

# Colorimetric and Resolution requirements of cameras

Alan Roberts

## **ADDENDUM 5 : Menu settings for**

### **BTS/Thomson Multi-media LDK6000**

Measurements and data for this appendix supplied by Richard Salmon

**This document is a report of the results of tests that are the precursor of those described in the EBU technical document Tech3335. It is not an endorsement of the product.**

This camera is not a camcorder, but of the conventional studio type, triax connected to a conventional ccu. It has many interesting and useful features. The camera closely resembles other, small studio cameras. It has the usual shoulder pad that makes it operable hand-held, and is no bigger than a conventional camera.

The camera is designed to operate on the 1080-line standards, but is intended to operate also on the 720-line progressive standards, and eventually on a 1080-line progressive standard. The ccds are 1920 pixels by 4320 rows, each with a 4:1 aspect ratio. To operate at 1080 lines pro-scan, rows are added together in groups of 4. For 1080 line interlace, the grouping is in sets of 8, phase shifted by 4 four alternate fields. Grouping in sets of 6 gives 720 pro-scan and so on. Derivatives of this camera may well be manufactured under different type numbers (maybe LDK7000, and certainly Viper Filmstream). In the form tested, it produced simultaneously HDTV and SDTV outputs. It can use either HDTV or conventional SDTV viewfinders and monitoring. It can operate in a mixed environment, simultaneously feeding HDTV and SDTV programme switchers but under single control. Control of the camera is by conventional OCP and MCP (Operational and Main Control Panels), and is little different from any conventional SDTV studio camera. One useful feature is that the aperture correction can be set separately for HD and SD outputs, the HD settings apply equally to the HD and SD output, but a separate AK is used for the SD output. Thus the camera can be optimised for HD images, but the SD feed can be optimised independently.

Transfer characteristic (gamma, black stretch and knee) can be set conventionally, and a good "film-look" can be obtained for post-processed production. There is a "Black Press" option which produces a good "film-look" directly from the camera.

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## ADDENDUM 5 : Menu settings for BTS/Thomson Multi-media LDK6000

Menu items that contribute significantly to the "BBC look" are highlighted.

### Camera Head System Menu Structure

#### MAIN Menu

Menu text	User level	Values	Blocked if	File	Default	BBC	Comment
VF >>	0 1 2 3 S						
Lens >>	0 1 2 3 S						
Video >>	2 3 S						
Install >>	0 1 2 3 S						
Files >>	1 2 3 S						
Security >>	0 1 2 3 S						
Diagnostics >>	2 3 S						
Service >>	3 S						

#### VF Menu

Menu text	User level	Values	Blocked if	File	Default	BBC	Comment
VF mon	2 3 S	Y,R,G,B,-G	-	operator	Y		
VF Contour >>							
VF Contour	2 3 S	On, Off	-	operator	On		
Level	2 3 S	0..99	VF cont. Off	operator	95	50	
Focus Assist	0 1 2 3 S	On,Off	-	operator	On		
Zebra >>							
Zebra	3 S	On,Off	"2" VF used	operator	Off		Switch on VF
mode	3 S	Level, band	Zebra Off	operator	Level		
level (%)	3 S	0..99	Zebra Off	operator	90		
contrast	3 S	0..99	Zebra Off	operator	15		
Centre Cross	0 1 2 3 S	On,Off	-	operator	Off		
Safe Area	0 1 2 3 S	On,Off	-	operator	Off		
Audio Bar	0 1 2 3 S	On,Off	Triax	operator	Off		
Iris Ind.	0 1 2 3 S	On,Off	SuperXPander	operator	Off		
Focus Ind.	0 1 2 3 S	On,Off	SuperXPander	operator	Off		
Zoom Ind.	0 1 2 3 S	On,Off	-	operator	Off		
Box downright	0 1 2 3 S	Fltr,Off	-	operator	Off		
Marker	0 1 2 3 S	Off,4:3,16:9,14:9	-	operator	Off		inicates filters
Marker Type	0 1 2 3 S	Dot,Shad, Both	-	operator	Off		actually " 4:3" On, Off on the camera
Ind. White	2 3 S	0..99	-	operator	28	70	"Shad" doesn't do the right thing
Ind. Black	2 3 S	0..99	-	operator	30		viewfinder text brightness
Display	2 3 S	On,Time	-	operator	Time		useful to set this to On for set-up
Menu Time	3 S	0..10 sec.	Display On	operator	10		
Info Time	3 S	0..20 sec.	-	operator	5		
Rotary Speed	3 S	0..10 sec.	-	operator	5		
VF Notch	2 3 S	On,Off	-	operator	Off		
Ext Asp Ratio	0 1 2 3 S	4:3,16:9	-	operator	4:3		
Int Asp Ratio	0 1 2 3 S	4:3,16:9	-	operator	16:9		

