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Videotechnikai készülékek jellemzői idegen nyelven



A követelménymodul megnevezése:

A műszaki cikkek (világossági, világítástechnikai, elektrotechnikai, híradástechnikai, számítástechnikai termékek kéziszerszámok, kisgépek, vas-árak eladásával kapcsolatos követelmények)

A követelménymodul száma: 0123-06 A tartalomlelem azonosító száma és célcsoportja: SzT-a39-50



VIDEOTECHNIKAI KÉSZÜLÉKEK JELLEMZŐI IDEGEN NYELVEN

ESETFELVETÉS – MUNKAHELYZET

Videotechnikai berendezéseket forgalmazó szaküzletbe angol anyanyelvű turista érkezik. Magyarországi tartózkodása alatt szeretne minél több videó felvételt készíteni, ezért magával hozta a régi, jól bevált VHS-C rendszerű kézikameráját is, a hozzá tartozó üres szalagokkal és egyéb kiegészítőkkel együtt. Az üzletben elmondja, hogy a készüléket hosszabb ideje nem használta, az akkumulátor teljesen lemerült. A szállodai szobában hiába próbálkozott az újratöltéssel, minden kísérlet eredménytelennek bizonyult. A kamera tápellátását egy 9,6 V-os nikkel-kadmium áramforrás biztosítja, amit a kamkorderrel együtt be is mutat az angol nyelven értő kereskedőnek. Az eladó sajnálattal közli, hogy ehhez a típushoz már nem lehet kapni tartalékkumulátort, még utángyártottat sem.

Bemutatja az üzletben forgalmazott kamkorderek választékát. Az eladótér kialakításából adódóan, valamennyi készülék kipróbálható közeli és távolabbi felvételek készítésével is. A bolt hátsó részén egy akváriumot és egy félig nyitott mini terráriumot rendeztek be a kereskedők, ahol az állványra szerelt készülékek segítségével bárki rögzítheti a sokféle, élénk színű egzotikus állat pihenését, ill. mozgását. Összehasonlítva a régi, analóg módon rögzített filmekkel — a vásárló által, digitális, "full HD" kamerával készített felvételt visszajátszva — érzékelhetővé válik a különbség a színek mélységében és a részletek gazdagságában. A készülék megvásárlása mellett szól az a körülmény is, hogy a vevő Írországban biztosítási kárszakértőként dolgozik és gyakran merül fel igényként, hogy jó minőségű felvétellel legyen dokumentálva a káresemény és a helyszín.

A vásárló elmondja, hogy a közeledő digitális átállás, a földfelszíni SD/HD műsorszórás miatt Írországban is egyre többen vásárolnak ún. Full HD 3D televíziót és az otthoni házimozsi rendszeréből már csak egy jó minőségű Blu-ray lejátszó hiányzik. Olyan készüléket szeretne, ami tudja a Viera Cast vagy annak megfelelő technológiát, képes SD memóriakártyáról képeket és AVCHD formátumú videókat lejátszani, az előlapon található USB csatlakozón felül van a hátoldalon is egy olyan USB portja is, amibe vezeték nélküli LAN adapter helyezhető, ill. ezen keresztül memóriából JPEG/MP3 és DivX médiafájlokat is kezel.

A végleges döntés előtt a vásárló szeretne egy olyan kamkordert is kipróbálni, ami közvetlenül 8cm-es mini Blu-ray lemezre rögzíti a felvételt. Végezetül a kereskedő felhívja a vásárló figyelmét arra is, hogy a boltban gyári tartalék lítium-ion akkumulátort, memóriakártyát és egyéb kiegészítőket is lehet vásárolni a kiválasztott video berendezésekhez. Az SD kártyákon található jelölésekhez rövid magyarázatot is fűz.

SZAKMAI INFORMÁCIÓTARTALOM

Reading

Is Blu-ray Really Blue?

When the CD was introduced in the early '80s, it meant an enormous leap from analogue sound recording. Not only did it offer a significant improvement in audio quality, its primary application, but its 650 MB storage capacity also meant a giant leap in data storage and retrieval.

