

# SPECIFICATIONS

Model Number	SCD20	SCD21	SCD23	SCD24	SCD27	SCD29
<b>A. General</b>						
Format	Mini-DV	Mini-DV	Mini-DV	Mini-DV	Mini-DV	Mini-DV
Signal Format	NTSC	NTSC	NTSC	NTSC	NTSC	NTSC
Dimension(WxHxD)	58.5x90x156	58.5x90x156	58.5x90x156	58.5x90x156	61.5x90x156	61.5x90x156
Weight(Net)	500g	500g	500g	500g	520g	520g
Power Consumption	LCD on / EVF on	4.7W / 3.7W	4.7W / 3.7W	4.7W / 3.7W	4.9W / 3.9W	4.9W / 3.9W
LCD Monitor	Size	2.5"	2.5"	2.5"	3.5"	3.5"
	Pixel	112K	112K	112K	112K	112K
	Bright / Color Adjust	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
	Rotation Angle	90 + 270 deg.	90 + 270 deg.	90 + 270 deg.	90 + 270 deg.	90 + 270 deg.
	Mirror	0	0	0	0	0
Viewfinder	Display Device	BW	BW	BW	BW	Color
	Size	0.24"	0.24"	0.24"	0.24"	0.24"
	Pixel	77K	77K	77K	77K	113K
	Diopter Adjust	0	0	0	0	0
	Built-in Light	X	0	0	0	0
<b>B. Camera System</b>						
Lens	Optical Zoom Ratio	10x	10x	10x	10x	10x
	Digital Zoom Ratio (Selectable)	100x/200x/400x/800x	100x/200x/400x/800x	100x/200x/400x/800x	100x/200x/400x/800x	100x/200x/400x/800x
	Focal Length (f)	2.7 - 27mm	2.7 - 27mm	2.7 - 27mm	2.7 - 27mm	2.7 - 27mm
	F.No(Wide/Tele)	1.4/1.8	1.4/1.8	1.4/1.8	1.4/1.8	1.4/1.8
	Zooming Speed	Variable 4 Step	Variable 4 Step	Variable 4 Step	Variable 4 Step	Variable 4 Step
	Filter Diameter	37	37	37	37	37
	0 Lux Recording	X	X	Nite Pix	Nite Pix	Nite Pix
Macro	Wide Macro	Wide Macro	Wide Macro	Wide Macro	Wide Macro	Wide Macro
CCD	Size	1/6"	1/6"	1/6"	1/6"	1/6"
	Pixel(Max/Effective)	680K	680K	680K	680K	680K
Features	Image Stabilizer	DIS	DIS	DIS	DIS	DIS
	Auto Focus / Manual Focus	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
	Program AE					
	1.Auto	0	0	0	0	0
	2.Sports	0	0	0	0	0
	3.Portrait	0	0	0	0	0
	4.Spotlight	0	0	0	0	0
	5.Sand/snow	0	0	0	0	0
	6.High Speed Shutter	0	0	0	0	0
	Manual Shutter	1/60-1/10000, 8 Step	1/60-1/10000, 8 Step	1/60-1/10000, 8 Step	1/60-1/10000, 8 Step	1/60-1/10000, 8 Step
	Slow Shutter	1/8, 1/15, 1/30	1/8, 1/15, 1/30	1/8, 1/15, 1/30	1/8, 1/15, 1/30	1/8, 1/15, 1/30
	Power Nite Pix	X	X	0	0	0
	Auto Shutter Speed	0	0	0	0	0
	Auto White Balance	0	0	0	0	0
	Manual White Balance(A/H/W/O)	0	0	0	0	0
	Manual Iris Set	30 step	30 step	30 step	30 step	30 step
	Photo Mode	0	0	0	0	0
	Built-in Digital Camera	X	X	0	0	0
Digital Special Effects						
	1.Art	0	0	0	0	0
	2.Mosaic	0	0	0	0	0
	3.Sepia	0	0	0	0	0
	4.Nega	0	0	0	0	0
	5.Mirror	0	0	0	0	0
	6.B/W	0	0	0	0	0
	7.Emboss	0	0	0	0	0
	8.Cinema	0	0	0	0	0
	9.Make-up (R/G/B/Y)	0	0	0	0	0
	Back Light compensation	BLC	BLC	BLC	BLC	BLC
	Fade In/Out	0	0	0	0	0
	Low Light sensitivity (Visible)	3 Lux	3 Lux	3 Lux	3 Lux	3 Lux
