

# PT-FW430 Series

PT-**FW430**U PT-**FX400**U



# Long-Lasting Brightness and Excellent Cost Savings





# **Durable Performance**





The Panasonic PT-FW430 Series boasts high performance with minimal maintenance over time. Its highly reliable optical system and dust-resistant structure provide a long operating life. Advanced Panasonic technologies, such as Daylight View Premium, ensure excellent projected images. The PT-FW430 Series models are equipped with many ecology-conscious features, starting with Eco Management functions that reduce wasteful power consumption. These high-quality projectors also support wireless projection from not only PCs but also iPads and other devices for easy use (optional).\*1 Superb installation flexibility, thanks to the 2x zoom lens and horizontal/vertical lens shift, also makes the PT-FW430 Series ideal for both first-time installation and as replacement units.

#### PT-**FW430**U



3,500 lm WXGA Side-by-Side Wireless Function (optional)

#### PT-**FX400**U



<sup>\*1</sup> The optional Wireless Module ET-WM200U is required.

### **Reliability and Easy Maintenance**

#### 6,000-Hour Lamp Replacement Cycle\*2

An original lamp drive system and a more durable new lamp unit help maintain optimal lamp performance for longer-lasting brightness than predecessor models.\* This has resulted in a 6,000-hour lamp replacement cycle.

#### Dust-Resistant Design and an Eco Filter that Needs No Replacement for 12,000 Hours

Extreme care has been taken in designing the dust-resistant structure inside the PT-FW430 Series cabinet. The lens section, where dust enters, has been protected and separated from the optical block, which is the heart of the projector. Integrated molding of internal cabinet parts has also been increased to further improve sealing per-

The Eco Filter consists of two Micro Cut Filters (electrostatic filters), a pre-filter and a main filter, which use an ion effect to collect extremely small dust particles. The pre-filter has a honeycomb configuration and the main filter is pleated to achieve a large surface area that raises its dust collecting performance. Thanks to these features, the Eco Filter has a replacement cycle of 12,000 hours.

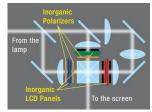


formance. The intake and exhaust airflow paths are straight, and the intake airflow path is provided with a new Eco Filter unit to guard the optical components from dust. This dust-resistant design keeps the air inside the projector clean for long periods of time and minimizes brightness degradation. The Eco Filter's long replacement cycle\*4 of 12,000 hours reduces the hassle of maintenance. And, as an environmental consideration, the filter can be washed with water and reused.\*5

#### Inorganic Materials Maintain Image Quality Longer

The PT-FW430 Series projectors' optical block maintains a high level of performance over time, due to the use of

inorganic materials in the LCD panels and polarizers, thus achieving a replacement cycle of 12,000 hours. It also makes them the logical choice for a truly dependable LCD projector system.



## **Superb and Ecological Performance**

# Detail Clarity Processor 3 Brings Depth and Clarity to Details

The frequency of the video signal is analyzed for each scene, and distribution data is extracted for the ultra high, high, medium and low-range frequencies. This unique Panasonic image correction circuit optimally enhances each area of the screen. High-precision detection is applied from 2-dimensional horizontal/vertical data to produce more natural, lifelike images with high definition.

# Daylight View Premium for Better Color Perception\*6

This function corrects the image quality to project sharp, clear images even in brightly lit rooms. A luminance sensor measures the ambient brightness, and a real-time adjustment function optimizes sharpness and brightness





Simulated image with Daylight View Premium turned off.





Simulated image with Daylight View Premium turned on.

according to the surroundings. This adjustment function also works together with the Detail Clarity Processor 3 to enhance the realism and vividness of projected images. This makes images easier to view and offers high contrast.

#### Eco Management Functions

A number of functions are provided to reduce power consumption. They adjust the brightness according to ambient light conditions, and reduce the lamp power

when there is no signal input or the projector is in AV Mute mode. You can easily set the Eco Management functions according to operating conditions by using the ECO button on the remote control.









Under dark conditions

#### Standby Mode: Eco\*7

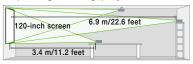
The PT-FW430 Series has attained a low stand-by power level of 0.3 W\*8 (standby mode: ECO). It also helps to slash running costs, and reduces environmental impact.