Blue semiconductor lasers were developed in the late 1990s, when blue lasers were large and expensive gas laser instruments. Later, blue and violet semiconductor laser devices were introduced in the market. At that time there were several variants of laser products.

Blu-ray' wasn't just some marketing ploy. The name is derived from the blue/violet laser used to read the disc, although marketing experts did jazz it up a bit by dropping the letter "e" off from 'blue'.

Conventional DVDs use a red laser, which has a much longer wavelength than blue/violet light. This might be seen as a minor difference but Blu-ray discs allow you to store almost ten times the amount of data on a DVD.



Figure 11 50GB Rewritable Single-Sided / Single Layer Blu-ray Discs with Up to 2x Writing Speed, 3 Pack

¹ Source: http://www2.panasonic.com/consumer-electronics/shop/Supplies-Accessories/Video/Blu-ray-Disc-Players/Blu-ray-Discs/model.LM-BE50DU3_11002_700000000000005702

BD allows you the compatibility with CD and DVD because its format is based on the same bare disc physical form factor. Presently, Blu-ray Discs hold the capacity of 25GB/50GB but there are certain developments by leading companies to push the storage capacity to 500GB on a single disc by using 20 layers. Mini BDs are only used in Full HD camcorders.

Full HD camcorders

Full HD camcorders record video on hard disk, memory card or Mini BD in High definition format. Most HD camcorders can record 1080 horizontal lines of an image and offer a huge increase in image quality compared to standard definition camcorders that can only record 400–600 horizontal lines.

At the first sight an HD camcorder will look no different to standard camcorder in its appearance but will have better sensors inside able to record a more detailed image.

As all of the newly developed televisions are able to display HD video, it seems the sound choice to buy a HD camcorder and enjoy the extra quality that your TV can offer.

TANULÁSIRÁNYÍTÓ

1. Tuning in

a) Look at the following camcorder selector (Figure 2). Visit the producer's official website to use the programme to help the customer in choosing a full HD camera. Check the price on a Hungarian site.

<http://www2.panasonic.com/consumer-electronics/support/Cameras-Camcorders/Camcorders.75489>

The customer's requirements are the following:

Full high definition recording

Format: 1080/60p MPEG-4

12X optical zoom

30X/700X digital zoom

Weight with battery: less than 600g

Monitor: 3"

