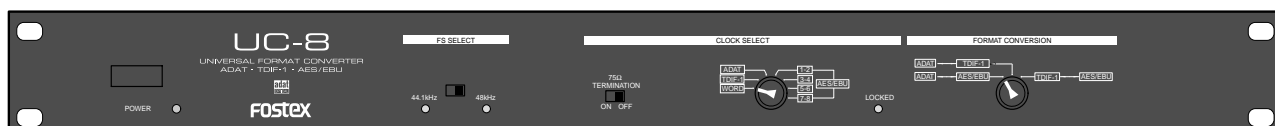


# Owner's Manual

## Universal Format Converter

# Model UC-8



## Introduction

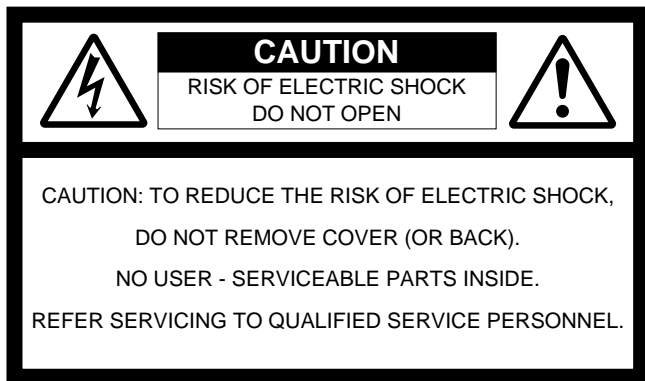
The Model UC-8 is a universal format converter that converts the format of the digital input signal to different format. It can convert between adat digital and AES/EBU, adat digital and TDIF-1, and AES/EBU and TDIF-1.

By inserting the UC-8 between two digital recorders which have different digital formats, you can digitally transfer signals between them (44.1 kHz/48 kHz, 24-bit digital signals only).

Please read this manual thoroughly before using the converter.

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## "WARNING"

"TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE."

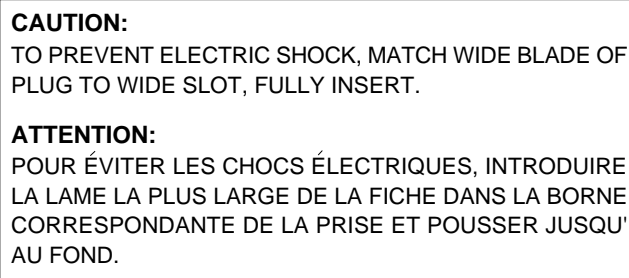
## SAFETY INSTRUCTIONS

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 the appliance and in the operating instructions should be adhered to.
4. Follow Instructions - All operating and use instructions should be followed.
5. Water and Moisture - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
6. Carts and Stands - The appliance should be used only with a cart or stand that is recommended by the manufacturer.



An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

7. Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.



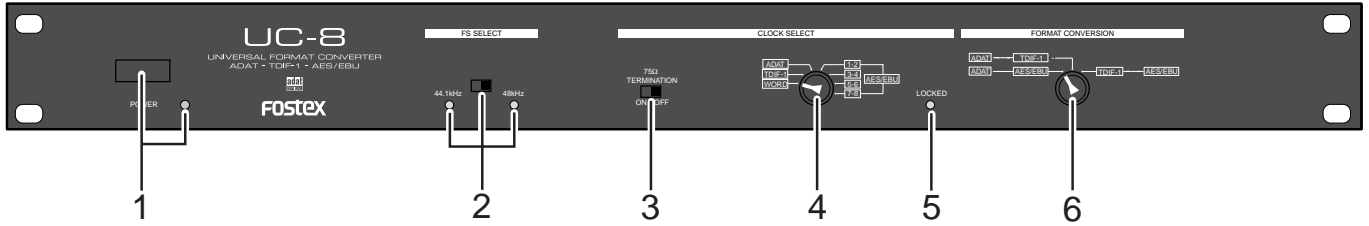
The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



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

9. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
10. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. Grounding or Polarization - The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.
12. 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.
13. Cleaning - The appliance should be cleaned only as recommended by the manufacturer.
14. Nonuse Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
15. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
16. Damage Requiring Service - The appliance should be serviced by qualified service personnel when:
  - A. The power supply cord or the plug has been damaged; or
  - B. Objects have fallen, or liquid has been spilled into the appliance; or
  - C. The appliance has been exposed to rain; or
  - D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
  - E. The appliance has been dropped, or the enclosure damaged.
17. Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

# Names and Functions



## 1. POWER switch and indicator

Turns on or off the power to the UC-8. When on, the indicator illuminates on green.

