



USER MANUAL

DIGITAL STAGE BOX

DSB-3216/DSB-1632

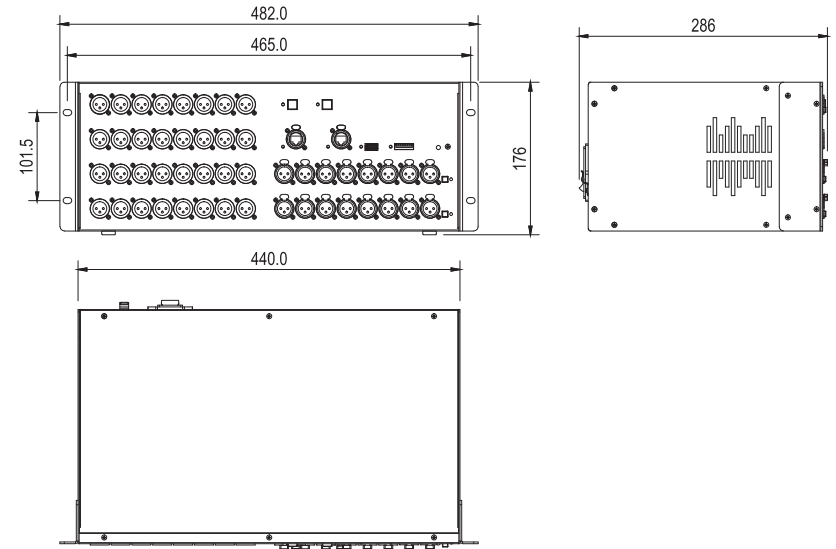
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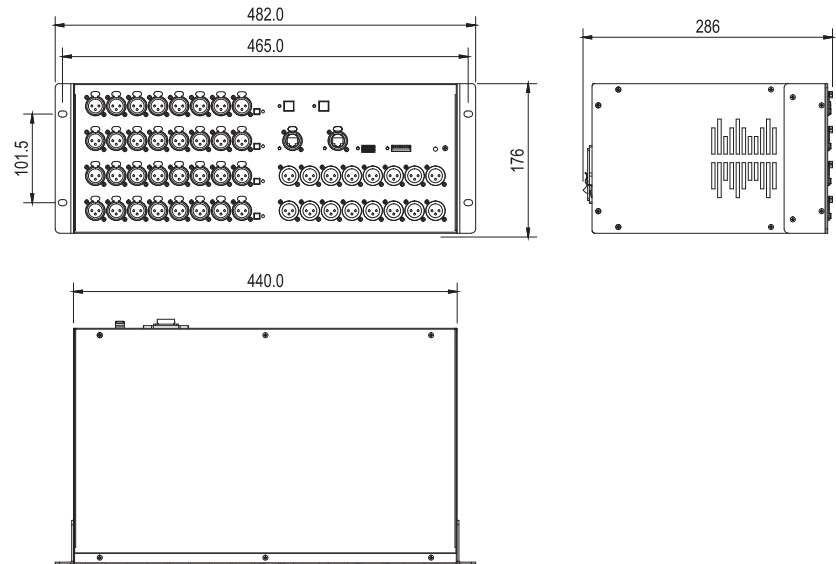
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GD202007292 070403962E

DSB-1632



DSB-3216



GD202007292

070403962E

Channel number	16 input, 32 output
AD convert	sample rate 96.0 kHz; signal processing 24 bit
DA convert	sample rate 96.0 kHz; signal processing 24 bit
Frequency response	± 0.5 dB (@ +0 dBu, 20 Hz to 20 kHz)
THD+ Noise	≤ 0.005 % (input: +22 dBu, 20 Hz to 20 kHz)
Dynamic range	107 dB
Crosstalk	≤ -100 dB (input: +0 dBu)
Maximum input level	+22dBu
Maximum output level	+21.5dBu
Input impedance	600 ohms
Load impedance	10 k ohms
Residual noise	≤ -88 dBu
SNR:	108dB
System delay	302 μ s
Connector	16x female XLR, 32x male XLR, RJ45 connectors *2, USB2.0*1
Indicator	power supply indicator *1, phantom power supply indicator*4, network socket indicator*2, USB socket indicator *1, Master indicator*1, +20dB gain indicator, Mute all outputs indicator*1
AC supply	AC100~240V (50/60 Hz)
Power supply	46 W
Phantom power supply	+48 V / 22 mA
Size	483(W) x 290 (D) x 177.0 (H) mm
Operating temperature	0~+40°C

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Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



The symbol is used to indicate that some hazardous live terminals are involved within this apparatus, even under the normal operating conditions, which may be sufficient to constitute the risk of electric shock or death.



The symbol is used in the service documentation to indicate that specific component shall be replaced only by the component specified in that documentation for safety reasons.



Protective grounding terminal



Alternating current/voltage

ON: Denotes the apparatus is turned on



Hazardous live terminal

OFF: Denotes the apparatus is turned off.

WARNING: Describes precautions that should be observed to prevent the danger of injury or death to the operator.

CAUTION: Describes precautions that should be observed to prevent danger of the apparatus.

1. IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions.
- Keep these instructions.
- Heed all warning.
- Follow all instructions.

• Water & Moisture

The apparatus should be protected from moisture and rain, can not used near water, for example: near bathtub, kitchen sink or a swimming pool, etc.

• Heat

The apparatus should be located away from the heat source such as radiators, stoves or other appliances that produce heat.

• Ventilation

Do not block areas of ventilation opening. Failure to do could result in fire. Always install accordance with the manufacturer's instructions.

• Object and Liquid Entry

Objects do not fall into and liquids are not spilled into the inside of the apparatus for safety.

• Power Cord and Plug

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, refer

to electrician for replacement.

• Power Supply

The apparatus should be connected to the power supply only of the type as marked on the apparatus or described in the manual. Failure to do could result in damage to the product and possibly the user.

Unplug this apparatus during lightning storms or when unused for long periods of time.

Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

• Fuse

To prevent the risk of fire and damaging the unit, please use only of the recommended fuse type as described in the manual. Before replacing the fuse, make sure the unit turned off and disconnected from the AC outlet.

• Electrical Connection

Improper electrical wiring may invalidate the product warranty.

• Cleaning

Clean only with a dry cloth. Do not use any solvents such as benzol or alcohol.

• Servicing

Do not implement any servicing other than those means described in the manual. Refer all servicing to qualified service personnel only.

• Only use accessories/attachments or parts recommended by the manufacturer.

DSB-3216 Specification

Channel number	32 input, 16 output
AD convert	sample rate 96.0 kHz; signal processing 24 bit
DA convert	sample rate 96.0 kHz; signal processing 24 bit
Frequency response	±0.5dB (@ +0 dBu, 20 Hz to 20 kHz)
THD+ Noise	≤0.005 % (Dynamic range: +22 dBu, 20 Hz to 20 kHz)
Dynamic range	107 dB
Crosstalk	≤-100 dB (input: +0 dBu)
Maximum input level	+22dBu
Maximum output level	+21.5dBu
Input impedance	600 ohms
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SNR:	108dB
System delay	302μs
Connector	32x female XLR, 16x male XLR, RJ45 connectors *2, USB2.0*1
Indicator	power supply indicator *1, phantom power supply indicator*4, network socket indicator*2, USB socket indicator *1, Master indicator*1, +20dB gain indicator, Mute all outputs indicator*1
AC supply	AC100~240V (50/60 Hz)
Power supply	46 W
Phantom power supply	+48 V / 22 mA
Size	483(W) x 290 (D) x 177.0 (H) mm
Operating temperature	0~+40°C

Sub-unit of DSB-3216/DSB-1632 provides many different indicators, which are used for displaying the current state of system. In addition, these units also provide error indicators, which can let you know the when a potentially serious problem is detected in the system.

Below table displays the various states and meaning of error indicator and suggests the measures for troubleshooting and security operation.

DSB-3216 and DSB-1632 unit: system state indicator			
Indicator	State	Meaning	Measures for troubleshooting
Main/Backup network port indicator	Light	Communication established	●/ (normal operation)
	Dark	No communication established	<ul style="list-style-type: none"> ● Make sure all digital stage boxes are powered on. ● Check that the network cable is connected. ● Check the network cable for damage. ● Whether using the right type of network cable or not? ● If you have checked all external causes and the indicator is still not light, please feedback the question to the dealer.
	Flash	No communication established	<ul style="list-style-type: none"> ● Only one master light in the system must be on. ● If you have checked all external causes and the indicator is still not light, please feedback the question to the dealer.

Fault	Possible solutions
The power and the indicator cannot be turned on.	<ul style="list-style-type: none"> ● Is the power cord connected correctly? ● Is the POWER switch on? ● If you have checked all possible causes and the power still cannot be turned on, please feedback the question to the dealer.
The device cannot receive the input signal.	<ul style="list-style-type: none"> ● Is the input cable connected correctly? ● Is the signal source device transmitting the correct signal? ● Is DIP switch setting correctly?
Input level too low	<ul style="list-style-type: none"> ● If a condenser microphone is being used, is the phantom power on for the corresponding channel? ● Is +20 gain switch on?
No signal output	<ul style="list-style-type: none"> ● Is the output cable connected correctly? ● Is the output muted? ● Is DIP switch setting correctly?
Cascading function not available	<ul style="list-style-type: none"> ● Is DIP switch set correctly? ● Is the network cable connected correctly?

WELCOME

Thank you for ordering DSB-3216/DSB-1632 Digital Stage Box! DSB-3216/DSB-1632 system brings the digital revolution into the audio transmission world, it can transmit high quality audio of 48 channels (32 analog inputs and 16 analog outputs) in a long distance by only a light network cable. In order to fully use the functions, please read the manual carefully before use.

ABOUT THE MANUAL

The manual of digital stage box DSB-3216/DSB-1632 introduces not only the main functions but also the connection and operation of the system. In order to fully use the system, we suggest to read the whole manual.

DSB-3216/DSB-1632 Digital Stage Box system includes two main sub-units:

DSB-3216 Stage Unit
DSB-1632 FOH Unit

Main accessories included:


AC power cord *2 (1pcs for DSB-3216 unit and 1pcs for DSB-1632 unit)
User's manual *2 (1pcs for DSB-3216 unit and 1pcs for DSB-1632 unit)


Terms in the manual:


In the whole manual, the name of each unit is usually shorten and abbreviated as "DSB-3216", "DSB-1632". When the progress and description involved the whole system, the name uses "DSB-3216/DSB-1632 system". When described as the digital stage box, it's abbreviated as DSB. In the product application, audio signal mainly comes from "Stage" area and transmits to "Mixer" unit (or FOH) by digital stage box. Certainly, the digital stage box has many other ways of application, the manual calls the actual location as "Stage", "Mixer" or "FOH". Those terms are only for the sake of introduction, or to describe the signal flow of the system in terms that can be understood by the audio engineer.

Attention, Tips and Warning icons

In the manual, you will see areas highlighted in grey, which offer the extra information related to the function and operation described in the paper.

 Warning that it includes the important information that can help you avoid damaging the device.

 Details describing the current topic.

 Offering a suggestion or tip

DSB-3216/DSB-1632 system

- Through one network cable, maximum supporting the transmission of 48 channels analog audio;
- The transmission of digital signal adopts the design of main and backup dual interfaces, the maximum lossless transmission of network cable is 100meters;
- +20dB gain setting for input channel;
- +48V phantom power switch for each 8 channels;
- One-key mute operation for all output;
- It has the function of cascading multiple digital stage boxes;
- It can be installed on standard rack.

