

Ampex Tape-Type List

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This list started out as a response to the huge number of people asking questions about surplus instrumentation tape, developed into a short description on identifying Ampex tapes, and then developed into an attempt at categorizing all Ampex tapes made. This list is far from complete but is a good beginning:

Note: All tapes backcoated unless otherwise indicated

NB= Non-Backcoated

LNER= Low Noise Extended Range

LNHO= Low Noise High Output

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- 021-- 1 mil rejected NB acetate tape (sold as Shamrock) (early 60s)
 - 031-- 1.5 mil rejected mastering tape (maybe 406, 456, etc. depending on batch)
(Was available in 2500' pancakes as well as 7" reels in 1983)
 - 041-- 1 mil version of 031 in 7" only
 - 051-- 0.5 mil rejected NB acetate tape (sold as Shamrock) (early 60s)

 - 101-- Betamax half-inch videocassette (intro before 1978)
 - 102-- VHS videocassette (late seventies)
 - 142-- Helical 2" format video tape for VR-660/1500 (1962-?)
 - 144-- Transverse scan video tape (1964-?) for quad-format machines
 - 145-- Helical 2" formulated for VR-660/1500 video recorders (1966-?) backcoated
 - 147-- A-format tape formulated for VR-7000 video recorders (1965-?)
 - 148-- High Band 2" video tape (B&W)
 - 161-- 1" videotape (1968-?)
 - 163-- 1/2" helical scan industrial videotape (1968-?)
 - 164-- 1/2" helical scan videotape for color use
 - 165-- 1" videotape for IVC 600/800 series recorders
 - 167-- U-Matic videocassette (replaced by 187/197) (late seventies, sold in 83)
(Sometimes this is labelled KCA-xx where xx indicates running time)
 - 174-- 1/2" helical scan industrial videotape (1970s?)
 - 175-- 2" Quad tape (backcoated) replacing 144 (sold until 1990)
 - 187-- U-Matic videocassette
(Sometimes this is labelled KCA-xx where xx indicates running time)
 - 188-- Older Beta videocassette
 - 189-- VHS videocassette, NB (discontinued 199x?)
 - 190-- 1" IVC/Sony format videotape (1983)
 - 192-- 1" videotape (1970s) (replaced by 196)
 - 194-- 1/2" helical scan industrial videotape (1970s through 1983)
 - 196-- 1" B-format helical videotape (comes in two versions, earlier chrome later cobalt oxide), wound oxide out.
 - 197-- U-Matic 3/4" videocassette (coexists with 187, better quality tape)
 - 198-- Beta videocassette (oxide) (replaced by 208) (1987-??)
 - 199-- VHS videocassette, NB (? to sometime between 1990 and 1995)

 - 208-- Betacam 1/2" broadcast videocassette (oxide, not metal) (changed to BC in 1998)
 - 211-- 1.5 mil NB Irish ??? (1963 sample)
 - 219-- D-1 digital videocassette (replaced by 229) (1990)
 - 220-- Degaussing and head cleaning cartridge for cassettes (not real tape)
 - 228-- Degaussing and head cleaning cartridge for 8-track tape (not real tape)
 - 229-- D-1 digital videocassette (renamed D1V in 1998)
 - 288-- Hi-8mm videocassette
 - 289-- S-VHS videocassette
 - 291-- 1.5 mil polyester 1/4" audio on 7" reel.

292-- 1.0 mil polyester 1/4" audio backcoated on 7" reel, black oxide.
296-- 1" C-format helical videotape
297-- U-Matic SP videocassette
298-- Betacam SP 1/2" videocassette (metal) (replaced by 398) (1990)

301-- General purpose audio NB tape available on reel or cassette (1968-?)
304-- Tape optimized for low speed logging use (1968-?)
311-- Irish version of 511 (1962)
319-- D-2 digital videocassette (replaced by 329) (1988)
321-- Irish version of 521 (1962)
329-- D-2 digital videocassette
331-- Irish version of 531 (1962)
332-- 1.5 mil "Plus Series" NB consumer 1/4" tape (185 nWb/m) (1970s-1980s)
341-- Irish version of 541 (1962), later sold in orange Ampex box
342-- 1 mil "Plus Series" NB consumer 1/4" tape (185 nWb/m) (1970s-1980s)
344-- 1 mil PE, low noise, non-backcoated 1/4" tape. (available in 1973)
345-- 1.5 mil red oxide tape (recommended for B&K 7004 recorder) (av in 1976)
351-- Irish version of 551 (1962)
352-- LO-NOISE compact cassette (lowest grade) (1978)
361-- Compact cassette tape (1969-?)
364-- 20/20 Plus cassette tape (mid-grade) (pre-1978 to 1983)
365-- Grand Master type I cassette tape (pre-1978 to 1983)
366-- Grand Master type II cassette tape (pre-1978 to 1983)
370-- HOLN cassette tape lowest-grade (discontinued 1983)
371-- Plus Series cassette tape (lower grade) (1978)
372-- Ampex 406 on 7" reels for consumer use (mid/late 70s). "20-20 series"
373-- 1 mil version of 372
381-- Low grade 8-track cartridge (1976)
382-- Plus Series 8-track cartridge (1978)
388-- 20/20 Plus Series 8-track cartridge (1978)
389-- Grand Master 8-track cartridge (1978)
398-- Betacam SP videocassette (metal) (renamed BSP in 1998)

