adat RMB

REMOTE METER BRIDGE

Reference Manual

ALESIS

adat® RMB

REMOTE METER BRIDGE

Reference Manual

TABLE OF CONTENTS

Peak Mode LEDS

15-Segment LED Bargraph Meters

FRONT PANEL

ALESIS
adat RMB
REMOTE METER BRIDGE

Decay Speed LEDS

FAST   MOMENTARY
SLOW   CONTINUOUS

DECAY   PEAK   PEAK
SPEED   MODE   CLEAR

0dB	0dB	0dB
-2	-2	-2
-4	-4	-4
-6	-6	-6
-9	-9	-9
-12	-12	-12
-15	-15	-15
-18	-18	-18
-22	-22	-22
-27	-27	-27
-32	-32	-32
-38	-38	-38
-44	-44	-44
-51	-51	-51
-60	-60	-60

1 2 3 4 5 6 7 8   9 10 11 12 13 14 15 16   17 18 19 20 21 22 23 24   25 26 27 28 29 30 31 32

RECORD   RECORD   RECORD
INPUT   INPUT   INPUT

Decay Speed Switch   **Peak Mode Switch**   **Peak Clear Button**

Record & Input Status LEDS

Power Switch

REAR PANEL

POWER

I
O

ALESIS
ALESIS CORPORATION, LOS ANGELES

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO
CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE AND (2) THIS DEVICE MUST ACCEPT
ANY INTERFERENCE RECIEVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

CAUTION: TO PREVENT ELECTRICAL SHOCK DO NOT REMOVE COVERS. NO USER SERVICABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

TRACKS 25-32   TRACKS 17-24   TRACKS 9-16   TRACKS 1-8

90-250 VAC 50-60 Hz

ADAT Meter Bridge Connectors

90-250 VAC Power Receptacle

CHAPTER 1: INTRODUCTION

1.0 ABOUT THE RMB

Congratulations! You've just purchased an invaluable addition to the BRC/ADAT system. The RMB Remote Meter Bridge is designed to give you instant level information by providing 15-segment LED bargraph meters for up to 32 ADAT tracks. In addition, LED indicators are provided for displaying the record and input status of each track. The RMB is perfect for mounting atop the BRC Master Remote Control, or in a standard 19" equipment rack, or it can be installed above your mixing console. Here are some of the features the RMB will provide you:

- **32 channel meter bridge.** 15-segment LED bargraph meters keep you informed of the levels for up to 32 tracks (4 ADATs). The meters have two decay speeds, fast and slow, which control the time it takes for the level indicators to fall back down when audio is no longer present or the tape transport is stopped.

- **Selectable peak mode.** Each time a track's level reaches a new peak, the corresponding LED on the RMB will either remain lit momentarily, or continuously, or not at all, depending on the mode you select from the front panel. All peak LEDs can be instantly cleared from the display with the press of a single button.

- **ADAT interaction.** Not only does the RMB display the levels of each ADAT track, it also adjusts each ADAT's bargraph display to match the RMB's configuration. If you select Momentary Peak Mode, the ADATs will also be set to the same mode automatically. When you clear the peak LEDs on the RMB, the peaks in the ADATs' displays are also cleared.

- **Easy hookup and operation.** The RMB can either be mounted atop the BRC, or rack-mounted in a standard 19" equipment rack. Four dual male, 9-pin D connector cables are used to link the RMB with up to four ADATs.

- **Voltage tolerant power supply.** The RMB accepts any AC voltage between 90 and 250 volts.

1

1.1 ABOUT THIS MANUAL

This manual is designed to give you a basic overview of the RMB's setup and operation. For more information on digital recording, see Appendix 1 in the ADAT manual. Appendix 2 in the ADAT manual is a glossary of digital recording terms that may be helpful as you read this manual.

In this manual, buttons and LEDs are spelled with all capital letters (such as DECAY SPEED LEDs or PEAK CLEAR button).

