imaging.
- **Stereo.** Connect two mono cords to the LEFT and RIGHT INPUTS from a stereo source, and two other mono cords from the LEFT and RIGHT OUTPUTS to a stereo amplification system or two mixer inputs.



Connections & System Hookup

Interfacing to a Mixing Console

The VFX-series handles mono or stereo sends at all system levels. The input circuitry of the VFX-series can easily handle +4dBu levels, while having enough input and output gain to interface with the low signal levels of budget recording systems.

The VFX-series may be connected to a mixing console in several different ways. It can be used to effect several instruments at once by using the auxiliary send and return controls of the mixer. Another method of interfacing is to connect the unit directly to the insert send and return patch points of the channel that is to be effected.

Yet another way of interfacing the VFX-series to a mixer or recording console would be in-line across the output of your mixing console. This last setup would be used only if you wanted effects on the entire mix.

Using Aux Sends

Generally, mixing consoles provide two types of auxiliary sends: prefader sends for creating a cue (headphone) mix, and individual, post-fader effect sends. Typically, if a mixer has more than two sends per channel (4, 6 or 8, perhaps), the first two sends are reserved for the cue send, while the remaining sends are used to feed effects, such as the VFX-series. If you are using a mixer with more than two sends, connect the VFX-series using post-fader sends.

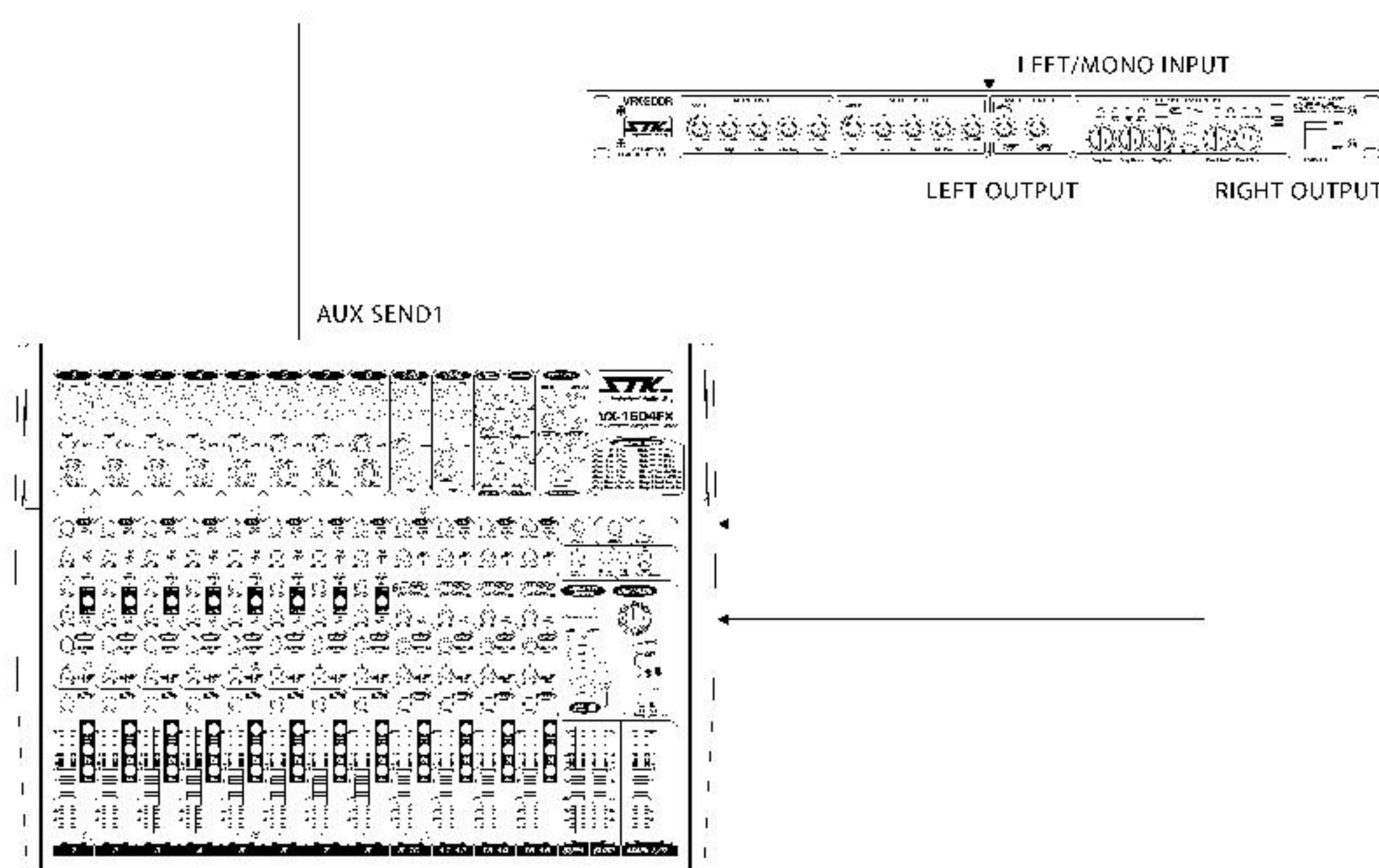
Using a mixer's aux sends poses a distinct advantage: each channel has its own level control feeding the aux output (and eventually the VFX-series input). This allows you to make a mix of any channels you want to go to the effects by using the individual channels' aux send levels on the mixer. Most consoles also have aux master controls, which set the overall level of each aux output.

