5.2 Clip features

5.2.1 PDF file searching for specific clip features

The PDF of the user manual may be searched to find clips that match the given CF-words ('CF'= Clip Feature).
The majority of the CF-words relate to aspects of the clip such as lighting and subject matter; those that pertain to 3D are denoted as 'CF3D-…'.

5.2.2 Excel file sorting for specific clip features

In addition to the PDF of this manual, an Excel file is provided which lists all the clips and the clip features in columns. This spreadsheet is in Excel .xls format (compatible with Excel versions from 97-2000 and later).

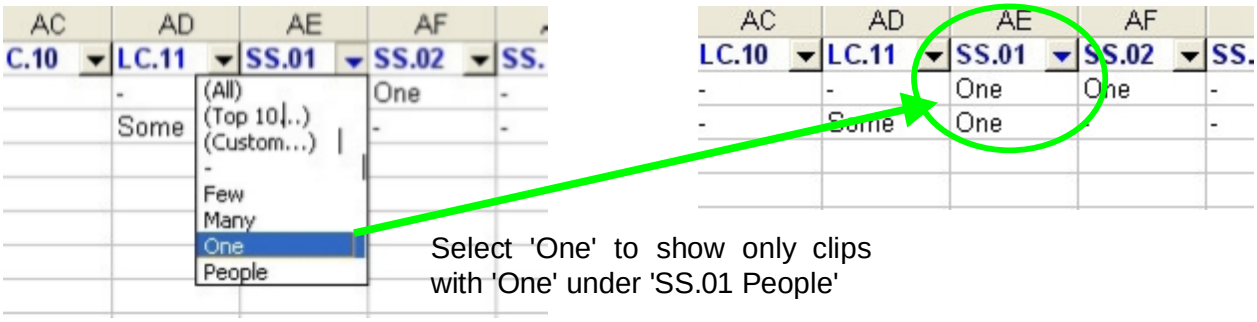
There are two tabs in the spreadsheet:

- the first tab has the clip set title: this has all the items listed in the manual for the clip
- the second tab "Clip features" just lists the individual clips, with the list of their clip features and individual columns for each individual clip feature.

Probably the "Clip features" tab is easiest to use to find specific clips with specific features, although every column may be sorted for specific features, by clicking on the drop-down arrow adjacent to each column heading (the examples below are from the T2V001 USA East clip set)

	A	B	C	D	E	F	G	
1			GN.01	GN.02	GN.03	GN.04	GN.05	GN.06
2	Number(s)	Title	Filename(s)	Horizontal x vertical si	Progressive / Interlaced	Video format	Bits per sam	Video c
3	T2V001001, T2V001101, T2V00 1	Bars_countdown	T2V001001_Bars_countdown_1920x1080p.yuv :	1920x1080; 1280x720	'p' file suffix = progressive; 'i'	YUV planar 4:	8 (for each of	HD colo
4	T2V001002, T2V001102, T2V00 202	Stars_n_Stripes	T2V001002_Stars_n_Stripes_1920x1080p.yuv :	1920x1080; 1280x720	'p' file suffix = progressive; 'i'	YUV planar 4:	8 (for each of	US flag
5	T2V001003, T2V001103, T2V 01203	Times_Square	T2V001003_Times_Square_1920x1080p.yuv : T2	1920x1080; 1280x720	'p' file suffix = progressive; 'i'	YUV planar 4:	8 (for each of	Somewh
6	T2V001004, T2V001104, T2 001204	Chrysler_building	T2V001004_Chrysler_building_1920x1080p.yuv :	1920x1080; 1280x720	'p' file suffix = progressive; 'i'	YUV planar 4:	8 (for each of	Slow zo
7	T2V001005, T2V001105, T2V001205	Display	T2V001005_Display_1920x1080p.yuv : T2V0011(	1920x1080; 1280x720	'p' file suffix = progressive; 'i'	YUV planar 4:	8 (for each of	Large ou

Click arrow to get drop-down list of items in this column (example below for 'SS.01 People')