## 2. Fs SELECT switch and indicators

Selects the Fs when converting an adat digital signal that does not have the Fs status information in the signal. You can select 44.1 kHz or 48 kHz, and the appropriate indicator illuminates.

When converting signals which contains the Fs status information in the signals, it takes priority and the setting of the Fs SELECT switch is ineffective.

## 3. 75Ω TERMINATION switch

Set the switch to ON when receiving an external word clock. Otherwise, set the switch to OFF.

## 4. CLOCK SELECT switch

Selects the master clock. See "Basic Connections and Settings" for details.

## 5. LOCKED indicator

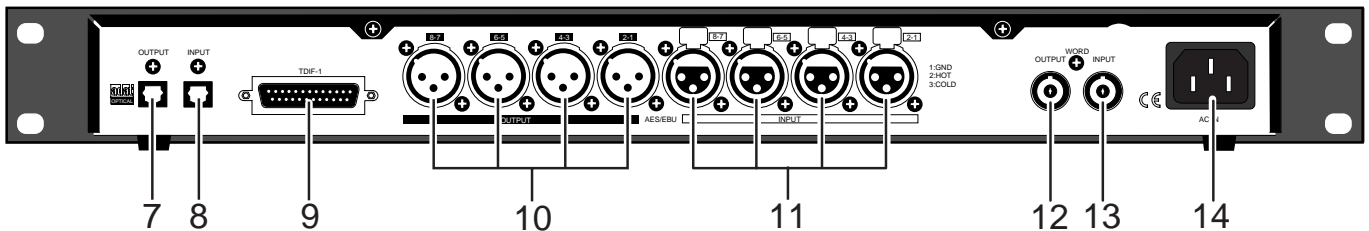
Shows the status of the clock selected by the CLOCK SELECT switch as follows.

CLOCK Select	Indicator Status
ADAT or AES/EBU	Lights up when the UC-8 is locked to an incoming master clock.
TDIF-1 or WORD	Lights up when receiving the appropriate clock.

## 6. FORMAT CONVERSION switch

Selects the combination of source and destination formats. You can select from the following:

Format Conversion	Note
ADAT <--> AES/EBU	Select this when converting an adat signal to AES/EBU signals, or vice versa.
ADAT <--> TDIF-1	Select this when converting an adat signal to TDIF signals, or vice versa.
TDIF-1 <--> AES/EBU	Select this when converting TDIF signals to AES/EBU signals, or vice versa.



## 7. adat OUTPUT connector

Feeds the signal converted to the adat format to an external unit.

## 8. adat INPUT connector

Receives an adat format signal from an external device.

## 9. TDIF-1 connector

Receives TDIF-1 format signals from an external device, or feeds the signal converted to the TDIF-1 format to an external unit.

## 10. AES/EBU OUTPUT connectors

Feeds the signal converted to the AES/EBU format to an external unit.

## 11. AES/EBU INPUT connectors

Receives an AES/EBU format signal from an external device.

## 12. WORD OUTPUT connector

Feeds a word clock to an external device when the UC-8 acts as a clock master.

## 13. WORD INPUT connector

Receives a word clock from an external digital device when the UC-8 is slaved to an external word clock. Make sure that the 75Ω TERMINATION switch on the front panel is set to ON when the unit is slaved to an external clock.

## 14. AC IN connector

Connects the supplied power cord.