#### LENS Menu

Menu text	User level	Values	Blocked if	File	Default	BBC	Comment
Lens Type	0 1 2 3 S	Std,WA	-	operator	STD		two basic settings
Auto Iris	0 1 2 3 S	On, Off	SuperXPander		Off		
Peak/Average	3 S	0..99	Auto Iris off	scene	65		
AutoIris Setpoint	3 S	0..99	-	scene	35		
Mom Iris Setpoint	3 S	0..99	-	scene	50		
Manufacturer	0 1 2 3 S	Fuj, Ang, Can, Other	-	-	Fuj1		for large lens adapter
Extended iris >>	3 S						
GainSpeed	S	0..99	-	operator	5		
ExpTimeSpeed	S	0..99	-	operator	4		
Min iris	3 S	5.6, 8, 11, 16	-	operator	F16.0		
Max iris	3 S	1.4, 2, 2.8, 4, 5.6	-	operator	F2.0		
Min exp time	3 S	1/100, 1/200, 1/500	-	operator	1/500		
Max Gain	3 S	0..15 (3db steps)	-	operator	15dB		
Autoiris const >>	3 S						
Iris gain	3 S	5..10	-	-	-		
VTR Switch	0 1 2 3 S	Alt,Mom	No LDK 5600		Alt		did not see this item

