

# HDV & XDCAM EX

Format, Codec, Compression

the international  
FILM SCHOOL  
sydney

ελληνικά

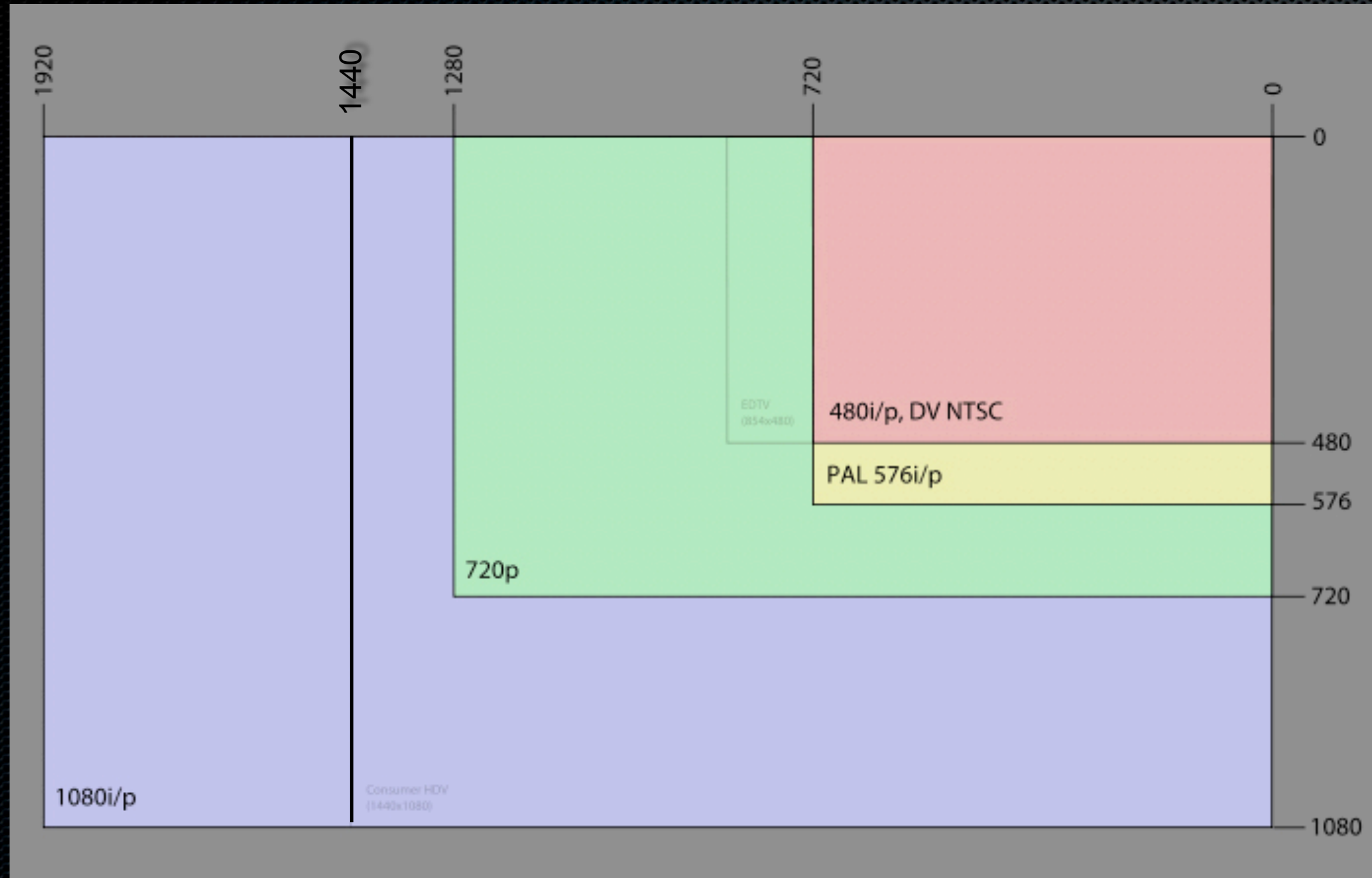
# WHAT are HDV and XDCAM EX?

The logo for HDV, consisting of the letters 'HDV' in a bold, black, sans-serif font, centered within a white rectangular box.The logo for XDCAM EX, consisting of the letters 'XDCAM' in a bold, black, sans-serif font and 'EX' in a bold, red, sans-serif font, centered within a white rectangular box.

