

328XD AND ALESIS ADAT AND BRC

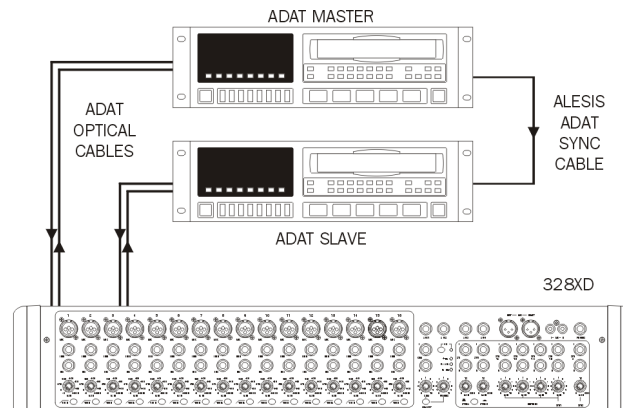
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CONNECTING THE SYSTEM

Audio Connections

Connect audio connections as shown in the diagram below. ADAT Optical cables must be connected from the ADAT Out ports of both the ADATs to the ADAT In ports of the 328XD and vice versa.

The ADAT connections allow digital transfer of either direct outputs for input channels 1-16 to the ADATs, or the 328XD's 8 Group outputs.

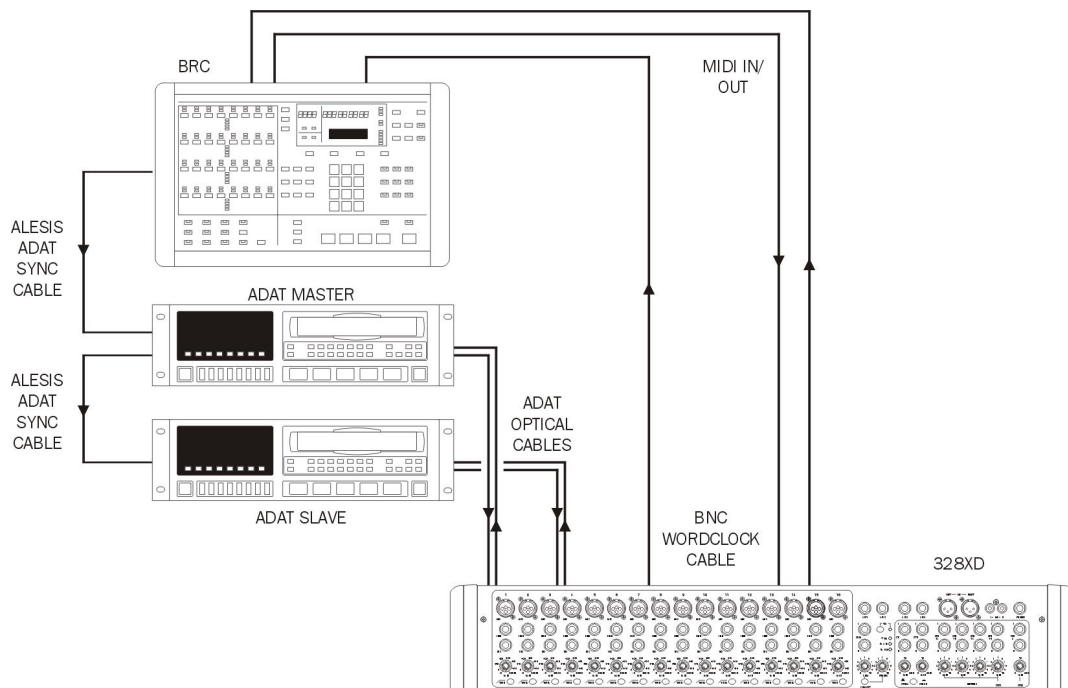


Synchronization Connections

Besides the audio connections, a BNC Wordclock cable must be connected from the 328XD Wordclock Out to the BRC 48kHz input to synchronize the transmission of the samples.