VIDEO Menu							
Menu text	User level	Values	Blocked if	File	Default	BBC	Comment
Colour filter	2 3 S	00 .. 99	3k2,5K6,7K5,AW C	scene	50		
Contour >>							
Contour	S	Off, On	-	scene	On		
Level	3 S	00 .. 99	Contour = Off	scene	50	26	
Srce Sel >>	3 S	Y,R,G,RG	-	scene	R+G		
<more> >>							
vert cont	3 S	0..99	Contour = Off	scene	25	29	
coarse/fine	3 S	0..99	Contour = Off	scene	50	99	
Level	S	0..99	Contour = Off	scene	50	26	repeats entry above
level dep.	S	0..99	Contour = Off	scene	40	54	
noise slice	S	0..99	Contour = Off	scene	5	15	
Soft Cont >>							
Soft Contour	2 3 S	Off, On	-	scene	Off		
Level	2 3 S	0..99	Soft Cont=Off	scene	70		
Knee Contour	3	Off, 1,2,3,4		scene	Off		
Skin >>							
Skin	2 3 S	Off, 1, 2, 1+2	-	scene	Off		
Auto	2 3 S	Off, On	Skin=Off or 1+2	-	Off		
View	2 3 S	Off, On	On Skin=Off		Off		
Skin Level	2 3 S	0..99	On Skin=Off	scene	50		
<more> >>							
width1 R	3 S	0..99	Skin <> 1	scene	50		
width1 B	3 S	0..99	Skin <> 1	scene	50		
color1 R	3 S	0..99	Skin <> 1	scene	50		
color1 B	3 S	0..99	Skin <> 1	scene	50		
width2 R	3 S	0..99	Skin <> 2	scene	50		
width2 B	3 S	0..99	Skin <> 2	scene	50		
color2 R	3 S	0..99	Skin <> 2	scene	50		
color2 B	3 S	0..99	Skin <> 2	scene	50		
Flare >>							
Flare	S	Off, On	-	scene	On		Must be on for operations
Red	S	0..99	Flare = Off	scene	10		
Green	S	0..99	Flare = Off	scene	15		
Blue	S	0..99	Flare = Off	scene	25		
Black >>							
Dyn. Black	2 3 S	Off, On	Triax	-	-		Not present on camera tested
Black stretch	3 S	0..99	Blk str = Off	scene	99	60	Not sure how this relates to Black Press/stretch
Master	2 3 S	0..99	-	scene	50		
<more> >>							
Red	3 S	0..99	-	scene	50		
Green	3 S	0..99	-	scene	50		
Blue	3 S	0..99	-	scene	50		
Master	3 S	0..99	-	scene	50		
Gain >>							
Red	2 3 S	0..99	-	scene	50		
Green	2 3 S	0..99	-	scene	50		
Blue	2 3 S	0..99	-	scene	50		
Knee >>							
Knee	2 3 S	Off, Var	-	scene	Off	On	
Knee Type	3 S	Y, NAM	-	scene	Y		
Slope M	3 S	0..99	knee <> var	scene	60	90	
Point M	3 S	0..99	knee <> var	scene	50	46	
<more> >>							
Knee Lim	S	0..99	knee <> var	scene	99		
Desat'n	S	Off, On	knee=off	scene	On	Off	
Desat Lvl	S	0..99	desat = off	scene	50		
Auto Point	S	0..99	knee <> auto	scene	30		
Auto Ref	S	0..99	knee <> auto	scene	30		
Gamma >>							
Gamma	2 3 S	Nom,Low,Pre	-	scene	Nom		
Master	3 S	0..99	gamma<>Pre	scene	76		
Red	3 S	0..99	gamma<>Pre	scene	76		
Green	3 S	0..99	gamma<>Pre	scene	76		
Blue	3 S	0..99	gamma<>Pre	scene	76		
<more> >>							
Curve	S	BBC04/05/06, ARD, 6xARD, CCIR, RAI	-	scene	ARD	BBC05	
Gamma	S	Gamma, Lin	-	scene	gamma		
Matrix >>							
Matrix	3 S	EBU,RAI,BBC,B/W, skin,1:1,CFL,var1&2	-	scene	Skin	BBC	
R..G	S	0..99	Matrix<>Var	scene	--		
G..R	S	0..99	Matrix<>Var	scene	--		
R..B	S	0..99	Matrix<>Var	scene	--		

B..R	S	0..99	Matrix<>Var	scene	--	
G..B	S	0..99	Matrix<>Var	scene	--	
B..G	S	0..99	Matrix<>Var	scene	--	
Mat / Gamma	S	G/M, M/G	-	scene	G/M	M/G matrix before/after gamma
White Limit >>						
White Limit	S	Off, On	-	scene	On	
Master	S	0..99	Wh.Limit = Off	scene	80	
Shading >>						
Shading	S	Off, On	-	scene	On	
H saw red	S	0..99	Shading = Off	-	50	
H saw green	S	0..99	Shading = Off	-	50	
H saw blue	S	0..99	Shading = Off	-	50	
H par red	S	0..99	Shading = Off	-	0	
H par green	S	0..99	Shading = Off	-	0	
H par blue	S	0..99	Shading = Off	-	0	
V saw red	S	0..99	Shading = Off	-	50	
V saw green	S	0..99	Shading = Off	-	50	
V saw blue	S	0..99	Shading = Off	-	50	
V par red	S	0..99	Shading = Off	-	0	
V par green	S	0..99	Shading = Off	-	0	
V par blue	S	0..99	Shading = Off	-	0	
Saturation	2 3 S	0..99	-	-	50	40

