# VGN-AR690U VAIO® AR Digital Studio™ Notebook PC

### EXPERIENCE BLU-RAY DISC® TECHNOLOGY

With Blu-ray Disc capabilities, you can enjoy stunning HD video in crystalclear full 1080 HD resolution or record 25-50GB of video, pictures or data to a single Blu-ray Disc media, that's five times the capacity of standard DVDs.

## POWERFUL PERFORMANCE

Core<sup>™</sup> 2 Duo processor T7500 (2.2GHz<sup>1</sup>)

security and entertainment features.

# **MULTIMEDIA POWERHOUSE**

The VAIO® AR notebook combines the convenience and portability of a notebook with the power and performance of a desktop.

Featuring a full-sized keyboard, stunning 17" widescreen display8 and NVIDA® GeForce® Go 8400M GT graphics card.

HDMI™ connector provides single-cable HD connectivity to a compatible HDTV or A/V receiver.

Media management software suite provides the tools needed to manage music, movies and photos.

## **SUPERIOR TECHNOLOGIES**

802.11n offers a massive boost in speed and considerably more range than 802.11a/b/q<sup>3</sup>.

Built-in 1.3 megapixel camera and microphone let you participate in video chats and conferencing<sup>12</sup>

Enjoy brilliant colors and stunning clarity while conserving power with XBRITE-HiColor™ LCD technology.

The VAIO® AR690 notebook is a 1080 HD multimedia powerhouse with Blu-ray Disc™ technology, DVR capabilities and a 17" widescreen display<sup>8</sup> with XBRITE-HiColor™ LCD technology. Watch Blu-ray Disc™ movies<sup>15</sup> in stunning HD clarity, record<sup>18</sup> 25-50GB of content to a single Blu-ray Disc<sup>™</sup> media and even watch, record and manage cable TV content<sup>17</sup>.

Intel® Centrino® Duo processor technology and super-powerful Intel®

Roomy 320GB<sup>2</sup> hard drive and 2GB RAM.

Microsoft® Windows Vista® Ultimate is easy-to-use and delivers new









XBRITE-HiColor









# VGN-AR690U VAIO® AR Digital Studio™ Notebook PC

#### **Specifications**

General

Computer Type: Notebook

Type of Use: Desktop Replacement

Action Buttons: S1, S2, AV Mode, Volume, Mute, Eject, Play/Pause/Stop, Wireless LAN On/Off, FF and Rewind

Hardware

Pointing Device: Electro-Static touch pad

Keyboard: QWERTY, 86 keys with 2.5mm stroke and 19.05mm pitch

Camera: Built-in 1.3 megapixel MOTION EYE® camera and

Processor

Type: Intel® Core™ 2 Duo Processor T7500

Speed: 2.2GHz1

Front Side Bus Speed: 800MHz

L2 Cache: 4MB Advanced Smart Cache

Technology: Intel® Centrino® Duo processor technology

Memory

Type: DDR2 SDRAM

Installed: 2GB (1GBx2) PC2-5300

Maximum: 4GB16

Speed: 667MHZ

**Hard Drive** 

Capacity: 320GB2 (160GB x2)

Speed: 5400rpm

Interface: Serial ATA

Optical Drive#

DVD+R DL Write: 4x max.

DVD+R Write: 8x max

DVD+RW Write: 8x max. DVD-RWrite: 8x max

DVD-RW Write: 6x max.

CD-R Write: 24x max.

CD-RW Write: 16x max.

DVD+RW-Yes4

CD Read: 24x max

DVD Read: 8x max.

DVD-RAM Write: 5x max.

DVD-R DL Write: 4x max.

