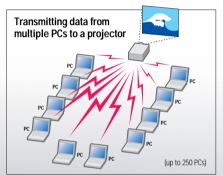# PG-M25X Wireless Communication Allows Interactive and Collaborative Meetings with Realtime Information on a Sharp, Clear Screen

Realtime Wireless Presentations (PG-M25X only)

Based on a high-quality, new image compression system from the application of VQ (Vector Quantization) Technology along with high-speed coding/decoding technology from the use of the Linux operating system plus wireless network technology (IEEE802.11b), Sharp developed the Image Capturing System as a fundamental concept of the wireless projector. Thus, the PG-M25X allows smooth realtime presentations without tedious cable connections. Enabling communications between multiple PCs and a single projector, or a PC and multiple projectors, this projector is ideal for all types of meetings, from project brainstorming to product presentations.
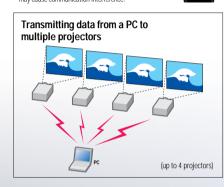
• Wireless LAN eliminates tedious RGB cable connection setup between PC and projector.
• Up to 250 PCs can be connected to a single projector and can be preset for group presentations. The PG-M25X projects images in the order that the PCs transmit images to the

projector*. When transmitting data from multiple PCs to a projector using a conventional system, cables must be switched each time data is required from a different PC. The PG-M25X alleviates this by performing the switching internally. With a series of presenters lined up, just the touch of a key changes between data PCs to facilitate seamless multiple presentations. The result is smooth, speedy meeting and enhanced interactive communication.

• Up to 4 projectors can be driven simultaneously from a single PC. To achieve this with a conventional system would require RGB cable connections between each projector setup. The PC wireless LAN replaces that with simple placement and presentation setup.
• Two wireless LAN Cards are included.

* Transmitting data from multiple PCs at the same time may cause communication interference.

Transmitting data from multiple PCs to a projector (up to 250 PCs)

Transmitting data from a PC to multiple projectors (up to 4 projectors)

VQ (Vector Quatitization) Technology

1. Any image displayed on the PC can be projected wirelessly in realtime.
• Any application software such as PowerPoint, Excel and Word that runs on the Windows operating system can be displayed.
• Mouse cursor movement can be also displayed.
• Thus, even the meeting minutes you are creating on the spot can be also displayed in realtime.
2. High quality images can be quickly displayed within approximately 2 to 4 seconds (with a XGA data image display) thanks to the VQ data image compression system.

3. Provides quasi-animation effects (1 to 5 frames/sec.)
4. Residential software on the PC automatically sends the image data to the projector and the presenter does not need to send it each time, thus enabling a smooth presentation.

JPEG Format   JPEG 2000 Format   VQ Compression

Sharp, Tohoku University, and SIPEC Corp. jointly developed the innovative VQ (Vector Quantitization) image compression technology in order to realize a high quality, realtime image transmission system for a wireless LAN. Generating no mosquito noise (unavoidable with JPEG or JPEG2000) as well as reducing block noise, the VQ still image compression technology provides clearer projection images than JPEG or JPEG2000 with a PSNR (Peak Signal to Noise Ratio) improvement of 5 to 10 dB, especially for characters.

* The briefcase and PC pictured are not included.

High-Quality Performance Provided from Sharp's High-End Optical Technology

Newly Designed Original Engine

Slim, Lightweight and Compact Design from Sharp Original Straight Optical System
With the DLP™ system and Sharp's original straight optical engine, the PG-M25X/M20X achieves an amazingly slim (7.6cm), lightweight (2.6kg) and compact (4.2 litre) body. Bring it with your mobile notebook PC anywhere your business takes you.

* The bag pictured is included.

Sealed Optics
The optical mechanism of DLP™ system projectors is sealed in its structure, preventing dust, dirt and smoke from entering the body to a much greater degree than with LCD projectors. This enables longer use and reduces maintenance costs. These projectors are ideal for schools or other educational and training facilities, or for entertainment and leisure establishments such as sports bars or karaoke bars.

Sharp's Original Straight Optical System

Projection Lens   Colour Wheel   Projection Lamp   DMD™

High Brightness and High Contrast
The new 12° DMD™ chip has a wider tilt angle than conventional chips, providing significantly improved optical efficiency and excellent contrast ratio. Plus, the DDR (Double Data Rate) DLP™ Engine together with the newly developed air bearing motor achieves 3x colour wheel rotation speed, reducing colour breaking phenomena common with previous generation DLP™ projectors.

■ 1900 ANSI Lumen Brightness
■ Brightness Switchover Function: 1900/1520 ANSI Lumen Brightness Switchable
■ 1000:1 High Contrast
■ Low Fan Noise: 37dB
■ 2000-Hour Lamp Life, among the longest in micro-portable projectors
■ Superior image quality with Fujinon™ optical lens system

True XGA Image Quality

Advanced Compatibility with High-End PCs, Workstations and DTV
Incorporating proprietary Sharp LSI technology, the PG-M25X/M20X works with powerful PCs and workstations used for specialised applications, such as medical, prepress DTP, CAD and CAM.

