dbx

500XR
A/V REMOTE SELECTOR

Instruction Manual

Inspection and Installation

Your unit was carefully packed at the factory in a carton designed to protect it. Nevertheless, we recommend examining both carton and contents for any signs of damage that may have occurred during shipping. If there is evidence of damage, don't destroy the carton or any of the packing material, and notify your dbx dealer immediately.

In any case it is a good idea to save the carton and packing materials should you ever need to ship your unit in the future.

The carton should contain a model 500XR, this instruction manual, and a warranty/registration card.

No special ventilation is required in any installation; other components may be stacked above or below the 500XR provided that they themselves do not get hot.

"dbx" is a registered trademark of dbx.

For Customers in the U.K. - Important for Your Safety

The wires in this mains lead are coloured in accordance with the following codes:
    Blue: Neutral
    Brown: Live
As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

    The wire which is coloured blue must be connected to the terminal which is marked by the letter N or coloured black.
    The wire which is coloured brown must be connected to the terminal which is marked by the letter L or coloured red.

Warning

Do not connect any wire to the larger pin marked E or ⏚ when wiring a plug. Ensure that all terminals are securely tightened and that no loose strands of wire exists.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

— **CAUTION** —
TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert you of the presence of uninsulated dangerous voltage within the unit's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert you of the presence of important operating and maintenance instructions in the literature accompanying the unit.

WARNING
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

Contents

1 Features

The dbx 500XR is the remote-controlled audio and video selector unit which can connect and control up to two VCRs and one VDP, two input lines, and up to two tape decks for both monitoring and recording. You can dub (copy) from any one to others for both video and audio programs. While dubbing a video tape, you can add a new audio sound track. Moreover thanks to the external audio and video processor loops, you can add video and audio enhancers to improve the video image, correct, and enhance the video and audio sound. The handheld remote lets you control all of the 500XR's functions.

2 Connections

Note for Connection

For the simplicity's sake, in this manual the terms "VCR-1," etc. are used for the VCR connected to the VCR-1 jacks, etc.; and the "TAPE-1 deck" for the deck connected to the TAPE-1 jacks on the rear panel. And, the term "the master VCR (or tape deck)" is used for the VCR (or tape deck) which playbacks for dubbing, and the term "the slave VCR (or tape deck)" is used for the VCR (or tape deck) which records for dubbing.

The 500XR has been designed with the integration of a video system with audio stereo systems in mind. For this purpose, the 500XR connects with any audio amplifiers or receivers through the tape monitor loops. In this way, the sound from any video program can be played through the superior electronics of the audio system.

If you connect the 500XR in the "Tape 1" loop of your amplifier or receiver and wish to monitor the preamp sources, leave the preamp set to monitor "Tape 1." If you preamp is one of those that have separate input selector and "Rec Out" selector, leave the input selector knob (or whatever) on "Tape 1" and choose the program source with the "Rec Out" selector.

2-1 Connectors
See figure on next page.

① [LINE IN] 1/2 jacks
These are the 500XR's "high level" inputs where you hook up the 500XR to the tape outputs of your preamp. You can connect a CD player's output etc., to one of this pair. Connect the preamp's "Tape Out'* jacks to these jacks, left channel to left and right channel to right.

* Also called "Tape Rec," "Rec," "To Tape Rec," "Rec Out," "To Tape Inputs," "To Tape," "Tape Output," etc.; there probably are others.

② [LINE OUT] 1/2 jacks
These are where you hook up the 500XR's audio output to the inputs of your preamp. For a regular use, connect the one of these jacks to your preamp through its "Tape In" jacks**, and use the other for an auxiliary purpose.

** Also called "Play," "Tape Play," "Playback," "From Tape," "From Tape Outputs," etc.; others here too, probably.

③ [TAPE] 1/2 IN and OUT jacks
These are where you connect your cassette decks and/or your reel-to-reel recorders. The hookup is simple. Connect these OUT jacks to the "Input" jacks on your tape deck, and return its "Output" to the 500XR's IN jacks.***

*** Same 1 or 2 loop as going out.

④ [VDP] jacks (V/R/L)
This is where you connect your video disc player. Connect your VDP's "Video Output" to the 500XR's [V] jack. Connect your VDP's "Audio Outputs" to the 500XR's [L] and [R] jacks.

⑤ [VCR-1/2] IN and OUT jacks (V/R/L)
These are where you connect your video cassette recorders. Connect the OUT/V jack to the "Video Input" jack on your VCR, and return its "Video Output" to the 500XR's IN/V jack.**** Connect the OUT/R and L jacks to the "Audio Inputs" on your VCR, and return its "Audio outputs" to the 500XR's IN/R and L jacks.

**** Same 1 or 2 loop as going out.

⑥ [V-MONI. OUT] 1/2 jacks

These are where you hook up the 500XR's video output to the input of your video monitor(s) - up to two. Connect the 500XR's [V-MONI. OUT] 1 and/or 2 jack to the "Video In" of your video monitor(s).

⑦ [A(Audio)-PROCESSOR] IN and OUT jacks

This is where you connect your audio processing device, such as an equalizer, expander, etc. Connect the 500XR's OUT jacks to the "Input" of the processor. Return the processor's "Output" to the 500XR's IN jacks.

⑧ [V(Video)-PROCESSOR] IN and OUT jacks

This is where you connect your video processing device, such as a stabilizer, video enhancer, color processor, or the other. Connect the 500XR's OUT jack to the "Input" of the processor. Return the processor's video output from its "Output" jack to the 500XR's IN jack.

⑨ AC Outlets (600 W max)

These are unswitched (not switched on and off by the 500XR's power switch) AC outlets which may be used to power the associated audio equipment.

⑩ AC line voltage requirement indicator

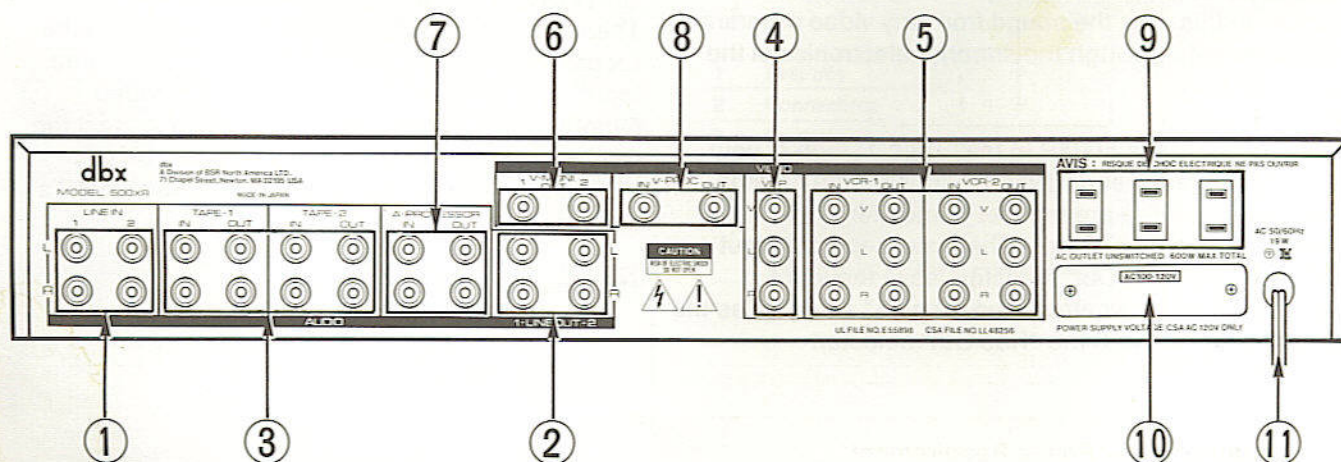The indicator displays the nominal AC line voltage for which the 500XR has been set at the factory.