**INSTALL Menu LDK 5600 Multi-Purpose Adapter**

Not the version tested; see below

Menu text	User level	Values	Blocked if	File	Default	BBC	Comment
Video Mode	2 3 S	1080i,720p	Not Available	-	-		
Disable Camera	0 1 2 3 S	Off, On	-	-	Off		
IR receiver	0 1 2 3 S	Off, On	-	operator	Off		
OnAir Lamp	0 1 2 3 S	Off, On	VF<> 7"	operator	On		
Notch	0 1 2 3 S	Off, On	-	operator	Off		
Exposure >>	0 1 2 3 S						
Lighting	1 2 3 S	-10..+10	Exp<>50,60Hz	scene	0		
Clean Scan >>	1 2 3 S						
Mode	1 2 3 S	Normal,Extended	-	scene	Normal		
Value	1 2 3 S	*	-	scene	-		* See section 5 of Operation Manual 'Shooting Screens'
Units	1 2 3 S	Hz, mSec	-	scene	mSec		
Gain preset >>							
Gain - (dB)	2 3 S	-3, -6	-	operator	-3dB		
Gain + (dB)	2 3 S	3,6,9	-	operator	3dB		
Gain ++ (dB)	2 3 S	6,9,12	-	operator	6dB		
Autowhite	S		Coltemp<>AW				
Awb speed	S	0..99	-	operator	4		
Awb gain	S	0..99	-	operator	10		
Quick Smart Touch	1 2 3 S	On, Off	not installed	-	On		

**INSTALL Menu LDK 5460 Triax Adapter**

Menu text	User level	Values	Blocked if	File	Default	BBC	Comment
Video Mode	2 3 S	1080i,720p	Not Available	-	-		Camera tested had options: 1080i50, 1080i60, 720p50, 720p60, but these need to be changed as links in base station and head for the present.
Disable Cam	0 1 2 3 S	Off, On	-	-	Off		
IR receiver	0 1 2 3 S	Off, On	-	operator	Off		
OnAir Lamp	0 1 2 3 S	Off, On	VF<> 7	operator	On		
Intercom >>							
Side tone	1 2 3 S	0..99	-	operator	50		
Cam. Mic	1 2 3 S	On,Off,Switch	Cam. Mic=On	operator	Off		
Cam. Mic Gain	1 2 3 S	0dB,40dB	-	operator	40dB		
Cam. Mic Pwr	1 2 3 S	On,Off	-	operator	Off		
Cam. Prod	1 2 3 S	Off,L,R,Both	-	operator	Off		
Cam. Eng	1 2 3 S	Off,L,R,Both	-	operator	Off		
Cam. Prog	1 2 3 S	Off,L,R,Both	-	operator	Off		
Cam. Track	1 2 3 S	Off,L,R,Both	-	operator	Off		
Cam. Track lvl	1 2 3 S	0..99	-	operator	50		
Track Mic To	1 2 3 S	Off,Cam,Eng, Prod,All	-	operator	Off		
Track Mic Gain	1 2 3 S	0dB,40dB	-	operator	40dB		
Track Mic Pwr	1 2 3 S	On,Off	-	operator	Off		
Track Source	1 2 3 S	Side,Eng	-	operator	Side		
Cam. Mic To	1 2 3 S	CH1,CH2	-	operator	CH1		
Audio >>							
Audio 1 Gain	1 2 3 S	-22 to -64 by 6	-	operator	-22		
Audio 1 HPF	1 2 3 S	On,Off	-	operator	Off		
Audio 2 Gain	1 2 3 S	-22 to -64 by 6	-	operator	-22		
Audio 2 HPF	1 2 3 S	On,Off	-	operator	Off		
Notch	3 S	Off, On	-	operator	Off		
Exposure >>							
Lighting	1 2 3 S	-10..+10	Exp<>50,60Hz	scene	0		
Clean Scan >>	1 2 3 S						Press switch for 2 seconds
Mode	1 2 3 S	Norm,Extended	-	scene	Normal		