1.2 OVERVIEW OF MAIN FUNCTIONS

Here is a brief rundown of the RMB's main functions:

1.2A Bargraph Meters

Levels for 32 ADAT tracks are displayed using 15-segment LED bargraph indicators, ranging from -60 to 0 dB. Below each bargraph indicator are two additional LEDs, used to indicate each track's record and input status.

For information about setting levels, refer to section 3.3 in the ADAT Reference Manual.

1.2B Decay Speeds

The RMB has two speeds (fast or slow) to control the rate at which each track's level indicator will fall back down when audio is no longer present, or the tape transport is stopped.

1.2C Peak Modes

The RMB uses three different peak modes: Momentary, Continuous and Off. When a track's level reaches its peak, the corresponding LED will either remain lit for a moment, or remain lit continuously (until the PEAK CLEAR button is pressed), or will not remain lit if the Peak Mode is turned off.

CHAPTER 2: HOOKUP

2.0 POWER

The RMB works with *any* AC voltage from 90 to 250 volts, 50 to 60 Hz. This eliminates the need for transformers or voltage switches. The RMB comes with a line cord for the destination to which the RMB is shipped.

The RMB's IEC-spec AC cord (do not substitute any other AC cord) is designed for connection to an outlet that includes three pins, with the third pin connected to ground. The ground connection is an important safety feature designed to keep the chassis of electronic devices such as the ADAT, BRC, AI-1 and RMB at ground potential. Unfortunately, the presence of a third ground pin does not always indicate that an outlet is properly grounded. Use an AC line tester to determine this. If the outlet is not grounded, consult with a licensed electrician. When AC currents are suspected of being highly unstable in voltage and frequency, a professional power conditioner should be used.

2.1 CONNECTION TO ADAT(S)

The RMB comes with a snake with four male, 9-pin D connectors at each end (labeled 1–4), which is used to connect the RMB to up to four ADATs. The end of the snake fanned out into short cables should connect to the RMB, and the end with longer cables should connect to the ADATs. If the installation requires a cable longer than that supplied, use high-quality shielded cables wired pin-to-pin. Lengths of 100 feet or more may be acceptable, depending upon the quality of the cables and connectors used. The ADATs are connected to the corresponding connectors on the back of the RMB, with respect to the tracks each ADAT is being used for (see figure 1). These connections can be made while the power is on.

To connect the RMB to a four–ADAT system:

1. Connect one end of the cable labeled "1" to the Meter Bridge Out connector of the first ADAT (tracks 1–8), and connect the other end to the Tracks 1–8 connector on the RMB. Push each connector firmly into its socket, then tighten both screws;

2. Connect one end of the cable labeled "2" to the Meter Bridge Out connector of the second ADAT (tracks 9–16), and connect the other end to the Tracks 9–16 connector on the RMB;

3. Connect one end of the cable labeled "3" to the Meter Bridge Out connector of the third ADAT (tracks 17–24), and connect the other end to the Tracks 17–24 connector on the RMB;