401-- 1.5 mil mastering tape.... probably pre-1965
404-- low-noise NB mastering tape (1965-?)
406-- 1.5 mil mastering tape (260 nWb/m)
407-- 1 mil version of 406
408-- 406 wound slightly differently for Nagra recorders. (Intro 1997)
411-- 1.5 mil NB (sample dated 1964)
414-- 1.5 mil NB. Very dark oxide.
434-- 1.5 mil non-backcoated high-output brown-oxide consumer tape (1960s)
444-- 1 mil version of 434
456-- 1.5 mil mastering tape (370 nWb/m)
457-- 1 mil version of 456 (by 1992 available only in 7" 1/4" reel)
460-- Digital audio tape (backcoated) for 3M machines (deleted 1982)
467-- 4mm DAT tape backcoated, now called DAT (1998)
467-- U-Matic oxide tape for digital audio, now called DAU (1998)
467-- Oxide 1/4" NAGRA-D, 1" for Pro-Digit, 1/2" for DASH tape for digital audio
472-- Stereo audio cassettes (CrO2, NB) (250 nW/m)
478-- 1.5 mil low-print mastering tape (250 nWb/m)
480-- 1.5 mil Quantegy equiv. of 3M 908, modified 478 coat w/ smoother B (1997) for Nagra
488-- 8mm tape designed for DTRS (Tascam DA-88) use, backcoated. (now DA8 in 98)
489-- S-VHS tape designed for Alesis ADAT use, backcoated. (now ADAT in 98)
499-- 1.5 mil mastering tape (520 nWb/m)

511-- 1.5 mil acetate version of 531 (1962)
521-- 1 mil acetate version of 531 (1962)

531-- "premium tape for semi-professional and home use" 1.5 mil NB Mylar 5", 7" (1962). Red oxide
541-- 1.0 mil Mylar base version of 531 (1962) Looks like later 641 tape.
551-- 0.5 mil Mylar base version of 531 (1962)

601-- .66 mil Cassette duplicating pancakes (NB) (1978)
602-- .44 mil version of 601
603-- .66 mil High performance cassette pancake (NB) (1979)
604-- .44 mil version of 603
607-- Thick standard bias cassette loads (NB) (1983)
608-- Thin standard bias cassette loads (NB) (1983)
609-- Thick chrome cassette loads (NB) (1983)
610-- Thin chrome cassette loads (NB) (1983)
611-- 1.5 mil brown oxide NB acetate (7" samples dated to 1963-1971)
617-- 0.5 mil FeO₂ cassette bulk-load pancake
618-- 0.3 mil version of 617
619-- .62 mil cassette duplication pancake (pre-1988-1993)
620-- .46 mil version of 619 (pre-1988-1993)
621-- 1 mil version of 611
631-- 1.5 mil non-backcoated "red oxide" voice-grade audio tape (185 nW/m)
632-- 1.5 mil non-backcoated "brown oxide" LNHO duplicating tape (185 nW/m)
638-- Empty 7" 1/4" accessory reel (not tape)
641-- 1 mil version of 631 (1960s-present)
642-- 1 mil equivalent of 632
651-- 0.5 mil version of 641
660-- HOLN black shell bulk cassettes (discontinued 1983)
661-- 0.5 mil version of 641 with thinner oxide (1968-present) (cassette or 1/4)
671-- 0.75 mil LNER non-backcoated extended-length tape (cassette or 1/4)
672-- FeO₂ audio cassette (discontinued 1993)
674-- Cassette, low noise for high speed duplication. (existed in 1978, not now)
675-- 8-track cartridge pancakes, back-lubricated
678-- Cassette (discontinued)