Value	1 2 3 S	*	-	scene	-	* See section 5 of Operation Manual 'Shooting Screens'
Units	1 2 3 S	Hz, mSec	-	scene	mSec	
Gain preset >>						
Gain - (dB)	2 3 S	-3,-6	-	operator	-3dB	
Gain + (dB)	2 3 S	3,6,9	-	operator	3dB	
Gain ++ (dB)	2 3 S	6,9,12	-	operator	6dB	
Autowhite >>				Coltemp<>AW		
Awb speed	S	0..99	-	operator	4	
Awb gain	S	0..99	-	operator	10	
Quick Smart Tch	1 2 3 S	On, Off	not installed	-	On	
Private Data	0 1 2 3 S	C->B,B->C,B<->C	-	operator	Inter	
PCI id					1	

Not in manual

**FILES Menu**

Menu text	User level	Values	Blocked if	File	Default	BBC	Comment
Store scenefile >>							
File select	2 3 S	sacm1..4, scard1..4	-	-	-		
Store	2 3 S	Exec	-	-	-		
Recall scenefile >>							
File select	2 3 S	standard, scam1..4, scard1..4	-	-	-		
Recall	2 3 S	Exec	-	-	-		
Store oper. file >>							
File select	1 2 3 S	ocam 1, ocard1..2	-	-	-		
Store	1 2 3 S	Exec	-	-	-		
Recall oper. file >>							
File select	1 2 3 S	standard, ocam1, ocard1..2	-	-	-		
Recall	1 2 3 S	Exec	-	-	-		
Attributes >>							
File select	2 3 S	available files	-	-	-		
File name	2 3 S		-	-	-		
Attribute	2 3 S	R/W, R	no card not installed	-	R/W		
Standard files >>							
Standard settings	2 3 S	Exec	-	-	-		
Lighting ---							
Night	2 3 S	Exec	-	-	-		
Fluorescent	2 3 S	Exec	-	-	-		
Extreme contrast	2 3 S	Exec	-	-	-		
Creative ---							
Sport warm color	2 3 S	Exec	-	-	-		
Sport interview	2 3 S	Exec	-	-	-		
HI film	2 3 S	Exec	-	-	-		
HI film + skin	2 3 S	Exec	-	-	-		
LO Film	2 3 S	Exec	-	-	-		
LO film + skin	2 3 S	Exec	-	-	-		
Sepia film	2 3 S	Exec	-	-	-		
Matching ---							
LDK9x + LDK10	2 3 S	Exec	-	-	-		
DVW-xxx	2 3 S	Exec	-	-	-		
HL-xxx	2 3 S	Exec	-	-	-		
Standard settings	2 3 S	Exec	-	-	-		

**SECURITY Menu**

Menu text	User level	Values	Blocked if	File	Default	BBC	Comment
Installed Level	2 3 S	user0..user3	no owner	-	u3		Level 0 is most restrictive, level 3 do anything. Must have pin.
Run Hours >>			card or PIN				Seemed to work without owner card.
Days ago	2 3 S	0 ... 30		-	0		
Set Time >>							
Hour	2 3 S	0 ... 23		-	-		
Minute	2 3 S	0 ... 59		-	-		
Set Date >>							
Year	2 3 S	0 ... 99		-	-		
Month	2 3 S	1 ... 12		-	-		
Day	2 3 S	1 ... 31		-	0		
PIN code >>			no owner card/PIN		0		
Four digits	0 1 2 3 S	0000 ... 9999	-	-	0000		
Customer files >>			no owner card/PIN		-		
Stor cust Scn	0 1 2 3 S	Exec	-	-	-		
Stor cust. Op	0 1 2 3 S	Exec	-	-	-		
Stor cust Vtr	0 1 2 3 S	Exec	no DVCPRO	-	-		
Green Button >>			no owner card/PIN		-		
Standard	0 1 2 3 S	Factory/Customer	-	-	Factory	Cust.	Ensure that BBC "Customer" settings installed on reset
Scene file	0 1 2 3 S	On,Off	-	-	On		
Operator file	0 1 2 3 S	On,Off	-	-	On		
VTR file	0 1 2 3 S	On,Off	no DVCPRO	-	Off		Not yet implemented?