Coming back from the VFX-series outputs into the mixer, you have two options:

- connecting to dedicated return inputs, or
- connecting to inputs.

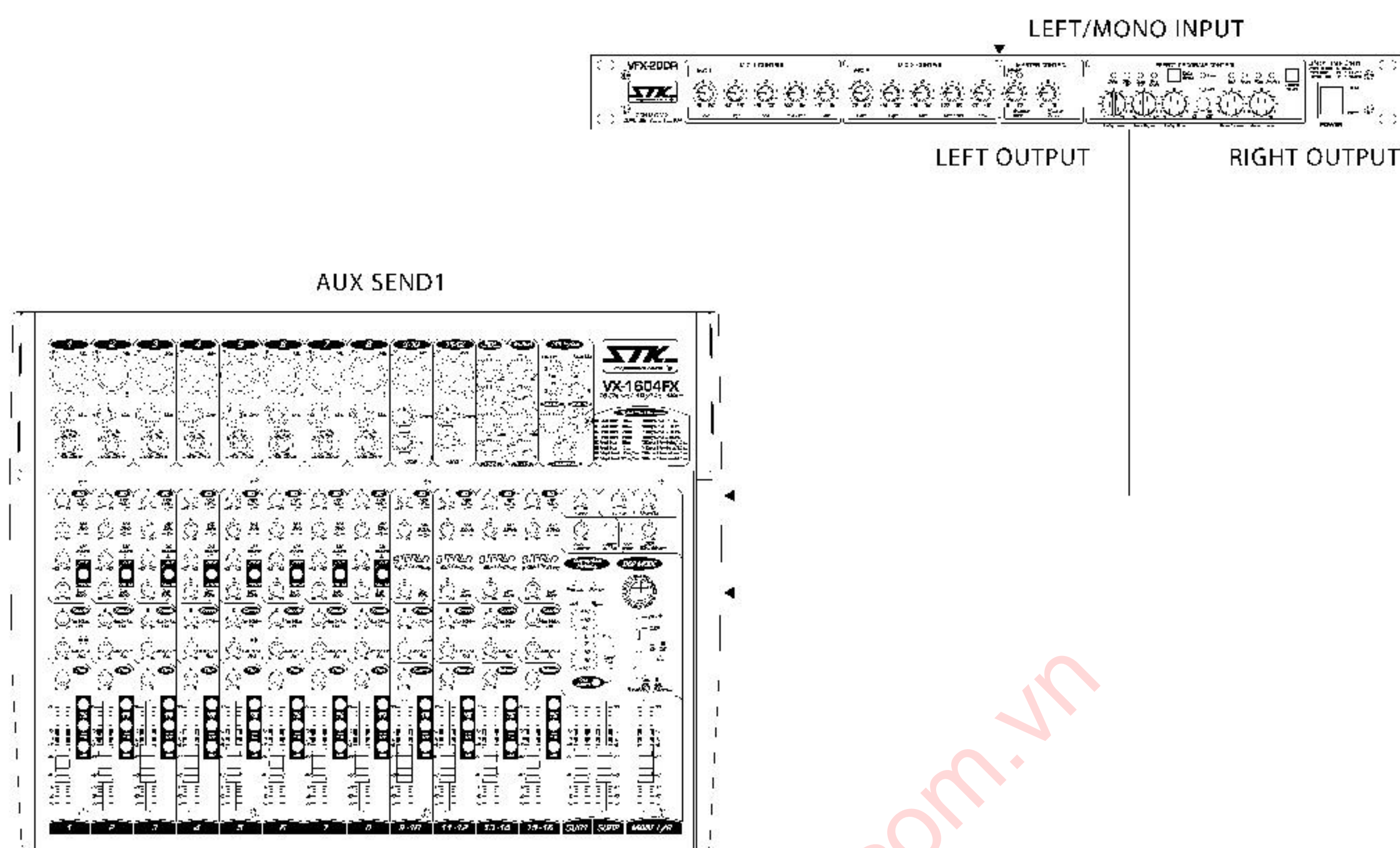
The former is good if your mixer provides dedicated inputs (called returns) for effect devices like the VFX-series. If your mixer does not have these, or you have already used them all, consider connecting the VFX-series to channel inputs (if there are any remaining). This method gives you the added bonus of more panning options and EQ on the effects. No matter where you connect the output of the VFX-series into the mixer, you are in control of the balance between the mixer's channel inputs (the unaffected signal being routed to the aux sends and the mix), and the effect returns coming from the VFX-series. The effect returns generally should only contain effected signal, and not have any unaffected signal mixed with it (since these two signals are blended together at the mixer). Therefore, it may be necessary to modify the mix so that only the effected signal is present at the VFX-series outputs. To do this, turn the Mix control all the way to the right.