BD-R Read: 2x max

BD-RWrite: 2x max BD-RE Write: 2x max

BD-ROM Read: 2x max BD-RF Read: 2x max

BD-R DL Read: 1.6x max

BD-R DL Write: 1x max

DVD-RAM Read: 5x max

Blu-Ray Disc™ Support: Yes¹5 (BD-R/-RE/-ROM/ DVD+-RW/+-R

DL/RAM Drive)

BD-RE DL Read: 1.6x max BD-RF DI Write: 1x max

Multimedia Card Reader: Supports Memory Stick® and Memory Stick Duo™ media⁵ with MagicGate® functionality and Secure Digital Media (SD)

One PCMCIA - Type II/Type I card slot with CardBus support One ExpressCard® /54 Slot

 $Sound\,System:\,Sony @\,Sound\,Reality ^{\text{\scriptsize IM}}\,-\,Audio\,Enhancer$ 

Screen or Display Technology: WUXGA

Screen Size: 17"8

Resolution: 1920x1200

XBRITE-HiColor™ Technology: Yes

Graphics

Processor: NVIDIA® GeForce® 8600M GT Graphics Processing Unit Video RAM: 1023MB14 Total Available Graphics

TV Tuner: Yes - ATI TV Wonder™ Digital Cable Tuner (NTSC and ATSC Support)

Inputs and Outputs

Ethernet Port: 1

HDMI™ Connection Output(s): 1

Headphone Jack: 1

i.LINK® Interface: 1 (4pin) i.LINK® connector (IEEE 1394)6

Modem Jack: 1 Microphone Input: 1

S-Video Output(s): 1

USB Port(s): 3 (2.0 compliant)

VGA Output(s): 1 DC-In: 1 S/PDIF Output(s): 1

Networking/Modem

Ethernet Protocol: Fast Ethernet (RJ-45)

Ethernet Speed: 10Base-T/100Base-TX/1000Base-T

Modem Type: Integrated V.92/V.90 Modem with (RJ-11)

Wireless LAN: Intel® PRO/Wireless 4965AGN Network Connection

Bluetooth® Technology: Integrated Bluetooth® Technology10 Power

Battery Type: Standard Capacity Battery (VGP-BPS2C)

Estimated Battery Life: 1.5 to 3.5 hours7 with standard battery Power Requirements: 150W=10%

Operating System: Microsoft® Windows Vista® Ultimate Internet Services: AOL® 90-Day Risk Free Trial - New Users Only

Supplied Software: Microsoft® Works SE 9.0 w/ 60-Day Trial Version of Microsoft® Office Home and Student 2007<sup>13</sup>

Sony® Original Software: Click to DVD® - DVD Creation, LocationFree® Player
\*Please access VAIO® Help and Support from your PC for a

complete list of software applications and trials

Security and Anti-Virus Software: Norton 360™ All-In-One Security 60-day Trial

Service and Warranty Information

Telephone Support: 1 year toll-free technical telephone assistance, available 24/711 See actual warranty for details

Limited Warranty and Onsite Service: 1 Year Limited Warranty with Onsite Service<sup>9</sup>

Online and Email Support: Support available from http://www.esupport.sony.com/EN/VAIO

**Dimensions** 

Weight: 8.4 lbs. with standard battery19 Measurements: 16.4"(W) x 1.32"(H) x 11.8"(D)19

Supplied Accessorie

Standard Lithium-ion Battery (VGP-BPS9A/B)

AC Adapter (VGP-AC19V15)

Optional Accessories

Additional Standard Capacity Battery (VGP-BPL9A/B)

Additional AC Adapter (VGP-AC19V15)

Large Capacity Battery (VGP-BPL9)

Universal Carrying Case (VGP-AMB1)

Notebook Roller Case (VGP-AMB6) Neoprene Notebook and AC Adapter Case (VGP-AMC2) USB Laser Mouse (VGP-UMS55/B)

Wireless Presentation Mouse (VGP-WMS50A)

All-in-one 2.1 Channel Speaker (VGP-SP100) USB Floppy Drive (VGP-UFD1)

Color: Glossy Piano Black UPC Code: 027242725188

- GHz denotes microprocessor internal clock speed; other factors may affect application performance. CPU speed will be reduced under
- certain operating conditions.

  2. GB means one billion bytes when referring to hard drive capacity.

  Accessible capacity may vary. A portion of hard disk space is reserved as

- Accessible capacity may vary. A portion of hard disk space is reserved: a recovery partition.

