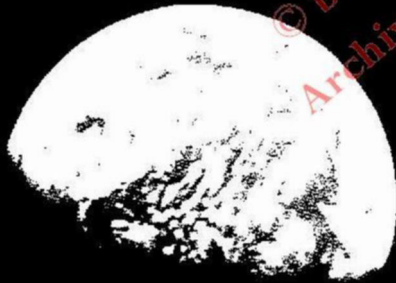
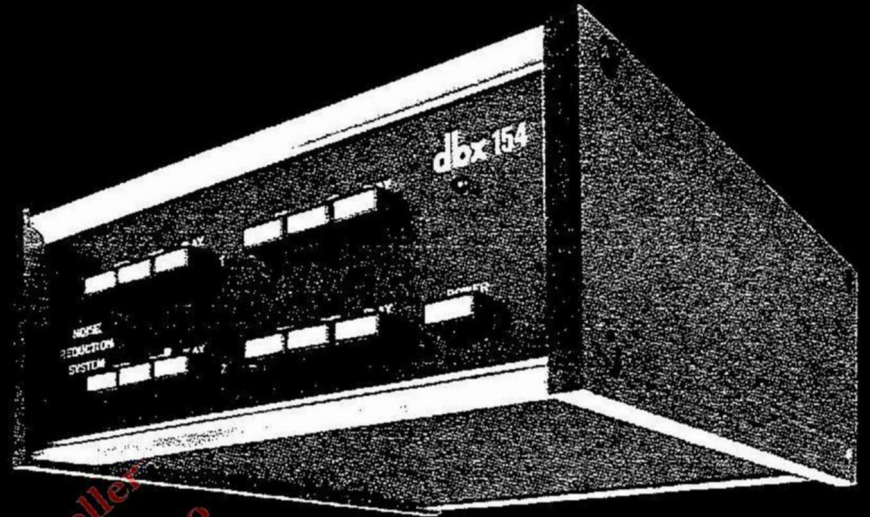


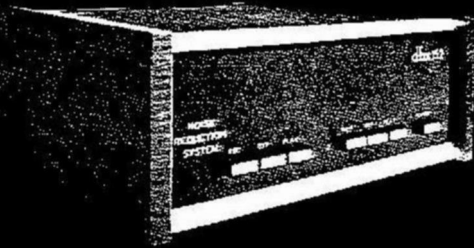
# dbx

## the sound of silence

professional noise reduction system for the small recording studio



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Archiv Michael Otto



# professional noise reduction system for the small recording studio

- 30 dB noise reduction
- 10 dB more headroom
- Compatible with all dbx professional studio systems
- No level matching required for accurate code-decode tracking
- Most economical professional quality system
- Pairs may be ganged for rack mounting

The dbx 150 series provides professional quality noise reduction for the small recording studio, semi-professional recordist, and serious audiophile. The 150 series is compatible with dbx professional studio systems. Tape recordings encoded on dbx 150 series may be decoded on dbx professional models and vice-versa. This compatibility allows recordings made on the 150 series to be re-mixed or mastered at studios using professional dbx noise reduction systems. The 150 series has models available with two modes of operation for the noise reduction process.

**Simultaneous code-decode:** Each channel has separate code and decode noise reduction electronics which allows monitoring of the decoded signal during recording.

**Switchable code-decode:** Models with this feature have only one noise reduction circuit for each channel. They must be switched to record (encode) and must remain in that mode continuously during the recording process. When playback is desired, the noise reduction electronics must be switched to the playback (decode) mode.

#### **Three models are available in this series:**

Model 157—two channels of simultaneous code and decode

Model 152—two channels of switchable code or decode

Model 154—four channels of switchable code or decode

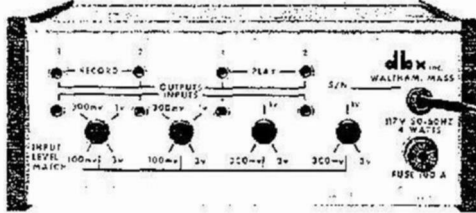
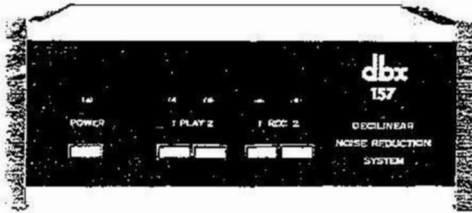
Any pair of the 150 series can be rack mounted utilizing the RM-150 rack mounting kit (occupies 3 1/2" of panel space).

Features include 10 dB additional headroom, in excess of 30 dB noise reduction, over 100 dB dynamic range, low distortion for complete code-decode cycle, excellent transient tracking, no pilot tones or complex alignment procedure, and low cost.

Sound on sound, ping-pong, or duplication through several generations will not color the sound. Clarity of sound, perfect transient reproduction, and total absence of audible background noise can be achieved only with dbx noise reduction.