# Basic Connections and Settings

## <Notes>

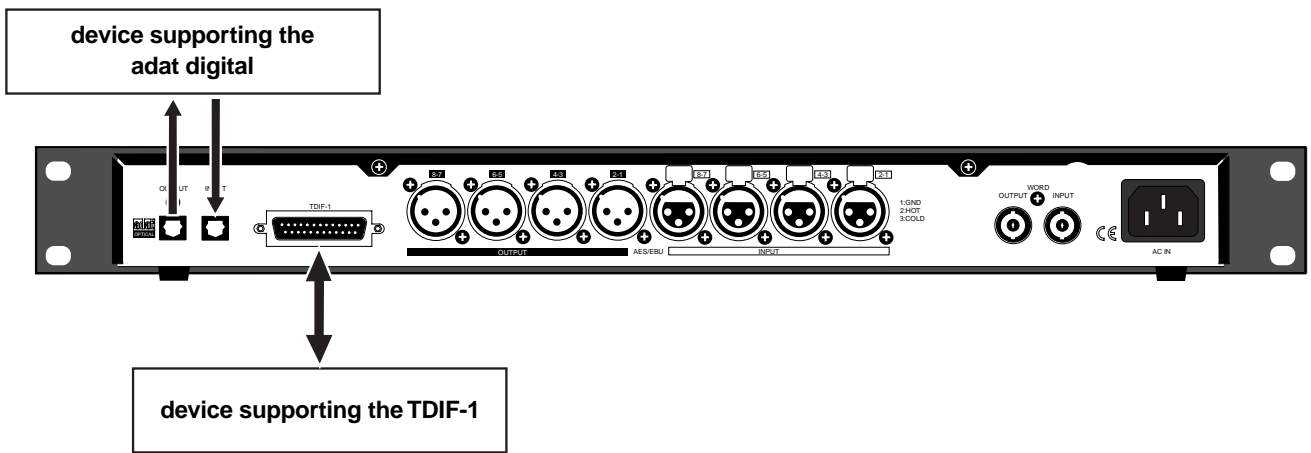
- Make sure that the unit is turned off when connect or disconnect cables.
- Make sure that the unit is turned off when changing the select switch setting. If you change the setting when the power is on, unwanted noise may be generated.
- If you try to convert a signal other than signals with a 44.1 kHz or 48 kHz sampling frequency and 24-bit quantization, the UC-8 may generate noise.

## Between adat and TDIF-1 devices

To convert an adat signal to a TDIF-1 signal or vice versa, connect the devices and set the switches on the front panel as follows:

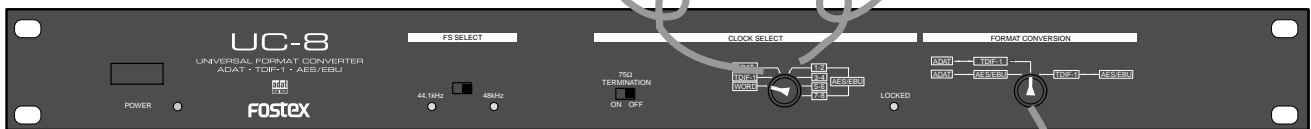
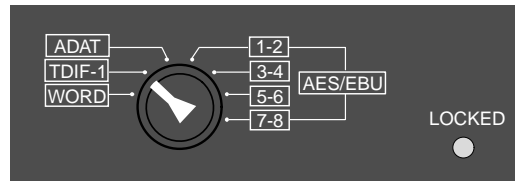
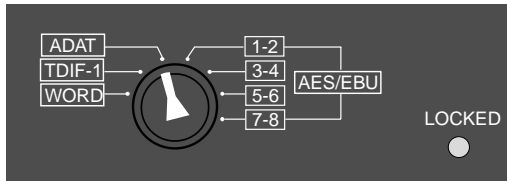
### <Fs SELECT switch setting>

In this case, you do not have to set the Fs SELECT switch because the Fs of the converted signal depends on the Fs information in the TDIF-1 signal.



To convert an adat signal to a TDIF-1 signal, set the CLOCK SELECT switch to "ADAT".

To convert a TDIF-1 signal to an adat signal, set the CLOCK SELECT switch to "TDIF-1".

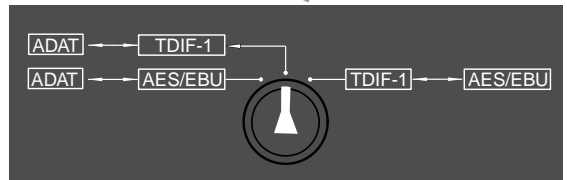


### <About WORD clock>

In the connection example above, the UC-8 is locked to an incoming digital signal (adat or TDIF-1).

However, if the while system is lock to another WORD clock, feed the master clock to the WORD INPUT of the UC-8 as well as the other devices. In this case, set the CLOCK SELECT switch to "WORD" and the 75Ω TERMINATION to "ON".

If you use the TASCAM DA-88 for a TDIF-1 device in the connection above, connect the WORD OUT connector of the UC-8 and the WORD IN connector of the DA-88, so that the word clock is supplied to the DA-88 from the UC-8.