### **Installation and Operation Flexibility**

#### 2x Zoom Lens and Horizontal/Vertical Lens Shift

The 2x zoom lens and horizontal/vertical lens shift let you accommodate a wide range of room sizes and shapes. When lights or ventilation holes are located in the ceiling mounting site, you can simply relocate the projector to avoid them. And when replacing existing projectors, this

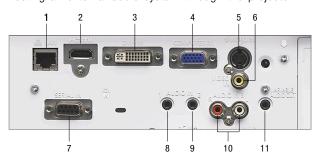
can reduce costs by permitting the use of existing mounting positions and cablings.



NOTE: This illustration shows the projection distances of the PT-FW430U.

#### **Abundant Connection Terminals, Including HDMI**

Interfaces include HDMI and DVI-I inputs. The serial terminal (RS-232C) has an Emulate function that lets you continue using existing control systems when replacing previous Panasonic models. It is also possible to output audio during Standby mode. This is convenient when connecting an external audio system through the projector.\*9



- LAN connector
- 2 HDMI input
- 3 DVI-I input Computer input
- S-Video input
- Video input 6
- Serial input
- Audio input 1
- Audio input 2
- 10 Audio input 3
- 11 Audio output

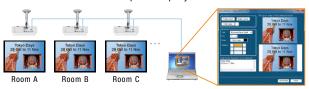
# **Easy Remote Monitoring and Control**

The PT-FW430 Series can be easily operated remotely over a LAN, because it is done using the computer's Web browser. Furthermore, the projector sends an email message to notify the operator when an error has occurred. or a lamp needs to be replaced. Panasonic's original freeware, "Multi Projector Monitoring and Control Software

Ver. 2.5," allows the user to control and monitor multiple projectors at the same time over a LAN. This software also adds a new function that allows still images and text messages to be simultane-



ously distributed to multiple projectors. And the PT-FW430 Series models are compatible with PJLink™ (class 1) to enable integrated control of systems that contain different brands of PJLink<sup>™</sup>-compatible projectors.



#### **Easy Wireless Projection from** Multiple PCs (Optional)

The optional Wireless Module ET-WM200U allows the PT-FW430 Series to provide wireless projection of the same images that are displayed on the PC screen. There is no need to connect the PC with a VGA cable, so you get smooth video presentations with any system layout you want and it is also possible to transmit audio. Settings for wireless connection can be made quickly and easily using Wireless Manager ME 5.5 software and you can also simultaneously project the images from multiple

PCs up to 16 PCs using the "Multi-Live mode." The wireless LAN security is also newly-compatible with the EAP (Extensible Authentication Protocol) (except for EAP-LEAP).



The wireless module ET-WM200U mounted on the projector

NOTE: Network functions such as Live mode and Multi-Live mode can also be used with a wired LAN.





Four-Window Multi Style displays up to four computer screens at a time.



Four-Window Index Style displays thumbnails of four computer screens.



16-Window Index Style displays thumbnails of 16 computer screens.

- This value is calculated by continuously turning the lamp on for 2 hours and off for 0.25 hours. The lamp replacement cycle will decrease if the lamp is turned on/off more frequently, or if it is left on for longer intervals. PT-FW300NTU/FW300U/F300NTU/F300U.
- The usage environment affects the duration of the filter
- When washing with water, please follow the procedures listed in the operating instructions. Also, we recommend replacing the filter with a new one after it has been washed and reused twice. If the filter is not sufficiently clean after washing, replace it with a new one.
- There is no actual change in the rated brightness or contrast ratio.
- When the standby mode is set to ECO, network functions such as power on over the LAN will not operate. Also, only certain commands can be received for external control using the serial terminal.
- 0.3 W at 100-120 V AC. 0.4 W at 220-240 V AC.
- Audio monitoring requires external speakers and an audio amplifier.

#### Panasonic Wireless Projector for iOS

"Panasonic Wireless Projector for iOS" application, which is free and available on the App Store, allows wireless projection from an iPad, iPhone or iPod touch. When a JPEG or PDF file is opened, the image is sent to the projector and displayed. Pre-



sentations can be done using only the wireless projector and an iPad, iPhone or iPod touch. Various touch screen operations, such as rotating the direction of the screen, flicking to turn pages, and pinching to zoom in or out, are possible. iPad 1G, iPhone 3GS/4 and iPod touch 3G/4G devices with iOS 4.1/4.2 are supported.

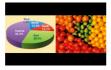




#### Side-by-Side Function\*10

The PT-FW430U can simultaneously display images from two sources onto a single screen. For example, you can display a PC image on the left and a video image on the

right. Taking advantage of the widescreen projection, this function gives you a host of new application possibilities to explore.



#### Scheduling Function

Scheduled operation is possible using the built-in timer function, without having to use a PC and software.