NOTE: It must be decided whether MIDI Time Code (MTC) or Longitudinal Timecode (LTC or SMPTE) is to be used to transmit the timecode from the BRC to the 328XD. If LTC is to be used, MIDI connections must still be made, in order to enable the transmission of MIDI Machine Control (MMC). MMC is responsible for the transmission of the Transport and Locate Controls between BRC and 328XD.

In the following diagram the MIDI cable from the BRC MIDI Out port is used to transmit the MIDI Timecode to the 328XD.



To summarize, the connections required are as follows:

BNC Wordclock cable:

328XD Wordclock out → BRC Wordclock In

MIDI Cables (required even if MIDI Timecode is not to be used):

328XD MIDI Out → BRC MIDI In

BRC MIDI Out → 328XD MIDI In

SMPTE Cable (required only if SMPTE is to be used instead of MIDI Timecode)

BRC Timecode Out → 328XD Timecode In

Alesis Sync Cables:

BRC Sync Out → ADAT Master Sync In

ADAT Master Sync Out → ADAT Slave Sync In

Optical Cables:

ADAT Master Optical Out → 328XD 8 Track A Optical In

328XD 8 Track A Optical Out → ADAT Master Optical In

ADAT Slave Optical Out → 328XD 8 Track B Optical In

328XD 8 Track B Optical Out → ADAT Slave Optical In

328XD CONFIGURATION

Wordclock

In a configuration using the BRC, the 328XD must be made to be the wordclock master device. Enter the 328XD Menu pages by pressing the <MENU> button on the right hand side of the LCD display. Using the encoder beneath the display, scroll up or down until the 'Clock Source Sel' menu is highlighted, and press <ENTER>. Here, either the internal sampling rate can be toggled between 44.1kHz and 48kHz. As the BRC responds only to a 48kHz input, the 328XD must be set to Internal Clock at 48kHz. Use the encoder to set the clock to 48kHz, press <ENTER> to set the sample rate and <MENU> to return to the menu pages.

```
<Wordclock Src.>  
Internal:48.0kHz
```

Tape Ports

To ensure that the 328XD Tape Ports are set to ADAT, enter the 328XD Menu pages by pressing the <MENU> button on the right hand side of the LCD display. Using the PARAM encoder beneath the display, scroll up or down until the 'Tape Port Select' menu is highlighted. Press <ENTER> and keep pressing the Up cursor arrow until the '<Tape Ch17-24 >' menu page is displayed. Using the PARAM encoder, set the Bank Source to ADAT. Press the Down cursor arrow once, to set the wordlength. Newer ADATs such as the XT-20 or LX-20 are capable of 20-bit recording, and so for optimum results, 20-bit wordlength can be selected here. If using the black Classic ADAT, 16-bit should be selected. The ADAT manuals should be consulted for further information. The wordlength is set on the 328XD with the PARAM encoder.

```
<Tape Ch17->24 >  
Bank Source:ADAT
```

Press the Down cursor arrow once to set the wordlength. Newer ADATs such as the XT-20 or LX-20 are capable of 20-bit recording, and so for optimum results, 20-bit wordlength can be selected here. If using the black Classic ADAT, 16-bit should be selected. The ADAT manuals should be consulted for further information. The wordlength is set on the 328XD with the PARAM encoder. Press <MENU> to return to the menu pages.

```
<Tape Ch17->24 >  
Wordlength: 20
```

MIDI

To configure the 328XD to send the MMC controls to the BRC and vice versa, the Alesis BRC must be selected in the Tape Machine Setup menu. Enter the Menu pages by pressing the <MENU> button, and scroll up or down with the PARAM encoder until the 'Tape Mach Setup' menu is highlighted. Press <ENTER>, scroll until 'Alesis BRC' is highlighted and press <ENTER> again.

```
<Tape Mach Type>  
Alesis BRC
```

NOTE: Once the BRC has been selected, the timecode source must be selected. If no SMPTE cable has been connected, MTC must be selected; if a SMPTE cable has been connected, LTC must be selected.

```
Alesis BRC  
Timecode Src:MTC
```

or

```
Alesis BRC  
Timecode Src:LTC
```

The frame rate must also be selected. The options are 24 frame, 25 frame, 30 drop frame and 30 non-drop frame. Whichever is selected here must also be selected later when setting up the BRC.

```
Alesis BRC  
Frame Rate: 24
```