- HD Formats
- Acquisition Formats
- Compressed Formats

- *Frame Size...*
- *Frame Rate...*
- *Compression & Datarate...*

# FRAME SIZE?



HDV=  
1280x720 Sq Pixels

1440x1080 PAR 1.333:1

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XDCAM EX=  
1280x720 Sq Pixels

1920x1080 Sq Pixels

# FRAME RATES

720 =

60p, 30p, 50p, 25p, 24p

1080 =

60i, 50i, 30p, 25p, 24p

# INTERLACED IMAGE



# PROGRESSIVE IMAGE



# PROGRESSIVE vs INTERLACE



# COMPRESSION (CODEC)

MPEG-2 Transport Stream



\*.m2t

\*.mpeg (Premiere Pro)

\*.mpg

\*.m2v

\*.MOV (Final Cut Pro)

Long GOP

4:2:0

19mbps/25mbps/35mbps

\*NLE/Capture Dependent

# COMPRESSION (CODEC)

MPEG-2 Transport Stream

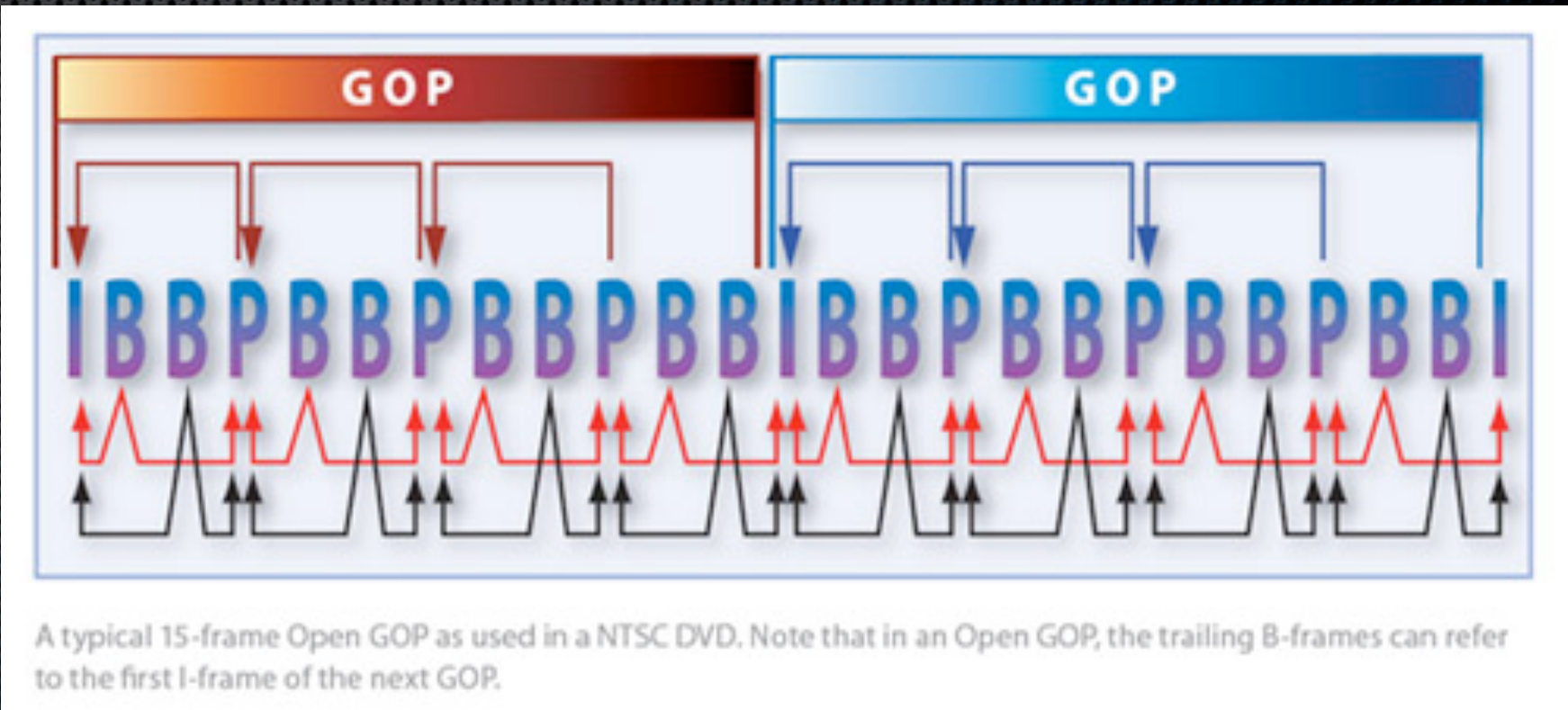
Long GOP



4:2:0

19mbps/25mbps/35mbps

Temporal Compression  
15 frame groups

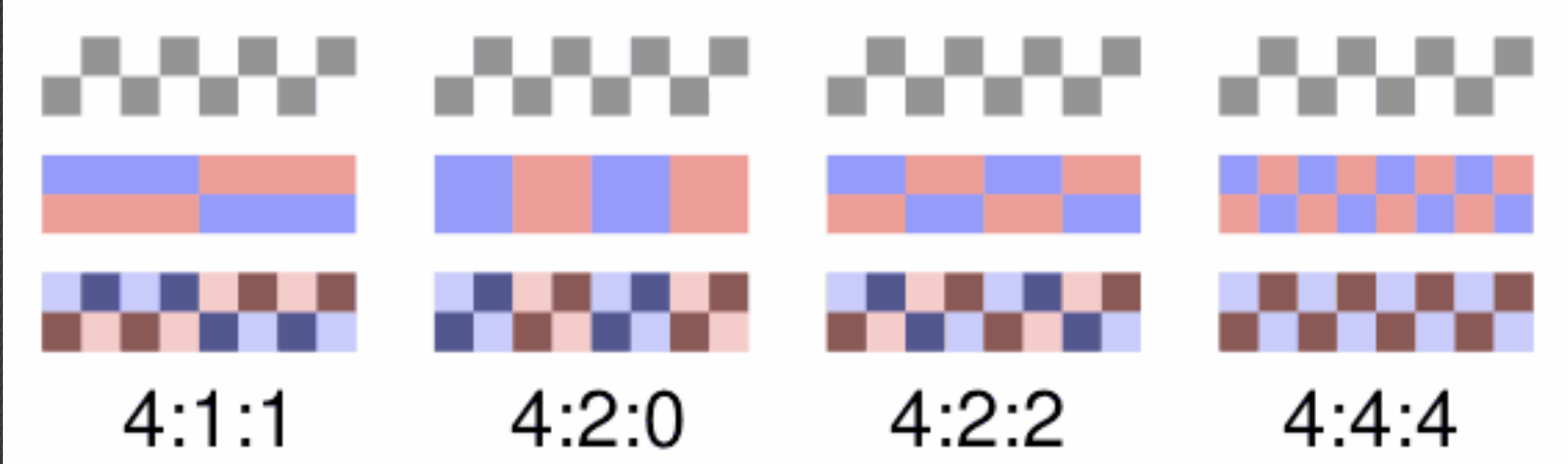


# COMPRESSION (CODEC)

MPEG-2 Transport Stream

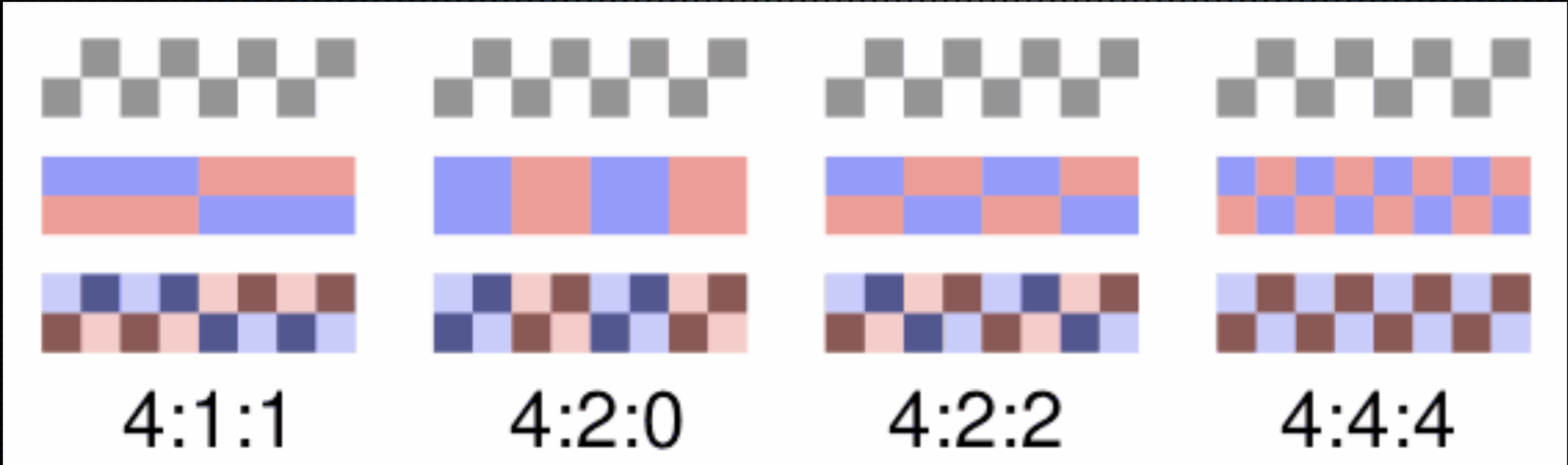
Long GOP

4:2:0 →



19mbps/25mbps/35mbps

# COMPRESSION (CODEC)



# COMPRESSION (CODEC)

MPEG-2 Transport Stream

Long GOP

4:2:0

19mbps/25mbps/35mbps



HDV 720p = 19mbps :  
13gb/hour

HDV 1080i = 25mbps :  
13gb/hour

XDCAM EX 1080p = 35mbps :  
20gb/hour