Unscrew the small voltage cover plate near the AC cord. Move the switch with a small driver, and turn the plate upside down (180-degree or, in other words, which exposes the switch in its new voltage position), and screw it back on. Do not turn the plate over.
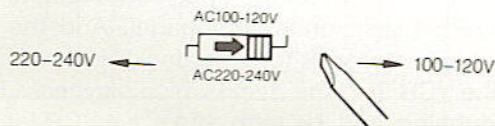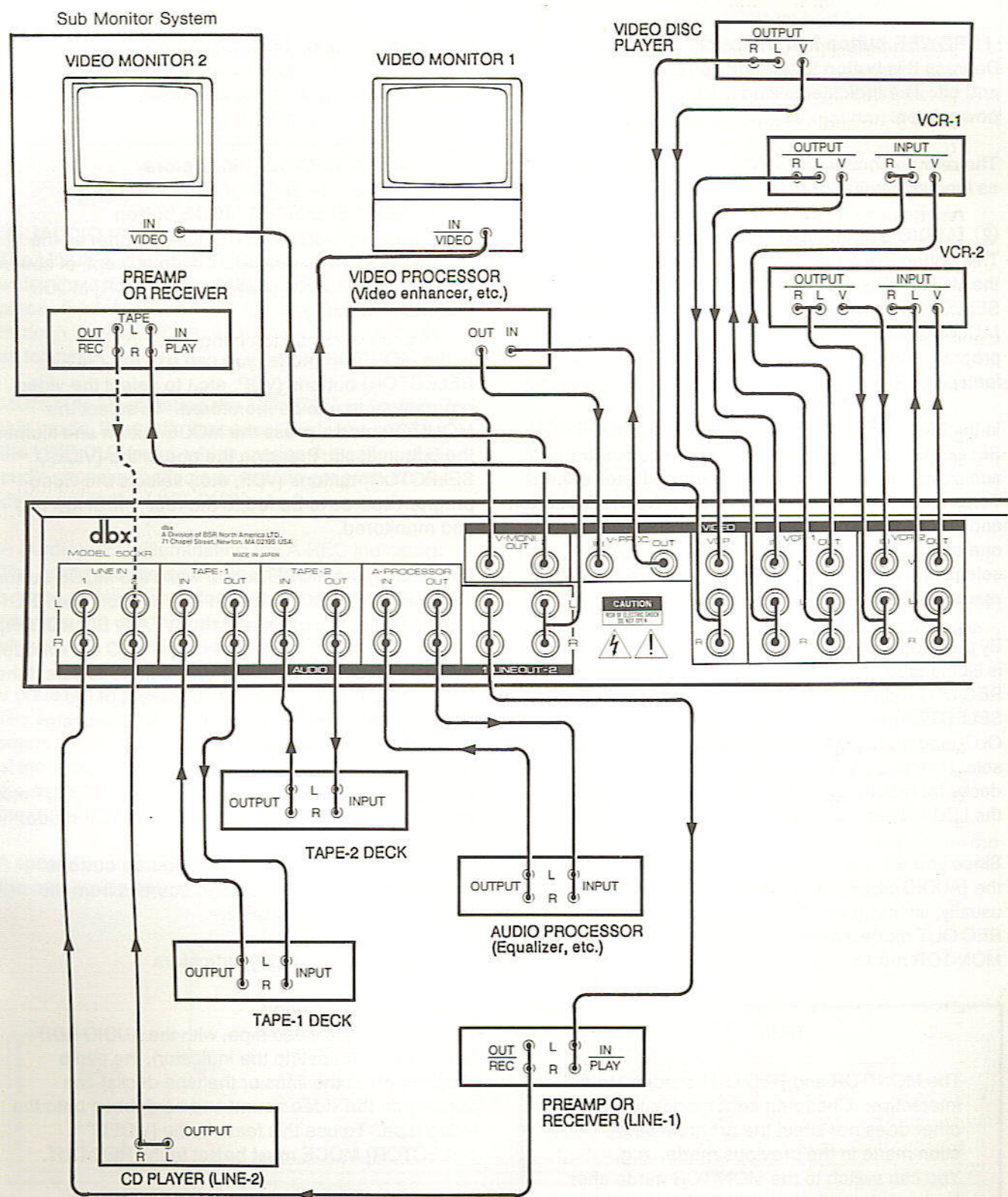

⑪ Power cord

Connect this cord to the appropriate power source. The nominal power consumption of the 500XR is 19W.

2-2 Typical Hookup Diagram * Use 75-ohm video cables for the connection of video signals.

Sub Monitor System

VIDEO MONITOR 2

VIDEO MONITOR 1

VIDEO DISC PLAYER

OUTPUT
R L V

VCR-1

OUTPUT
R L V

INPUT
R L V

VCR-2

OUTPUT
R L V

INPUT
R L V

IN
VIDEO

IN
VIDEO

PREAMP
OR RECEIVER

VIDEO PROCESSOR
(Video enhancer, etc.)

OUT
REC

TAPE
L

R

IN
PLAY

OUT IN

dbx
dbx
A Division of BSR North America LTD.,
71 Chapel Street, Newton, MA 02195 USA
MADE IN JAPAN

MODEL 500XR

LINE IN
1

TAPE-1
IN OUT

TAPE-2
IN OUT

A-PROCESSOR
IN OUT

V-MONI
OUT

V-PROC OUT

VIDEO
VCR 1

VCR 1
IN OUT

VCR 2
OUT

L

R

AUDIO

LINE OUT-2

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

L

R

OUTPUT
L
R
INPUT

TAPE-2 DECK

OUTPUT
L
R
INPUT

AUDIO PROCESSOR
(Equalizer, etc.)

OUTPUT
L
R
INPUT

TAPE-1 DECK

OUT
REC
L
R
IN
PLAY

PREAMP OR
RECEIVER (LINE-1)

OUTPUT
R L

CD PLAYER (LINE-2)

Important -- Power Requirement

Power requirements for electrical equipment differ from area to area.
Please ensure that your unit meets the power requirements in your
area. If in doubt, consult a qualified electrician.

100V, 50 Hz for Japan,
120V, 60 Hz for U.S.A. and Canada,
220V, 50 Hz for Europe except U.K.,
240V, 50 Hz for U.K. and Australia.

3 Controls and Functions

① **POWER button and indicator**
Depress this button to turn the 500XR's power on and off. The indicator is illuminated while the power is on.

The remote control unit's POWER button can work as long as the 500XR is plugged to the wall outlet.

② **[AUDIO SELECTOR] MODE button**
This button, each time pressed, toggles between the MONITOR and the REC OUT mode of the [AUDIO SELECTOR] buttons (TAPE-1, etc.), whether the [AUDIO SELECTOR] buttons are used to select the program source for monitoring (MONITOR) only, or, for taping (REC OUT).

In the MONITOR mode, you can use the [AUDIO SELECTOR] buttons (TAPE-1, etc.) to select the audio program source to be monitored (listened). To select the MONITOR mode, press the MODE button and illuminate the button itself. Pressing the one of the [AUDIO SELECTOR] buttons (TAPE-1, etc.) selects the audio program source to be fed to the rear LINE OUT jacks and listened.

By pressing the MODE button while the MODE button is illuminated, the MODE button is turned off, the REC OUT indicator will blink, and the [AUDIO SELECTOR] is set to the REC OUT mode. In the REC OUT mode, the [AUDIO SELECTOR] buttons is used to select the audio program which is fed to the tape decks for recording (or dubbing), and illuminate the LED indicator in the REC OUT row.