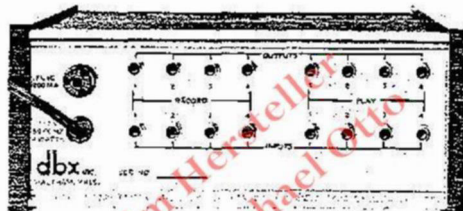
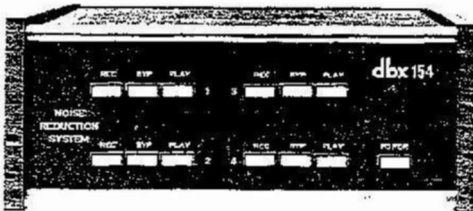
## Model 157 Features

Most versatile model ● Two channels simultaneous code and decode ● Independent input level match for each input ● Allows optimization of operating levels with virtually any tape recorder ● LED indicators for rapid visual confirmation of operating mode



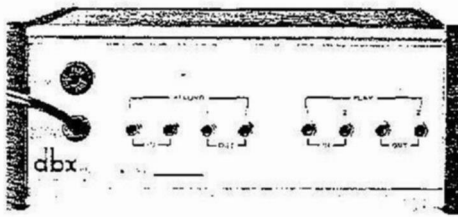
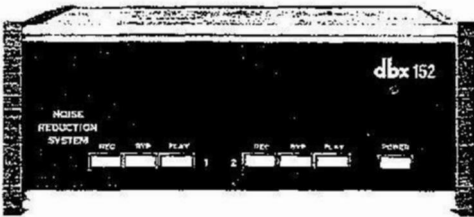
## Model 154 Features

Four channels switchable code or decode ● Channel modes independently selectable ● Input level match at 0 dBm ● Most economical four channel system



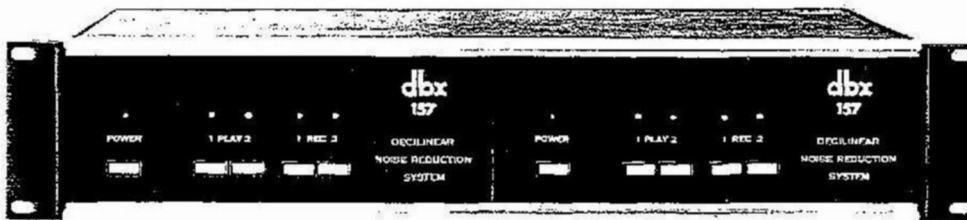
## Model 152 Features

Two channels switchable code or decode selectable ● Channel modes independently selectable ● Input level match at 0 dBm ● Most economical two channel system



## Two Model 157's

adapted for mounting in 3 1/2" rack space with RM-150 rack mounting kit



## specifications

- Input impedance
  - 50 k ohms, unbalanced
- Input level
  - +21 dBm max. (9 V RMS)
- Equivalent input noise
  - 88 dBm typ. 30-20,000 Hz (30  $\mu$ V RMS)
- Input unity level
  - Model 152 - 775 mV (0 dBm) record or play
  - Model 154 - 775 mV (0 dBm) record or play
  - Model 157 - adjustable; record (100 mV to 3 V) -18 to +12 dBm; play (300 mV to 3 V) -8 to +12 dBm
- Output impedance
  - 100 ohms, unbalanced
- Output level
  - +21 dBm max. into 10 k ohms bridging;
  - +17 dBm max. into 600 ohms
- Noise reduction
  - In excess of 30 dB
- Frequency response
  - $\pm 1$  dB 30-20,000 Hz, for the complete code and decode cycle
- Distortion
  - 0.3% THD code and decode;
  - 0.05% above 1 kHz
- Connectors
  - RCA type phono input and output
- Size
  - 3 1/2" H x 9" W x 10 1/2" D.
  - Two units may be ganged for standard relay rack mounting
- Weight
  - 7 lbs
- Power line requirements
  - 115 Vac 50-60 Hz
- Power consumption
  - Models 154 and 157 - 4 watts
  - Model 152 - 2 watts

# dbx introduces the Sound of Silence

dbx, Incorporated has perfected a tape noise reduction system which allows the input signal to be reproduced exactly without added noise contributed by the tape recording process. (We do not attempt to remove noise present in the original input signal, however.)

The dbx system uses 2:1 compression before recording and 2:1 expansion on playback. These compression and expansion functions are linear in decibels over a dynamic range greater than 100 dB. No level matching is required for accurate code-decode tracking. RMS level sensors are used to eliminate compressor-expander tracking errors due to phase shifts in the tape recorder. Frequency pre-emphasis and de-emphasis are added to the signal and RMS level sensors to achieve a large reduction in audible tape hiss without danger or overload or high frequency self-erasure on the tape. Tape modulation noise or hiss cannot be heard even in the presence of strong low frequency signals which do not mask the hiss.

dbx noise reduction systems provide tape recorders with 10 dB additional headroom, and in excess of 30 dB noise reduction. They are the most effective and simplest systems on the market. Only when tape hiss is completely eliminated via the dbx system does one realize how pervasive background noise has been in recorded sound.

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The dbx logo is rendered in a bold, lowercase, sans-serif typeface. The letters 'd', 'b', and 'x' are significantly larger and more prominent than the 'o', which is smaller and positioned between the 'b' and 'x'. The overall appearance is clean and modern.

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