  3. Requires a compatible 802.11n access point. Some functionality may require Internet services, which may require a fee.

  4. DVD Media/Formats are not universally compatible.

  5. Supports Memory Stick PRO® high-capacity media tested up to 8GB.

  6. i.LINK is a trademark of Sony used only to designate that a product contains an IEEE 1394 connector. All products with an i.LINK connector may not communicate with each other.

  Actual Pattery life may vary based on product settings usage natter.
- 7. Actual battery life may vary based on product settings, usage patterns, battery and environmental conditions.
  8. Viewable area measured diagonally.
  9. When available, Sony will provide Onsite Service in fulfillment of its limited.
- warranty obligations. Any such services are subject to the terms and conditions of the limited warranty. See actual Limited Warranty for details. Onsite Service will be provided via third-party technician to be dispatched as needed following phone-based troubleshooting. Some repairs may be accomplished with self repair kits. Onsite Service may not be available in all locations. 10. Use of this Bluetooth enabled product with other devices may vary as
- not all Bluetooth devices are compatible.

  11. For certain third party software applications, Sony provides first level Phone Support. Additional telephone support may be available from the applicable 3rd party vendor. Availability and schedule for any such
- support is determined by the applicable software vendor.

  12. Broadband connection is required along with third party services whi may require a subscription fee and other service fees.

  13. 60-Day Trial Version of Microsoft® Office 2007- This trial software will
- work only for 60 days after you first use it. You will not be able to use the software if you do not activate it as described the first time you use the software. You can activate the software by Internet: Internet
- the software. You can activate the software by Internet: Internet service charges may apply. If you want to keep using the software after the 60-day trial period, you must convert to the perpetual version. You can convert online by following the conversion instructions presented during setup and paying the required fees.

  14. Total Available Graphics Memory refers to the new Microsoft® Windows Vista® classification of graphics memory, which is the total of Dedicated Video Memory, System Video memory and Shared System Memory. Shared System Memory vaires depending on the operating condition and system memory vaires depending on the operating condition
- and system memory size.

  15. As with other optical media devices, circumstances may limit compatibility or prevent Bluray Disc\* media playback VAIO computers may not support movie playback on packaged media recorded in AVC
- or VC1 formats at high bit rates.

  16. A portion of the system memory over 3GB available to the operating
- system.

  17. The digital TV tuner supports a CableCARD™ removable security module. Contact your cable operator to receive a CableCARD compatible with your operator's network (additional charges may apply). Not all functions that are available when using a set-top box provided by your cable operator will be supported by CableCARD (e.g., video-on-demand and pay-per-view functionality may not be supported). Premium HDTV programming requires additional
- subscription fee Video recording to Blu-ray Disc™ media is done in MP2 format only.
   Non-metric measures are approximate and may vary.

Computer Interface: The computer industry lacks standards, and therefore, computer interacte: The computer industry lacks standards, and therefore, there are a multitude of varying software packages and add-on hardware options. This personal computer is not manufactured to operate any specific software, and Sony does not and cannot make any warranty or representation with respect to the performance of this product with any particular software packages and/or non-Sony add-on hardware options except those mentioned in this document. Sony hereby disclaims any representations or warranty that this product is compatible with any combination of traducts you may choose to connect. While Sony combination of products you may choose to connect. While Sony representatives or Sony authorized dealers may be able to assist you and may make recommendations, they are NOT authorized to vary or waive this disclaimer. Purchasers must determine for themselves the suitability and compatibility of the hardware and software in each and every particular instance. Software titles pre-installed on the Sony Notebook Computer are subject to change without notice. Simulated graphic shown on display. Pre-installed software may not be identical to retail versions or have all Installed software may not be identical to retail versions or nave all documentation. This product meets the standards of the International Energy Star Program for energy efficiency. Features and specifications are subject to change without notice. Lamp in this product contains mercury. Disposal of these materials may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliance

(www.eiae.org).

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