#### Direct Power Off

The cooling fan continues to operate even when the main power switch is turned off after projection is finished. This also allows the power to be turned off by directly switching off the room's main breaker for systems, such as ceiling mounted systems, where the main power switch cannot be reached.

#### 15m (49ft) Long-Range Wireless Remote Control

A unique ID number can be assigned to each projector using the supplied wireless remote control unit. This allows operation of a desired projector when multiple units are set up at the same location. Three frequently used functions can be assigned to the Function buttons for instant recall.



- $\star 10$  This function is not effective for some source combinations.
- \*11 Still images that can be uploaded are limited to 1024 x 768 pixel bitmap files. Also, the application will reduce the number of colors to 191.
- \*12 When the lamp mode is set to ECO; 33 dB when the lamp mode is set to Normal. Measurement, measuring conditions and method of notation all comply with ISO 21118 international standards.

# Effective Theft Prevention with the Startup Logo

You can change the default Panasonic start up logo to any logo you want, such as your company's logo for example. A new logo can be easily uploaded by con-



necting a computer to the projector through the LAN or serial connection by using the Logo Transfer Software\*11. An abundance of other security measures are also included, such as a security bar, a user password, a control panel lock, and text superimposing. This is very effective for preventing theft.

#### Quiet, 29 dB\*12 Operation

The 29 dB\*<sup>12</sup> silent design ensures that you won't be bothered by fan noise during operation. It also lets listeners focus on what the presenter is saying as well as what is being shown on the projection screen.

#### Easy Lamp and Air Filter Replacement

For easier maintenance, you can replace the lamp from the rear and the air filter through the side panel, even after the projector is installed on the ceiling. Furthermore, the replacement lamp unit ET-LAF100A can be used with all of the Panasonic PT-F100/F200/F300 Series projectors, for efficient lamp purchase planning.





#### Other Valuable Features

- Picture mode selection (standard/dynamic/natural/cine-ma/whiteboard/blackboard): whiteboard and blackboard modes are convenient when projecting in rooms that do not have a screen.
- AV mute for image/sound muting
- Selectable 17-language onscreen menu
- Menu lock function
- · Built-in closed caption decoder

#### Ecology-conscious Design

Panasonic works from every angle to minimize environmental impact in the product design, production and delivery processes, and in the performance of the product during its life cycle. The PT-FW430 Series projector reflects the following ecological considerations.

- No halogenated flame retardants are used in the cabinet.
- Non-coated cabinet for easy recycling.
- Lead-free solder is used to mount components to the printed circuit boards.
- · Lamp power switching further reduces power consumption.
- "FCO" button on the remote control.
- Standby power consumption of only 0.3 W\*8 has been achieved (standby mode: ECO)\*7.
- Auto Power Save activates standby mode when no signal is input.
- · RoHS compliant



All PT-FW430 Series projectors are carefully manufactured at the Panasonic factory in Japan, under strict quality control. This is another, very important advantage of a Panasonic projector.