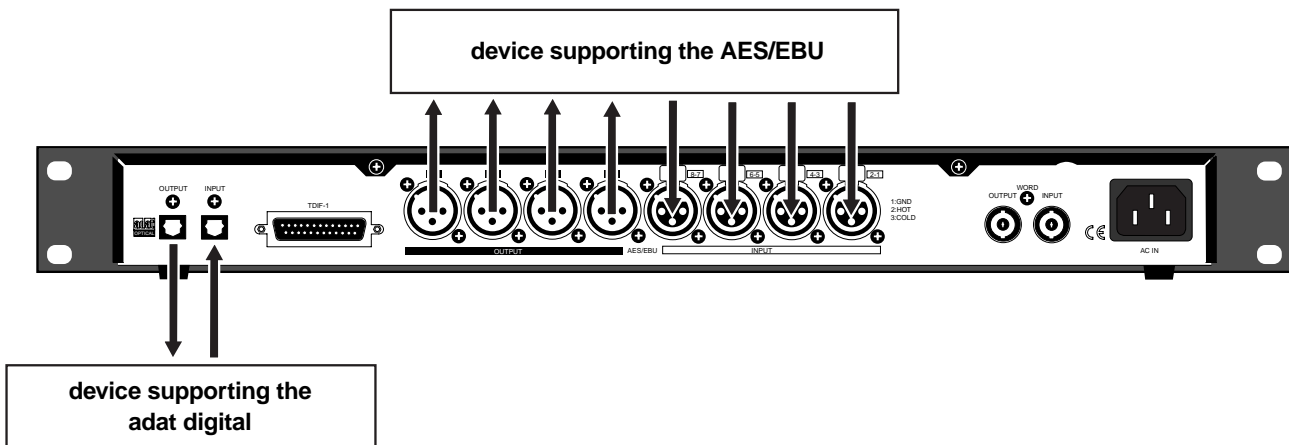
Set the FORMAT CONVERSION switch to "ADAT <--> TDIF-1".

## Between adat and AES/EBU devices

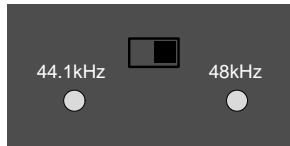
To convert an adat signal to AES/EBU signals or vice versa, connect the devices and set the switches on the front panel as follows:

### <Fs SELECT switch setting>

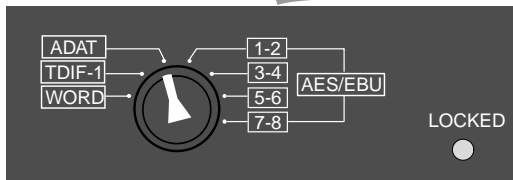
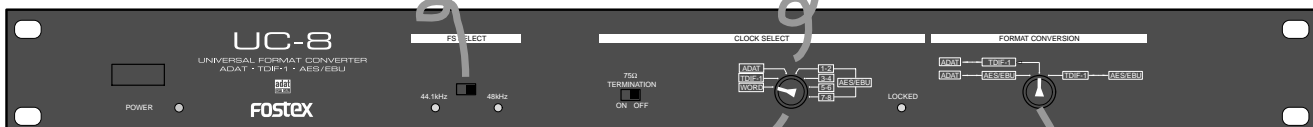
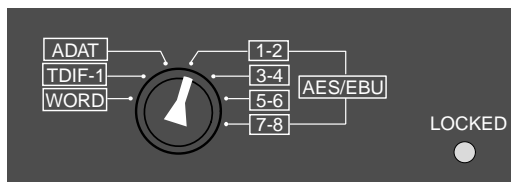
If both of the AES/EBU INPUT and OUTPUT connectors are connected to an AES/EBU device, you do not have to set the Fs SELECT switch when converting an adat signal to AES/EBU signals, because the Fs of the converted signal depends on the Fs information in the AES/EBU signal. However, if you convert an adat signal to AES/EBU signals when the AES/EBU INPUT connectors are not connected, set the Fs SELECT switch correctly to match the Fs of the adat signal.



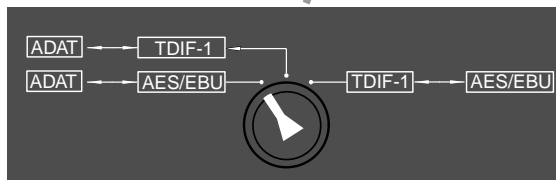
Set the Fs SELECT switch when AES/EBU INPUT connectors are not used (see "Fs SELECT switch setting" above for details).