<b>C. VCR System</b>						
Mechanism(DD3)	Heads	2	2	2	2	2
	Diameter of Drum	21.7mm	21.7mm	21.7mm	21.7mm	21.7mm
Features	Recording Speed (Selectable)	SP/LP	SP/LP	SP/LP	SP/LP	SP/LP
	Playback Speed (Automatic)	SP/LP	SP/LP	SP/LP	SP/LP	SP/LP
	Auto Tracking	0	0	0	0	0
	PB DSE (Mosaic / Mirror)	0	0	0	0	0
	PB Zoom	0	0	0	0	0
Audio	System	12/16 bit PCM	12/16 bit PCM	12/16 bit PCM	12/16 bit PCM	12/16 bit PCM
	Speaker (0.3W)	0	0	0	0	0
	Volume Adjust	0	0	0	0	0
	Built-in Microphone	Stereo	Stereo	Stereo	Stereo	Stereo
	Wind Filter	0	0	0	0	0
	Audio Dub(SP)	0 (12bit)	0 (12bit)	0 (12bit)	0 (12bit)	0 (12bit)
<b>D. Memory Stick Application</b>						
Memory Media		X	X	M.S Slot	M.S Slot	M.S Slot
Motion Picture Format / Resolution		X	X	MPEG4 / OVGA 10fps	MPEG4 / OVGA 10fps	MPEG4 / OVGA 10fps
Still Image Format / Resolution		X	X	JPEG / VGA	JPEG / VGA	JPEG / VGA
Image Quality Mode		X	X	Super Fine/Fine/Normal	Super Fine/Fine/Normal	Super Fine/Fine/Normal
Multi Display		X	X	0 (6 scene)	0 (6 scene)	0 (6 scene)
Continuous Shot		X	X	0	0	0
<b>E. PC Interface</b>						
IEEE1394	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out
OS for IEEE1394	Win98-XP / Mac	Win98-XP / Mac	Win98-XP / Mac	Win98-XP / Mac	Win98-XP / Mac	Win98-XP / Mac
USB Format	X	X	USB1.1	USB1.1	USB1.1	USB1.1
OS for USB	X	X	Win98-XP / Mac	Win98-XP / Mac	Win98-XP / Mac	Win98-XP / Mac
Bundle Software 1 (USB Driver-DVC Media)	X	X	0	0	0	0
Bundle Software 2 (Photo Express 4.0)	Option	Option	Option	Option	Option	Option
Bundle Software 3 (Video Studio 5.0)	Option	Option	Option	Option	Option	Option
Volume	P3/450MHz 64MB, 4GB	P3/450MHz 64MB, 4GB	P3/450MHz 64MB, 4GB	P3/450MHz 64MB, 4GB	P3/450MHz 64MB, 4GB	P3/450MHz 64MB, 4GB
<b>F. USB Streaming</b>						
Motion Picture Streaming Format / Resolution	X	X	MPEG4 / OVGA 10fps	MPEG4 / OVGA 10fps	MPEG4 / OVGA 10fps	MPEG4 / OVGA 10fps
Still Image Format / Resolution	X	X	JPEG / VGA	JPEG / VGA	JPEG / VGA	JPEG / VGA
PC Camera / E-mail	X / X	X / X	0 / 0	0 / 0	0 / 0	0 / 0
External Storage	X	X	0	0	0	0
<b>G. Accessory</b>						
AC Adapter/Charger	AA-E7	AA-E7	AA-E7	AA-E7	AA-E7	AA-E7
AC Cord	0	0	0	0	0	0
Battery Pack	SB-L110	SB-L110	SB-L110	SB-L110	SB-L110	SB-L110
Hand Grip	Installed	Installed	Installed	Installed	Installed	Installed
Remote Control	X	X	X	X	X	X
Lithium Cell (Clock / Remoon)	0 / X	0 / X	0 / X	0 / 0	0 / 0	0 / 0
A/V Cable	0	0	0	0	0	0
Shoulder Strap	0	0	0	0	0	0
S-Video Cable	X	X	X	X	X	X
Carrying Case / Blank tape	Option	Option	Option	Option	Option	Option
USB Cable	X	X	X	X	X	X
Memory Stick	X	X	X	8M	X	8M
Software CD	X	X	0	0	0	0
Instruction Book	0	0	0	0	0	0