HDD: 240GB

Price: less than 350.000 HUF

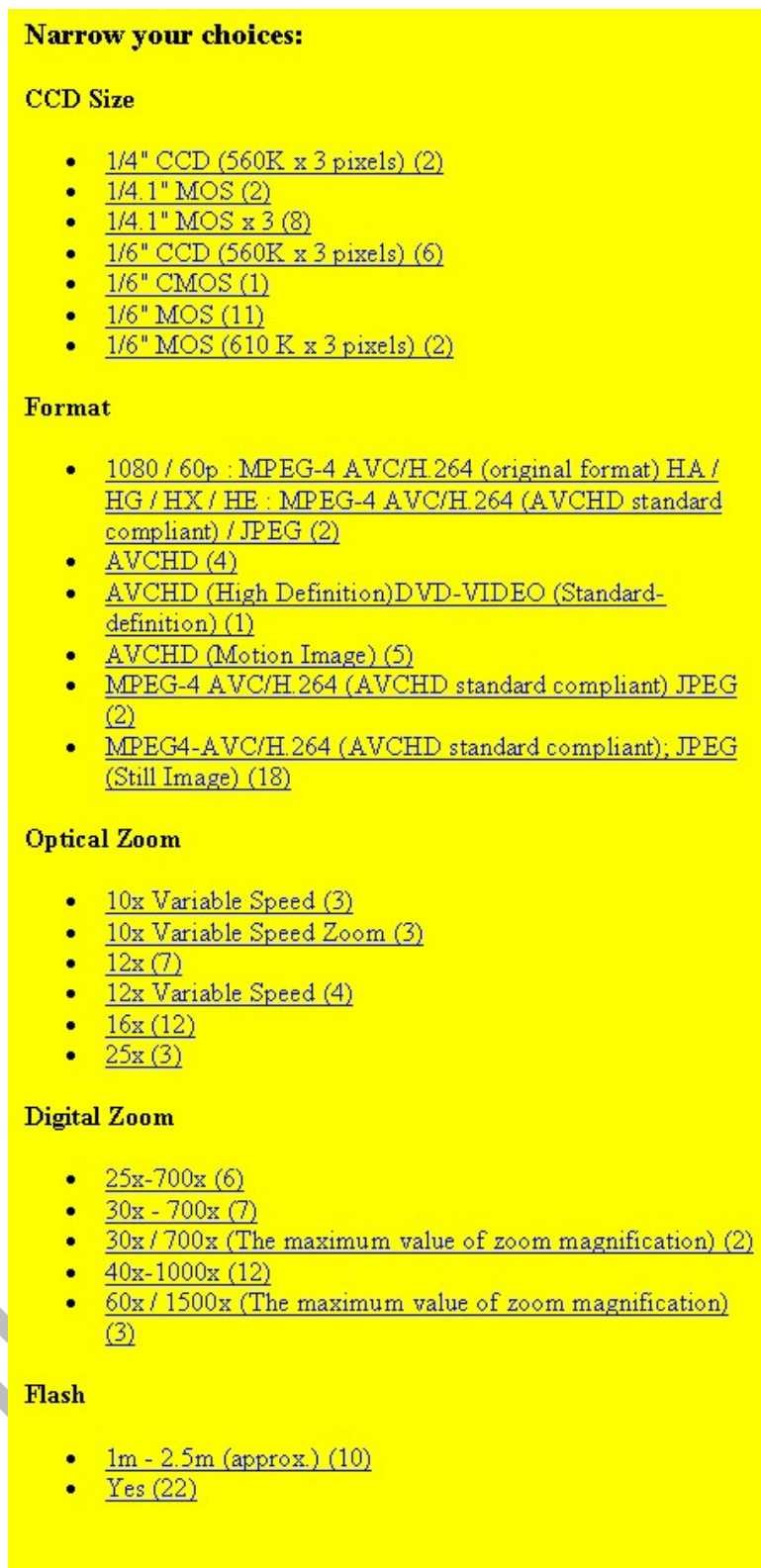


Figure 2 Camcorder selector²

² Source: <http://www2.panasonic.com/consumer-electronics/support/Cameras-Camcorders/Camcorders.75489>

b) Visit this site to watch a video:

<http://www.youtube.com/watch?v=h19toffXnf4&feature=related>

What are the accessories you can find in the box? Make notes while watching.

2. Presentation³

First, complete the text with filling in the empty spaces with the expressions you can find in the box. Then put the correct titles heading for each paragraph. There is one extra title which does not belong in any of the gaps. Consult your dictionary if you need. In the first exercise the first answer is given.

(1) twice as much	even in	take	during
without	also	Even when	when

Titles:

- A) To Reach Distant Subjects with an Intelligent Zoom
- B) The Brightest Lens You've Ever Seen
- C) How to Capture Large Groups
- D) 3 separate MOS sensors
- E) Ultra smooth Images

Paragraph 1

This camcorder uses the progressive method to record (1) *twice as much* image data as the interlace method. Whereas interlacing requires two images to produce a complete picture, the progressive method records a single image as a complete picture. This extremely dense image information creates intricate detail and silky smooth motion. (2) subjects move quickly, afterimages are minimized to create more natural images. The progressive method is most effective when shooting detailed designs where interference patterns tend to occur, or when capturing scenes (3) sports events where the subjects are intensely moving around. Also, the recorded images are displayed clearly even when they are made into still images, so it is possible to preserve stunning photos (4)clipping them from videos.

³ Source: http://www2.panasonic.com/consumer-electronics/shop/Cameras-Camcorders/Camcorders/2010-Camcorders/model.HDC-HS700K_11002_7000000000000005702

Paragraph 2

Our HD camcorders use special lenses, which are renowned for their ability to render sharp images and excellent shading. They (5) suppress ghosting, flare, and distortion at the image edges. Even in strong sunlight, these superb lenses maintain high contrast and resolution. A bright new F1.5–F2.8 lens with a 46mm filter diameter has been created for this device. Efficient light collection allows the new lens to capture bright, clear images (6)dim lighting or at high shutter speeds. This high-end lens brings out all the beauty of Full-HD images.