Once the 328XD has been set up, it is very advisable to store a User Setup of the above settings. Enter the Menu pages by pressing the <MENU> button and scroll through the menus until 'User Setups' is highlighted. Press <ENTER> and scroll through to find a vacant setup location. Press <STORE> in the 328XD Snapshot panel. The User Setup will now be stored. To edit the parameters of the setup, while the setup is highlighted in the display, press <ENTER>. To recall the setup, highlight it in the User Setups menu in the LCD and press the <RECALL> button in the Snapshot panel.

```
<Setup#01 >  
ID:BRC 2 ADAT:
```

NOTE: Before proceeding to the ADAT and BRC setup, recall the User Setup as illustrated above and switch off the 328XD.

BRC AND ADAT CONFIGURATION

Firstly, turn on the Slave ADAT. Allow a few seconds for the ADAT to boot correctly. Next turn on the Master ADAT. Allow a few more seconds for the ADAT to boot and recognize the Slave ADAT. Then turn on the BRC. Ensure that the BRC recognizes both ADATs. If it does not recognize the ADATs, you will need to turn off the BRC and reinitialize it, by holding down <RECORD> and <PLAY> and turning on the BRC. You may need to repeat this procedure until the BRC recognizes the two ADATs.

Once the BRC and ADATs are stable, the BRC must be set up correctly.

BRC Setup

TIMECODE

To set the BRC to Timecode generation to either MTC or SMPTE:

MTC: Press <EDIT>, <GEN SYNC>, <GEN SYNC> on the BRC. Using the <UPPERCASE> and <LOWERCASE> cursor keys, select MTC.

```
Generate Sync
MIDI: MTC
```

SMPTE: Press <EDIT>, <GEN SYNC> on the BRC to select SMPTE timecode output. Using the <UPPERCASE> cursor key select +4dB.

```
Generate Sync
SMPTE: +4dB
```

NOTE: SMPTE should only be selected if the SMPTE cable is connected between the BRC and the 328XD.

WORDCLOCK

Press <EXT SYNC> on the BRC. Ensure that the <EDIT> button has remained lit, and use the <UPPERCASE> and <LOWERCASE> cursor keys until the display reads

```
Clock Source
48KHz Input
```

To leave the EDIT mode, press <EDIT>

CONFIRMING THE SETTINGS

To implement the above settings made to the BRC:

Press

<GEN SYNC> then <EXT SYNC>

Then the

<GEN SYNC> (Generate Sync - MTC/SMPTE)

and

<EXT SYNC> (External Sync - Wordclock)

buttons should now be lit, indicating that the BRC is generating MIDI Timecode or SMPTE and sending it to the 328XD, and is receiving 48kHz Wordclock from the 328XD on the BNC cable.

FRAME RATE

Press the <SMPTE> button on the BRC until the LED indicates the same Frame Rate as was selected in the 328XD configuration.

ADAT Setup

BLACK CLASSIC ADAT:

Press <DIGITAL IN> (on both ADATs if two are connected)

LATER MODEL

Press <Digital Input> (on both ADATs if two are connected)

NOTE: Do not do this from the BRC – the <DIGITAL I/O> button sets the BRC and connected ADATs into track bounce mode.

To complete the setup, turn on the 328XD again.

NOTES ON SINGLE ADAT OPERATION

The 328XD should be set up as outlined above, with a few notable exceptions. As an ADAT has no MIDI capabilities or a SMPTE output, Timecode cannot be transmitted and the 328XD Transport Controls cannot be used. The Tape Port should be set to ADAT as above, ensuring that if only one ADAT is connected that the unused port is set to TDIF.

The ADAT(s) should be set to Digital Input, as outlined on the previous page, and also set to receive external clock. To set the clock to external, press the <CLOCK SELECT> button on the front panel until DIG 48K is seen in the display.

NOTE: If 48K flashes in the display, the ADAT tape is formatted at 44.1kHz. The 328XD should now be set to generate wordclock at 44.1kHz (see above). The sampling rate will now remain lit on the ADAT display.

SOUNDCRAFT

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