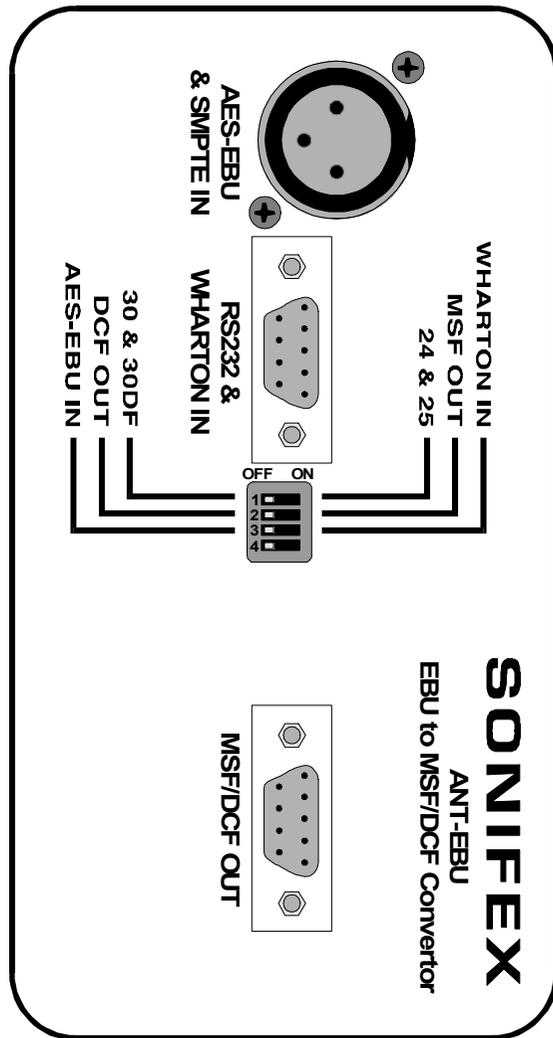The ANT-EBU convertor box converts incoming AES-EBU, or Wharton clock signals, to an MSF or DCF clock output, for use with the Sonifex RTC-1 PC clock card, or the Sentinel+ range of audio logging machines.

AES-EBU & SMPTE IN

AES-EBU IN
DCF OUT
30 & 30DF

RS232 & WHARTON IN

WHARTON IN
MSF OUT
24 & 25

OFF   ON
1
2
3
4

MSF/DCF OUT

SONIFEX
ANT-EBU
EBU to MSF/DCF Convertor

To use the convertor, connect either the AES-EBU, or the Wharton (RS232) input to the respective inputs, depending on the one which you wish to use.

Using the DIP switches, configure the convertor to your requirements :

If you are using the AES-EBU input, set switch 3 to Off and set switch 1 to select the frame rate of the input. Switch 1 is ignored for Wharton clock input :

Parameter	Switch 3 0n	Switch 3 Off
Input	Wharton CLK	SMPTE

Parameter	Switch 1 0n	Switch 1 Off
SMPTE Frames	24 & 25	30 & 30 DF

Switch 2 selects whether you output an MSF or DCF signal :

Parameter	Switch 2 0n	Switch 2 Off
Output	MSF	DCF

Then simply connect the MSF/DCF output cable between the MSF/DCF Out socket and the RTC-1 card, or Sentinel+ "EXT CLOCK" input.

Important - The time-code converter should be reset after changing the switch settings. This is achieved by turning the power off (removing the MSF/DCF output connector) and then back on.

Specifications

Input Specifications

Input Signal	Signal Rate	Signal Levels
SMPTE \ EBU	24 Frames/s 25 Frames/s 30 Drop Frame 30 Non-Drop	5V balanced signal meeting the RS422A standard.
Wharton Clock	RS232 at 1200 baud/s	Standard RS232 levels

Output Specifications

Output Signal	Signal Levels
MSF	0-5V
DCF	0-5V

Connections

AES-EBU Input

The AES-EBU connector is a standard 3 pin XLR input with the following pin assignments :

    Pin1 :   Screen
    Pin2 :   Phase
    Pin3 :   Non-phase

RS232 Input

The RS232 connector is a 9 way female 'D' Type socket with the following pin assignments :

    Pin1 :   Not connected
    Pin2 :   RXD
    Pin3 :   Not connected
    Pin4 :   Not connected
    Pin5 :   Signal Ground
    Pin6 :   Not connected
    Pin7 :   Not connected
    Pin8 :   Not connected
    Pin9 :   Not connected

MSF/DCF Output

The clock connector is a balanced 9 way female 'D' Type socket with the following pin assignments :

    Pin1 :   Signal Phase
    Pin2 :   Signal Non Phase
    Pin3 :   0V
    Pin4 :   +12V
    Pin5 :   Not connected
    Pin6 :   0V
    Pin7 :   0V
    Pin8 :   Not connected
    Pin9 :   Not connected

ANT-EBU USER HANDBOOK