Paragraph 3

The 35mm wide-angle lens fits more people and more of the background into the frame than a conventional 44.9mm lens. This is especially handy when you want to (7) a group photo in a small room.

Paragraph 4

This camcorder features a 12x optical zoom and an Intelligent Zoom function that goes all the way up to 18x. When using Intelligent Zoom, Intelligent Resolution Technology lets you shoot at high zoom rates while preserving image sharpness. You get crisp images of highly detailed objects – (8) the blurry edges.



Figure 3⁴ Full HD Camcorder

3. What a Difference this Blu-ray Makes?

Read the statements (1–12). Study the picture (Figure 1) and the technical specifications⁵ and the user's manual⁶ of this player and then fill in the chart below. Put a tick (✓) if the sentence is true or a cross (✗) if it is false. Focus on the statements. Not all the technical details are necessary) to fill in the chart. Consult your dictionary if you need. Two examples are given.

⁴ Source: http://www2.panasonic.com/consumer-electronics/shop/Cameras-Camcorders/Camcorders/2010-Camcorders/model.HDC-HS700K_11002_70000000000000005702

⁵ Source: http://www2.panasonic.com/consumer-electronics/shop/Cameras-Camcorders/Camcorders/2010-Camcorders/model.HDC-HS700K_11002_70000000000000005702

⁶ Source: <http://www2.panasonic.com/consumer-electronics/support/Cameras-Camcorders/Camcorders/Hi-Def-Camcorders/model.HDC-HS700K>



Figure 4⁷ Blue-ray Disc Player

1.	This device is ready for playing back full HD 3D Blu-ray discs.	✓
2.	This player has got only one USB port for a wireless LAN adaptor.	✗
3.	When playing back 3D videos, you have to use a 3D compatible TV and a HDMI cable.	
4.	You can find two HDMI output on the back of this device. The HDMI MAIN AV OUT and the HDMI SUB AV OUT.	
5.	Mini SD Cards, micro SD Cards, micro SDHC Cards and Micro SDXC Cards can be used without an adaptor card.	
6.	Music CDs cannot be played back properly with the help of this player.	
7.	You can connect a home cinema amplifier to this unit via a coaxial or optical terminal or 5.1/7.1ch audio terminal.	
8.	This unit can be connected to a broadband network by using a LAN cable or a wireless LAN adaptor.	
9.	This player is prepared for linked operations with the TV that is a convenient function called VIERA Link.	
10.	With this player you can access a selection of Internet services with VIERA CAST Home screen.	
11.	Digital Living Network Alliance certified media server cannot be connected with this unit.	
12.	With the help of this player you can play back still pictures as well.	

TECHNICAL SPECIFICATIONS	
FORMAT:	
BD-ROM	FULL HD 3D BD — BD-Live
BD-RE / BD-RE DL	Version 3, JPEG
BD-R/BD-R DL	Version2 — DivX® — DivX HD

⁷ Source: <http://cea.mblast.com/files/companies/20408/Logo/JPEG/89263.bdplayer-tn.jpg>

DVD-ROM	DVD Video
DVD-RAM	DVD-VR —JPEG — AVCHD
DVD-R/-RW/-R(DL) — DVD-R/-RW/-R(DL) Discs recorded and finalized on DVD video recorders/cameras. — Playback	DVD Video — DVD-VR — AVCHD — JPEG/ MP3 (DVD-R/ DVD-R DL) — DivX® /DivX HD (DVD-R/ DVD-R DL)
+R/+R(DL)/+RW Playback	Video, AVCHD
CD	CD-DA
CD-R/-RW	CD-DA - MP3 — JPEG — DivX® /DivX HD
SD Memory Card	AVCHD, MPEG2 — JPEG
USB	MP3 — JPEG — DivX® /DivX HD
VIDEO:.	
Signal System	NTSC
PHL Reference Chroma Processor Plus	Yes
High Precision 4:4:4	Yes (Adaptive High Precision 4:4:4)
P4HD (Pixel Precision Progressive Processing for HD)	Yes
Enhanced Full HD Up Sampling (New P4HD)	Yes
Precise Pixel Generation	Yes
16-Level Motion Detection w/ Pixel-Based Motion Adaptive	Yes
Diagonal Processing	Yes
3:2/2:2 Pull-Down Progressive Processing	Yes
i/p Conversion for 1080p 1080p Availability of 1080p video sources is currently limited to sources such as Panasonic Blu-ray Disc? players. HDMI connection may be required. Playback	Yes
Up-conversion to 1080p 1080p Availability of 1080p video sources is currently limited to sources such as Panasonic Blu-ray Disc? players. HDMI connection may be required. Playback	Yes
Video D/A Converter	148.5MHz/12bit
Digital Noise Reduction	Yes (3D-NR/ Integrated NR)
1080/24p Playback	Yes
Deep Color	Yes
x.v.Color™	Yes
Picture Mode	Yes (Normal/Soft/Fine/Cinema/User)
Picture Adjustment	Yes
AUDIO:	

