

MAGNETIC REFERENCE LABORATORY, INC.

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Three-Frequency Calibration Tapes: 1 kHz, 10 kHz, and 100 Hz, a each

These "minimalist" three-frequency Calibration Tapes contain a 1 kHz signal for setting level, a 10 kHz signal for setting azimuth and high-frequency equalization, and a 100 Hz signal for setting the low-frequency equalization. (See other side for two-frequency tapes with 1 kHz and 10 kHz.) They are shown in the table below for ¼-, ½-, 1-, and 2-inch widths; and 3.75-, 7.5-, 15-, and 30-in/s tape speeds.

Catalog numbers are shown for reference fluxivities of both 250 nWb/m ("+3 dB") and 355 nWb/m ("+6 dB"). All tones are recorded at 0 dB on all tapes except at 3.75 in/s all tones are

recorded at -10 dB to avoid saturating the tape at high frequencies. All recordings are fringing compensated.

Catalog numbers and prices are given for both 4-minute and 8-minute total durations.

See "Choosing and Using MRL Calibration Tapes for Audio Tape Recorder Standardization", MRL Publication Choo&U, for more information on choosing and converting between different equalizations and levels, as well as descriptions of other test signals that are available from MRL, and notes on using Calibration Tapes.

Table of Three-Frequency Calibration Tapes with 1 kHz, 10 kHz, and 100 Hz, a each

Medium	Tape Speed	Equalization Standard	Level of Recorded Signals*	4 minutes total		8 minutes total	
				Catalog Number for Reference Fluxivity of:		Catalog Number for Reference Fluxivity of:	
				250 nWb/m ("+3 dB")	355 nWb/m ("+6 dB")	250 nWb/m ("+3 dB")	355 nWb/m ("+6 dB")
¼ in	3.75 in/s	IEC & NAB	-10 dB	221-644-382-107	221-644-412-103	221-644-382-123	221-644-412-129
	7.5 in/s	IEC (IEC1)	0 dB	231-644-482-107	231-644-512-103	231-644-482-123	231-644-512-129
		NAB (IEC2)	0 dB	233-644-482-103	233-644-512-109	233-644-482-129	233-644-512-125
	15 in/s	IEC (IEC1)	0 dB	241-644-482-104	241-644-512-100	241-644-482-120	241-644-512-126
		NAB (IEC2)	0 dB	243-644-482-100	243-644-512-106	243-644-482-126	243-644-512-122
30 in/s	AES (IEC2)	0 dB	251-644-482-101	251-644-512-107	251-644-482-127	251-644-512-123	
½ in	3.75 in/s	IEC & NAB	-10 dB	321-644-382-106	321-644-412-102	321-644-382-122	321-644-412-128
	7.5 in/s	IEC (IEC1)	0 dB	331-644-482-106	331-644-512-102	331-644-482-122	331-644-512-128
		NAB (IEC2)	0 dB	333-644-482-102	333-644-512-108	333-644-482-128	333-644-512-124
	15 in/s	IEC (IEC1)	0 dB	341-644-482-103	341-644-512-109	341-644-482-129	341-644-512-125
		NAB (IEC2)	0 dB	343-644-482-109	343-644-512-105	343-644-482-125	343-644-512-121
30 in/s	AES (IEC2)	0 dB	351-644-482-100	351-644-512-106	351-644-482-126	351-644-512-122	
1 in	3.75 in/s	IEC & NAB	-10 dB	421-644-382-105	421-644-412-101	421-644-382-121	421-644-412-127
	7.5 in/s	IEC (IEC1)	0 dB	431-644-482-105	431-644-512-101	431-644-482-121	431-644-512-127
		NAB (IEC2)	0 dB	433-644-482-101	433-644-512-107	433-644-482-127	433-644-512-123
	15 in/s	IEC (IEC1)	0 dB	441-644-482-102	441-644-512-108	441-644-482-128	441-644-512-124
		NAB (IEC2)	0 dB	443-644-482-108	443-644-512-104	443-644-482-124	443-644-512-120
30 in/s	AES (IEC2)	0 dB	451-644-482-109	451-644-512-105	451-644-482-125	451-644-512-121	
2 in	7.5 in/s	IEC (IEC1)	0 dB	531-644-482-104	531-644-512-100	531-644-482-120	531-644-512-126
		NAB (IEC2)	0 dB	533-644-482-100	533-644-512-106	533-644-482-126	533-644-512-122
	15 in/s	IEC (IEC1)	0 dB	541-644-482-101	541-644-512-107	541-644-482-127	541-644-512-123
		NAB (IEC2)	0 dB	543-644-482-107	543-644-512-103	543-644-482-123	543-644-512-129
	30 in/s	AES (IEC2)	0 dB	551-644-482-108	551-644-512-104	551-644-482-124	551-644-512-120

* Because of tape saturation at the higher frequencies at lower speeds, some tapes are recorded at -10 dB.