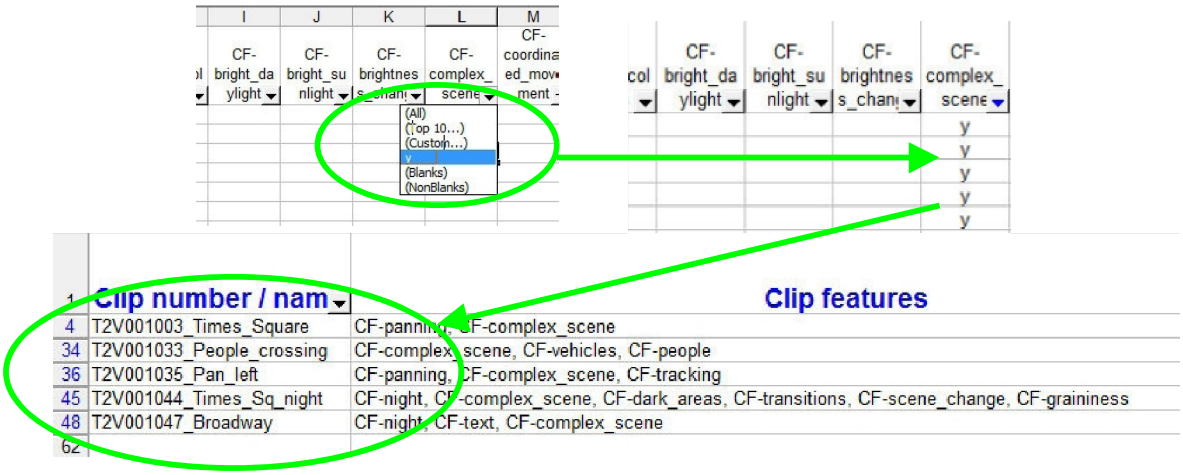
Select 'One' to show only clips with 'One' under 'SS.01 People'

Note that this first tab on the spreadsheet is roughly 100 columns wide (from column A to column CZ), so it may be helpful to use the 'Freeze Panes' feature (on the 'Window' menu in Excel 2000 and 2003) or split windows to keep the clip number visible.

The "Clip features" tab appears and can be sorted as indicated below:

	A	B	C	D	E	F	G
1	Clip number / nam	Clip features	CF-animal	CF-angl	CF-bandin	CF-black_background	CF-bright_daylight
2	T2V001001_Bars_countdown	CF-text, CF-dark_areas, CF-patterns, CF-black_background, CF-round_objects, CF-transitions, CF-large_monochromatic				y	
3	T2V001002_Stars_n_Stripes	CF-bright colours, CF-large_monochromatic, CF-movement_across					
4	T2V001003_Times_Square	CF-panning, CF-complex_scene					
5	T2V001004_Chrysler_building	CF-zoom_in, CF-fine_details, CF-low_contrast, CF-dull_daylight					
6	T2V001005_Display	CF-high_contrast, CF-rapid_changes					
7	T2V001006_Smiling	CF-faces, CF-people					
8	T2V001007_Traffic_duty	CF-faces, CF-text, CF-people					
9	T2V001008_Empire_State	CF-patterns, CF-scroll, CF-faces, CF-hand_held					
10	T2V001009_FDNY	CF-out_of_focus, CF-vehicles					
11	T2V001010_Checked_caps	CF-people, CF-movement_out, CF-patterns					
12	T2V001011_Gold_statue	CF-water, CF-patterns, CF-large_monochromatic					
13	T2V001012_Eyewitness_news	CF-moving text					

Selecting a drop-down menu and clicking on 'y' reduces the list to those that have that CF value:



5.2.3 List of 'CF' ('clip features') words used

The PDF of the user manual may be searched to find clips that match the given CF-words ('CF'= Clip Feature).

3D specific:

CF3D-effect_mild	CF3D-effect_medium	CF3D-effect_strong
CF3D-effect_excessive	CF3D-peak_negative	CF3D-peak_positive
CF3D-effect_change		
CF3D-perception_hard	CF3D-viewer_discomfort	CF3D-window_violation
CF3D-diff_colour	CF3D-diff_elements	CF3D-diff_geometry
CF3D-diff_not_genlocked		
CF3D-Sky_spec_yes	CF3D-Sky_spec_no	
CF3D-zoom	CF3D-rotation	CF3D-fast_movement
CF3D-contrast	CF3D-grain	

Meanings of the 3D-specific CF-words above:

CF3D-effect_mild CF3D-effect_medium CF3D-effect_strong CF3D-effect_excessive	How strong the 3D effect in general is perceived to be for the clip, when viewed with the screen size and distance as described in section 3.2.10 At least one of these is stated for every clip
CF3D-effect_change	The depth of the 3D effect changes during the clip
CF3D-peak_negative CF3D-peak_positive	Transitory peak negative or positive disparity which exceeds the Sky specification (see section 3.2.16)
CF3D-perception_hard	3D is hard to perceive either due to scene contents (differences left to right) or lighting differences (e.g. flare from sunlight in one side only) or random nature of scene contents