System Components

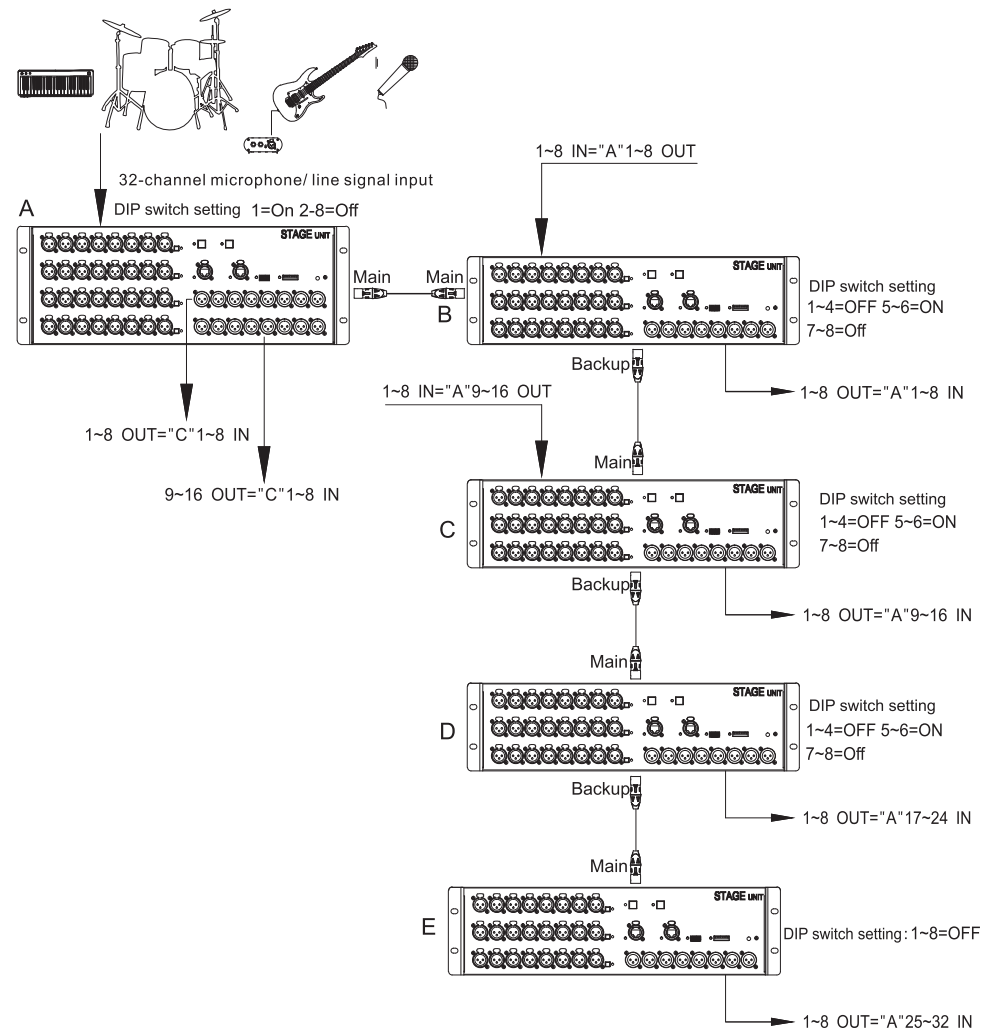
DSB-3216 Stage Unit

- “Stage” unit has 32 XLR signal inputs and 16 XLR signal outputs;
- All new and precisely designed preamplifier has a clear and warm sound (Max input level +22dBu);
- With system status indicator;
- MIAN and BACKUP interfaces are used for connecting DSB-1632, and DSB-3216 can also be connected in the case of cascade;
- Button MUTE ALL OUTPUTS connects the audio source without noise.