\* Design and specifications are subject to change without notice.



## Compact and Easy Digital-cam

Samsung  
Digital Camcorder **Mini DV**

— NTSC 2003. 1

# DESIGN



Ergonomic Power Button



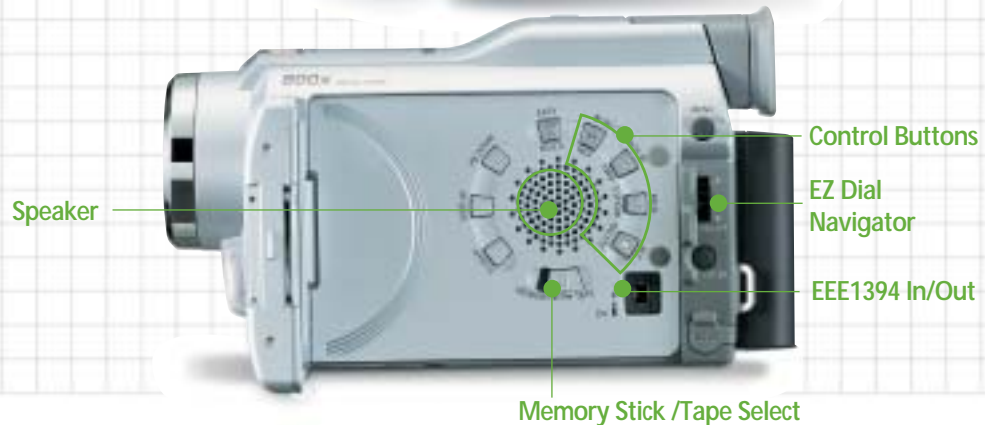
Power Nite Pix

Nite Pix  
Slow Shutter

## 2.5" LCD Model



## 3.5" LCD Model



# LINE-UP



## 2.5" LCD Model

### SCD20

- Mini-DV
- Easy-Q
- Optical 10x, Digital 800x Zoom Lens
- 1/6", 680K Pixel CCD
- 2.5" LCD Monitor
- EZ Dial Navigator
- Slow Shutter
- Digital Image Stabilizer
- Playback Zoom
- Photo Mode
- Color OSD
- Digital PCM Stereo Audio
- External Mic.
- IEEE1394 in / out

### SCD21

- Mini-DV
- Easy-Q
- Optical 10x, Digital 800x Zoom Lens
- 1/6", 680K Pixel CCD
- 2.5" LCD Monitor
- EZ Dial Navigator
- Slow Shutter
- **Video Light**
- Digital Image Stabilizer
- Playback Zoom
- Photo Mode
- Color OSD
- Digital PCM Stereo Audio
- External Mic.
- IEEE1394 in / out