• Horizontal Frequency: 15-126 kHz
• Vertical Frequency: 43-200 Hz*
• Pixel Clock: 12-230 MHz

• Compatible with Sync. on Green/Composite Sync. signals-Compatible with workstations (SUN, SGI, IBM, HP)
• HDTV/DTV Compatible: 480I/480P/720P/1080I
• UXGA (1,600 x 1,200), SXGA+ (1,400 x 1,050), SXGA (1,280 x 1,024) and Macintosh 21" (1,280 x 1,024) Compatible in Advanced Intelligent Compression
• True XGA (1,024 x 768), SVGA, VGA and Macintosh (19"/16"/13") Compatible

* Temporary noise may be visible with vertical frequencies above 100Hz if OSD functions are activated.

Advanced Intelligent Compression
Higher resolution pictures can be compressed while keeping high quality to fit into the panel resolution.

Enhanced Up-Scaling
Lower picture resolutions can be up-scaled to the high image quality of projector panels.

DTV/HDTV and DVD Compatible
The PG-M25X/M20X provides high-quality images from DVD, HDTV and DTV (480P, 720P, 1080I with 4:3 and 16:9 aspect ratios) by receiving RGB signals and component signals (Y, PB, PR).

4-Position Gamma Correction
Gamma is an image quality enhancement function that offers a richer image by brightening the darker portions of the image without altering the brightness of the brighter portions. Four preset Gamma values (STANDARD, PRESENTATION, CINEMA and GAME) can be selected to allow for references in the images displayed and in the brightness of the room.

Detailed Still Graphics and Natural Reproduction Add More Expression to Your Presentations

CV-IC (Computer & Video Integrated Composer) System II Technology

New Progressive Mode
The Progressive Mode of the previous I/P Conversion still had jagged lines and unclear images. The new Progressive Mode compensates for this interference, to provide a natural and smooth picture in the progressive mode.

Still image viewed in progressive mode
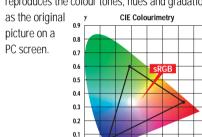
Previous I/P Conversion   New Progressive Mode

sRGB Compatibility
sRGB is an international standard of colour reproduction to reproduce the same natural colour tones as computer displays. With sRGB compatibility the PG-M25/20X faithfully reproduces the colour tones, hues and gradations as the original picture on a PC screen.

CIE Colourimetry   sRGB

Video Noise Reduction
Allows for a clear image even with noisy video source signals.

Without Video Noise Reduction   With Video Noise Reduction

Dynamic Gamma Correction
Dynamic Gamma Correction optimises Gamma correction frame by frame in real time, providing a crisp and vivid image.

Original Picture   Conventional Gamma Correction   Dynamic Gamma Correction

New Edge Up-Scaling
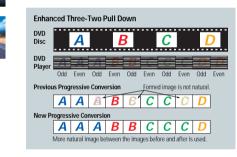Reduces jaggies and unnatural glare when up-scaling slanted lines, enabling sharper quality images.

Conventional Edge Up-Scaling   New Edge Up-Scaling

New Intelligent Compression
New Intelligent Compression makes faint, fine lines and letters clearer and sharper, suitable for project graphics, graph materials and PC menus, with almost perfect legibility.

Enhanced Three-Two Pull Down
Using the Film Mode, the PG-M25X/M20X can beautifully reproduce movie film recorded in 24Hz progressive format.

Enhanced Three-Two Pull Down

DVD Disc / DVD Player — A B C D
Previous Progressive Conversion — Contoured image is not natural.
A A A B B C C C D
New Progressive Conversion — More natural image between the images before and after is used.
A A A B B C C C D

Easy Operation

Active Digital Keystone Correction
The Active Digital Keystone Correction compensates for picture distortion when images are projected at an angle. This system smoothes out jaggies on keystone images and compresses the image keeping the 4:3 aspect ratio.

Enhanced Up-Scaling
Lower picture resolutions can be up-scaled to the high image quality of projector panels.

DTV/HDTV and DVD Compatible

High-Speed Auto Response Adjust (ARA)
Automatically and quickly synchronises in 2 to 3 seconds the projection settings, pixel clock, phase and horizontal and vertical positioning. This ensures a quick and smooth start to presentations.

Sharp Original Pull-Down Menu GUI (Graphical User Interface)
The easy-to-use icon-based GUI shows how to adjust pictures, languages and other settings.

Plus, single adjustment items can be displayed for setting without concealing the screen with menu bars.

Normal Menu   Single Adjustment Item

Other Outstanding Features

■ **Advanced Picture-in-Picture Function**
The PG-M25X/M20X can add video images onto a data screen image and the inset video image can be moved to any position.

■ **Theft Deterrent (System Lock)**
The theft deterrent function prevents unauthorized use of the projector.

■ **Auto Search Function**
Automatically searches for the input signal source such as VCR, DVD or PC.
■ **Monitor Output Capability with Optional Cable**
■ **New Image Capture Function**
Pictures created on a PC can be easily set into the projector as a custom image for startup or a background.

■ **Power Save Mode**
■ **High Quality Video Picture Circuits** (Digital Comb Filter, Digital Noise Reduction, Colour Transient and Y Delay, Colour Temperature Adjustment)
■ **Presentation Support:** Built-In Presentation Tools (PG-M25X only), Enlarge, Freeze, Startup Images (Default and Custom Images), Resize Function