**DIAGNOSTICS Menu**

Menu text	User level	Values	Blocked if	File	Default	BBC	Comment
Communication >>			LDK 5600				
Base Station	2 3 S	Ok, NotOk	-	-	-		
OCP	2 3 S	Ok, NotOk	-	-	-		
MCP	2 3 S	Ok, NotOk	-	-	-		
Adaptor Type	2 3 S	Triax, DVCPRO, ..	-	-	-		Triax
Sensor Type	2 3 S	IT,ITW,FT,DPM	-	-	-		DPM
Sensor Voltage	2 3 S	Ok, NotOk	-	-	-		
Shutter Run	2 3 S	Run, Stop	-	-	-	Run	
Front Power	2 3 S	Ok, NotOk	-	-	-		
Green carrier	2 3 S	Ok, NotOk	-	-	-		"Y Carrier" in camera tested
Cam. 12nc	2 3 S	...	-	-	-		3391
Cam. Version	S	...	-	-	-		2.8
Cam. Status	2 3 S	...	-	-	-		F0
Cam. Boot ver.	2 3 S	...	-	-	-		4.1
Cam. FPGA ver.	2 3 S	...	-	-	-		1.6
Adapter 12nc	2 3 S	...	-	-	-		3435
Adapter Version	S	...	-	-	-		1.2
Adapter Status	2 3 S	...	-	-	-		3
PPG Status							9 - not in manual

**SERVICE Menu**

Menu text	User level	Values	Blocked if	File	Default	BBC	Comment
Sawtooth	3 S	Off, On	-	-	Off		
Sawt Select	3 S	PrPr, Asic	-	-	PrPr		PrPb on camera tested
ViPr Test	S	Int/Ext	-	-	Int		
LPC	S	Off, On	-	-	On		
BPC	S	Off, On	-	-	On		
Chroma	0 1 2 3 S	Off, On	-	-	On		
Calibrations >>							Not on camera tested
Video ADC	S	Off, Run	-	-	Off		Not on camera tested
3200K	S	Off, Run	-	-	Off		Not on camera tested
3200K reset	S	Cust,Fact	-	-	Fact		Not on camera tested
Pulse comp	S	Off, Run	-	-	Run		Not on camera tested
Calib Params >>							Not on camera tested
Tol'nce 0.1%	S	1..25	-	-	3		Not on camera tested
Shutter phase	S	-30..+30	-	-	0		
Scaler >>							
Encoder	3 S	Off,On	-	-	Off		"On" on camera tested
SDI	3 S	Off,On	-	-	Off		
Encoder bars	3 S	Off,On	-	-	Off		
EPLD Test	S	Off,Sawt,Bars	-	-	Off		
Chroma	0 1 2 3 S	Off, On	-	-	On		

**MCP menu settings**

Manual for mcp does not yet have settings for LDK 6000

**Operate Menu**

Functions	Parameters	Factory File	BBC	Comments
Gain	R/G/B	50/50/50		
Black	R/G/B	50/50/50		
Knee	slope/point	60/50	90/ 46	
Contour	Level	50	26	for HD, 12 for SD
Gamma	Master	76		
Black Stretch	Master	99	60 ?	(with stretch/compress set to Press)
Colour Temp.	7 positions	3200 K		
Auto Black	On / Off	-		actually done continuously
Knee	Off / Auto / Var	Off	Var	Gives 1.5 stops head-room
Contour	Off / Var	Var	Off	(Off for film-look)
Gamma	Lin / 1 / 2 / Var	1	1	
Black Stretch	On / Off	Off	On	On for film look, Odd for video
Monitoring	11 Positions	Y		
Bars	Off/On	Off		
Exposure	9 positions	Nom		
Filter 1	A/B/C/D		A - clear	B=4p star, C=6p star, D=soft focus
Filter 2	1/2/3/4		1 - clear	2=1/4ND, 3=1/16ND, 4=1/64ND
Gain	- / 0 / + / ++	0		
Auto Iris	Off/On	Off		11 positions