#### **Specifications**

Model		PT- <b>FW430</b> U	PT- <b>FX400</b> U		
Power supply		100-240 V AC, 3.9-1.4 A, 50/60 Hz	-		
Power consumption		330 W (0.3 W at 100-120 V AC, 0.4 W at 220-240 V AC when standby mode set to eco*1, 9 W when standby mode set to normal, 20 W when standby mode set to normal and audio monitor out.)			
LCD panel	Panel size Display method Pixels Pixel configuration	18.9 mm (0.74 inches) diagonal (16:10 aspect ratio) Transparent LCD panel (× 3, R/G/B) 1,024,000 (1,280 × 800) × 3, total of 3,072,000 pixels Stripe	Transparent LCD panel (x 3, R/G/B)		
Lens		Manual 2× zoom (throw ratio: 1.34-2.68:1), manual focus F 1.7-2.6, f 21.6-43.0 mm	Manual 2× zoom (throw ratio: 1.48–2.96:1), manual focus F 1.7–2.6, f 24.0–47.2 mm		
Lamp		250 W UHM lamp (The lamp replacement cycle is 6,000 hours.*2)			
Screen size (diagonal)		0.84 - 7.62 m (33 - 300 inches), 16:10 aspect ratio	0.84-7.62 m (33-300 inches), 4:3 aspect ratio		
Brightness*3		3,500 lm (lamp mode: normal)	4,000 lm (lamp mode: normal)		
Center-to-corne	er uniformity*3	80%			
Contrast*3		600:1 (full on/full off)			
Resolution		1,280 $\times$ 800 pixels (Input signals that exceed this resolution will be converted to 1,280 $\times$ 800 pixels.)	$1,024 \times 768$ pixels (Input signals that exceed this resolution will be converted to $1,024 \times 768$ pixels.		
Scanning frequency	HDMI/DVI-I (digital) DVI-I (analog)/RGB YPBPR (YCBCR) Video/S-Video	fH: 27.0 kHz-68.7 kHz; fv: 24.0 Hz-85.0 Hz; dot cl fH: 15.6 kHz-91.1 kHz; fv: 24.0 Hz-85.1 Hz; dot cl fH: 15.75 kHz; fv: 60 Hz (480) [525i]) fH: 31.50 kHz; fv: 60 Hz (480) [525p]) fH: 31.50 kHz; fv: 50 Hz (576) [625i]) fH: 31.25 kHz; fv: 50 Hz (576) [625i]) fH: 37.50 kHz; fv: 50 Hz (720 [750]/50p) fH: 37.50 kHz; fv: 60 Hz (720 [750]/60p) fH: 15.75 kHz; fv: 60 Hz (NTSC/NTSC4.43/PAL-M/PA	lock: 162 MHz or lower fh: 33.75 kHz; fv: 60 Hz (1080 [1125]/60i) fh: 28.13 kHz; fv: 50 Hz (1080 [1125]/50i) fh: 27.00 kHz; fv: 24 Hz (1080 [1125]/24p) fh: 33.75 kHz; fv: 30 Hz (1080 [1125]/30p) fh: 67.50 kHz; fv: 60 Hz (1080 [1125]/60p) fh: 56.25 kHz, fv: 50 Hz (1080 [1125]/50p)		
Optical axis shif	Horizontal	±51% from center of screen (manual) ±24% from center of screen (manual)	±50% from center of screen (manual) ±27% from center of screen (manual)		
Keystone correction range		Vertical: ±30°			
Installation		Ceiling/desk, front/rear			
Built-in speaker	•	Output power: 5.0 W (monaural)			
Terminals HDMI IN  DVI-I IN  COMPUTER (RGB) IN VIDEO IN S-VIDEO IN AUDIO IN 1 AUDIO IN 2 AUDIO IN 3 AUDIO OUT SERIAL IN LAN WIRELESS MODULE		480p, 576p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/24p, 1080/60p, 1080/50p, VGA (640 × 480)—WSXGA+ (1,680 × 1,050), compatible with non-interlaced signals only; dot clock: 25.2–146.25 MHz; Audio signal: linear PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz) DVI-I 29-pin × 1  Diglat: (DVI 1.0 compliant, compatible with HDCP, compatible with single link only) 480p, 576p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/24p, 1080/60p, 1080/50p, VGA (640 × 480)—WSXGA+ (1,680 × 1,050), compatible with non-interlaced signals only; dot clock: 25.2–146.25 MHz; Analog: (RGB/YPBPR (YCBCR)) ID-sub HD 15-pin (female) × 1 (RGB/YPBPR × 1) RCA pin × 1 (composite video) Mini DIN 4-pin × 1 (S-Video) M3 × 1 (L, R × 1), 0.5 Vrms M3 × 1 (L, R × 1), 0.5 Vrms RCA pin × 2 (L, R × 1), 0.5 Vrms RCA pin × 2 (L, R × 1), 0.5 Vrms RCA pin × 2 (L, R × 1), 0.5 Vrms RCA pin × 1 (remails) × 1 for external control (RS-232C compliant) D-sub 9-pin (female) × 1 for external control (RS-232C compliant) RJ-45 × 1 (for network connection, 108ase-T/1008ase-TX, compliant with PJLink™) Connector for optional wireless module ET-WM200U × 1			
Cabinet materials		Molded plastic (PC+ABS)			
Dimensions (W $\times$ H $\times$ D)		430 × 125.5*4 × 323 mm (16-15/16" × 4-15/16" * 4 × 12-23/32") (Protruding parts not included)			
Weight		Approximately 6.0 kg (13.2 lbs.)			
Operating environment		Operating temperature: 0°C-40°C (32°F-104°F)*5; operating humidity: 20%-80% (no condensation)			
Supplied accessories		Power cord, wireless remote control unit, batteries (AA type × 2), software CD-ROM (Logo Transfer Software, Multi Projector Monitoring & Control Software Ver. 2.5, Wireless Manager ME 5.5)			
4 When the stand		d. 6			