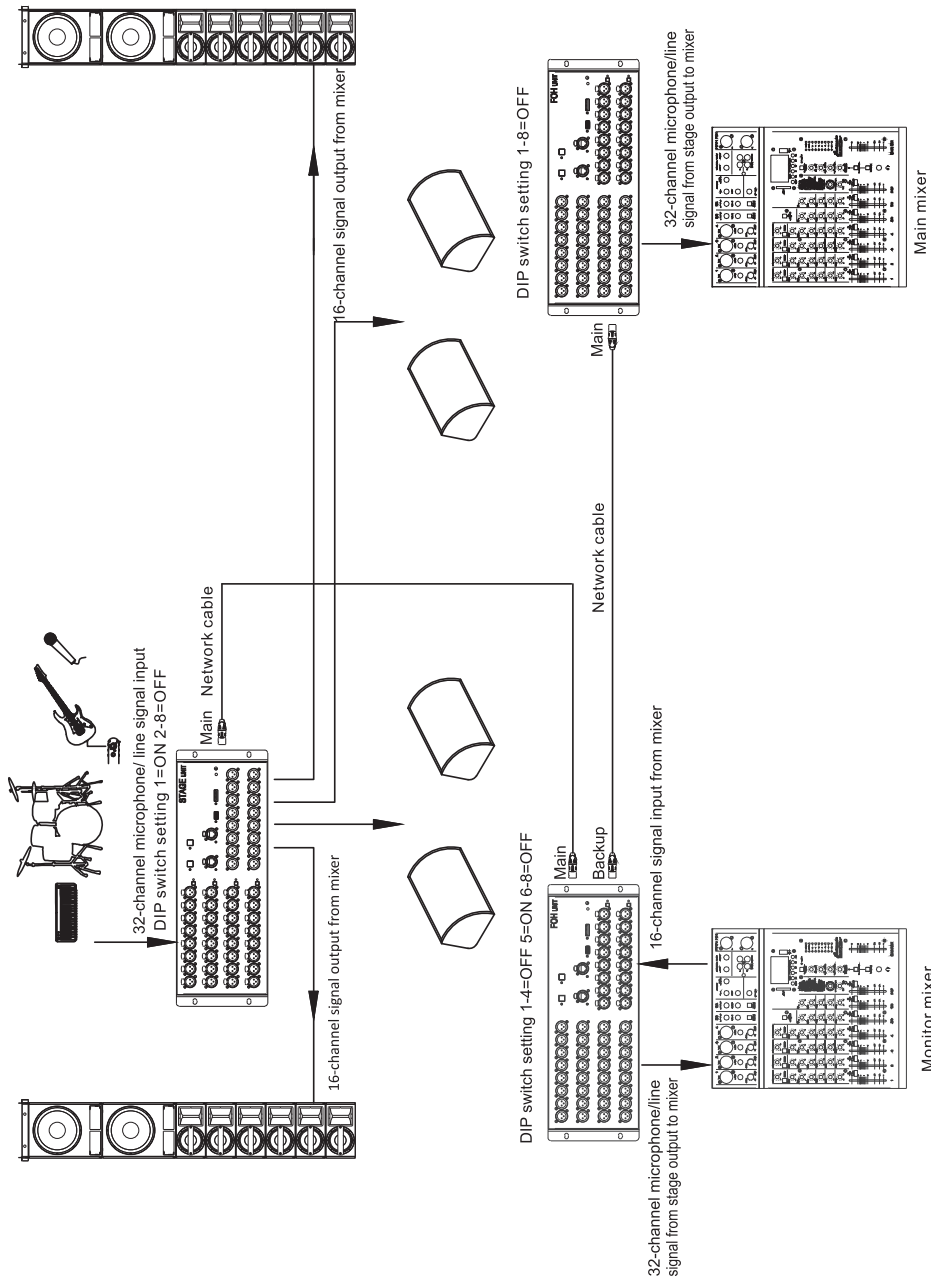
DSB-1632 FOH Unit

- “FOH” unit has 16 XLR signal inputs and 32 XLR signal outputs;
- All new and precisely designed preamplifier has a clear and warm sound (Max input level +22dBu);
- With system status indicator;
- MIAN and BACKUP interfaces are used for connecting DSB-3216, and DSB-1632 can also be connected in the case of cascade;
- Button MUTE ALL OUTPUTS connects the audio source without noise.

System connection 4 (Cascade)

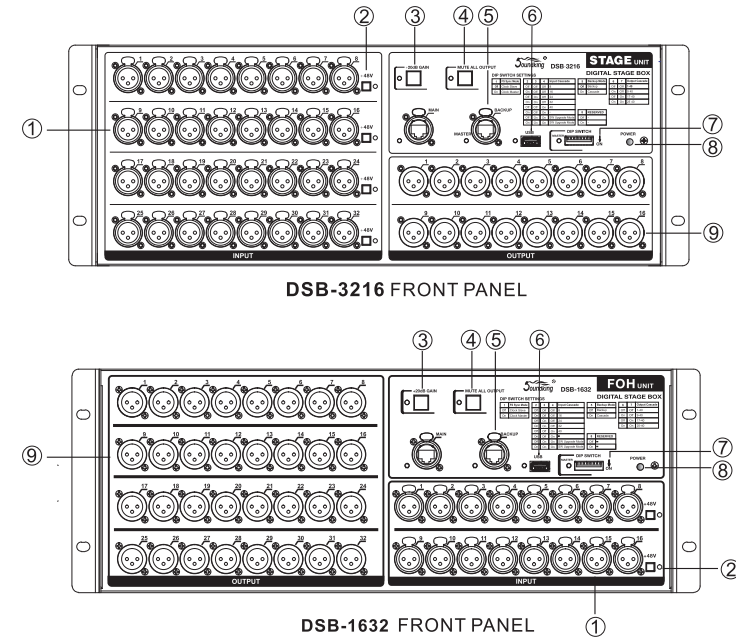


You can change the number of channels you want to cascade over a total of 48 input and output channels as needed, please see DIP Switch Setting for details.



You can change the number of channels you want to cascade over a total of 48 input and output channels as needed, please see DIP Switch Setting for details.

DSB-3216/DSB-1632 FRONT PANEL



1. INPUT socket

Each input provides balance input interface with female XLR connector. All inputs set a +20dB gain button, in addition, +48V phantom power switch for each 8 inputs.

2. Phantom Power Switch and indicator

It's +48V phantom power switch, the front panel sets a +48V phantom power switch and indicator for each 8 inputs. When turn on the corresponding phantom power switch, the indicator will be on.

- Please make sure the phantom power is off when not use it.
- Please make sure there is no other device than the phantom power supply device when you turn on the phantom power. Add the phantom power into the device that is not needs phantom power may damage the device.
- Please do not connect or break off inputs when you turn on the phantom power, otherwise it will damage to the connecting device and/or the machine.
- To avoid possible damage to the speakers, please make sure the amplifier and/or active speakers are off when you turn on or off the phantom power. In addition, it is recommended to turn on the mute switch on the digital stage box when you turn on/off the phantom power. The rapid increase of the peak level caused by switching operation may damage the hearing if the device and the bystander.

PANEL DESCRIPTION

3. +20dB gain button and indicator

When the button is pressed, the red indicator will be on, and this switch will affect the signal gain amplification of all input channels of the device +20dB.

- +20dB gain button can only control the corresponding digital stage box, for example, pressing the button of the “stage” unit can only gain all the input signals of the “stage” unit.

4. [MUTE ALL OUTPUTS] switch and indicator

When the button is pressed, the indicator will be on, and DSB-3216/DSB1632 system output mute, which can achieve the noise free connection of audio input source. When the button is pressed again, the indicator will be off and the mute off.

- [MUTE ALL OUTPUTS] switch can only control the corresponding digital stage box, for example, pressing the button of the “stage” unit can only mute all the output channels of the “stage” unit.

5. [MAIN/BACKUP] RJ45 network socket

DSB has two communication ports (RJ45), connect the DSB-3216 and DSB-1632 through Rj45 interface with standard Ethernet cable (CAT5e of higher is recommended) and the corresponding interface signal indicator is always on and green after connecting successfully.

RJ45 interfaces can be configured to run in one of two models:

1) Backup mode:

Under this mode, two ports transmit the same audio signal between two digital stage boxes. If two ports on DSB has all connected, the other port will keep the link without delay when one port is pulled out/cut off.