Since you will find it more advantageous to set the [AUDIO SELECTOR] to the MONITOR mode usually, after you have made a selection in the REC OUT mode, we recommend you reselect the MONITOR mode.

```
Note

The MONITOR and REC OUT modes are not
interactive: Changing either mode to the
other does not affect the program selec-
tion made in the previous mode. e.g.
You can switch to the MONITOR mode after
having selected a program to be recorded
in the REC OUT mode, for listening to
another program while the recording is
being made. (The same applies to the
video operating mode which follows.)
```

---

③ **[AUDIO SELECTOR] program source buttons**
These buttons are used to select the audio sources from the lines, tape decks, and the video sound, for monitoring and recording.

③A **[AUDIO REC OUT] indicators**

④ **[VIDEO SELECTOR] MODE button**
This button operates in the similar manner as the [AUDIO SELECTOR] MODE button, except, of course, it affects the 500XR's [VIDEO SELECTOR] MODE buttons (VDP, etc.).

In the MONITOR mode, you can use the [VIDEO SELECTOR] buttons (VDP, etc.) to select the video program source to be monitored. To select the MONITOR mode, press the MODE button and illuminate the button itself. Pressing the one of the [VIDEO SELECTOR] buttons (VDP, etc.) selects the video program source to be fed to the rear V-MONI. jacks and monitored.

By pressing the MODE button while the MODE button is illuminated, the MODE button is turned off, the REC OUT indicator will blink, and the [VIDEO SELECTOR] is set to the REC OUT mode. In the REC OUT mode, the [VIDEO SELECTOR] buttons is used to select the video program which is fed to the input of the VCRs for recording (or dubbing), and illuminate the LED indicator in the REC OUT row.

After you have made a selection in the REC OUT mode, we recommend you reselect the MONITOR mode.

⑤ **[VIDEO SELECTOR] video source buttons**
These buttons select the video sources from the VDP, VCR-1, and the VCR-2.

⑤A **[VIDEO REC OUT] indicators**

⑥ **AUDIO EDIT button**
When dubbing a video tape, with the AUDIO EDIT button on (illuminating the indicator), the audio program (from the lines or the tape decks) can supersede the video sound and be dubbed onto the video tape. To use this feature, the [VIDEO SELECTOR] MODE must be set to the REC OUT.

A special caution: This button has no effect if the [AUDIO SELECTOR] VIDEO SOUND is selected in the (AUDIO) REC OUT mode (illuminating the VIDEO SOUND LED indicator in the REC OUT row).

⑦ [AUDIO PROCESSOR] IN button
This button is used to switch in the operation of the audio processor that may be connected to the rear panel [EXTERNAL PROCESSOR] IN/OUT jacks. The audio processor is "IN" when the button is turned on (illuminated).

If you wish to remove the audio processor action from the signal path, simply press and turn off the [AUDIO PROCESSOR] IN button.

⑧ [AUDIO PROCESSOR] MODE button
The MODE button is used to select the position in which the action of the audio processor takes place. Each time pressed, the MODE button toggles through the MONITOR, A-REC, and the V-REC mode, as follows.

MONITOR (illuminating the MONITOR indicator): In this mode, the audio processor is placed before the LINE OUT jacks, which means the action of the audio processor affects any audio program source delivered to the LINE OUT jacks for monitoring.

A (Audio)-REC (illuminating the A-REC indicator): The audio processor is placed between the master source and the recording tape deck, which means that you can use the processor to alter the audio signal to be recorded onto the tape deck.

V (Video)-REC (illuminating the V-REC indicator): The audio processor is placed between the master sound source (VDP, or VCRs) and the sound inputs of the recording VCR, which means that you can use the audio processor to alter the audio signal of the video tape to be recorded onto the VCR.

A special caution: In the A-REC or V-REC mode, the monitoring sound is not affected by the action

of the audio processor.

⑨ [VIDEO PROCESSOR] IN button
This button is used to switch in the operation of the video processor that may be connected to the rear panel [VIDEO PROCESSOR] IN/OUT jacks. The video processor is "IN" when the button is turned on (illuminated).

If you wish to remove the video processor action from the video signal path, simply press and turn off the [VIDEO PROCESSOR] IN button.

⑩ [VIDEO PROCESSOR] MODE button
The MODE button is used to select the position in which the action of the video processor takes place. Each time pressed, the MODE button toggles between the MONITOR and the REC mode, as follows.
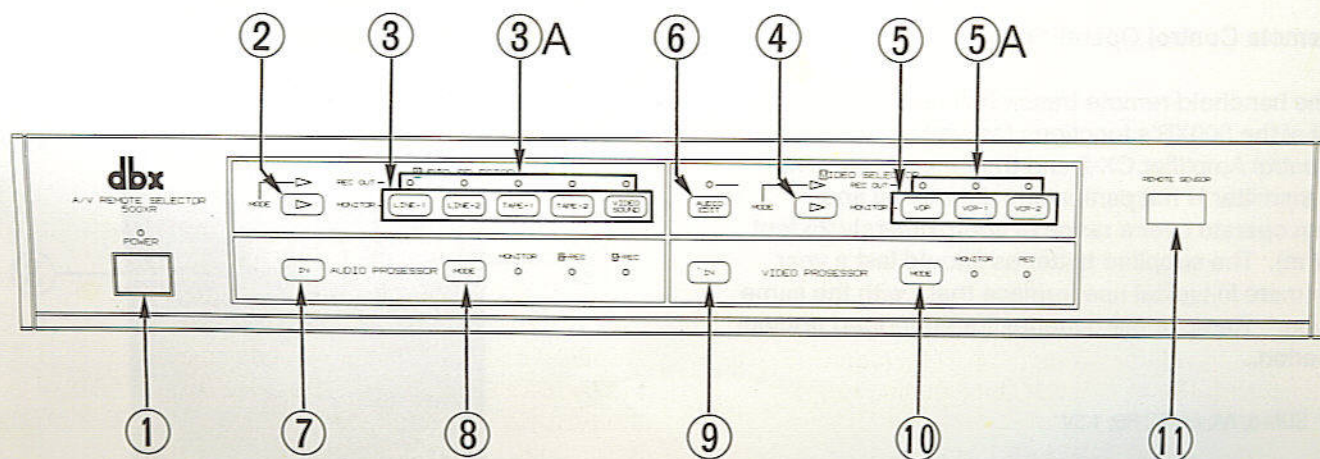
MONITOR (illuminating the MONITOR indicator): In this mode, the video processor is placed before the V-MONI. jacks, which means the action of the video processor affects any video source delivered to the V-MONI. jacks for watching.

REC (illuminating the REC indicator): The video processor is placed between the master source and the recording VCR, which means that you can use the video processor to alter the picture to be recorded on the video tape.

A special caution: In the REC mode, the picture to be monitored is not affected by the action of the video processor.

⑪ REMOTE SENSOR
This window accepts the infrared command from the remote control transmitter.
See page 8.

4 Operation

Contents for the Operation section

Before Operation

After you have connected the 500XR to your preamp(s) and your VCR(s) and deck(s) to the 500XR as just instructed, note that the preamp's Tape-Monitor button or switch has to be set to Tape, not Source.

If your preamp has separate Rec Out and Input Select (i.e., you can listen to one thing while taping another), leave the Select switch on Tape and choose program sources with Rec Out.

Remote Control Operation

The handheld remote transmitter lets you control all of the 500XR's functions (as well as the dbx Control Amplifier CX-2 and the tuner TX-3). The transmitter is not particularly directional and can operate over a range of approximately 25 feet (7 m). The supplied batteries should last a year or more in typical use; replace them with the same type.* Remove the batteries for prolonged nonuse period.

* SUM-3, AA, or IEC R6; 1.5V

The transmitter has been designed for the multiple use with all of the 500XR, dbx control amplifier model CX-2, and the dbx tuner TX-3. The numbers below indicate the index numbers for the equivalent controls the transmitter duplicates of the main unit 500XR controls, as described in the Controls and Functions section in pages 6 and 7.