### SCD23

- Mini-DV
- Easy-Q
- Optical 10x, Digital 800x Zoom Lens
- 1/6", 680K Pixel CCD
- 2.5" LCD Monitor
- EZ Dial Navigator
- Slow Shutter
- **Nite Pix**
- **Power Nite Pix**
- **Video Light**
- Digital Image Stabilizer
- Playback Zoom
- Photo Mode
- **Memory Stick Slot**
- **Built-in Digital Camera**
- **Multi Display**
- **MPEG-4 Movie Clip**
- Color OSD
- Digital PCM Stereo Audio
- External Mic.
- IEEE1394 in / out
- **USB Streaming**



### SCD24

- Mini-DV
- Easy-Q
- Optical 10x, Digital 800x Zoom Lens
- 1/6", 680K Pixel CCD
- 2.5" LCD Monitor
- EZ Dial Navigator
- Slow Shutter
- **Nite Pix**
- **Power Nite Pix**
- **Video Light**
- Digital Image Stabilizer
- Playback Zoom
- Photo Mode
- **8M Memory Stick**
- **Built-in Digital Camera**
- **Multi Display**
- **MPEG-4 Movie Clip**
- Color OSD
- Digital PCM Stereo Audio
- External Mic.
- IEEE1394 in / out
- **USB Streaming**



2.5" LCD Model



3.5" LCD Model

## 3.5" LCD Model

### SCD27

- Mini-DV
- Easy-Q
- Optical 10x, Digital 800x Zoom Lens
- 1/6", 680K Pixel CCD
- 3.5" LCD Monitor
- EZ Dial Navigator
- Slow Shutter
- **Nite Pix**
- **Power Nite Pix**
- **Video Light**
- Digital Image Stabilizer
- Playback Zoom
- Photo Mode
- **Memory Stick Slot**
- **Built-in Digital Camera**
- **Multi Display**
- **MPEG-4 Movie Clip**
- Color OSD
- Digital PCM Stereo Audio
- External Mic.
- IEEE1394 in / out
- **USB Streaming**
- **Analog Input**

### SCD29

- Mini-DV
- Easy-Q
- Optical 10x, Digital 800x Zoom Lens
- 1/6", 680K Pixel CCD
- 3.5" LCD Monitor
- **Color Viewfinder**
- EZ Dial Navigator
- Slow Shutter
- **Nite Pix**
- **Power Nite Pix**
- **Video Light**
- Digital Image Stabilizer
- Playback Zoom
- Photo Mode
- **8M Memory Stick**
- **Built-in Digital Camera**
- **Multi Display**
- **MPEG-4 Movie Clip**
- Color OSD
- Digital PCM Stereo Audio
- External Mic.
- IEEE1394 in / out
- **USB Streaming**
- **Analog Input**

# FEATURES

## EASY Easy-Q

Introduction of the Easy-Q technology enhances the user-friendly experience.

- **Easy-Q** guarantees uniformly excellent shots for the user under any conditions. For Easy-Q Mode, you press the Easy-Q button, from there, everything is set.



## EASY EZ Dial Navigator

The EZ Dial Navigator feature allows you quick and easy access to the most commonly used functions by rotating the conveniently positioned thumb wheel. The Main Key functions that can be executed from EZ Dial Navigator:

- Manual focus / Auto focus
- Shutter Speed / Exposure
- White Balance
- Program AE
- Digital Special Effect
- Electrical Image Stabilizer
- Remote Control
- Date / Time



2.5" TFT Color LCD

EZ Dial Navigator

## Digital Zoom 800x Zoom Lens (Optical 10x, Digital 800x)

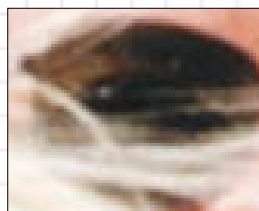
- You can easily make a distant object closer by using the 10x / 800x Zoom.



1x



10x Optical Zoom



Digital Zoom

## 3.5" LCD 112K Pixel LCD Monitor (Option by Model)

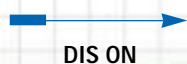
- The 3.5" LCD screen provides larger view of images. It is much easier to see what you are recording and to playback what you have captured. (SCD 27, 29 only)

## Digital Image Stabilizer Image Stabilizer

- The Image Stabilizer function compensates for slight shaking movements caused by an unstable position, and offers the best stable picture.