**Setup Menu 1**

Functions	Parameters	Factory File	BBC	Comments
Gain	R/G/B	50/50/50		
Black	R/G/B	50/50/50		
Flare	R/G/B	10, 15, 25		Basic values for ordinary lens
Gamma	R/Master/B	76, 76, 76		
Knee	slope/point		90, 46	

Knee Desat			50	
White Clip		80	102-104%	102-104%
Video Mode				Change actually needs to be made with links on pcb in base and camera head.
VM			1080i/50	
Flare	On/Off		On	Off is no use if you have a lens on the camera!!!
Gamma Sel	Lin / 1 / 2 / Var	1	1	2 gives a steeper curve
Knee	Off/On		On for film	Gives 1.5 stops head-room
Knee Desat	Off/On		Off	
White Clip	Off/On		On	
Monitoring		Y		
Gamma	BBC04/05/06, ARD, 6xARD, CCIR, RAI		BBC05	
Knee Src			Y	
Sawtooth	Off/On	Off		
Auto Iris	Off/On	Off		

**Setup Menu 2**

Functions	Parameters	Factory File	BBC	Comments
Contour	(Control Mode HDTV)			
Level	0..99	50	26	
Soft Cont	0..99	70		but is off
Coarse/fine	0..99	50	99	
V-level	0..99	25	29	
Noise Slicer	0..99	5	15	
Level Depend	0..99	40	54	
Contour	(Control Mode SD)			
Level	0..99	50	12	These SD values are not recalled from scenefile on set-up card. so must be entered manually
Soft Cont	0..99	70		
Coarse/fine	0..99	50	99	
V-level	0..99	25	99	
Noise Slicer	0..99	5	06	
Level Depend	0..99	40	50	
Contour	Off/Var	Var	Var	(off for film-look)
Soft Cont	Off/On	Off		
Knee Cont	1..4/On/Off	Off		
Monitoring	11-positions	Y		
Contour Sel	Y,R,G,R+G	R+G		
Auto Iris	On / Off	Off		

**Setup Menu 3**

Functions	Parameters	Factory File	BBC	Comments
Contour	0..99	50	26hd/12sd	(Control Mode HD/SD in Menu 2)
Soft Cont	0..99	70		but is off
Skin Level	Skin 1 and 2	50		but is off
Skin 1 Window	R/B	50/50		
Skin 1 Colour	R/B	50/50		
Skin 2 Window	R/B	50/50		
Skin 2 Colour	R/B	50/50		
Contour	Off/Var	Var	Var	(Off for film-look)
Soft Cont	Off/On	Off		
Skin Cont	Off / 1 / 2 / 1+2	Off		
Monitoring	11-positions	Y		
Contour Sel	Y,R,G,R+G	R+G		

**Setup Menu 4**

Functions	Parameters	Factory File	BBC	Comments
Iris Peak/av'ge	0..99	65		
Exposure Cont	-	50.6		
Lighting	0..99	0		
Notch Depth	0..99	99		but set to Off
Saturation	0..99	50	40	
Exposure	9 positions	Nom	Var	(Off for film-look)
Notch	Off/On	On	Off	
Chroma	Off/On	On		
Monitoring	11-positions	Y		
Auto Iris	On / Off	Off		

**Setup Menu 5**

Functions	Parameters	Factory File	BBC	Comments
Matrix				
G->R/B->R	G->R/B->R	- / -		
R->G/B->G	R->G/B->G	- / -		
R->B/G->B	R->B/G->B	- / -		
Gamma	R/Master/B	76/76/76		
Matrix select	EBU,RAI,BBC,B/W,skin,1:1,CFL,var1&2	skin	BBC	
Mat sequence	M/G - G/M	G/M	M/G	