2) Cascade mode:

Cascade mode allows multiple digital stage boxes to be connected together and audio signals can be transmitted along the chain.

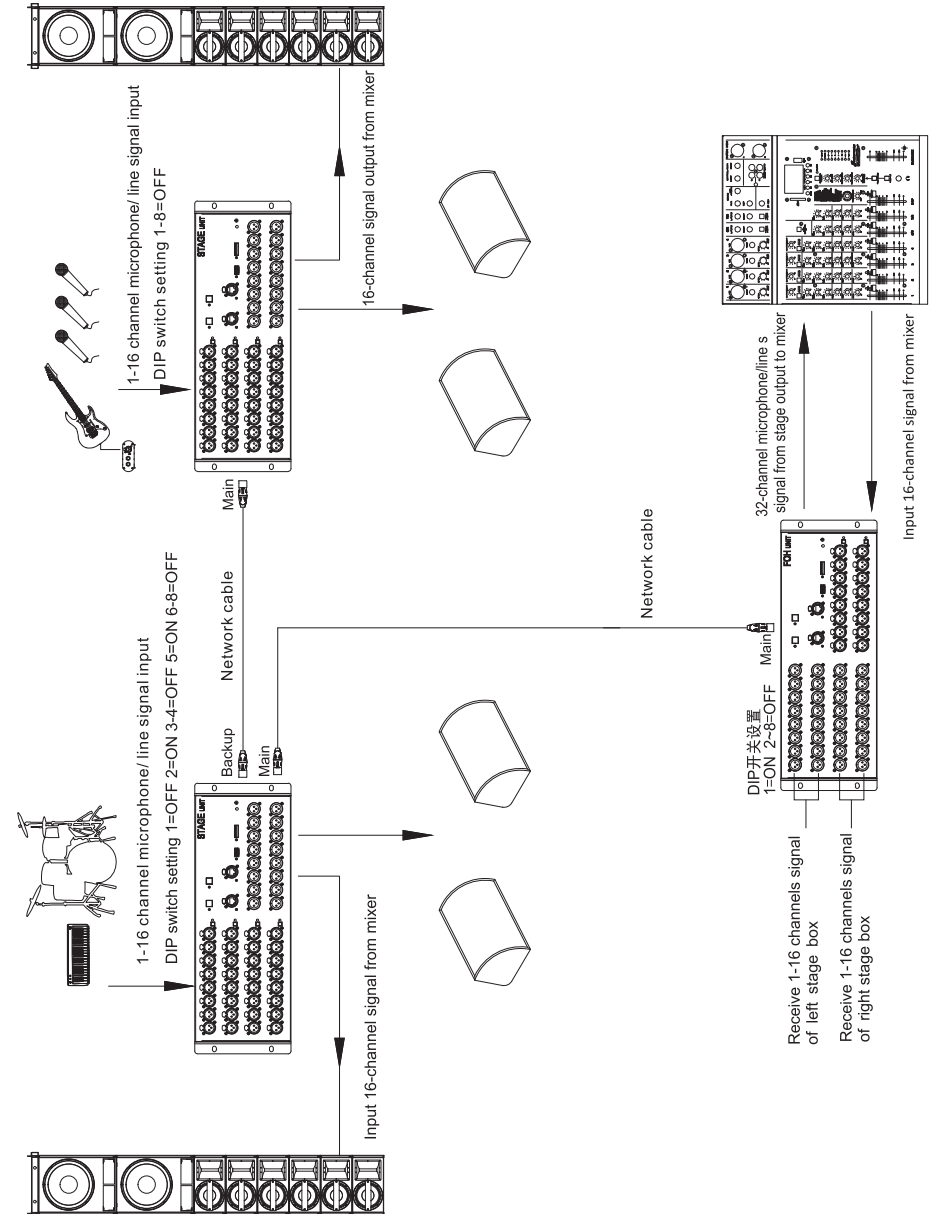
For example, in a daisy chain connected system with three DSB units, DSB in the middle of the chain has a communication port (MAIN) connects the other DSB.

- If the connection in the daisy chain is broken, the signal flow will interrupted at the change point and no signal will be transmitted through the point.
- It is recommended to use Ethernet with RJ45 plug compatible with Neutrik ether®CAT5, or standard RJ45 plug.
- Using STP (shielded twisted pair) cable can prevent electromagnetic interference.
- About the length of usable cable, not more than 100m recommended and the specific length will be affected by the network cable.

6. USB interface

Turn on the power switch and connect the U disk with the latest firmware to the USB interface to update the firmware of this device. When upgrading, the LED will flash, and it will stay on after upgrading. Pull off the U disk and restart the device after upgrading, the firmware updates to the latest version. The firmware has been burned before delivery, if no latest version, there is no need to burn is again.