OFF

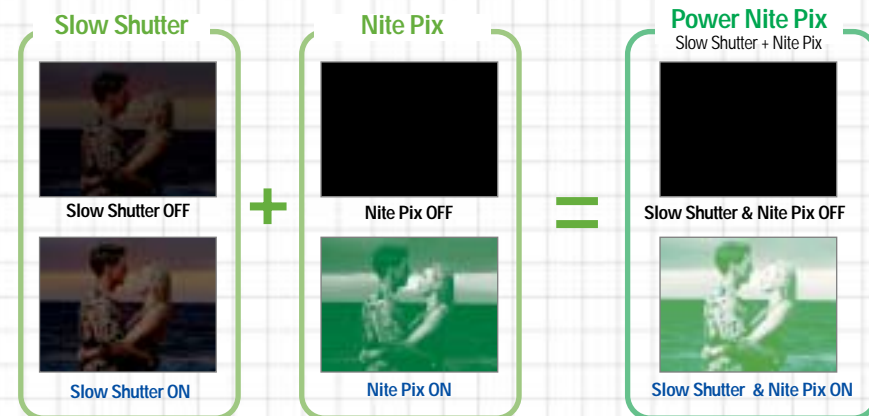


ON



## Slow Shutter / Nite Pix / Power Nite Pix (Option by Model)

- When you shoot in dark conditions, just press the 'Slow Shutter' button. It allows you to capture brighter color images using a slow shutter speed.
- 'Nite Pix' allows you to capture footage at close distance, even under conditions of total darkness, to level of '0' Lux, by utilizing the infrared rays emitted from the camcorder. (SCD23, 24, 27, 29 only)
- When shooting in completely dark conditions (0 Lux), select both the 'Nite Pix' and 'Slow Shutter' buttons. The 'Nite Pix' enables you to capture images in total darkness using infrared rays emitted from the camcorder. 'Slow Shutter' makes 'Nite Pix' more powerful by enhancing the brightness. (SCD23, 24, 27, 29 only)



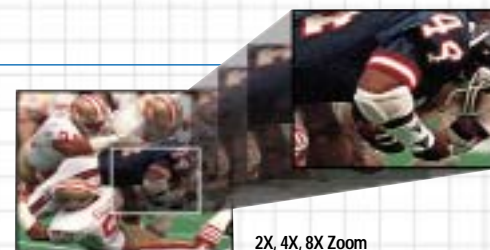
## Built-in Video Light (Option by Model)

- The built-in video light enables you to get clear, colorful images even in total darkness. Without any extra equipment, you can get the light by pressing a button.



## Playback Zoom

- The Playback Zoom feature allows enlarged view of specific area when you are playing what you have captured. You can select the ratio of zooming up to 8x.



2X, 4X, 8X Zoom



## Multi Display (Option by Model)

- Utilizing the Multi-Screen feature, you can see 6 still pictures on a screen at the same time and it makes you search the pictures you have taken before. (SCD 23, 24, 27, 29 only)



## MPEG-4 Video Clip Recording (Option by Model)

- You can make short movie-clips by capturing them at a connected PC. SCD22 streams the MPEG-4 video to PC through a USB interface in real time. You can easily make short movie clips by storing them on a Memory Stick in MPEG-4 format. The saved files can be conveniently sent via e-mail or posted on the internet for your friends to view. (SCD23, 24, 27, 29 only)



# FEATURES



## 680K Pixels CCD

- 680,000 Pixels CCD delivers high resolution video images with superior color resolution and detail.
- It surpasses the conventional camcorder with its high performance PC Interface.



Hi8 Camcorder

Digital Camcorder



## DSE (Digital Special Effect)

- Easily add professional and artistic touches to the film.