To convert AES/EBU signals to an adat signal, set the CLOCK SELECT switch to "1-2", "3-4", "5-6", or "7-8" appropriately according to the connector to be used. If all eight AES/EBU input channels are used, you may set any of the four positions above.



To convert an adat signal to AES/EBU signals, set the CLOCK SELECT switch to "ADAT".



Set the FORMAT CONVERSION switch to "ADAT <--> AES/EBU".

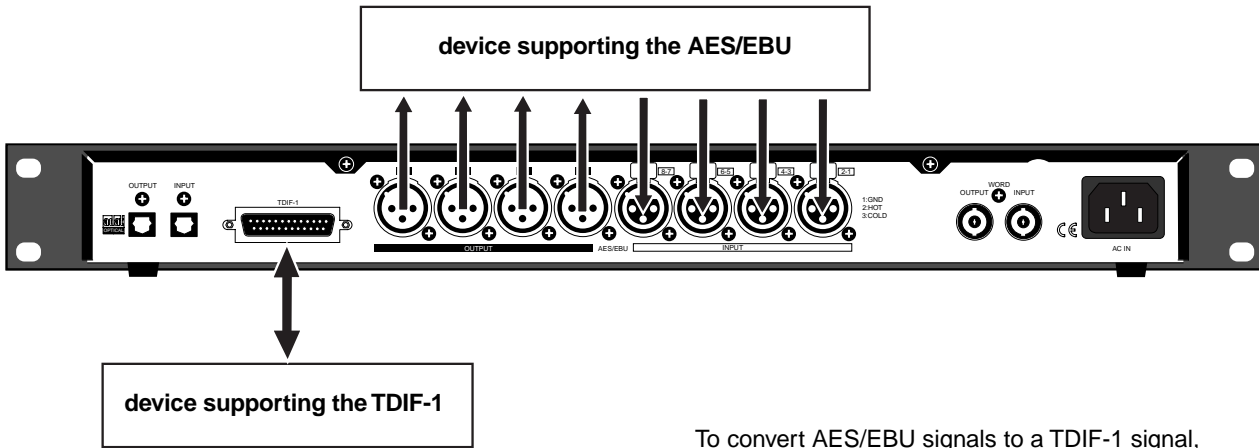
### <About WORD clock>

In the connection example above, the UC-8 is locked to an incoming digital signal (adat or AES/EBU). However, if the while system is lock to another WORD clock, feed the master clock to the WORD INPUT of the UC-8 as well as the other devices. In this case, set the CLOCK SELECT switch to "WORD" and the 75Ω TERMINATION to "ON".

## Between AES/EBU and TDIF-1 devices

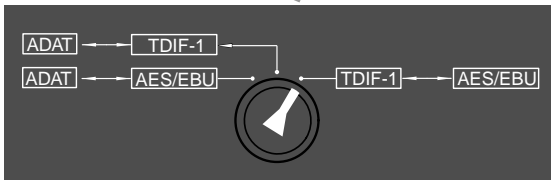
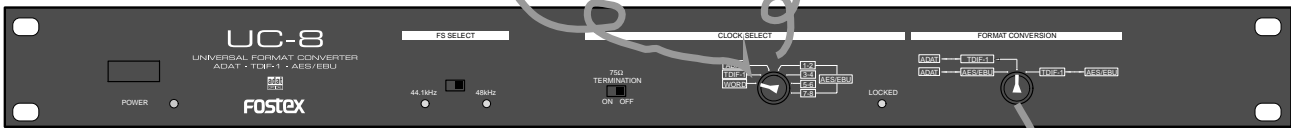
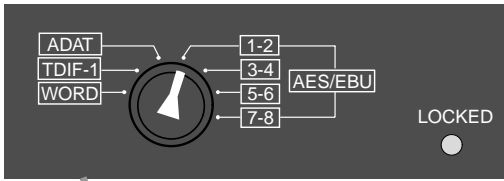
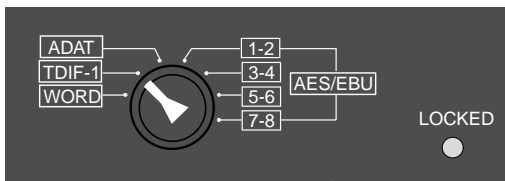
To convert AES/EBU signals to a TDIF-1 signal or vice versa, connect devices and set the switches on the front panel as follows.