Note that the transmitter buttons are labeled in purple for the functions of the 500XR. The labelings of other colors are for controlling the dbx Control Amplifier CX-2 (yellow) and/or the dbx Tuner TX-3 (red).

To achieve the transmitter to be usable for the 500XR, you must first (after having turned on the 500XR's power) press the "500XR" button on the transmitter. It should be noted that the transmitter may not operate properly unless this step has been done successfully.
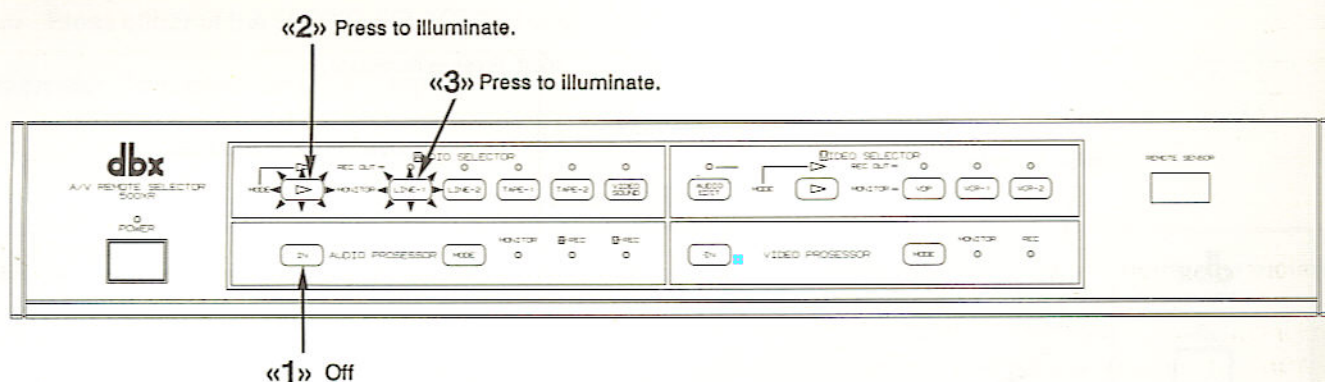

8
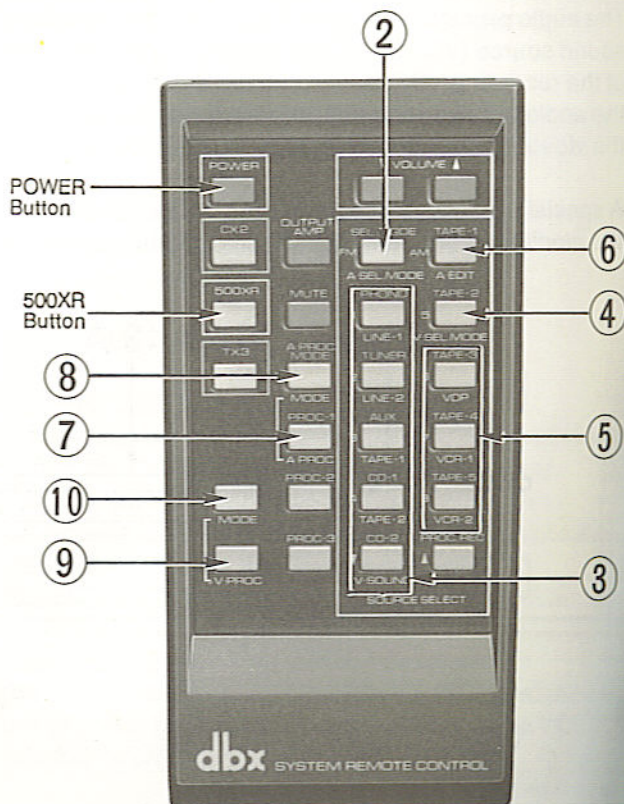
4-1 Monitoring

1 To Monitor the lines or tapes (LINE-1, LINE-2, TAPE-1, or TAPE-2)

«1» Make sure that the [AUDIO PROCESSOR] IN button is turned off. (Refer to page 16, for the use of the audio processor for monitoring.)

«2» Make sure that the [AUDIO SELECTOR] MODE button is illuminated (the MONITOR mode). If not, press the [AUDIO SELECTOR] MODE button to illuminate itself.

«3» Press one of the AUDIO SELECTOR buttons which selects the program you monitor.

Example: To monitor the LINE-1 input

«2» Press to illuminate.

«3» Press to illuminate.


«1» Off

9

2 **To Monitor the VCRs or VDP**

«1» Make sure that the [AUDIO PROCESSOR] IN button is turned off. (Refer to page 16, for the use of the audio processor for monitoring.) Also make sure that the [VIDEO PROCESSOR] IN button is turned off. (Refer to page 14, for the use of the video processor for monitoring.)

«2» Make sure that the [VIDEO SELECTOR] MODE button is illuminated (the MONITOR mode). If not, press the [VIDEO SELECTOR] MODE button to illuminate itself.

«3» Press one of the VIDEO SELECTOR buttons which selects the source you monitor.

«4» Make sure that the [AUDIO SELECTOR] MODE button is illuminated (the MONITOR mode). If not, press the [AUDIO SELECTOR] MODE button to illuminate itself.

«5» Press the VIDEO SOUND button of the AUDIO SELECTOR buttons.

You can select other AUDIO SELECTOR button to press (LINEs or TAPEs) if you wish to listen to the audio program while watching the video tape.

Example: To monitor the VCR-1

«2» Press to illuminate.

«5» Press to illuminate.

«4» Press to illuminate.

«3» Press to illuminate.

«1» Off
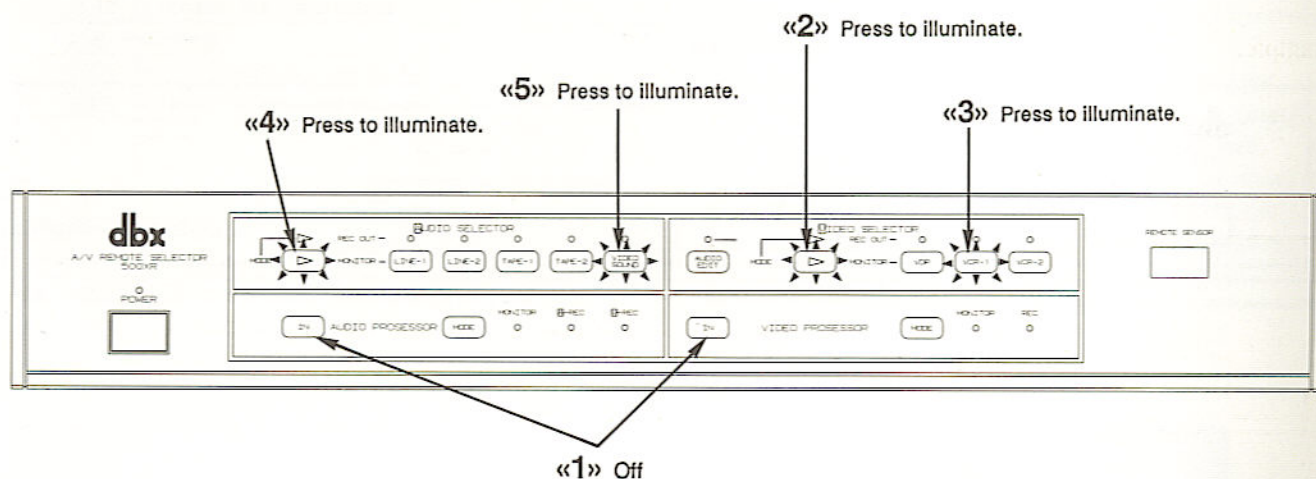
4-2 Recording

1 Recording the Audio Programs onto the Tape Decks

«1» Select the audio program source you wish to tape -- FM broadcasts, phono, CD, etc. -- on your preamps.