Original

Art

Mosaic

Sepia

Negative

Mirror

B/W

Emboss

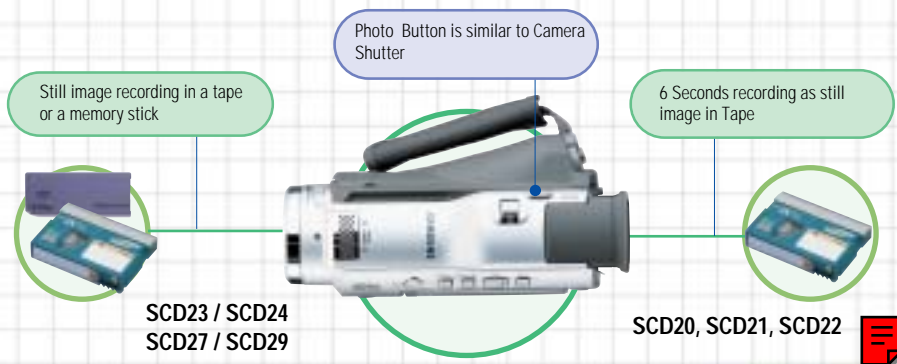
Cinema

Make Up (RGBY)



## Photo Mode / Built-in Digital Camera

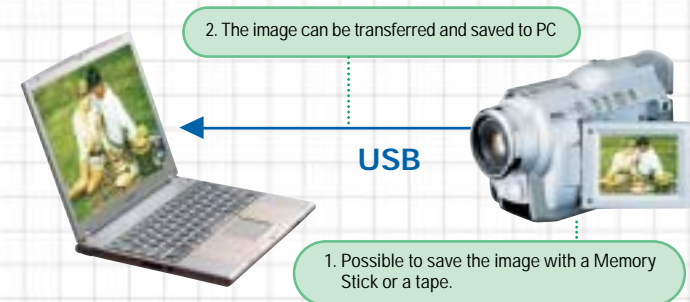
- The Built-in Digital Camera function allows you easy picture taking and the ability to save still pictures on the supplied Memory Stick.
- The Snap Shot feature can record still images for up to about 6 seconds to video tape. It is then easy to transfer these still images to your PC.



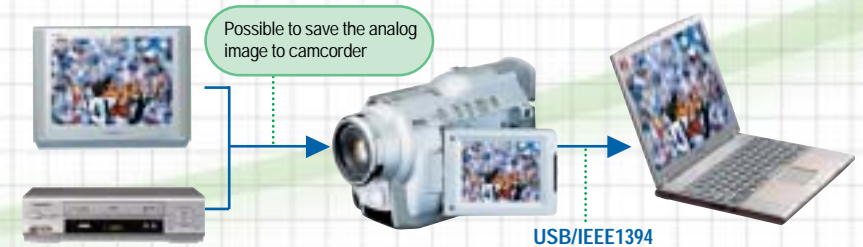
## IEEE1394 in / out



## USB Streaming (Option by Model)



## Analog Input (Option by Model)



# ACCESSORIES

## Supplied Accessories



## Battery Information

### • Samsung Genuine Video Accessory



This mark proves that the product is "Samsung Genuine Video Accessory". Problems concerning quality and safety may arise from using other accessories than one manufactured by Samsung Electronics on a Samsung camcorder.

### • Rechargeable Lithium-Ion Battery Pack



#### SB-L110

- Li-ion Battery Pack for Digital Camcorder
- 38.4 x 55.5 x 20.5 (mm) / 78g
- 1100mAh / 8.14W/h



#### SB-L220

- Li-ion Battery Pack for 8mm Camcorder
- 38.4 x 55.5 x 39.5 (mm) / 147.3g
- 2200mAh / 16.28W/h

