

SPECIAL REPORT Wireless Music & Movies at Home

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World's Biggest HDTV!

Mitsubishi's
82" Beauty

DVD Recorder Buying Guide

- 20 Models Listed
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- Panasonic & RCA
Decks Reviewed

Hot DVD Players from Samsung & Pioneer

The Lion King on DVD



**Bringing the
Theater Home**
3 Awesome
Video Projectors



NOVEMBER 2003

www.soundandvisionmag.com
AOL Keyword: Sound & Vision

Mitsubishi

82-inch Rear-Projection HDTV



Standing 6 feet high and measuring almost 7 feet wide, it dwarfs other RPTVs, and its 82-inch (diagonal) screen is large enough to rival those of some front-projection systems. But one advantage it has over front projectors is that it doesn't need a dark room to create bright images.

The set ships in two separate boxes and comes with a series of Ikea-like instructions for assembly — a project best left to your Mitsubishi dealer. That's a good thing, too. Since the WL-82913 costs a cool 21 grand, anyone who buys it has probably never shopped at Ikea.

There's no denying Mitsubishi gives you a lot of TV for that kind of scratch. Behind the massive screen sits the most comprehensive collection of cutting-edge TV technology I've seen in one package. First on the list is the three-panel LCoS (liquid crystal on silicon) light engine, which takes the place of the familiar red, green, and blue tubes found inside most RPTVs. An LCoS projector can provide high resolution, with very close spacing between pixels to counter the "screen-door" grid effect visible on some LCD-based projection systems. The light engine in the WL-82913

fast facts

KEY FEATURES

- 82-inch (diagonal) 16:9 screen
- 1080p LCoS display engine
- Integrated HDTV tuner
- NetCommand home networking control

INPUTS/OUTPUTS

front inputs FireWire; composite/S-video with stereo audio; four flash-memory card slots
rear inputs two FireWire; DVI/HDCP, VGA, three wideband component video (one also RGB+H/V), two composite/S-video, all with stereo audio; digital antenna/cable; two analog antenna/cable; speaker-level center-channel audio; RS-232C serial port
rear outputs composite/S-video with stereo audio; coaxial digital and stereo analog audio

DIMENSIONS 83¼ inches wide, 73¾ inches high, 29¾ inches deep

WEIGHT 515 pounds

PRICE \$21,000

MANUFACTURER Mitsubishi Digital Electronics America, Dept. S&V, 9351 Jeronimo Rd., Irvine, CA 92618; www.mitsubishi-tv.com; 800-332-2119

My uncle is an architect who works in Orange County, California, and I've always loved visiting the palatial homes he helps design while they're still under construction. Many of these upscale residences have dedicated home theaters built around front-projection TV systems, with plenty of space for rows of theater-style seats and the requisite antique popcorn machine. I like to guess

how large the screens will be and imagine the future occupants and their lucky guests relaxing in front of 80- or 100-inch images. I've never pictured these wealthy home theater-goers gathered around anything so common as a rear-projection TV (RPTV), but then again, I'd never seen anything like the Mitsubishi WL-82913.

The manual puts it plainly enough: "The WL-82913 is currently the largest self-contained rear-projection TV available."

test report

HIGH POINTS

Extremely detailed images.
Great color reproduction.
Wide range of connection options.

LOW POINTS

Expensive.
Limited shadow detail.

has 1,920 x 1,080 pixels per panel and can therefore deliver every pixel in 1080i (interlaced) high-definition programs.

In addition, the set includes the NetCommand operating system for controlling a rack's worth of A/V gear through a single onscreen interface. There's also a built-in HDTV tuner compatible with both over-the-air broadcast and cable signals, a dual-view picture-in-picture (PIP) feature that handles standard, high-def, and computer images, four multimedia card slots, and more jacks than a \$100 table in Vegas.



Like a big girl trying to streamline her figure, the Mitsubishi dresses completely in black. The high-gloss finish gives it a distinguished look despite its bulk, but the cabinet does tend to reflect room lighting. The only accents are the big diamond logo and a thin silver belt below the screen that camouflages a full set of critical buttons.

I really appreciated the simple remote control, especially considering the set's multitude of features. Large but not too large, it fit nicely in my hand, with plenty of space between the buttons. Green backlighting, activated by a side button, illuminates every key. A dedicated Device button let me quickly select between different inputs, and a switch on the top of the remote can be set to one of four other components it can control directly.

Users who've taken the time to set up the NetCommand system won't need to use that switch at all. You get eight infrared (IR) blasters, enough to operate the com-

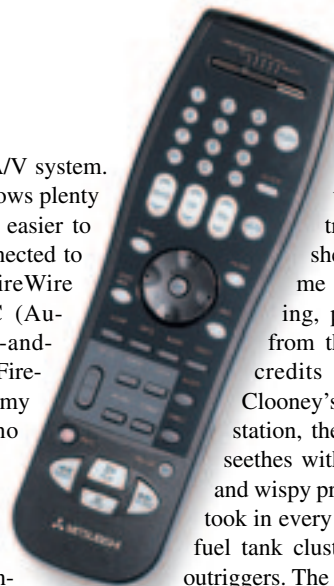
ponents in just about any A/V system. A detailed setup process allows plenty of customization. It's even easier to operate digital devices connected to any of the set's three FireWire ports, thanks to the AVC (Audio/Video Control) plug-and-play protocol built into the FireWire standard. It controlled my JVC D-VHS deck with no problems.