**<Fs SELECT switch setting>**  
 You do not have to set the Fs SELECT switch when converting AES/EBU signals to a TDIF-1 signal or vice versa. The Fs of the converted signals matches the Fs of the source signals.



To convert a TDIF-1 signal to AES/EBU signals, set the CLOCK SELECT switch to "TDIF-1".

To convert AES/EBU signals to a TDIF-1 signal, set the CLOCK SELECT switch to "1-2", "3-4", "5-6", or "7-8" appropriately according to the connector to be used. If all eight AES/EBU input channels are used, you may set any of the four positions above.



Set the FORMAT CONVERSION switch to "TDIF-1 <-> AES/EBU".

**<About WORD clock>**  
 In the connection example above, the UC-8 is locked to an incoming digital signal (TDIF-1 or AES/EBU). However, if the while system is lock to another WORD clock, feed the master clock to the WORD INPUT of the UC-8 as well as the other devices. In this case, set the CLOCK SELECT switch to "WORD" and the 75Ω TERMINATION to "ON".

# Specifications

## TDIF-1 In/Out

Connector : D-sub 25 pin (female)  
 Format : TDIF-1 (TEAC Digital Interface-1)

## adat Output

Connector : OPTICAL  
 Format : Alesis Proprietary Multi Channel Optical Digital Interface (adat)

## adat Input

Connector : OPTICAL  
 Format : Alesis Proprietary Multi Channel Optical Digital Interface (adat)

## AES/EBU Output

Connector : XLR-3-31 (2pin HOT)  
 Format : IEC 60958 (AES/EBU)

## AES/EBU Input

Connector : XLR-3-32 (2pin HOT)  
 Format : IEC 60958 (AES/EBU)

## WORD Output

Connector : BNC type  
 Output level : TTL level

## WORD Input

Connector : BNC type  
 Input level : TTL level  
 (included 75Ω termination switch)

**Sampling Freq.** : 44.1kHz/48kHz

**Quantization** : 24bits


**Power Supply** : 120VAC 60Hz  
 : 230V~ 50/60Hz (AC inlet type)

**Dimensions** : 482 (W) x 44 (H) x 220 (D) mm

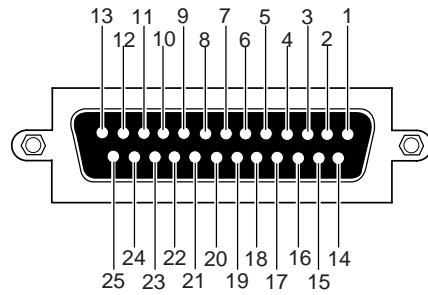
**Weights** : 2kg

\* Specifications and appearance are subject to change without notice for product improvement.

\* “TDIF-1” is trademark of TEAC Corporation.

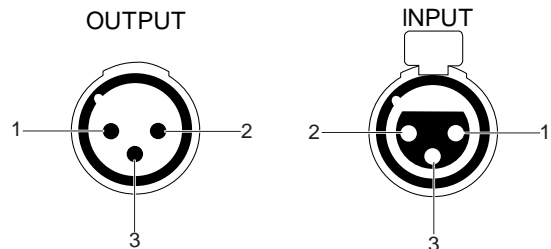
\* “Adat” and the  symbol are trademarks of Alesis Corporation.

## Connector Pin Assign (TDIF-1)



1	D OUT 1/2	14	GROUND
2	D OUT 3/4	15	GROUND
3	D OUT 5/6	16	GROUND
4	D OUT 7/8	17	GROUND
5	LRCK OUT	18	EMPHASIS OUT
6	FS 0 OUT	19	FS 1 OUT
7	GROUND	20	FS 1 IN
8	FS 0 IN	21	EMPHASIS IN
9	LRCK IN	22	GROUND
10	D IN 7/8	23	GROUND
11	D IN 5/6	24	GROUND
12	D IN 3/4	25	GROUND
13	D IN 1/2		

## Connector Pin Assign (AES/EBU)



1	GROUND
2	HOT
3	COLD

# Declaration of EC Directive

This equipment is compatible with the EMC Directive (89/336/EEC) - Directive on approximation of member nation's ordinance concerning the electromagnetic compatibility and with the Low Voltage Directive (73/23/EEC) - Directive on approximation of member nation's ordinance concerning electric equipment designed to be used within the specified voltage range.