- \*1 When the standby mode is set to eco, network functions such as power on over the
- When the statious mode is set up does necessary the set of the statious such as gower on over all example. All will not operate. Also, only certain commands can be received for external control using the serial terminal.
   This value is calculated by continuously turning the lamp on for 2 hours and off for 0.25 hours. The lamp replacement cycle will decrease if the lamp is turned on/off more frequently, or if it is leiten on for longer intervals.
- \*3 Measurement, measuring conditions and method of notation all comply with ISO
- The operating temperature and the state of the state of

#### NOTES ON USE

- Do not install the projector in locations that are subject to excessive water, humidity, steam or oily smoke. Doing so may result in fire, malfunction or electric shock. The projector uses a high-voltage mercury lamp that contains high internal pressure. This lamp may break, emitting a large sound, or fail to illuminate, due to impact or
- The projector uses a high-wattage lamp that becomes very hot during operation. Please observe the following precautions
- Never place objects on top of the projector while it is in operation.

  Make sure there is an unobstructed space of 500 mm (19-11/16 in) or more around the projector's intake and exhaust openings.

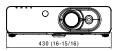
  Do not stack projector units directly on top of one another for the purpose of multiple (stacked) projection.
- When stacking projector units, be sure to provide the amount of space indicated between them. These space requirements also apply to installation where only one projector unit is operating at one time and the other unit is used as a backup.

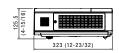
  If the projector is placed in a box or enclosure, the temperature of the air surrounding the projector must be between 0°C (32°F) and 40°C (104°F). Also, make sure
- the projector's intake and exhaust openings are not blocked. Take particular care to ensure that hot air from the exhaust openings is not sucked into the intake
- The lamp replacement cycle duration becomes shorter if the projector is operated repeatedly for short periods.

   The length of time that it takes for the lamp to break or fail to illuminate varies greatly depending on individual lamp characteristics and usage conditions.
- The brightness of the lamp will gradually decrease with use.
- 5. Due to natural characteristics of lamps, screen brightness may vary (flicker). This is not an indication of faulty lamp performance

#### **Dimensions**

unit: millimeters (inches)





#### **Projection Distance**

unit: meters (feet)

PT-FW430U (16:10 aspect ratio; throw ratio: 1.34-2.68:1)

Projection size (diagonal)	Projection Min (wide)	n distance Max (telephoto)	Height from edge of screen to center of lens
0.84 m 33″	- (-)	1.8 (6.0)	0-0.45 (0-1.5)
1.02 m 40"	1.1 (3.6)	2.3 (7.4)	0-0.54 (0-1.8)
2.03 m	2.3 (7.4)	4.6	-0.01-1.09
80"		(14.9)	(0-3.6)
3.05 m	3.4	6.9	-0.02-1.63
120″	(11.2)	(22.5)	(-0.1- 5.3)
5.08 m	5.7	11.5	-0.03-2.73
200″	(18.8)	(37.6)	(-0.1- 8.9)
7.62 m	8.6	17.2	-0.05-4.09
300″	(28.3)	(56.5)	(-0.2-13.4)

#### PT-FX400U (4:3 aspect ratio; throw ratio: 1.48-2.96:1)

	,			,
	Projection size (diagonal)	Projection Min (wide)	n distance Max (telephoto)	Height from edge of screen to center of lens
	0.84 m 33"	- (-)	1.9 (6.4)	0-0.50 (0-1.7)
	1.02 m 40"	1.2 (3.8)	2.4 (7.8)	0-0.61 (0- 2.0)
	2.03 m 80"	2.4 (7.8)	4.8 (15.7)	0-1.22 $(0-4.0)$
	3.05 m 120"	3.6 (11.9)	7.2 (23.6)	0-1.83 (0-6.0)
	5.08 m 200″	6.1 (19.9)	12.0 (39.5)	0-3.05 (0-10.0)
	7.62 m 300″	9.1 (29.9)	18.1 (59.3)	0-4.57 (0-15.0)

#### **Optional Accessories**

#### ET-PKF110H

Ceiling mount bracket for high ceilings



#### ET-PKF110S

Ceiling mount bracket for low ceilings



#### ET-WM200U

Wireless module

ET-EMF100 Replacement



#### ET-LAF100A Replacement lamp unit



#### Freeware

Multi Projector Monitoring and Control Software Ver. 2.5



#### For more information about Panasonic projectors

# **Panasonic**

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>>> http://panasonic.net/avc/projector



Factories of Business Solutions Business Group have received ISO 14001:2004—the Environmental Management System certificatio

ept for third parties' peripherals)

All information included here is valid as of July 2011.

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