4. Connect one end of the cable labeled "4" to the Meter Bridge Out connector of the fourth ADAT (tracks 25–32), and connect the other end to the Tracks 25–32 connector on the RMB.
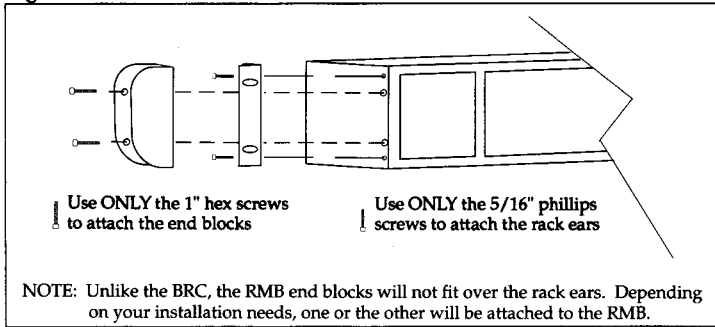
Figure 1
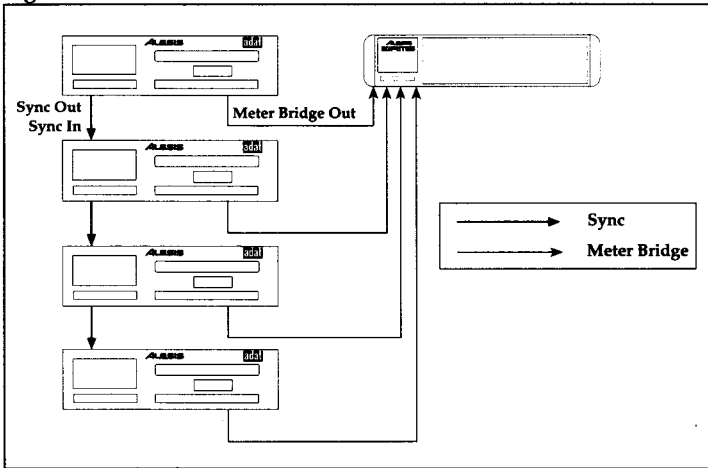
2.2 RACK-MOUNTING

The two end blocks on either end of the RMB may be removed, if you wish to rack-mount the unit using the rack ears included with the RMB. The figure below indicates the rack ears' locations and the screws that mount the end blocks.

Figure 2

Use ONLY the 1" hex screws to attach the end blocks

Use ONLY the 5/16" phillips screws to attach the rack ears

NOTE: Unlike the BRC, the RMB end blocks will not fit over the rack ears. Depending on your installation needs, one or the other will be attached to the RMB.

2.3 MOUNTING TO THE BRC

The RMB includes a mounting bracket for attaching to the top of the BRC Master Remote Control. The figures below illustrate how the mounting bracket may be attached to either side of the BRC, and to the bottom of the RMB.

1. Turn the RMB upside down, its front facing you, and remove the three screws in the middle of the RMB.
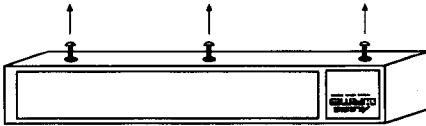
2. Place the attachment bar on the bottom of the RMB, with its arms extending towards you. Fasten the attachment bar to the RMB using the three screws removed in step 1 and the washers provided.
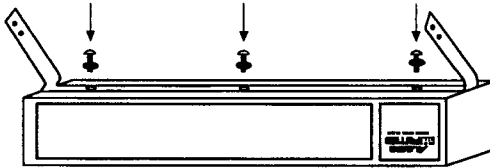

3. Match up the two holes in the side of the attachment bar with the threaded holes in the side of the RMB. Attach the RMB/bar assembly to the BRC by inserting one screw and washer on each side, through the front hole. Tighten these two screws securely.

IMPORTANT: MAKE SURE THESE SCREWS ARE THE 5/16" SCREWS INCLUDED WITH THE RMB PACKAGE, NOT THE LONGER SCREWS INCLUDED WITH THE BRC AND INTENDED FOR USE WITH THE ROLL-AROUND STAND.
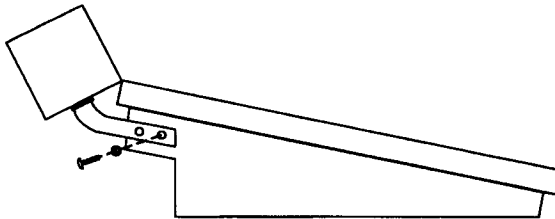

NOTE: If your BRC is attached to a stand, skip to step 5. If your BRC is table standing, move on to step 4.