Caution, if the preamp has a Rec Out selector, leave the Input Select on Tape and choose the program with the Rec Out.

«2» Make sure that the [AUDIO PROCESSOR] IN button is off (not illuminated).

«3» Press the [AUDIO SELECTOR] MODE button to select the REC OUT mode (blinking the REC OUT indicator ►).

«4» Press either of the [AUDIO SELECTOR] LINE-
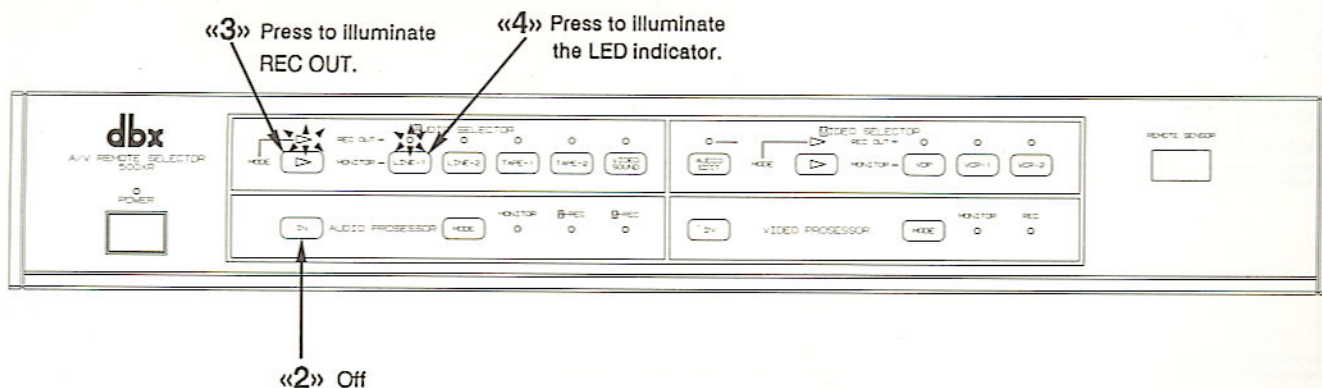
Example: To record the LINE-1 input

1 or LINE-2 button whichever selects the preamp.

You can select the TAPE-1 (or TAPE-2) button for copying (dubbing) a cassette onto the TAPE-2 (or TAPE-1) deck.

If you press the VIDEO SOUND button, the sound program from the VDP or VCRs, as selected by the [VIDEO MONITOR SELECTOR] buttons, can be taped on the tape deck(s), unless the AUDIO EDIT button is turned on.

«5» Play the audio program and record it on the tape deck(s).

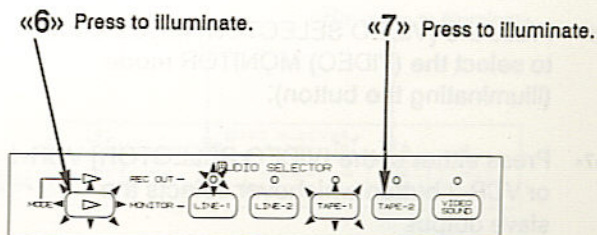«3» Press to illuminate REC OUT. «4» Press to illuminate the LED indicator.

«2» Off

Monitoring the Recording

You can monitor the program information that is being recorded by using the MONITOR mode.

«6» Make sure that the [AUDIO SELECTOR] MODE button is illuminated (the MONITOR mode). If not, press the [AUDIO SELECTOR] MODE button to illuminate itself.

«7» Press either of the [AUDIO SELECTOR] TAPE-1 or TAPE-2 button which selects the recording tape deck.

If the tape deck you are using has tape monitoring facilities -- 3-head type --, you can after-monitor the recording by selecting the slave deck's output in this step.

«6» Press to illuminate.   «7» Press to illuminate.

2 Recording from one VCR (or VDP) to the other (Dubbing)

«1»   Make sure that the AUDIO EDIT button is off
      (not illuminated).

«2»   Make sure that the [VIDEO PROCESSOR] IN button
      is off (not illuminated).

«3»   Press the [VIDEO SELECTOR] MODE button to
      select the REC OUT mode (blinking the REC
      OUT indicator ▶).

«4»   Press one of the [VIDEO SELECTOR] VDP, VCR-1,
      and VCR-2 buttons whichever selects the master VDP/
      VCR. The LED indicator above the button will be
      illuminated to indicate which program source is
      selected on-line.

«5»   Play the video program and record it on
      the VCR(s).

Example: Recording from the VCR-1 to the VCR-2 deck

«1» Off

«3» Press to blink
    REC OUT.

«4» Press to illuminate
    the LED indicator.

«2» Off
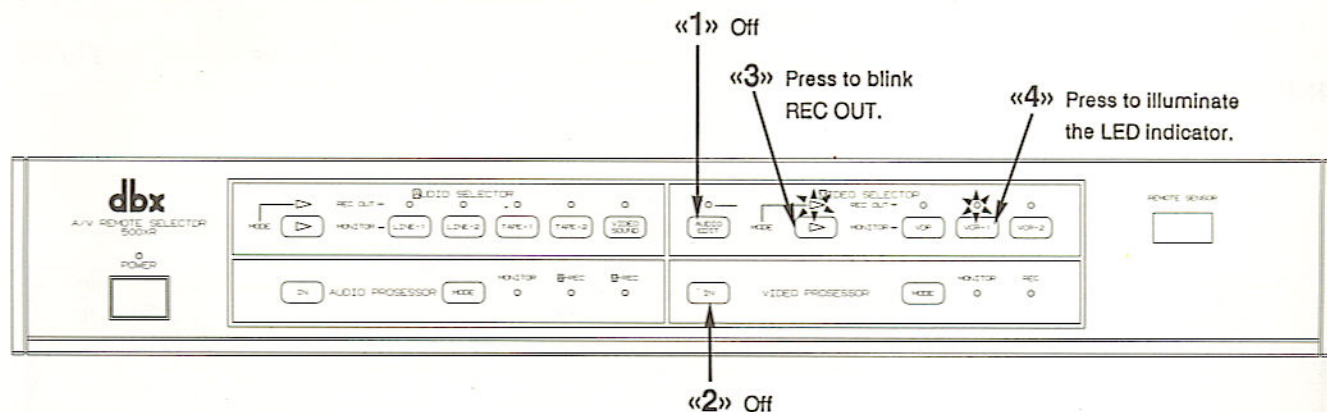
Monitoring the Recording

To monitor the output from the slave (recording)
VCR:

«6»   Press the [VIDEO SELECTOR] MODE button
      to select the (VIDEO) MONITOR mode
      (illuminating the button).

«7»   Press either of the [VIDEO SELECTOR] VCR-1
      or VCR-2 button whichever selects the
      slave output.

      If you select the master (playing) VCR,
      the output from the master VCR, before it
      is recorded, can be monitored.