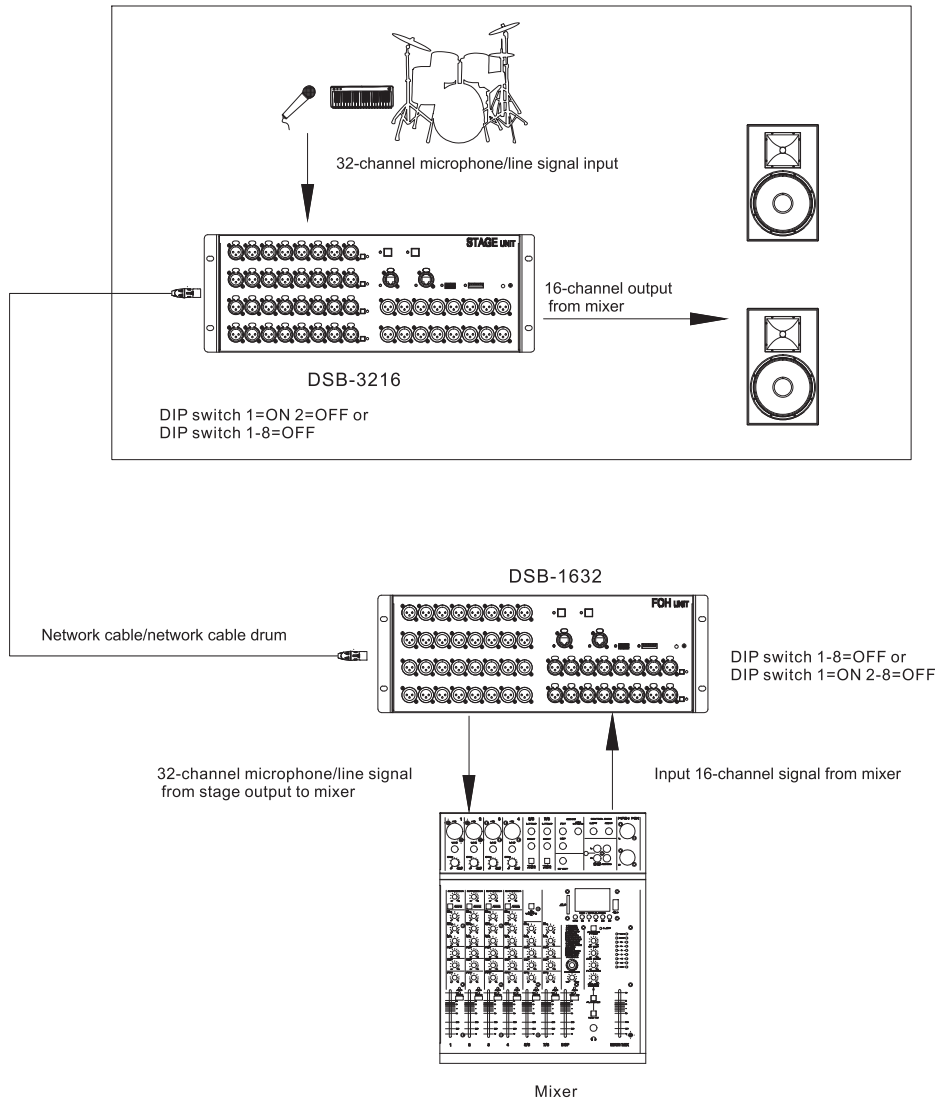
System connection 2 (Cascade)



You can change the number of channels you want to cascade over a total of 48 input and output channels as needed, please see DIP Switch Setting for details.

In order to prevent speakers or other devices from damage and fault, please make sure the power supply of device is lower or closed before making any connection.

Connection 1 (typical)



PANEL DESCRIPTION

7. DIP switch

The switch 1-2 of 8-bit DIP switch is used for setting MAIN/BACKUP mode, 3-8 switch is used for setting the function of cascading multiple digital stage boxes, please find page 10 for specific settings.

The switch must be set correctly for the system to work properly.

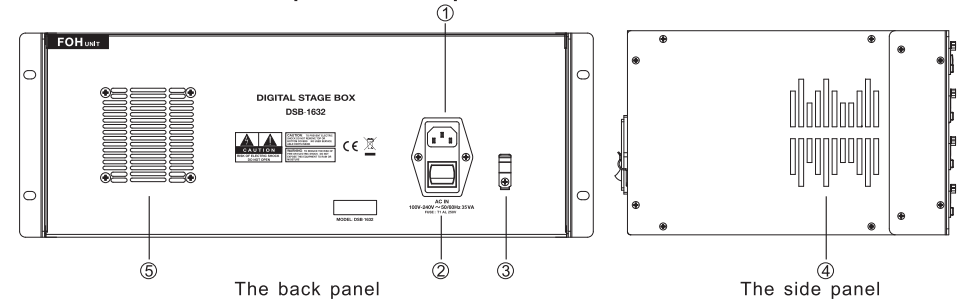
8. Power supply indicator

Turn on the AC power supply and the indicator will on.

9. OUTPUT socket

Each output channel provides balance output interface with male XLR connector. The typical value of the signal output is +0.5dBu, the maximum value is +22dBu.

DSB-3216/DSB-1632 rear panel and side panel



1. Power input socket

Connect one end of the attached AC power cord to the grounded AC power socket, connect another one to the AC IN socket for the internal power supply of DSB-3216 or DSB-1632. Use the clamp on the side panel to fix the power cord to prevent it from being pulled out accidentally.

Use only the power cord provided to prevent damage to DSB-3216/DSB-1632.

1. Power supply switch

Turn on/off the power.

2. Clamp for power cord

The clamp holds the AC power cord to prevent the cord from loosening from the AC power input socket when it is pulled.

3. Air intake

4. Cooling fan vent

Cooling fan is prevent the device from overheat. Air take provides fresh air for cooling fan and fan vent hot air through these vents.

When the temperature of internal box reaches about 34°C, the fan rotates slowly; when the temperature exceeds about 45°C, the fan rotates quickly; when the temperature is about 27°C, the fan stopped.

Please make sure that the cooling fan vent and air intake are not blocked, otherwise DSB-3216/DSB-1632 may overheat and be damaged.

Concept

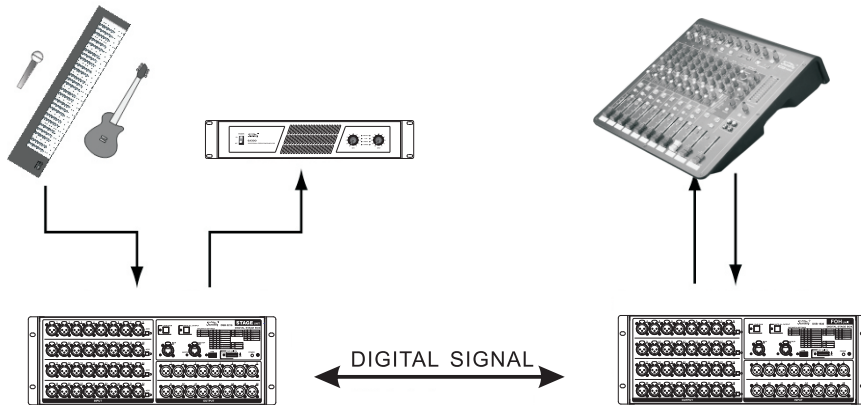
The purpose of DSB-3216/DSB-1632 system which is used for converting multi analog audio signals into digital signals and long distance transmission to another place and then restoring to analog audio signals again, is replacing the traditional analog audio stage box or cable drum. The advantage of digitization also brings features of easy installation, low cost, convenience and easy expansion.