VIDEOTECHNIKAI KÉSZÜLÉKEK JELLEMZŐI IDEGEN NYELVEN

Dolby® Digital Plus/ Dolby® TrueHD	Decode and Bitstream output
DTS™-HD Master Audio Essential/ DTS™-HD High Resolution Audio	Decode and Bitstream output
Audio D/A Converter	192kHz/24bit
96kHz Surround Re-Master	Yes (for All Formats)
Night Surround Mode	Yes
Dialogue Enhancer	Yes
Dynamic Range Compression	Yes
HDMI Jitter Purifier	Yes
Digital Tube Sound	Yes
High Clarity Sound	Yes
CONVENIENT:	
VIERA Link™ (HDAVI Control 5)	Yes
Wireless System	Yes
VIERA CAST™	Yes
Audio/JPEG Navigation Menu	Yes
DLNA	Yes
Playback Information Window	Yes
INPUT/OUTPUT:	
HDMI (Output)	2 Support features: 3D, Content type
USB Slot (USB 2.0 High Speed)	2 (Front, Rear)
Analog Audio Out	7.1ch
Component Video Out (Y, PB, PR)	Yes
Video Out	Yes
Digital Audio Out	1 optical, 1 coaxial
SD Memory Card Slot	Yes
Ethernet for Network	Yes (For BD-Live™, VIERA CAST™ and Firmware Update)
SPECIFICATIONS:	
Audio S/N	115dB
Dynamic Range	100dB
Power Source	AC 120V, 60Hz
Power Consumption	31W
Weight (lb) (Approx.)	5.7 (Approx.)
in Standby Mode	0.1W
in Quick Start Mode	7.7W
Dimensions (H x W x D)	2-5/8" x 16-15/16" x 9-11/16"

4. A card that brings back lots of good memories

Look at this SDHC memory card and study the compatibility explanation below.



Figure 5⁸ 64GB SDXC Memory Card

Complete the explanation with the proper words. The first answer is given.



Figure 6⁹ Understanding Backward Compatibility

(1) SDXC host products
support

format
SDHC host products

SD, SDHC
backwards

SDHC memory cards
inserted into

⁸ Source: http://www2.panasonic.com/consumer-electronics/shop/Supplies-Accessories/Cameras-Camcorders/Digital-Camera-Accessories/SD-Memory/model.RP-SDW64GE1K.O_11002_700000000000005702#tabsection

⁹ Source: http://panasonic.net/avc/sdcard/information/SDXC_english.html

SDXC memory cards can be used only with (1) *SDXC host products*. SDXC host products can use SDXC and (2) memory cards. (3) can be used with SDHC and SDXC host products. (4) can use both SD and SDHC memory cards. SDXC host products are (5) compatible with earlier SD and SDHC memory cards. If an SDXC memory card is (6) a PC or a host product that does not (7) SDXC memory cards, a message may prompt you to (8) the card.

5. Is there a camcorder in blue?

Study this picture. What is special in this camcorder? What sort of memory card can be inserted into this device? How big is the capacity of its winchester?