«6» Press to illuminate.
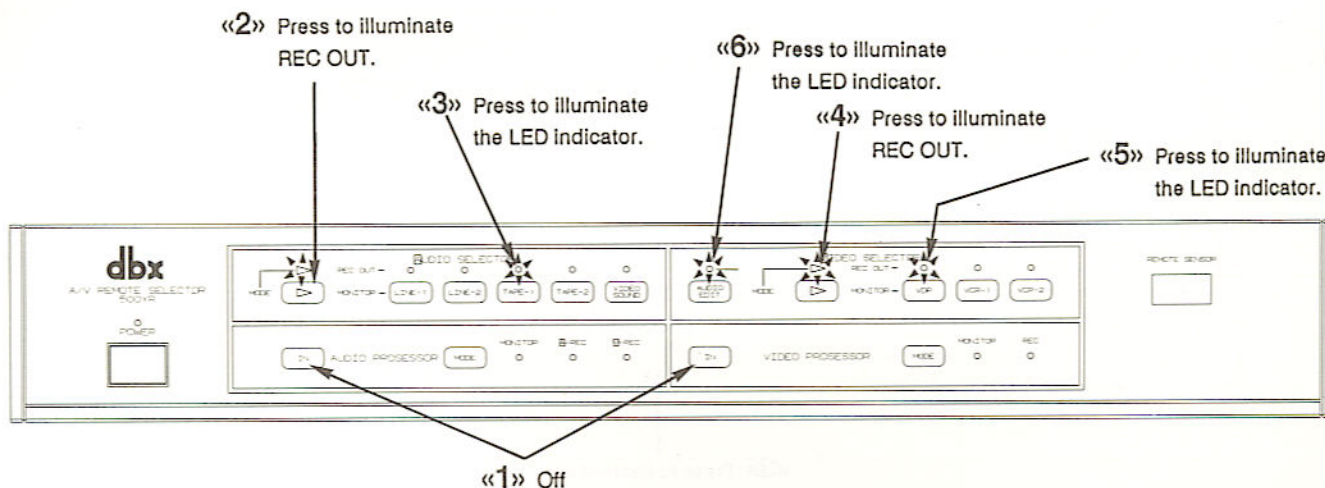
«7» Press to illuminate.
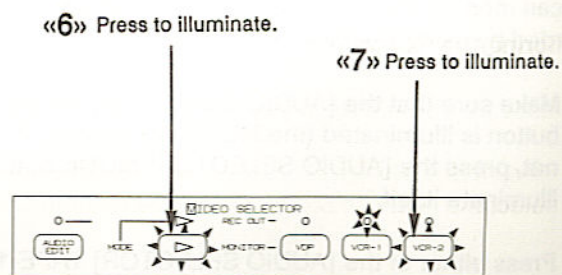
3 Recording (Dubbing) Using the AUDIO EDIT Feature

By turning on the AUDIO EDIT button when dubbing a video tape (or recording a video disc onto the VCR[s]), the preamp outputs (phono, CD, etc.) or tapes can supersede the video sound on the video tape. Proceed as follows:

«1» Make sure that both the [VIDEO PROCESSOR] IN and the [AUDIO PROCESSOR] IN buttons are off (not illuminated).

«2» Press the [AUDIO SELECTOR] MODE button to select the REC OUT mode (blinking the REC OUT indicator).

«3» Press one of the [AUDIO SELECTOR] buttons, except the VIDEO SOUND, for editing the master source.

«4» Press the [VIDEO SELECTOR] MODE button to select the REC OUT mode (blinking the REC OUT indicator).

«5» Press one of the [VIDEO SELECTOR] VDP, VCR-1, or VCR-2 button whichever selects the VDP or VCR to play the master picture source for recording. The LED indicator above the button will be illuminated.

«6» Turn on the AUDIO EDIT button.

Play the master audio and video programs and record it on the VCR.

Example: To record the TAPE-1 sound onto the VCR-1's sound track, while recording the VDP picture to the VCR-1's video track


«2» Press to illuminate REC OUT.

«3» Press to illuminate the LED indicator.

«6» Press to illuminate the LED indicator.

«4» Press to illuminate REC OUT.

«5» Press to illuminate the LED indicator.

«1» Off

Monitoring the Recording

To monitor the output from the slave (recording) VCR:

«7» Press the [VIDEO SELECTOR] MODE button to select the (VIDEO) MONITOR mode (illuminating the button).

«8» Press either of the [VIDEO SELECTOR] VCR-1 or VCR-2 button whichever selects the slave output.

If you select the master (playing) VCR, the output from the master VCR, before it is recorded, can be monitored.

«7» Press to illuminate.

«8» Press to illuminate.
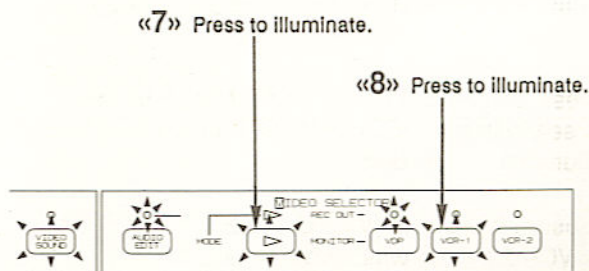
4-3 Processor Operation

1 Video Processor

Once you connect a video processor, for example a stabilizer, enhancer, color processor, etc., to the VIDEO PROCESSOR loop of the 500XR, you can use it for video monitoring or recording (dubbing) by a simple touch on the [VIDEO PROCESSOR] IN button.

The selection of the position at which the action of the video processor takes place with respect to the VCR(s) is made with the [VIDEO PROCESSOR] MODE button. For details, review the "3 Controls and Functions" section, item 10, page 7.

To ensure that you follow the proper operation of your processor, read the instructions accompanying the processor carefully.

1A Monitoring Using the Video Processor ([VIDEO PROCESSOR] MONITOR mode)
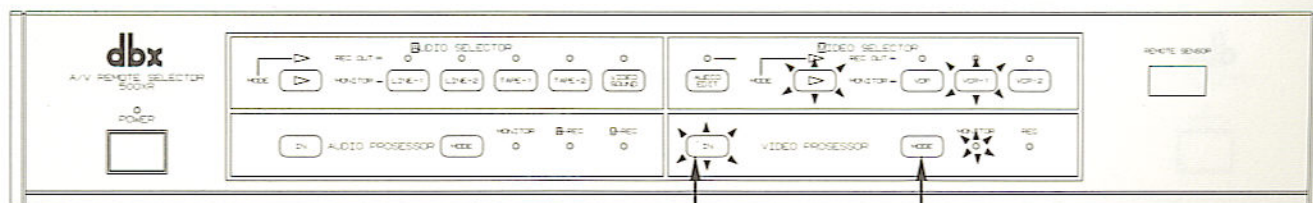
If you wish to use the video processor, for monitoring (watching) the video source, use it in the MONITOR mode, as follows.

«1» Refer to "4-1 2 To Monitor the VCRs or VDP," page 10, and play the video tape.

«2» Press the [VIDEO PROCESSOR] MODE button to turn on the MONITOR indicator.

«3» Turn on the [VIDEO PROCESSOR] IN button (illuminating the button).

The 500XR is now ready to playback the picture through the video processor.

Example: To monitor the VCR-1 with the video processor

«1» Ready the 500XR for monitoring the VCR-1 deck (see page 10).

«3» Press to illuminate.

«2» Press to illuminate MONITOR.

1 B Recording Using the Video Processor ([VIDEO PROCESSOR] REC OUT mode)

If you wish, the processed picture can be recorded onto the new video tape.

The video processor may be used simultaneously with the audio processor. See pages 16 and up.

«1» Refer to "Recording from one VCR (or VDP) to the other" section, page 12, and ready for start recording.
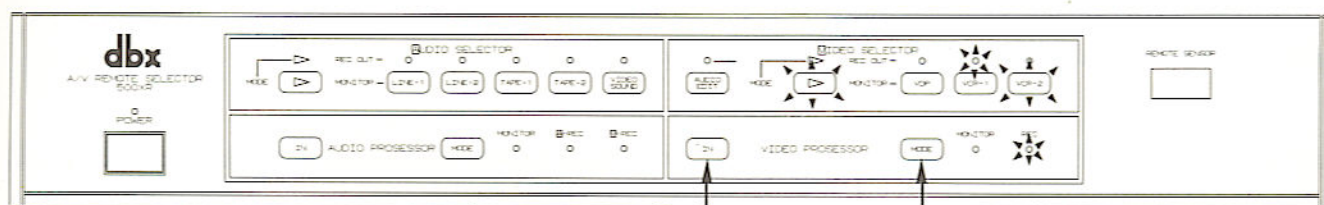
«2» Press the [VIDEO PROCESSOR] MODE button to turn on the REC indicator (the REC mode).