4. Place the back legs against the side of the BRC as shown, lining up the holes in the legs with the hole in the attachment bar and the threaded hole in the BRC.
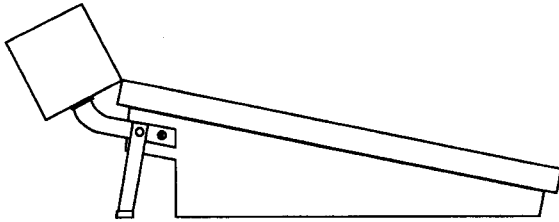
5. Insert one of the remaining two screws with washers into the second hole and tighten securely. Repeat for the other side of the BRC.
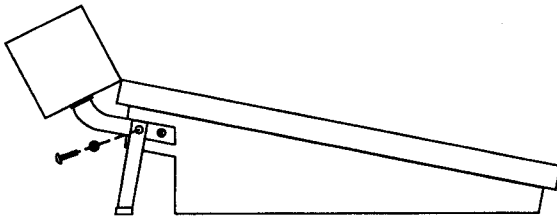
CHAPTER 3: BASIC OPERATION

3.0 POWERING-UP

Normally, the RMB does not need to be powered up in any order
with respect to the ADATs and the BRC for it to work properly.
The power switch may be found on the left side of the back of the
RMB.

When the RMB is powered up, a welcome message is displayed
in the bargraph indicators with the "Alesis" company logo. This
message disappears after a brief moment. At this point, the RMB
recalls the most recent mode of operation (the last mode before
power down). The mode is indicated by the LEDs on the left side
of the front panel, above the control buttons. These buttons are
used to change the operating mode. The DECAY SPEED and
PEAK MODE buttons define the possible uses of the RMB.

3.1 DECAY SPEED

The DECAY SPEED button is used to toggle between the two
decay speeds (FAST or SLOW) which the bargraph indicators
will use. The currently selected Decay Speed is indicated by the
two LEDs located directly above the DECAY SPEED button. Only
one of the speeds may be selected at a time. If the Decay Speed is
set to SLOW, pressing the DECAY SPEED button will select the
FAST setting. If the Decay Speed is set to FAST, pressing the
DECAY SPEED button will select the SLOW setting.

The RMB will automatically adjust the connected ADATs'
displays to match the currently selected Decay Speed setting.

3.2 PEAK MODE

The PEAK MODE button is used to cycle through the three Peak
Modes: Momentary, Continuous or Off. Only one of the modes
may be selected at a time. Each time the PEAK MODE button is
pressed, the Peak Mode will advance through these three modes.

The PEAK MODE LEDs, located directly above the PEAK MODE button, indicate the currently selected mode.

Here are descriptions of the three Peak Modes:

- **Momentary:** Each track's peak LED indicator will remain lit for about two seconds. The MOMENTARY LED will be lit to indicate this mode has been selected.

- **Continuous:** Each track's peak LED indicator will remain lit continuously, until the PEAK CLEAR button is pressed, or the PEAK MODE is changed. The CONTINUOUS LED will be lit to indicate this mode has been selected.

- **Off:** No peak indicators will appear on any tracks. Both the MOMENTARY and CONTINUOUS LEDs will be off to indicate neither of these modes has been selected.

The RMB will automatically adjust the connected ADATs' displays to match the currently selected Peak Mode setting.

3.3 PEAK CLEAR

The PEAK CLEAR button is used to remove any track peak LED indicators which remain lit while Continuous Peak Mode is selected. This button will have no effect if the Peak Mode is set to Momentary or Off.

The RMB will automatically clear the connected ADATs' bargraph displays whenever the RMB's PEAK CLEAR button is pressed.