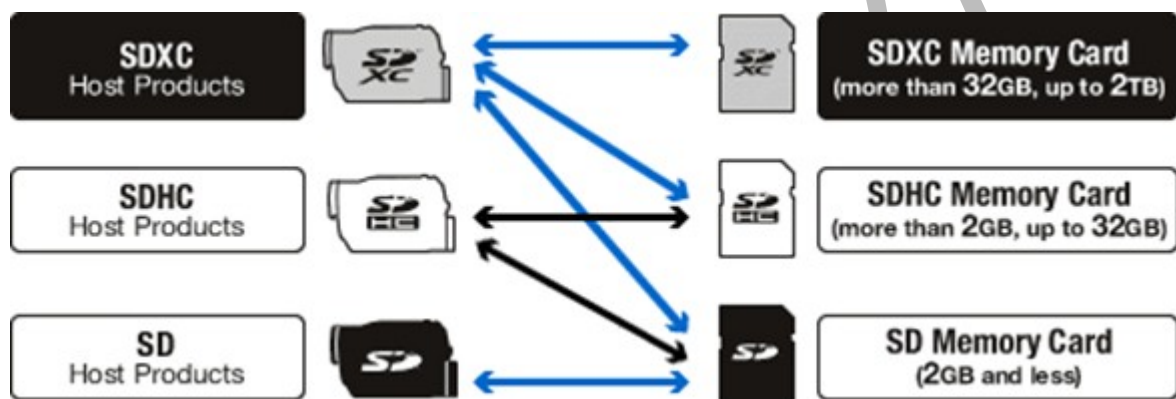


Figure 7¹⁰ The New Generation of Camcorders

Visit the website and learn more about this device.

<http://av.hitachi.com/camcorder/blu-ray/10/index.html>

¹⁰ Source: <http://av.hitachi.com/camcorder/blu-ray/10/index.html>

ÖNELLENŐRZŐ FELADATOK

1. feladat

Brush up your memory. Answer the questions on the basis of the "reading" section. Do this exercise in writing.

Is Blu-ray really blue?

1. What is the main advantage of using Blu-ray systems?
2. What is the maximum capacity of a normal Blu-ray disc?
3. How big storage capacity can you reach with using a 20-layer Blu-ray disc?

Full HD camcorders

1. What are the three separate formats you can record a video onto in full HD?
2. What sort of Blu-ray disc can you use in camcorders?

MEGOLDÁSOK

TANULÁSIRÁNYÍTÓ FELADATOK MEGOLDÁSAI

1. feladat

Tuning in

Answers:

a) According to the customer's requirements HDC-HS700K fulfil the requirements. In HDC-TM700K there is no 240GB hard disk driver. The prices at Hungarian distributors are about 348 000 HUF¹¹.

b) In this video you can see TM 700 model. The accessories in the box are the following in order:

(1) the software CD on the top, (2) the "trusty" owner's manual, (3) the "nice little" lens hood, (4) AV cables, (5) component cables, (6) AC power cord, (7) remote control, (8) a proper battery charger, (9) a battery, (10) the shoe, (11) the style, (12) a USB cable at the bottom

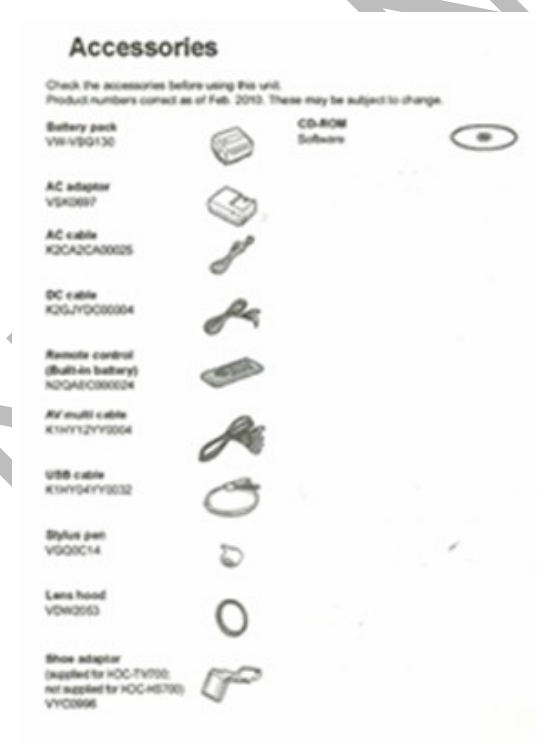


Figure 8¹² The contents of the camcorder box

¹¹Source: <http://www.electropark.hu/haztartasi-gepek/testapolas/elektromos-fogkefe/panasonic-hdc-hs700k-hdd-sd-kamera>