«3» Turn on the [VIDEO PROCESSOR] IN button (illuminating the button).

Above places the video processor action between the master source and the recording VCRs, and the system is now ready for recording the picture through the video processor.

Example: To record from the VCR-1 to VCR-2 decks

«1» Ready the 500XR for recording from the VCR-1 deck to the VCR-2 deck (see page 12).

«2» Press to illuminate REC.

«3» Press to illuminate.

2 **Audio Processor**

As described previously, an audio processor, such as an equalizer, expander, subharmonic synthesizer, may be used for processing the audio signals from the LINE input sources, tape decks, VCRs, or VDP, for both monitoring and dubbing.

Like the case for the video processor, the selection of the position at which the action of the audio processor take place, with respect to the tape deck or VCR, is made with the [AUDIO PROCESSOR] MODE button. For details, review the "3 Controls and Functions" section, item 8, page 7.

To ensure that you follow the proper operation of your audio processor, read the instructions accompanying the audio processor carefully.

2 A **Monitoring Using the Audio Processor ([AUDIO PROCESSOR] MONITOR mode)**

2 A1 **To Monitor the Lines or Tapes Using the Audio Processor**

«1» Refer to "4-1 1 To monitor the lines or tapes" section and ready for start monitoring.

«2» Press the [AUDIO PROCESSOR] MODE button to turn on the MONITOR indicator (the MONITOR mode).

«3» Turn on the [AUDIO PROCESSOR] IN button (illuminating the button).

You can now playback the audio signal through the audio processor.

Example: To monitor the TAPE-1 deck using the audio processor

«1» Ready the 500XR for monitoring the TAPE-1 deck (see page 9).

«2» Press to illuminate MONITOR.

«3» Press to illuminate.

2 A2 **To Monitor the Video Sound Using the Audio Processor**

To listen to the video tape using the audio processor, first simply follow the "4-1 2 To Monitor the VCRs or VDP (Picture and Sound)" section, page 10. Then, follow the "4-3 2 A1" section, above.

Example: To monitor the VDP sound using the audio processor

Press to illuminate MONITOR.

Press to illuminate.
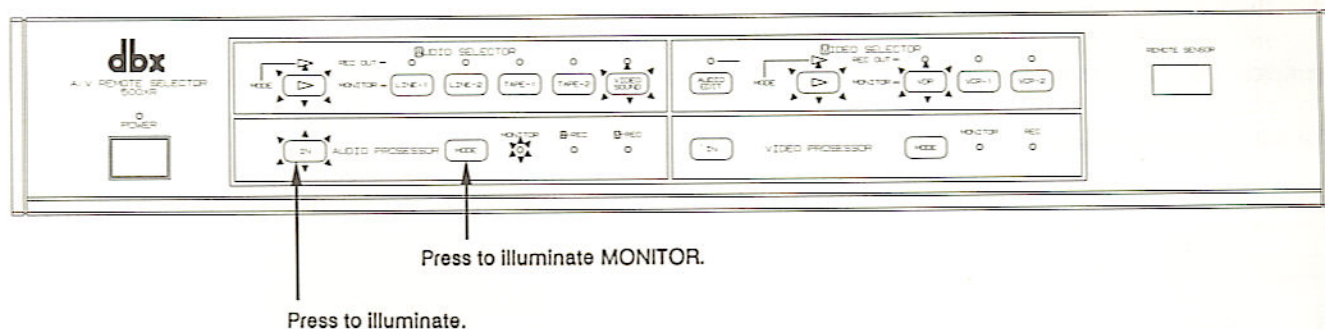
2 B **Recording Using the Audio Processor**
    ([AUDIO PROCESSOR] REC OUT mode)

Using the audio processor for tape dubbing, the processed audio signals can be recorded onto the new (dubbed) cassette tape.

2 B1 **To record the audio sources (or tapes) onto the tape decks (Dubbing)**

«1» Refer to "4-2 1 Recording the Audio Sources onto the Tape Decks" section and ready the system for recording.
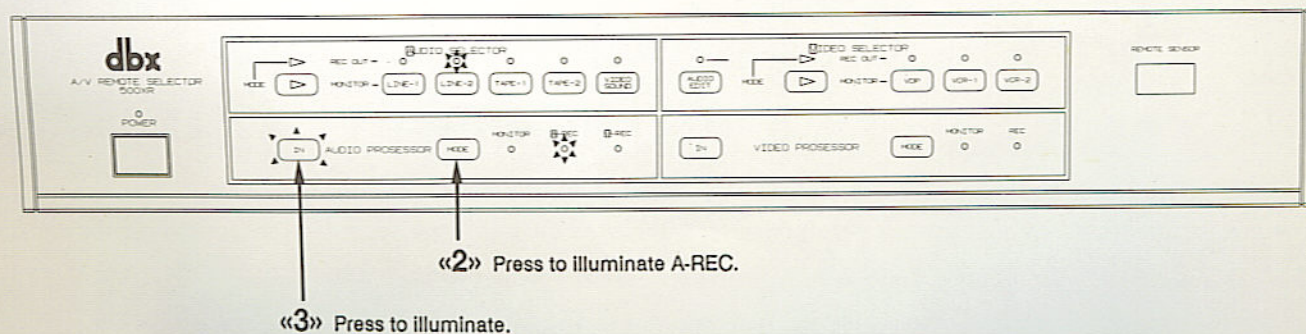
«2» Press the [AUDIO PROCESSOR] MODE button to turn on the A-REC indicator (the Audio-RECord mode).

«3» Turn on the [AUDIO PROCESSOR] IN button (illuminating the button).

Playback the source and record it on the slave tape deck.

Example: To record the LINE-2 input onto the TAPE-1 and/or TAPE-2 deck using the audio processor

For example, turning the AUDIO EDIT button on in the above lets the input from LINE-2 altered by the audio processor and recorded onto the VCR(s).

«2» Press to illuminate A-REC.

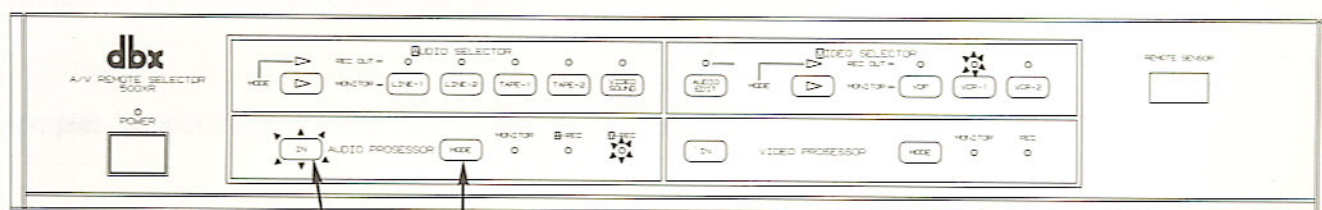«3» Press to illuminate.

2 B2 To record the video sound

«1» Refer to "4-2 2 Recording from one VCR (or VDP) to the other" section, page 12.

«2» Press the [AUDIO PROCESSOR] MODE button to turn on the V-REC indicator (the Video-RECord) mode.

«3» Turn on the [AUDIO PROCESSOR] IN button (illuminating the button).

Playback the video tape on the master VCR (or the video disc on the VDP) and record it on the slave VCR.