Gamma	1 / 2 / Var / Lin	1	1
Monitoring	11-positions	Y	
Gamma curve	BBC04/05/06, ARD, 6xARD, CCIR, RAI	ARD	BBC05

**Maintenance Menu 1**

Functions	Parameters	Factory File	BBC	Comments
White Shading				
H. Saw	R/G/B	50/50/50		
H. Par	R/G/B	0 / 0 / 0		
V. Saw	R/G/B	50/50/50		
V. Par	R/G/B	0 / 0 / 0		
Timing	HPh/Fine/Coarse	27/65/180		
White Shading	On / Off	On		
Cam. Disable	On / Off	Off		
Timing	On / Off	On		
Monitoring	11-positions	Y		
Intercom	Syst / Iso	Syst		
Audio	MCP/External	MCP		
Audio 1	-22 .. -64 dB in 6dB steps	-64 dB		
Audio 2	-22 .. -64 dB in 6dB steps	-64 dB		
Bars	On / Off	Off		
Cam Power	On / Off	On		

**Maintenance Menu 2**

Functions	Parameters	Factory File	BBC	Comments
OCP Controls				
Var. Blk Str.	Yes / No	Yes		
Var Gamma	Yes / No	Yes		
Variable Flare	Yes / No	Yes		
Satuation	Yes / No	Yes		
White Clipper	Yes / No	Yes		
Knee slope	Yes / No	Yes		
Knee point	Yes / No	Yes		
Iris	Normal / Rev	Normal		
OCP lock	Total / Upper	Total		
System				
Black contrast	Stretch / Press	Stretch	Press ?	Stretch (0..99) is not the same as Press (50..99)

**Files**

Transfer
View
Store
Recall
Execute

**Common**

Functions	Parameters	Factory File	BBC	Comments
Gain	R/G/B	50/50/50		Duplicates Setup Menu 1
Black	R/G/B	50/50/50		Duplicates Setup Menu 1
Gamma	R/Master/B	76, 76, 76		Duplicates Setup Menu 1
Camera Select				
Bars	On / Off	Off		Duplicates Maintenance Menu 1
Matrix select	EBU,RAI,BBC,B/W,skin,1:1,CFL,var1&2	SKIN	BBC	Duplicates Setup Menu 5
Gamma Sel	Lin / 1 / 2 / Var	1	1	Duplicates Setup Menu 1
Asp. Ratio	Ext/MCP			? 4:3 appears to be the only option!

**Diagnose**

Triax	OK	reports on hardware and software
Gen Lock	No Lock	
Ref Available	No	
Communication:		
Camera	Yes	
Base Station	Yes	
OCP	Yes	
Lens Type	...	
Software	407.3391 ST.F0	
	407.3425 ST.22	
	407.2597 ST.05	

**Base Station menus**

accessed from wheel under left-hand cover.

**MAIN Menu**

Menu text	User	Comments
<Menu Off>	O I	
Video >>	O I	
Monitoring >>	O I	



Audio/Intercom >>	O I
SDTV >>	O I
System >>	O I
Files >>	O I
Diagnostics >>	O I

**VIDEO Menu**

Menu text	User	Values	Default	Blocked if	File	Comments
Colour Bar >>						
Colour Bar	O I	On,Off	Off	-	-	-
White Bar Level	I	SMPTE, Full	SMPTE		System	
Ext. Black Clamp	O I	0..99	50		System	

**MONITORING Menu**

Menu text	User	Values	Default	Blocked if	File	Comments
Menu >>						
Display	O I	On,Time	Time	-	Operator	-
Menu Time	O I	5..99	10	-	Operator	
Statusbar >>						
Studio >>						
Studio	O I	On,Off	Off	-	Operator	-
Name	O I	[String]	---	-	-	-
Operator >>						
Operator	O I	On,Off	Off	-	Operator	-
Name	O I	[String]	---	-	-	-
Camera Number	O I	On,Off	Off	-	Operator	-

Other menu items listed in full in the base station users guide.