Mono In-Stereo Out. If you only want to feed the VFX-series a mono input, but wish to connect both of its outputs back to the mixer, you will need three 1/4" audio cables. Connect a mono cord from an effect send to the LEFT input of the VFX-series, another mono cord from the LEFT output of the VFX-series to an effect return or other mixer input, and another mono cord from the RIGHT output of the VFX-series to an adjacent effect return or mixer input.



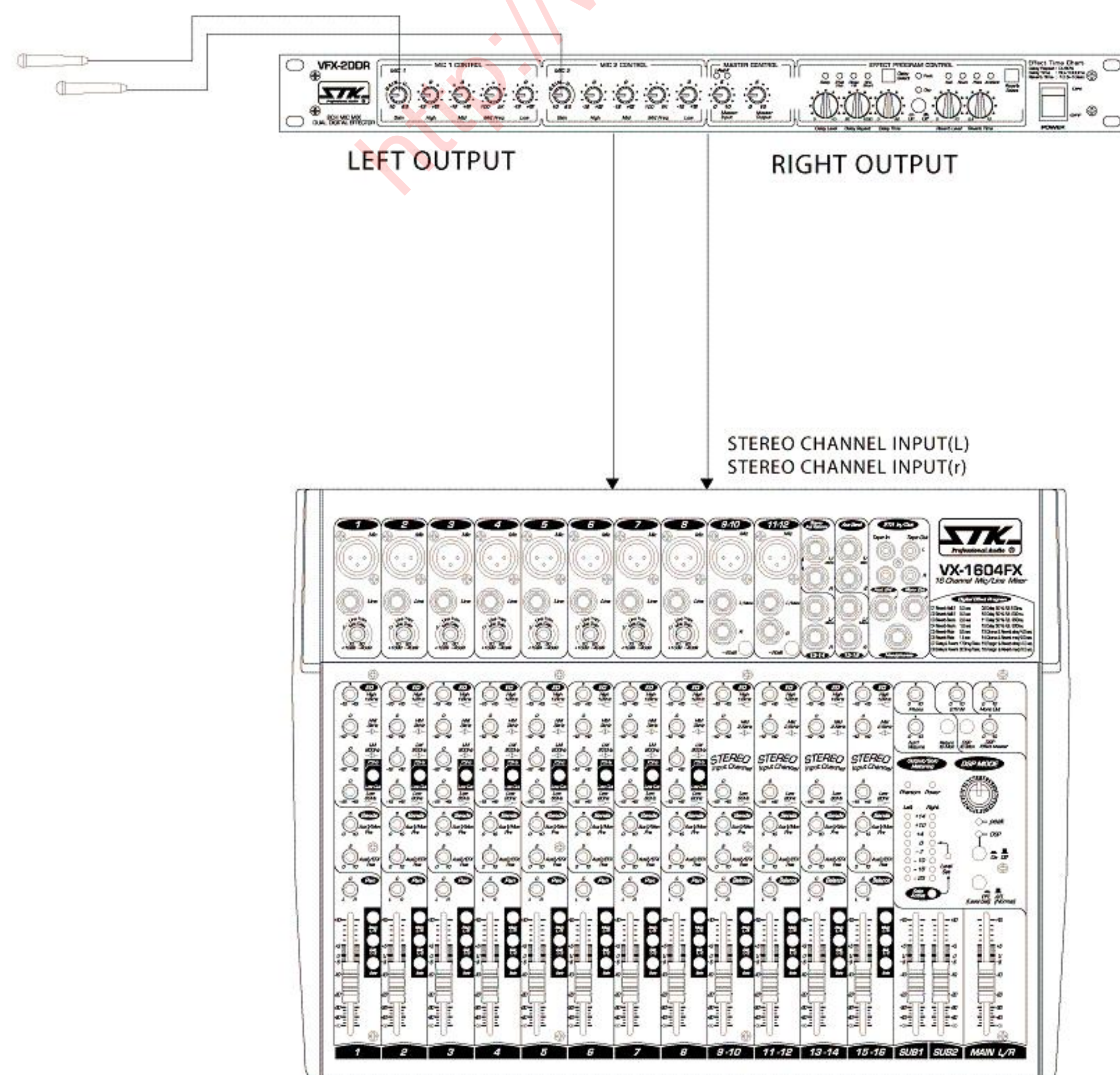
Connections & System Hookup

Stereo In-Stereo Out. This connection is similar to the one described above. However, by utilizing two sends from the mixer, we add one more cord and can now send a stereo signal to the VFX-series's inputs. For example, if you connected sends 3 and 4 to the LEFT and RIGHT inputs, and had a stereo instrument (such as a keyboard) connected to two channel inputs of the mixer (either one panned hard left and hard right), you would send the left channel to send 3 and the right channel to send 4.



Using Microphone Inputs of the VFX-series.