2. feladat

Presentation

Answers: (1) twice as much, (2) even when, (3) during, (4) when, (5) also, (6) even in, (7) take, (8) without

Pharagraph 1	Pharagraph 2	Pharagraph 3	Pharagraph 4
E	B	C	A

Comment: "D" does not fit in any of the gaps. Actually, the 3MOS system in question is used in this camcorder but not mentioned in the text.

3. feladat

What a Difference this Blu-ray Makes?

Answers:

1	2	3	4	5	6	7	8	9	10	11	12
✓	✗	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓

Comments: some of the answers require a detailed study of the owner's manual (p8-p12)

For more information visit this site:

<http://www2.panasonic.com/consumer-electronics/support/Video/Blu-ray-Disc-Players/model.DMP-BDT350>

4. feladat

A card that brings back lots of good memories

Answers: (1) SDXC host products, (2) SD, SDHC, (3) SDHC memory cards, (4) SDHC host products, (5) backwards, (6) inserted into, (7) support, (8) format

5. feladat

Is there a camcorder in blue?

Answers:

¹²Source: <http://www2.panasonic.com/consumer-electronics/support/Cameras-Camcorders/Camcorders/Hi-Def-Camcorders/model.HDC-HS700K>

This camcorder is the first to offer consumers the impressive benefits of **Blu-ray** disc **technology**. You can store up to 4 hours 45 minutes of Full HD video on a 32GB **SDHC** memory cards. Direct recording is also possible to the built-in **30 GB** Hard Disk Drive.

ÖNELLENŐRZŐ FELADATOK MEGOLDÁSAI

1. feladat

Is Blu-ray really blue?

Answers:

4. 1. Blu-ray discs allow you to store almost ten times the amount of data on a DVD.
5. 2. 25GB/50GB
6. 3. 500 GB

Comment: in reality a blu-ray laser beam is in blue-violet

Full HD camcorders

7. Answers:

1. Some of the camcorders have the versatility of being able to record Full HD video onto three separate formats such as **Blu-ray Disc, Hard Disk Drive, SD/SDHC/SDXC Card**.
2. Camcorders work with 8cm discs, which provide up to 1 hour of full HD recording.

IRODALOMJEGYZÉK

FELHASZNÁLT IRODALOM

<http://www.blu-raydisc.com/en/about/WhatisBlu-rayDisc/HistoryofBlu-rayDisc.html>

<http://www.makeuseof.com/tag/technology-explained-blurays-replacement-dvd/>

<http://www.sony.co.uk/product/>

<http://www.panasonic.com/>

<http://www.hitachi.com/products/personal/av/index.html>

AJÁNLOTT IRODALOM

<http://www.sony.co.uk/product/>

<http://www.panasonic.com/>

<http://www.hitachi.com/products/personal/av/index.html>

<http://www.philips.com/>

<http://www.samsung.com/>

Fabula László: Műszaki cikkek eladásával kapcsolatos követelmények. Duál Budapest Bt, Budapest, 2009.

A(z) 0123–06 modul a39–es szakmai tankönyvi tartalomeleme felhasználható az alábbi szakképesítésekhez:

A szakképesítés OKJ azonosító száma:	A szakképesítés megnevezése
31 341 01 0010 31 03	Műszakicikk eladó

A szakmai tankönyvi tartalomelem feldolgozásához ajánlott óraszám:
18 óra

A kiadvány az Új Magyarország Fejlesztési Terv
TÁMOP 2.2.1 08/1–2008–0002 „A képzés minőségének és tartalmának
fejlesztése” keretében készült.
A projekt az Európai Unió támogatásával, az Európai Szociális Alap
társfinanszírozásával valósul meg.

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