## The Affect of Immunity on This Equipment

The affect of the European Specification EN50082-1 (coexistence of electromagnetic waves - common immunity specification) on this equipment are as shown below.

\* In the electrical fast transient/burst requirements, surge, conducted disturbances by radio-frequency fields, power frequency magnetic field, radiate electromagnetic field requirements and static electricity discharging environment, this could be affected by generation of noise in some cases.

## FOSTEX DISTRIBUTORS LIST IN EUROPE

\* Including non-EU countries. (as of January, 2002)

### <AUSTRIA>

NAME: ATEC Audio-u. Videogeraete VertriebsgesmbH.  
ADD: Im Winkel 5, A-2325 Velm, Austria  
TEL: (+43) 2234-74004, FAX: (+43) 2234-74074

### <BELGIUM>

NAME: EML Sound Industries NV  
ADD: Bijvenestraat 1A, B3500 Hasselt, Belgium  
TEL: (+32) 11-232355, FAX: (+32) 11-232172

### <DENMARK>

NAME: SC Sound ApS  
ADD: Malervej 2, DK-2630 Taastrup, Denmark  
TEL: (+45) 4399-8877, FAX: (+45) 4399-8077

### <FINLAND>

NAME: Noretron Oy Audio  
ADD: P. O. Box 22, FIN-02631 Espoo, Finland  
TEL: (+358) 9-5259330, FAX: (+358) 9-52593352

### <FRANCE>

NAME: Guillard Musiques  
ADD: ZAC de Follieuses, B. P. 609, Les Echets, 01706 Miribel, France  
TEL: (+33) 472 26 27 00, FAX: (+33) 472 26 27 01

### <GERMANY>

NAME: Studiosound & Music GmbH  
ADD: Industriestrasse 20, D-35041 Marburg, F. R. Germany  
TEL: (+49) 6421-92510, FAX: (+49) 6421-925119

### <GREECE>

NAME: Bon Studio S. A.  
ADD: 6 Zaimi Street, Exarchia, 106.83 Athens, Greece  
TEL: (+30) 1-3809605-8, 3302059, FAX: (+30) 1-3845755

### <ICELAND>

NAME: I. D. elrf. electronic Ltd.  
ADD: ARMULA 38 108 REYKJAVIK, ICELAND  
TEL: (+354) 588 5010, FAX: (+354) 588 5011

### <ITALY>

NAME: Proel S. p. A.  
ADD: Zona Artigianale 64047-Sant' Omero (Teramo), Italy  
TEL: (+39) 0861-81241, FAX: (+39) 0861-887862

### <THE NETHERLANDS>

NAME: IEMKE ROOS AUDIO B. V.  
ADD: Kuiperbergweg 20, 1101 AG Amsterdam, The Netherlands  
TEL: (+31) 20-697-2121, FAX: (+31) 20-697-4201

### <NORWAY>

NAME: Siv. Ing. Benum A/S  
ADD: P. O. Box 145 Vinderen, 0319 Oslo 3, Norway  
TEL: (+47) 22-139900, FAX: (+47) 22-148259

### <PORTUGAL>

NAME: Caius - Tecnologias Audio e Musica, Lda.  
ADD: Rua de Santa Catarina, 131 4000 Porto, Portugal  
TEL: (+351) 2-2086009/2001394,  
FAX: (+351) 2-2054760/2087488

### <SPAIN>

NAME: Multitracker, S. A.  
ADD: C/Garcilaso No.9, Madrid 28010, Spain  
TEL: (+34) 91-4470700, 91-4470898, FAX: (+34) 91-5930716

### <SWEDEN>

NAME: TTS Scandinavia AB  
ADD: Kavallerivagen 24, 172 48 Sundbyberg, Sweden  
TEL: (+46) 8-59798000, FAX: (+46) 8-59798001

### <SWITZERLAND>

NAME: Audio Bauer Pro AG  
ADD: Bernerstrasse-Nord 182, CH-8064 Zurich, Switzerland  
TEL: (+41) 1-4323230, FAX: (+41) 1-4326558

### <UK>

NAME: SCV London  
ADD: 40 Chigwell Lane, Oakwood Hill Industrial Estate, Loughton, Essex IG10 3NY U.K.  
TEL: (+44) 020-8418-0778, FAX: (+44) 020-8418-0624