The old analog stage box

The old analog stage box is made up of a multi-core cable with a very large diameter, which includes multi wires (one for each channel) that convert audio signal from one place into another. Although analog multi-core cable finishes the work, it often gives customers an experience in cumbersome, bulky, hard and signal loss over long distance.

The new digital transmission system

The fundamental benefit of digital stage box system is converting multi analog audio signals into digital signals and transmitting by a light CATE5e network cable, which eliminates the huge volume of analog multi-channel cable, also signal degradation and noise interference caused by the long distance transmission of analog audio signal, so that the system can transmit hundreds of feet or more without damage to the sound quality.



A/D-D/A convert and signal optimization

The analog audio signal must be converted to digital signal before it transmitted by digital stage box system. Once the digital form is converted, the audio is sent to the receiving end of digital stage box unit by Ethernet cable. When get there, the signal will be converted to analog signal and connected to the audio device. For example, the process of analog mixer converting analog audio to digital data and returning again, which is called A/D and D/A transmission.

DSB-3216 and DSB-1632 units adopt very high quality 24 bit/ 96kHz A / D and D / A converters for all audio inputs and outputs to achieve the best sound quality.

In addition, DSB-3216 and DSB-1632 system provide +20dB gain preamplifier for each of 48 audio inputs so that the signal can be optimized at the source to get the higher A/D transmission quality.

DSB-3216/DSB-1632 Output

DSB-3216(DSB-1632) audio output is used for receiving audio signal connected to DSB-1632 (DSB-3216) audio input. Connect balanced audio output of DSB-3216(DSB-1632) to balanced audio input of needed device.

If you need to connect DSB-3216(DSB-1632) audio output to unbalanced device, please use DI box or impedance converter in series, or unbalanced wiring mode described in the last section.

⚠ When connect DSB-1632 or DSB-1632 audio output to external device such as mixer, make sure that the phantom power of these external devices is turned off.

Key switch function setting

Input +20dB gain

When this switch is turned on, the signal light is on and the input signal is amplified by +20dB. This switch will affect the gain of all input channel signals.

Phantom power

The input of each DSB-3216/DSB-1632 system can provide +48V phantom power for devices that require it. For example: when a condenser microphone is connected to any device other than a condenser microphone that requires phantom power, be sure to turn off the phantom power. If phantom power is incorrectly supplied to dynamic microphones, audio playback devices, or other devices that do not require such power, damage may result. Be sure to refer to the attached manual to check the specifications of any microphone to be used. (Phantom power of digital stage box: 48V DC, maximum 22m)

Use the below procedure to turn on the phantom power

Use the below procedure to turn on the phantom power on the desired channel. The phantom power switch can only control the corresponding (8 channel) phantom power of this machine to be turned on or off.

1. Press (+48V) to make its indicator light on.
2. Repeat the steps to turn on the phantom power of other channels.

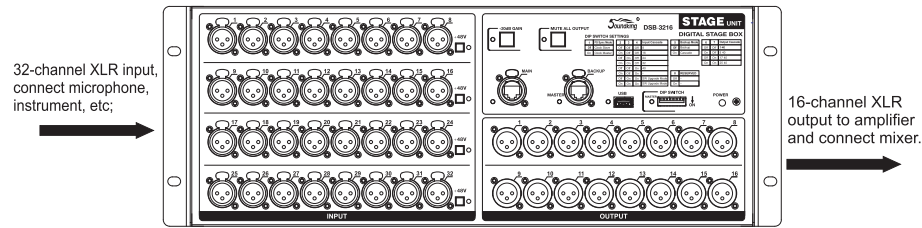
⚠ When the channel's phantom power setting (on/off) is changed, it is recommended that its output be temporarily muted to avoid noise.

MUTE ALL OUTPUTS

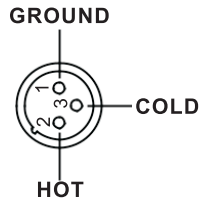
In general, when plugging and unplugging audio input and output devices on the DSB-3216 and DSB-1632 units, the volume of all devices connected to the audio output of the DSB-3216 and DSB-1632 systems should be reduced. However, in some cases, this may be impractical. In this case, you can temporarily mute the audio output from the DSB-3216 and DSB-1632 systems.

1. On the front panel of the DSB-3216 or DSB-1632, press the (MUTE ALL OUTPUTS) button, and its indicator lights. No sound is output when the indicator is on.
2. After completing the input connection with the unit, press the (MUTE ALL OUTPUTS) button again, the indicator light will go out, and the system output will no longer be silenced.

⚠ Note: (MUTE ALL OUTPUTS) only mutes the output of this unit, not the output of another DSB and other devices.



Below picture displays the wiring diagram of XLR balanced jack. First check the wiring diagram of the other device you want to connect before connecting.

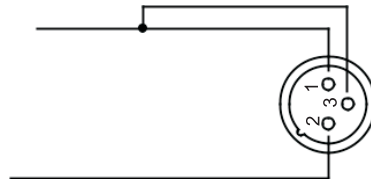


DSB-3216/DSB-1632 Audio input

DSB-3216/DSB-1632 Audio input is used for sending source audio signal to the audio output of DSB-1632(DSB-3216). Connect the output (microphone, instruments, etc) of balanced audio device to the balanced audio input of DSB-3216(DSB-1632) front panel.