CF3D-viewer_discomfort	Clips where it is considered that viewer discomfort might be caused, e.g. due to differences left to right, or excessive disparity that continues too long, or window violation(s)
CF3D-window_violation	Where a significant object appears in one side and not the other for a sufficiently long time as to be noticeable
CF3D-diff_colour	Where there is a colour difference between left and right
CF3D-diff_elements	Where there are some elements within the scene which are different between left and right, e.g. due to reflections
CF3D-diff_geometry	Where the geometry is different left to right e.g. due to differential zoom; optical effects
CF3D-diff_not_ genlocked	The cameras have not been 'genlocked' and there may be some very minor artefacts as a result (see section 3.2.13)
CF3D-Sky_spec_yes CF3D-Sky_spec_no	Whether or not the clip meets the Sky specification (see section 3.2.16) either for average or transitory negative and positive disparity One of these is stated for every clip
CF3D-zoom	Zooming in or out
CF3D-rotation	Effect on 3D of rotation
CF3D-fast_movement	Effect on 3D of fast movement
CF3D-contrast	High or low contrast in both views or contrast differences between left and right could affect 3D
CF3D-grain	Graininess of sequence could affect 3D

General:

CF-bright_sunlight	CF-bright_daylight	CF-sunrise_sunset
CF-dull_daylight	CF-brightness_change	CF-shaded
CF-indoors_bright	CF-indoors_dark	CF-night
CF-twilight	CF-light_picture	CF-dark_picture
CF-high_contrast	CF-black_background	CF-dark_areas
CF-low_contrast	CF-white_background	CF-monochromatic
CF-people	CF-vehicles	CF-water
CF-buildings	CF-faces	CF-text
CF-trees	CF-leaves_grass	CF-crowd
CF-sky	CF-clouds	CF-complex_scene
CF-patterns	CF-reflections	CF-round_objects
CF-round	CF-animals	
CF-lines	CF-moire	CF-moving_text
CF-fine_details	CF-highlights	CF-light_sky
CF-graininess	CF-out_of_focus	CF-depth_of_field

CF-bright_colours	CF-dull_colours	CF-large_monochromatic
CF-movement_in	CF-movement_out	CF-movement_up/down
CF-movement_across	CF-random_movement	CF-diagonal_movement
CF-coordinated_movement	CF-from_above	CF-hand_held
CF-low_subject_movement	CF-rapid_movement	CF-rapid_changes
CF-slow_motion	CF-speeded_up	
CF-fast_track_pan	CF-panning	CF-scroll
CF-tracking	CF-tracking_following	CF-jerky
CF-transition	CF-transitions	CF-fade
CF-zoom_in	CF-zoom_out	CF-rapid_zoom
CF-angled	CF-subjects_behind_foreground	CF-banding
CF-sound_vehicles	CF-sound_talking	CF-sound_water
CF-sound_other	CF-wind	CF-music

6. Detailed information on individual clips

The following pages provide detailed information on the clips in this set.

6.1 Detailed description of each clip

This section contains detailed descriptions of each video clip, and the associated audio.

70 features are listed for each clip: the purpose of providing these descriptions is to make it easier to select specific clips for specific features.

Therefore even if a characteristic does occur in a particular clip, this is not necessarily listed where it is not a prominent feature and/or where it is believed that the clip would not be selected for this particular feature.

Clearly to some extent these descriptions and selections are subjective, and the user is likely to come to their own conclusions as to which are most relevant to their particular codec / situation: the descriptions provided are intended to be an appropriate starting point.

01_Monorail

GN.01	Filename(s)	T3D002n01_Monorail_1920x1080p60/i30_8b_P420_l/r.yuv [n=0 for p60; n=1 for i30]
GN.02	Horizontal x vertical size	1920x1080
GN.03	Progressive / Interlaced	p60=progressive; i30=interlaced Top Field First
GN.04	Video format	YUV planar 4:2:0
GN.05	Bits per sample	8 (for each of Y, U, V)
GN.06	Video description	White monorail trains coming and going
GN.07	Principal purposes	Straightforward codec efficiency test in reasonably complex scene
GN.08	3D notes	Optical lens geometry not perfect left-right, but does not adversely affect 3D
GN.09	Duration (mins:secs:frames)	00:25:11 (60p), 00:25:05 (30i)
GN.10	Number of frames	1511 (60p), 755 (30i)
GN.11	File size on disk (MB), combined L+R	9,400 (60p) ; 4,700 (30i)
GN.12	3D CF-words	CF3D-effect_mild, CF3D-Sky_spec_yes
GN.13	CF-words	CF-bright_colours, CF-bright_sunlight, CF-buildings, CF-complex_scene, CF-fade, CF-fine_details, CF-large_monochromatic, CF-light_sky, CF-light_picture, CF-lines, CF-moire, CF-movement_across, CF-movement_in, CF-movement_out, CF-patterns, CF-rapid_changes, CF-scene_change, CF-sky, CF-transition, CF-vehicles
GN.14	Associated audio types	MPEG1 Layer II 48kHz 16bit stereo 384kbps Constant Bit Rate : 16bit uncompressed 48kHz stereo WAV
GN.15	Associated audio filenames	T3a002x01_Monorail_act_MP1LII.mpa : T3a002y01_Monorail_act_unc.wav
GN.16	Associated audio description	Actual audio recorded with video
GN.17	Audio duration	Same as video (video played at 59.94fps)