Besides those FireWire ports, the set has every relevant connection available today. Its VGA jack can handle computer resolutions up to 1,920 x 1,080, and one of its three wideband component-video connections can handle RGB+H/V signals as well. Four front-panel card slots accept the CompactFlash, SmartMedia, SD/MultiMedia-Card, and Memory Stick formats, allowing easy access to JPEG photos and even MP3 and Windows Media Audio (WMA) music files. An RF (radio-frequency) jack labeled DTV can be connected to an antenna or cable feed. When connected directly to cable, the QAM-compatible tuner automatically picked up all unscrambled high-def channels on Time Warner's Manhattan cable system, and it also found all my local digital broadcasters.

The huge screen affords a great opportunity to view two images side by side. The TV can put the image from just about any of its inputs — including VGA, DVI (Digital Visual Interface), FireWire, and component-video — in one of the two windows, although you can't watch two high-def sources at once. Memory-card sources also won't work with the split screen. Standard PIP is supported with most sources, including HDTV, and you can move the smaller window or change its size.

A lone format button is used to cycle through the set's display modes, and it takes about a second to make a switch. All six modes work with regular and 480p (progressive) sources. Despite a pair of modes that fill the 16:9 screen by zooming or cropping 4:3 programs, I preferred the Narrow mode's undistorted picture with black bars to either side. (One advantage of the TV's LCoS display system is that there's no danger of burn-in from black bars as on tube sets.)

All of a TV's features matter little, however, if the picture isn't up to snuff. After a brief calibration (see "in the lab"), I spun



up the Steven Soderbergh version of *Solaris*. The intricate detail, rich color, and sheer size of the image kept me riveted on this slow-moving, psychologically deep film from the opening titles until the credits at the end. As George Clooney's ship approaches the space station, the vast indigo planet below seethes with amorphous cloud shapes and wispy protrusions like solar flares. I took in every inch of the ship's complex fuel tank clusters, airlocks, and circular outriggers. The detail was crystal clear.

Thanks to the set's exceptionally accurate color decoder, I was able to achieve a perfect color balance. The benefits of this were particularly visible in the haunting sequence that blends scenes of Clooney and his wife's first meeting and scenes of his first encounter with her alien doppel-

in the lab

Color temperature (Warm color temperature before/after calibration)

Low window (30-IRE)7,488/6,489 K
High window (80-IRE)7,497/6,493 K

Brightness (Warm color temperature before/after calibration, 100-IRE)28.8/26.2 fL

Prior to calibration, the WL-82913's grayscale measured somewhat higher than the NTSC standard of 6,500 K, although it was very consistent from the low to the high end of the scale. Calibration resulted in a nearly perfect grayscale, varying by less than 50 K from 30 to 80 IRE — impressive. (Calibration needs to be performed by a qualified technician with specialized equipment, so discuss it with your dealer before purchase, or call the Imaging Science Foundation at 561-997-9073.)

After calibration, light output was close to ideal for an RPTV. The set's NTSC color decoder was refreshingly free of "red push," varying by no more than 5% according to the test pattern from the *Avia* DVD. After adjustment, the decoder was spot-on. DC restoration was excellent; the level of black varied only slightly with changes in the average brightness level. The TV would not display a 10-IRE window pattern from its 480p input, but it would via its 480i input. Convergence of the three LCoS panels wasn't perfect: I noticed red and green fringing around the white dots in a convergence test pattern. Geometry was perfect, and overscan patterns indicated no more than 4% picture loss on all sides, which is average. I noticed no screen-door effects, and individual pixels only became visible at less than 2 feet from the screen. Corner-to-corner focus was nearly perfect, with the set displaying excellent brightness uniformity over a wide viewing angle.

— D.K.

gänger. The blue of his cabin on the station looked icy, contrasting with the warm, glowing — but never too intense — reds of their apartment back on Earth. When her face finally materializes out of the shadows, the variations in her skin tone, red lips, and dark eyes combined for a look that was downright supernatural.

Her ghostly appearance also drew out the main weakness of the Mitsubishi: its inability to display deep blacks and fine shadow detail. The shadows at the edges of her face seemed to drop off into darkness instead of fading gradually, and the darkness itself was a shade of deep gray, not true black. (Mitsubishi says the software in the preproduction unit we reviewed has been updated with new gamma curves that allow it to do a better job with black level and shadow detail.)

I also noticed that the TV's 2:3 pull-down detection didn't seem to be functioning as well as that of my progressive-scan DVD player. When Clooney first arrives at the station, a pan from some space helmets across the airlock, and the lines on the bulkheads framing the windows, were interrupted by slight jagged edges. When I switched the player back to progressive mode, the jagged edges disappeared.

With a FireWire connection linking my D-VHS deck and the TV, a 720p-format high-definition montage from the new *Digital Video Essentials* test tape looked exceedingly crisp. The big-screen, high-resolution LCoS set clearly highlighted the difference between DVD and HDTV. Shots of Earth from the space shuttle were a feast of minutely detailed clouds, mountain ranges, and deep blue oceans, a re-

freshing change from the alien purple of *Solaris*. I saw tiny spots on the back of a brilliant yellow grasshopper and the separation between each panel of its abdomen. During one pan, however, the side of one of the skyscrapers flickered a bit, a scaling artifact visible as I watched both the 1080i and 720p versions of the tape.

The Mitsubishi conglomerate manufactures lots of stuff, but we Americans know the name best in terms of cars and TVs. Considering that the WL-82913 costs as much as a 2003 Galant V6, not too many people can afford to bask in its projected glory. If you're one of them — Orange County resident or otherwise — and you've decided against installing a dedicated front-projection system, the biggest RPTV on the planet may be just the alternative you're looking for. **S&W**

Not Just Television™. Mitsubishi Television.



www.mitsubishi-tv.com