CHAPTER 4: APPENDICES

4.0   APPENDIX 1: SPECIFICATIONS

Number of Track Indicators:	32
Front Panel Controls and Indicators:	32 channels of 15-segment LED bargraph indicators; 32 pairs of LED indicators for track record/ input status; Pushbuttons for Decay Speed, Peak Mode and Peak Clear; LED indicators for Decay Speed (Fast, Slow) and Peak Mode (Momentary, Continuous).
Rear Panel Controls and Connectors:	Four 9 pin D-Sub connectors for ADAT; AC power switch; IEC-spec AC cord connector.
Power Requirements:	90-250 VAC, 50–60 Hz, 50 W max.
Dimensions (H x W x D):	3-1/2" x 19" x 3-1/2" (2 Rack Spaces)
Weight:	4 lbs (1.9 kg)
Shipping Weight:	11 lbs (4.9 kg)
Accessories Included:	IEC style AC power cord Owner's Manual 30' snake of four 9 pin D-connectors BRC mounting bracket, screws, rack ears and two support legs
Optional Accessories:	AI-1 Digital Interface and Sample Rate Converter BRC Master Remote Control

4.1 APPENDIX 2: MAINTENANCE/SERVICE INFORMATION

4.1A Cleaning

Disconnect the AC cord, then use a damp cloth to clean the RMB's metal and plastic surfaces. Do not use solvents or harsh abrasives that may harm the surfaces.

4.1B Maintenance

Here are some tips for preventive maintenance:

- Periodically check the AC cord for signs of fraying or damage.

- Unplug the RMB when not in use for extended periods of time.

4.1C Servicing

DO NOT ATTEMPT REPAIRS YOURSELF. THERE ARE NO USER SERVICEABLE PARTS INSIDE THE RMB. Refer all servicing to Alesis. YOU MUST FIRST CONTACT ALESIS TO OBTAIN A RETURN AUTHORIZATION NUMBER BEFORE THE UNIT IS RETURNED TO ALESIS.

INSTRUCTIONS TO THE USER

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment has been verified to comply with the limits for a class B computing device, pursuant to FCC Rules. In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

ALESIS LIMITED WARRANTY

ALESIS CORPORATION ("ALESIS") warrants this product to be free of defects in material and workmanship for a period of 1 year from the date of original retail purchase. This warranty is enforceable only by the original retail purchaser.

To be protected by this warranty, the purchaser must complete and return the enclosed warranty card within 14 days of purchase.

During the warranty period ALESIS shall, at its sole and absolute option, either repair or replace free of charge any product that proves to be defective on inspection by ALESIS or its authorized service representative.

To obtain warranty service, the purchaser must first call or write ALESIS at the address and telephone number printed below to obtain a Return Authorization Number and instructions concerning where to return the unit for service. All inquiries must be accompanied by a description of the problem. All authorized returns must be sent to ALESIS or an authorized ALESIS repair facility postage prepaid, insured and properly packaged. Proof of purchase must be presented in the form of a bill of sale, cancelled check or some other positive proof that the product is within the warranty period. ALESIS reserves the right to update any unit returned for repair. ALESIS reserves the right to change or improve design of the product at any time without prior notice.

This warranty does not cover claims for damage due to abuse, neglect, alteration or attempted repair by unauthorized personnel, and is limited to failures arising during normal use that are due to defects in material or workmanship in the product.

ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE LENGTH OF THIS LIMITED WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

IN NO EVENT WILL ALESIS BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES RESULTING FROM THE BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING, AMONG OTHER THINGS, DAMAGE TO PROPERTY, DAMAGE BASED ON INCONVENIENCE OR ON LOSS OF USE OF THE PRODUCT, AND, TO THE EXTENT PERMITTED BY LAW, DAMAGES FOR PERSONAL INJURY. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This warranty only applies to products sold and used in the United States of America. For warranty information in all other countries please refer to your local distributor.

ALESIS
3630 Holdrege Avenue
Los Angeles, California 90016
1-(800)-5-ALESIS

Your warranty will be in effect
and you will receive warranty information
ONLY IF YOU SEND IN YOUR WARRANTY CARD

For Customer Service In Mexico call: 95-(800)-5-ALESIS