700-- 1 mil NB low speed logging with very thick coating (1978)
701-- 1 mil NB low speed logging tape (replaced by 704) (1978)
702-- 1 mil backcoated tape with same coating as 701 (1978)
703-- 0.5 mil version of 702 (1978)
704-- 1 mil non-backcoated low speed logging tape
705-- 1 mil backcoated low speed logging tape (same coating as 704) seen in 1/2"
706-- 0.5 mil backcoated low speed logging tape (same coating as 704)
721-- 1 mil Digital PCM instrumentation tape (cobalt)
722-- 0.8 mil Double Density digital PCM instrumentation tape (cobalt)
731-- Data cartridge for Ampex Digital Cassette Recorder (lower error rate)
733-- Data cartridge for Ampex Digital Cassette Recorder
738-- ?? NB instrumentation-
741-- ?? NB instrumentation- (circa 1962)
756-- 1 mil Intermediate band NB instrumentation- replaced by 766 in 1984
760-- Wideband instrumentation tape, NB (1966)
761-- 1 mil standard coat 1" or 1/2" NB low band FM instrumentation (1965)
762-- 1 mil thin coating 1" or 1/2" NB low band FM instrumentation (1965)
763-- 1.5 mil standard coat 1" or 1/2" NB low band FM instrumentation (1965)
764-- 1.5 mil thin coating 1" or 1/2" NB low band FM instrumentation (1965)
766-- 1 mil Intermediate band NB instrumentation- replaced by 767 in 1986
767-- 1 mil Intermediate band instrumentation tape
770-- Wideband instrumentation tape, NB (1966)
771-- Tape for FR-1800 instrumentation recorder (1965)
775-- 2" transverse scan instrumentation tape (probably selected 175)
782-- 1 mil wideband NB instrument tape (1972 or so) (replaced by 787)

786-- 1 mil NB High Resolution (1978)
787-- 1 mil backcoated High Resolution (1978) (replaced by 797)
795-- High Resolution (intermediate band with low drop-outs) instrumentation
79A-- Variant of 797 made for government use only
797-- 1 mil wideband instrumentation tape
799-- 1 mil High bit density digital PCM tape

830-- General name for 831, 832, 833 tape series of computer tapes
830-- (duplicate name) full track 7.5 ips alignment tape
831-- computer tape (1966-1968)
831-- (duplicate number) 1/4-track 3 3/4 ips alignment tape
832-- 1/2" computer tape (1965-1968)
834-- Computer tape (1966-1968)
835-- (duplicate number) 1/4-track 7.5 ips alignment tape
836-- 1/2" 1600 bpi computer tape (1965-late 70s?)
837-- Computer tape (1966-1968)
838-- 1/2" computer tape (1965-1968)
870-- General name for 871, 872, 873 tape series
871-- 556 bpi 7-track format IBM-compatible tape with new binder (1968)
872-- 800 bpi 7-track format IBM-compatible tape with new binder (1968)
873-- 800 bpi 9-track format IBM-compatible tape with new binder (1968)

8206-- 1 mil backcoated low speed logging tape (a 3M design), similar to 705.

ADAT- Formerly part 489 (1998)
BC -- Formerly part 208 (1998)
BSP-- Formerly part 398 (1998)
CDR-- Compact Disc Recordable (1994)
CDR1- Data tape cartridge (1968)
DA8-- Formerly part 488 (1998)
DAU-- Formerly part 467 in U-Matic (1998)
DAT-- Formerly part 467 in DAT (1998)
DBC-- Digital Betacam cartridge, metal particle tape (1998)
DDS-- 4mm DAT tape tested to DDS standards (1995)
DD1-- 19mm oxide tape for D-1 video format
DD8-- 8mm data cartridge (Exabyte style) (1995)
DIV-- Formerly part 229 (1998)
DV -- Tape for Ampex DCT recorder, 19mm metal D2-type cartridge (1998)
GP9-- 1/2", and 2" backcoated 320 nW/m high output mastering tape (1998)
HG -- A VHS videocassette offered until 1997.
ID2-- 19mm metal D-2 videotape.
MDR-- Recordable Minidisc (1998)
MOD-- Rewritable magneto-optical disk (1995)

Notes:

Ampex Plus-Series is a non-backcoated tape sold for consumer recording into the early 1980s. 1 or 1.5 mil, dark color, on 7" reels with leaders only.

All items without dates listed are current production items as far as this writing (1998).

Note that many instrumentation tapes come on rugged precision reels rather than normal NAB reels. They will fit on the same hubs but you cannot exchange flanges.

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