### • Battery Information

		SCD20	SCD21	SCD23	SCD24	SCD27	SCD29
Power Consumption	View Finder	3.7 W	3.7 W	3.7 W	3.7W	3.9W	3.9W
	LCD	4.7 W	4.7 W	4.7 W	4.7 W	4.9 W	4.9 W
Recording Time (VF/LCD Recording)	SB-L110	120 min.	120 min.	120 min.	120 min.	110 min.	110 min.
	- Light Off	95 min.	95 min.	95 min.	95 min.	90 min.	90 min.
- Manual Focus	SB-L220	240 min.	240 min.	240 min.	240 min.	225 min.	225 min.
		- No Zooming	190 min.	190 min.	190 min.	190 min.	180 min.
Charging Time	SB-L110	with BC-L1 : 100 min / with BC-L10 : 55 min					
	SB-L220	with BC-L1 : 200 min / with BC-L10 : 110 min					

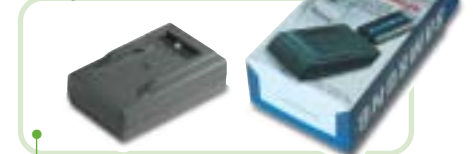
## Optional Accessories

### • Carrying Case (SC-D4P)



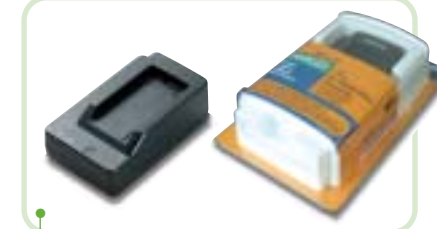
- Dimension : 203 x 140 x 99 (WxHxD, mm)
- Weight : 258g

### • Charger (BC-L1)



- Dimension : 65 x 34 x 107 (WxHxD, mm)
- Weight : 71g
- Input : DC8.4V, 1.5A (AA-E6, AA-E7 or CA-E3 Adapter)
- Charging Time : SB-L70 (80min.), SB-L110 (100 min.), SB-L220 (200 min.)

### • Quick Charger (BC-L10)



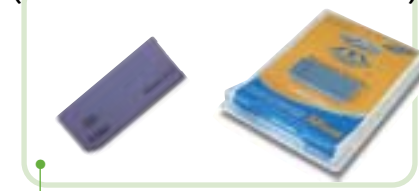
- Dimension : 78 x 45 x 123 (WxHxD, mm)
- Weight : 185g
- Power Capacity : 20W (8.4V / 1.5A)
- Charging Time : SB-L70 (45min.), SB-L110 (55 min.), SB-L220 (110 min.)

### • Car Adapter (CA-E3)



- Dimension : 45 x 27 x 100 (WxHxD, mm)
- Weight : 170g
- Input Voltage : DC 12V ~ DC 24V
- Output Voltage : DC 8.4V, 1.5A

### • Memory Stick (SMS-16NS / SMS-32NS / SMS-64NS)



- Dimension : 21.5 x 50 x 2.8 (WxHxD, mm)
- Weight : 4g
- Operating Voltage : 2.7V ~ 3.6V
- Power Consumption : about 45mA
- Access speed : 1.5Mbytes/sec (Writing / MAX) 2.45Mbytes/sec (Reading / MAX)

### • Memory Stick Reader (SMR-100Y)



- Dimension : 70 x 20 x 77 (WxHxD, mm)
- Weight : 65g
- Cable Length : 820mm
- Power Consumption : about 1.0W
- Data transfer speed : 20Mbps (MAX)
- USB Transfer speed : 12Mbps (Full Speed)
- Supported OS : Windows 98(\*), Windows ME, Windows 2000, Windows XP (\* with USB Storage Driver needed)

### • Remocon Tripod (TP-1RM)



- Maximum : 1470 mm / minimum : 1520mm
- Weight : 1260g
- Remocon Battery : AAA Size Battery 2 EA
- Selecting 6 modes of IR remocon according to the makers, TP-1RM is available for all camcorder model made by 6 makers: Samsung, JVC, Sharp, Canon, Panasonic, Sony.