Note: when connecting unbalanced sources

- Use DI box or series balanced converter
- Cable with the below wiring mode



When it needs to connect the unbalanced source with a length of more than 6 meters, it is recommended to place a DI box or balanced converter in series near the source, to get a best audio quality and noise suppression.
When connecting to the high impedance source (such as electric guitar or bass, passive pickup), please use DI box or impedance converter.

Rack installation

The device is rated to operate in the range of 0°C to 40°C. When the device is installed to the EIA standard equipment rack together with other digital stage equipment or electronic equipment, the internal temperature may exceed the specified upper limit, which will cause the performance degradation and damage. Please observe the below attentions when use the EIA standard equipment rack to install the device:

When install multi digital stage boxes to the same EIA standard rack, please remain the space of IU rack between two machines. In addition, please keep the opening of the rack open or install a suitable ventilation panel to reduce the possibility of heat storage.

When install the device together with other high power equipment, such as a power amplifier that can generate a lot of heat, please reserve more than IU space between two devices. In addition, please keep the opening of the rack open or install a suitable ventilation panel to reduce the possibility of heat storage.

In order to ensure enough air flow, please keep the back of rack open and put it at least 10cm from the wall of other surfaces. If the back of the rack does not remain open, install a commercially available fan or similar ventilation option to ensure adequate airflow. If a fan assembly is installed, closing the back of the rack may provide better cooling.

Sub-units connection

AC power connection

On DSB-3216:

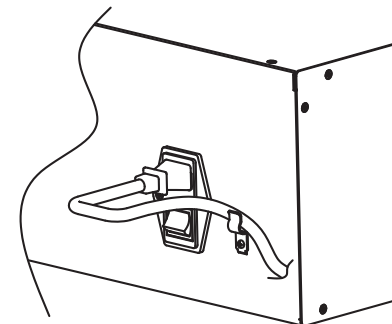
Connect one end of the attached AC power cord to the grounded AC power socket, connect another one to the AC IN socket for the internal power supply of DSB-3216.

On DSB-1632:

Connect one end of the attached AC power cord to the grounded AC power socket, connect another one to the AC IN socket for the internal power supply of DSB-1632.

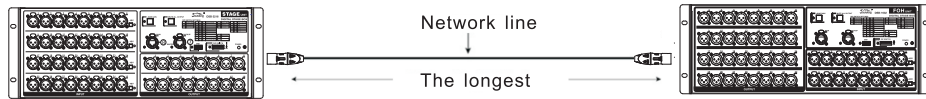
Clamp for power cord

The casing of DSB-3216 and DSB-1632 is equipped with the clamp to prevent the connected cord from being pulled out accidentally and cause power failure.



Connection and requirement of network cable

The connection of single cable requires standard Cat5e Ethernet cable with RJ45 plug and the maximum length is 100m (330 feet). The connection can be hot swappable, that is, it can be connected when the device is powered on.

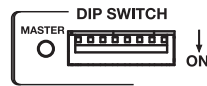


Attention about Cat5e cable

- Please do not subject Cat5e cable to pressures or physical shock.
- Please do not bend Cat5e cable during 25mm.
- Please do not fasten Cat5e cable.
- Avoid placing multiple Cat5e cables in parallel for long distance.
- Avoid placing Cat5e cable around the noise source.
(AC power cable, electric machinery, fluorescent lamp, etc.)

DIP switch setting

Both of DSB-3216 and DSB-1632 have DIP switch which is an 8P toggle switch and sets each device how to transmit audio in the whole system. DIP switch of each device must be set correctly to ensure normal operation of the system.



Switch 1	FS Sync Mode	Switch 2	Switch 3	Switch 4	INPUT Cascade	Switch 5	Backup Mode	Switch 6	Switch 7	Output Cascade	Switch 8	RESERVED
off	Clock Slave	off	off	off	8	off	Backup	off	off	1-40	off	
on	Clock Master	on	off	off	16	on	Cascade	on	off	9-40	on	
		off	on	off	24			off	on	17-40		
		on	on	off	32			on	on	25-40		
		off	off	on	40							
		on	off	on								
		off	on	on								
		on	on	on								

Switch 1 –Master/Slave selection

When DSB connected together, there should always be a master clock source and all of other DSB should be slave clock. Under the backup mode, one DSB as Master (Switch 1 -On) and another as Slave (Switch1 -Off), if under the cascade mode, the Master on DSB at either end of the chain and all of other DSB should be subordinate.

Switch 2~4—Input cascade (use only in cascade mode, toggle down switch 5 set to ON)

These switches are used for selecting which input channels of the DSB passing up from “BACKUP” port to “MAIN” network port of next DSB.

For example, when the input cascade sets 8 (2-off, 3-off, 4-off), only the input 1-8 if the DSB pass up along the chain and all other inputs will come from inputs received through “BACKUP” network port.

Switch 5—Backup mode

Switch two communication ports of DSB to “Backup mode” and “Cascade mode”. See page 6 for details.

Switch 6-7—Output cascade (use only in cascade mode, toggle down switch 5 set to ON)

These switches are used for selecting which channels, sending out output received from the “MAIN” network port of the DSB by “BACKUP” network port.

For example, if output cascade sets 9-40 (6-on, 7-off), output 9-40 will be sent out by “BACKUP” port connected with DSB, and this DSB still has 1-40 outputs.

Note: in above examples, “9-40” or “1-40” channels are only a limit channel number setting, not the channel number of this digital stage box. “9-40” pointed in the example, it's “9-32” in DSB-1632, “9-18” in DSB-3216.

Audio Connection



When connecting audio input under DSB-3216 and/or DSB-1632 powered on, please turn on the corresponding interface box Lighting the indicator of [MUTE ALL OUTPUTS] button on the front panel, which can mute the sound of audio output from DSB-3216/DSB-1632 system and prevent connected speakers and other devices from damage.



Please attention, [MUTE ALL OUTPUTS] only mute outputs of DSB-3216/DSB-1632 system, not other devices. Before connecting audio outputs of DSB-3216/DSB-1632 system to audio inputs of other devices, please make sure the power supply of device is lower or closed, to prevent from damage.