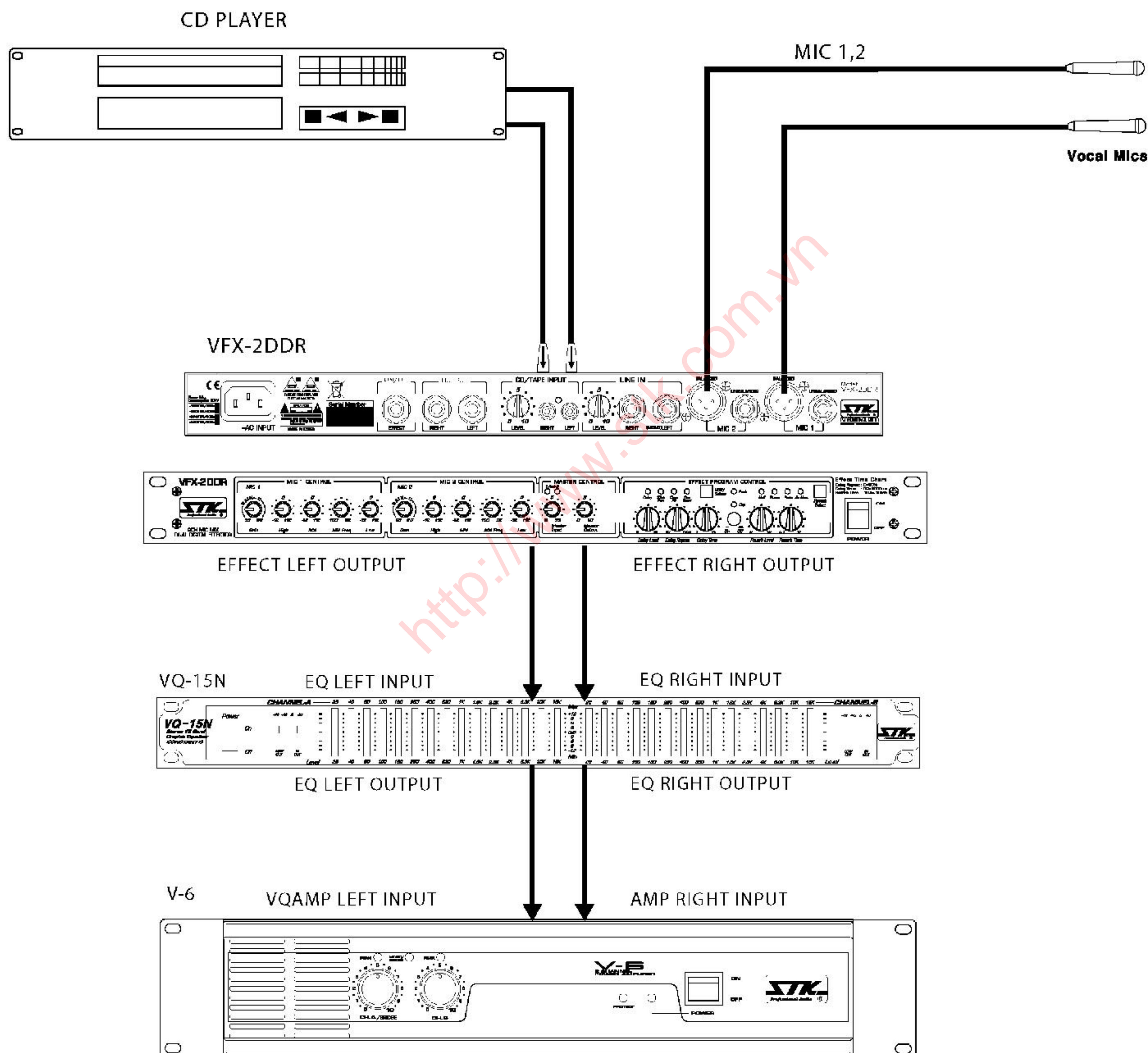
When you want to use the VFX-series with microphone, you can connect the VFX-series into the mixer's stereo inputs. This is done by using three microphone to connect the XLR mic input of the VFX-series. The LEFT and RIGHT outputs of the VFX-series are then connected to a stereo input of the mixer or line input.