Clip features		Details
3D DATA		
3DN.01	Ave. Negative disparity	0.0%
3DN.02	Ave. Positive disparity	0.3%
3DN.03	Ave. within Sky spec (-1% / +2%)	Yes
3DN.04	Peak Negative disparity	-0.2%
3DN.05	Peak Positive disparity	0.6%
3DN.06	Peak within Sky spec (-2.5% / +4%)	Yes
3DN.07	Interocular (mm)	40-65
3DN.08	Colour corrected	Yes
3DN.09	Geometric correction	None
3DN.10	Floating window used	No
3D EVALUATION		
3EV.01	3D effect	Mild
3EV.02	Change in 3D effect	-
3EV.03	Peak negative or positive disparity	-
3EV.04	3D perception hard	-
3EV.05	3D viewer discomfort	-
3EV.06	3D window violation	-

3EV.07	3D diff. Left to Right	-
3EV.08	Comply with Sky spec	Yes
3EV.09	3D possibly affected by	-

LIGHT CONDITIONS

LC.01	Bright sunlight	All
LC.02	Bright daylight	-
LC.03	Dull daylight	-
LC.04	Shaded areas	-
LC.05	Indoors bright	-
LC.06	Indoors dark	-
LC.07	Twilight	-
LC.08	Sunrise/sunset	-
LC.09	Night	-
LC.10	Backlighting	-
LC.11	Large brightness change	-

SCENE SUBJECTS

SS.01	People	Deep
SS.02	Faces	-
SS.03	Vehicles	Some
SS.04	Buildings	-
SS.05	Trees	One
SS.06	Text	One
SS.07	Talking head	-
SS.08	Water	Some slow
SS.09	Leaves/grass	-
SS.10	Sky	Monochromatic blue
SS.11	Clouds	-
SS.12	Patterns	-
SS.13	Round/curved objects	-

SCENE PROPERTIES

SP.01	Depth of field	Deep
SP.02	Out-of-focus	-
SP.03	Fine lines/moiré patterns	Some
SP.04	Reflections	-
SP.05	Scene change	One
SP.06	Fades	One
SP.07	Transitions	-
SP.08	Slow/fast motion	Some slow

COLOURS & CONTRAST

CC.01	Light picture	All
CC.02	Dark picture	-
CC.03	Bright colours	Most
CC.04	Dull colours	-
CC.05	Fine detail/moiré patterns	Areas
CC.06	High contrast areas	-
CC.07	Large monochromatic areas	One (sky)
CC.08	Graininess	-
CC.09	Black background	-
CC.10	White background	-

GLOBAL MOTION

GM.01	Fast track/pan	-
GM.02	Tracking in/out	-
GM.03	Tracking	-
GM.04	Panning	-
GM.05	Tracking (following)	-
GM.06	Fast scroll	-
GM.07	Scroll	-
GM.08	Angled	-
GM.09	Zoom in	-
GM.10	Zoom out	-
GM.11	Hand-held camera	-

SUBJECT MOTION

SM.01	Movement out of picture	Some, slow
SM.02	Movement into picture	Some, slow
SM.03	Movement across picture	Some, slow
SM.04	Movement up/down	-
SM.05	Diagonal movement	-
SM.06	Subjects behind foreground objects	-
SM.07	Low movement	-

SOUND CONTENT

SC.01	Talking	-
SC.02	Movement	-
SC.03	Vehicles	-

SC.04	Wind	-
SC.05	Music	-
SC.06	Background	Traffic
SC.07	Other	-

SOUND CHARACTERISTICS

SH.01	Mono/ stereo	Stereo
SH.02	Average volume	Quiet
SH.03	Level changes	-
SH.04	Clear/ distorted	Clear