Example: To record from the VCR-1 to the VCR-2 deck using the audio processor

«1» Ready the 500XR for recording from the VCR-1 to the VCR-2 deck (see page 12).
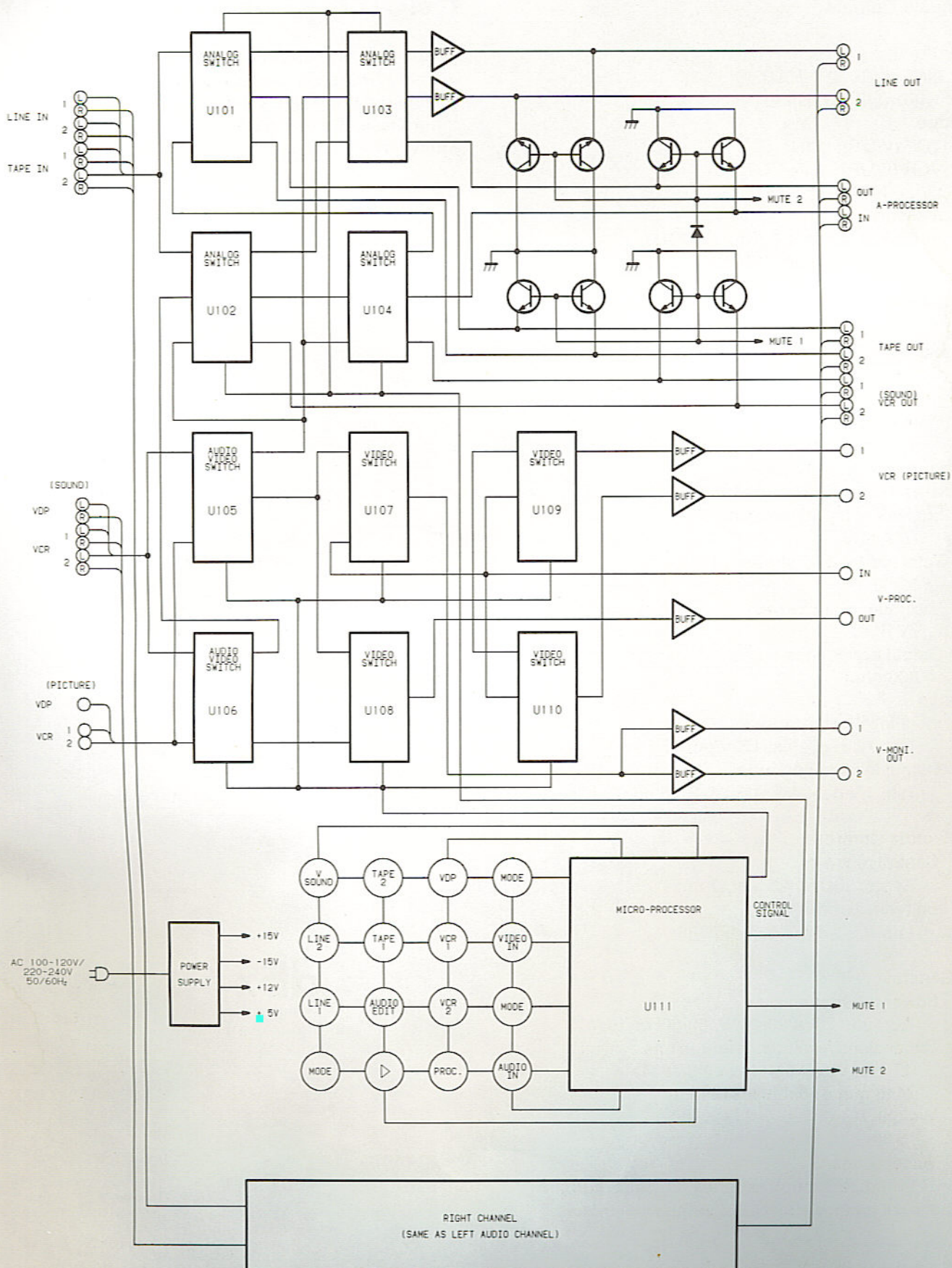

«2» Press to illuminate V-REC.

«3» Press to illuminate.

If you press the [AUDIO SELECTOR] VIDEO SOUND button , you can alter the video sound from the VCR-1 to be recorded onto the VCR-2.

5 Block Diagrams

LINE IN

TAPE IN

ANALOG SWITCH U101

ANALOG SWITCH U103

BUFF

BUFF

LINE OUT

MUTE 2

OUT

A-PROCESSOR

IN

ANALOG SWITCH U102

ANALOG SWITCH U104

MUTE 1

TAPE OUT

(SOUND) VCR OUT

(SOUND)

VDP

VCR

AUDIO VIDEO SWITCH U105

VIDEO SWITCH U107

VIDEO SWITCH U109

BUFF

BUFF

VCR (PICTURE)

IN

V-PROC.

OUT

(PICTURE)

VDP

VCR

AUDIO VIDEO SWITCH U106

VIDEO SWITCH U108

VIDEO SWITCH U110

BUFF

BUFF

V-MONI. OUT

V SOUND | TAPE 2 | VDP | MODE

LINE 2 | TAPE 1 | VCR 1 | VIDEO IN

LINE 1 | AUDIO EDIT | VCR 2 | MODE

MODE | ▷ | PROC. | AUDIO IN

MICRO-PROCESSOR

U111

CONTROL SIGNAL

MUTE 1

MUTE 2

AC 100~120V/ 220~240V 50/60Hz

POWER SUPPLY

+15V

-15V

+12V

5V

RIGHT CHANNEL
(SAME AS LEFT AUDIO CHANNEL)

19

Specifications

«Inputs/Outputs»

Audio
LINE (L/R): 2 IN/OUT
TAPE (L/R): 2 IN/OUT

Video
VDP (V/L/R): 1 IN
VCR (V/L/R): 2 IN/OUT
Video-MONItor: 2 OUT

Processors
Audio-PROCessor (L/R): 1 IN/OUT
Video-PROCessor: 1 IN/OUT

«Electrical»

Audio
Maximum input level
7V RMS
Input impedance
47 kohm
Frequency response
10 Hz to 50 kHz, +0/-1 dB
Equivalent input noise, IHF-A
-110 dBV
Total harmonic distortion, 1 kHz
0.008 %
Maximum output level
7V RMS
Output impedance
600 ohm

Video
Input level/impedance
Typ. 1 V p-p, Max. 1.5 V p-p/75 ohm
Output level/impedance
Typ. 1 V p-p, Max. 1.5 V p-p/75 ohm

«Remote Control»
Control range
Approximately 25 feet (7 m)
Batteries used
[1.5V] SUM-3, AA, or IEC R6: 2

«General»
Power requirement
AC 100-120V/220-240V, 50/60Hz, 19W
Dimensions, excluding protrusions
17-1/2" W x 2-5/8" H x 12-9/16" D
(446 mm x 66 mm x 319 mm)
Weight
9 lbs 5 oz (4.2 kg)
Accessories
Remote control, batteries (2), patch cord.
Design and specifications subject to change without notice.

Warranty and Factory Service

All dbx equipments are covered by a limited warranty (warranties for products purchased outside the U.S.A. are valid only in the country of purchase and the U.S.A.). For details, consult your warranty card or your dealer/distributor.

The dbx Customer Service Dept. will help you use this product. For answers to questions and information on problems, write:

dbx
71 Chapel St.
PO Box 100C
Newton, Mass. 02195 USA
Attn: Customer Service

You also may call (617) 964-3210 during business hours (USA Eastern time). The telex is 92-2522. Should it become necessary to have your equipment serviced at the factory:

1 Repack the unit, including a note with a description of the problem and the date of purchase.
2 Send the unit freight prepaid to the above address, marking it "Attn: Repairs."
3 We strongly recommend that you insure the package and send it by United Parcel Service whenever possible.

If you live outside the U.S.A., contact the nearest dbx dealer or distributor for the address of the nearest authorized repair center.