Connections & System Hookup

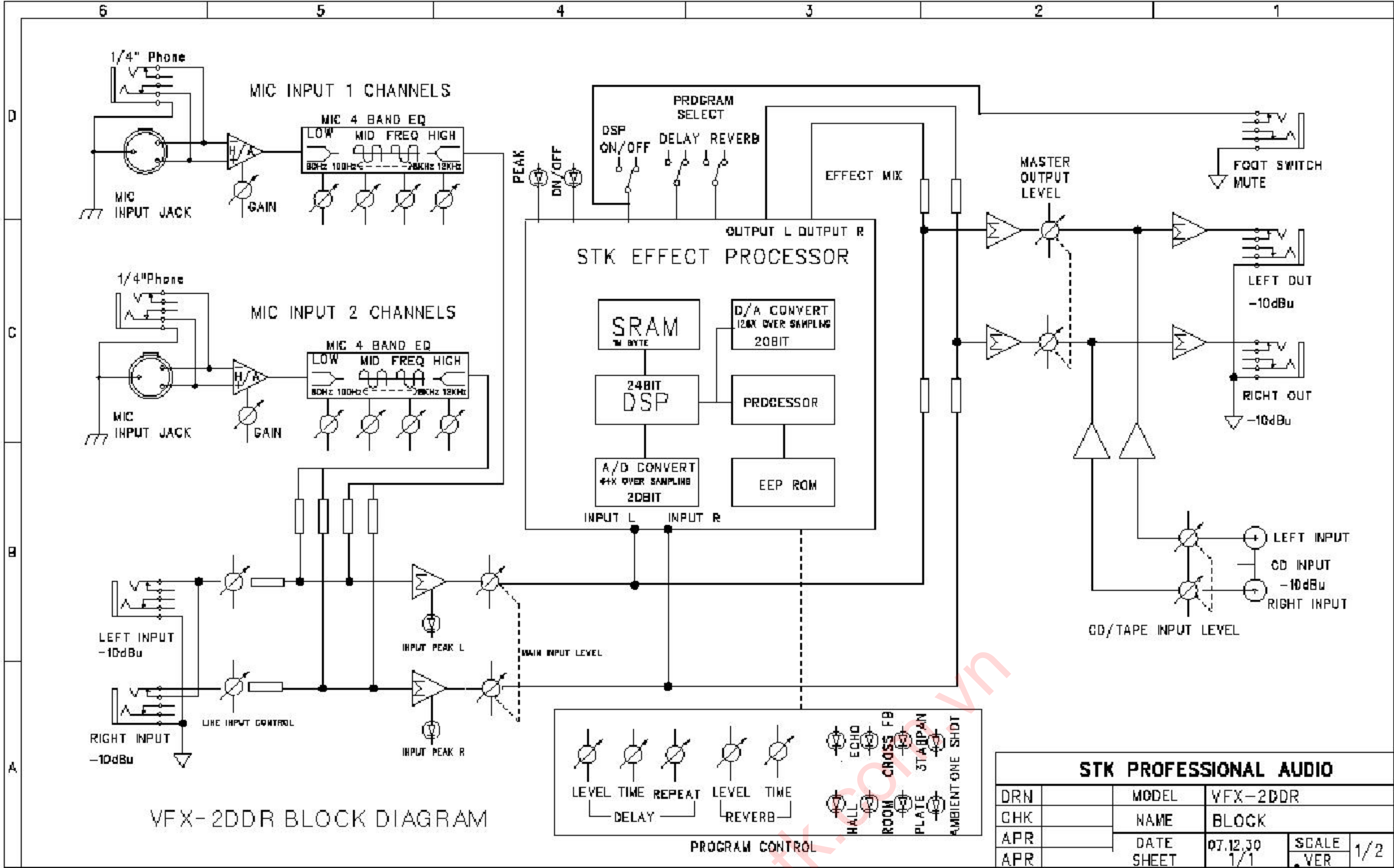
Using the VFX-series with Power Amplifier.

When you want to use the VFX-series with EQ and power amplifier, you can connect the VQ-15N equalizer and the V-6 power amplifier or other similar amplifier's inputs. This is done by using three microphones to connect the XLR Mic input of the VFX-series. The LEFT and RIGHT outputs of the VFX-series are then connected to the power amplifier input with VQ-15N. It's a simple application

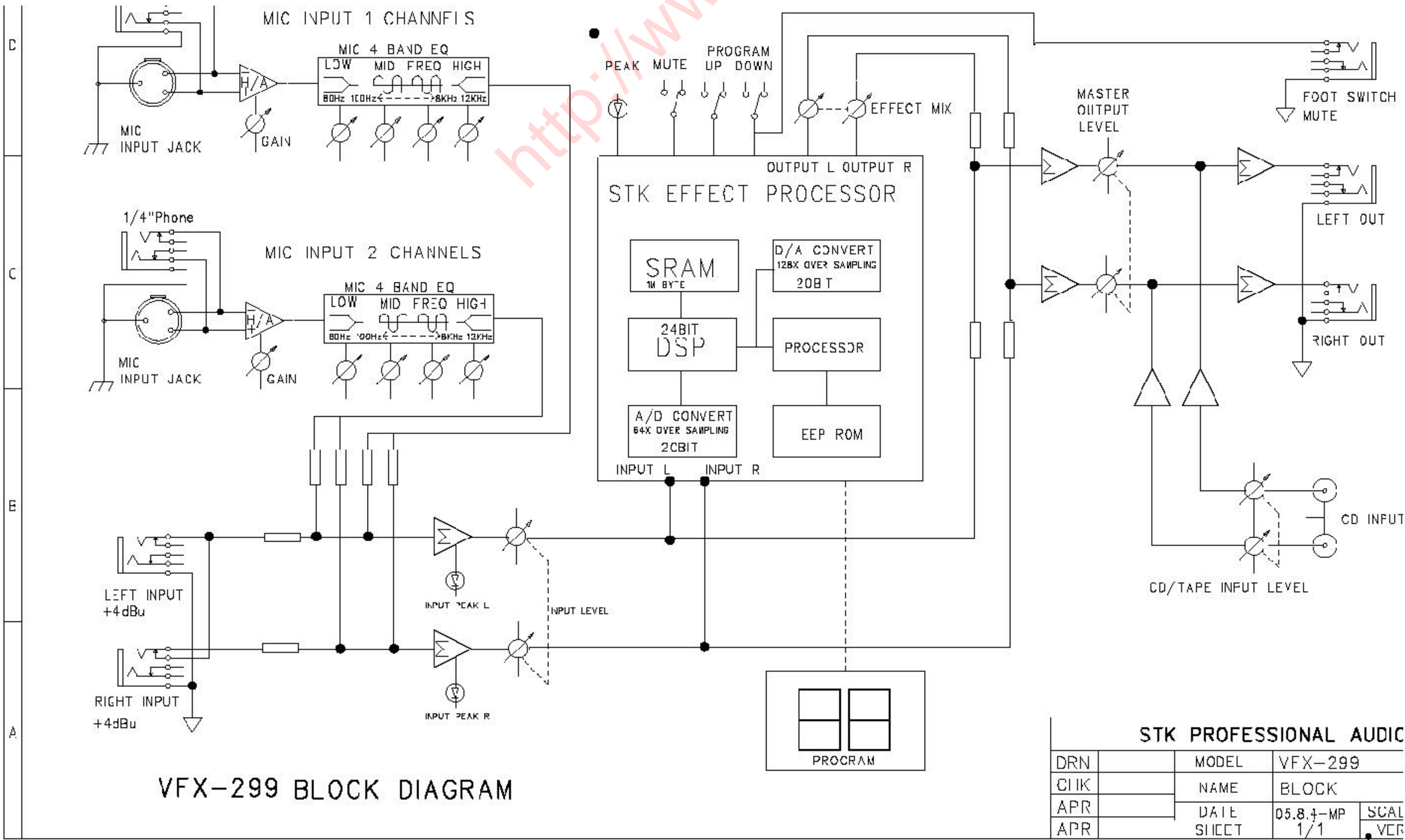


VII Block Diagram

VFX-2DDR



VFX-299



VIII Specifications

MODEL	VFX-2DDR			VFX-299
Electric				
Frequency Response	20Hz - 30 KHz			
Dynamic Range	80 dB (typical) /EIN : 129dB			
T.H.D	less than 0.05%(1KHz, max, level)			
Input				
Number of Channel	2($\frac{1}{4}$ " Unbal.)	2(XLR Bal.)	1(RCA Input)	
Line Input		Mic Input	CD/Tape Input	
Nominal Level	-10 dBu	-55 dBu	-10 dBu	
Impedance	47k Ω (stereo)	1k Ω	10k Ω	
Output	http://STK.com.vn			
Number of Channel	2($\frac{1}{4}$ " Unbal.): LEFT/RIGHT			
Nominal Level	+4 dBu			
Maximum Output Level	+20 dBu			
Impedance	330 Ω			
AD/DA Conversion				
AD Conversion	20bit			
DA Conversion	24bit			
Sampling Frequency	41.67KHz(VFX-2DDR) / 34.1KHz(VFX-299)			
Front Panel				
Controls	Mic1, Mic2 Gain,Main In/Out LEVEL, High, Mid, Mid freq, Low EQ			
	Input level	Effect Level		
	main output level,	CD/TAPE Level(Rear Panel)		
Buttons	Effect Program SELECT			
Indicators	EFFECT ON/OFF			
Rear Panel	http://STK.com.vn			
Input(Left/mono, Right)	2(XLR Jack), 2(Phone Jack), 1(RCA Jack)			
Output(Left, Right)	2(Phone Jack)			
Footswitch	1(Phone Jack)			
Power	AC Power : AC FUSE			
	120Vac 50/60Hz : RATED AC FUSE 500mA			
	220V-240Vac 50/60Hz : RATED AC FUSE T315mA			
Dimensions				
H×W×D	1.72×19.0×7.0 (Inch)			
	44×483×175 (mm)			
Net Weight	2.62Kg (5.28 lbs)			

<http://www.stk.com.vn>

Owner's Manual For The STK 2CH MIC Mix Multi Effector

<http://www.stk.com.vn>



PROFESSIONAL AUDIO
ENGINEERING AND MANUFACTURING