

Panasonic ideas for life



**Designed for Durability and
Installation Flexibility**

LCD Projector F300 series



December, 2008

F300 Series - Outline



	PT-FW300NT	PT-FW300	PT-F300NT	PT-F300
Resolution	WXGA (1280 x800)		XGA (1024 x 768)	
Brightness	3500 lm		4000 lm	
Daylight View	Daylight View 5			
Contrast	600:1			
Air Filter	Auto Cleaning Filter (ACF)			
Lamp Replacement Cycle	5,000 hours			
Wired LAN (RJ45)	YES			
Wireless LAN	YES	NO	YES	NO

Performance You Can Count On

1. High Durability for long lasting brightness

- New inorganic materials for LCD panels & polarizers.
- New Auto Cleaning Filter (ACF) * to keep dust out.
- Common lamp for all F series

2. Excellent Basic Features

- Brightness enhancement.4000lm(PT-F300NT/F300) & 3500lm(PT-FW300NT/FW300)
- New Daylight View 5 technology gives better white levels
- Wide aspect-ratio resolution with Side By Side function(PT-FW300NT/FW300)

3. Easy Installation and Maintenance

- Wide 2x optical zoom and H/V lens shift for flexible installation.
- Wired LAN: Web browser control/monitoring

F300 Series Key Features



1. High Durability for long lasting brightness



2. Excellent Basic Features



3. Easy Installation and Maintenance





Do you know what this is?



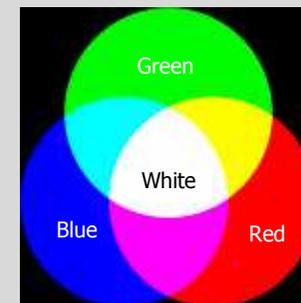
**After heavy use of LCD projectors,
picture image deteriorates and becomes
“Yellowish”***

**After using LCD projectors for a long time, this
sometimes happens when trying to project a “white”
image.**

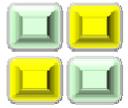
The blue polarizer deteriorates the fastest.

This inhibits the passage of blue light.

White – Blue = Yellowish Image



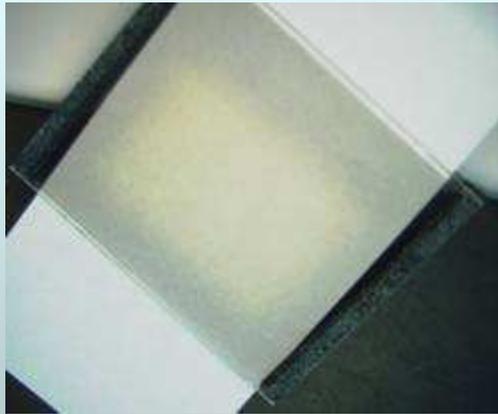
**this is an extreme example*



Long Lasting Brightness -New materials

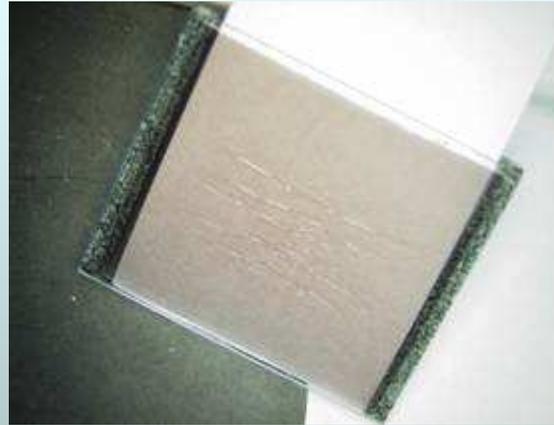
Reasons for picture deterioration over time

Due to extreme over heating
caused by heavy use of the projector

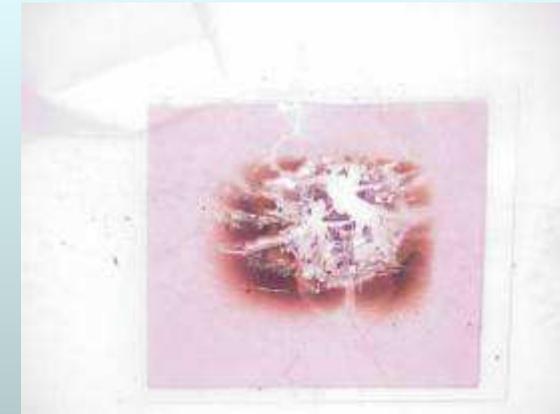


Shade

Due to
Ultra Violet Light



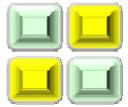
Shrinkage



Burn

Examples of polarizer deterioration

These sample pictures are taken from actual tests.



Long Lasting Brightness -New materials

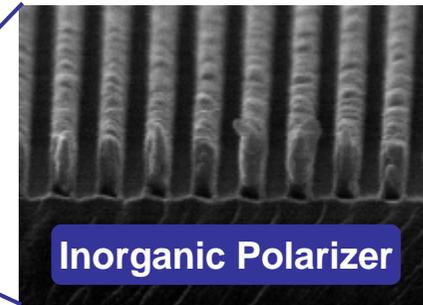
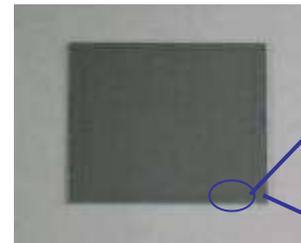
NEW

Newly designed LCD Panels & Polarizers extend the life time of the optical block !



Deterioration of the Blue Polarizer causes the "Yellowish" Picture Images

**New Inorganic Polarizer :
Metal Wire Grid**



Inorganic Polarizer

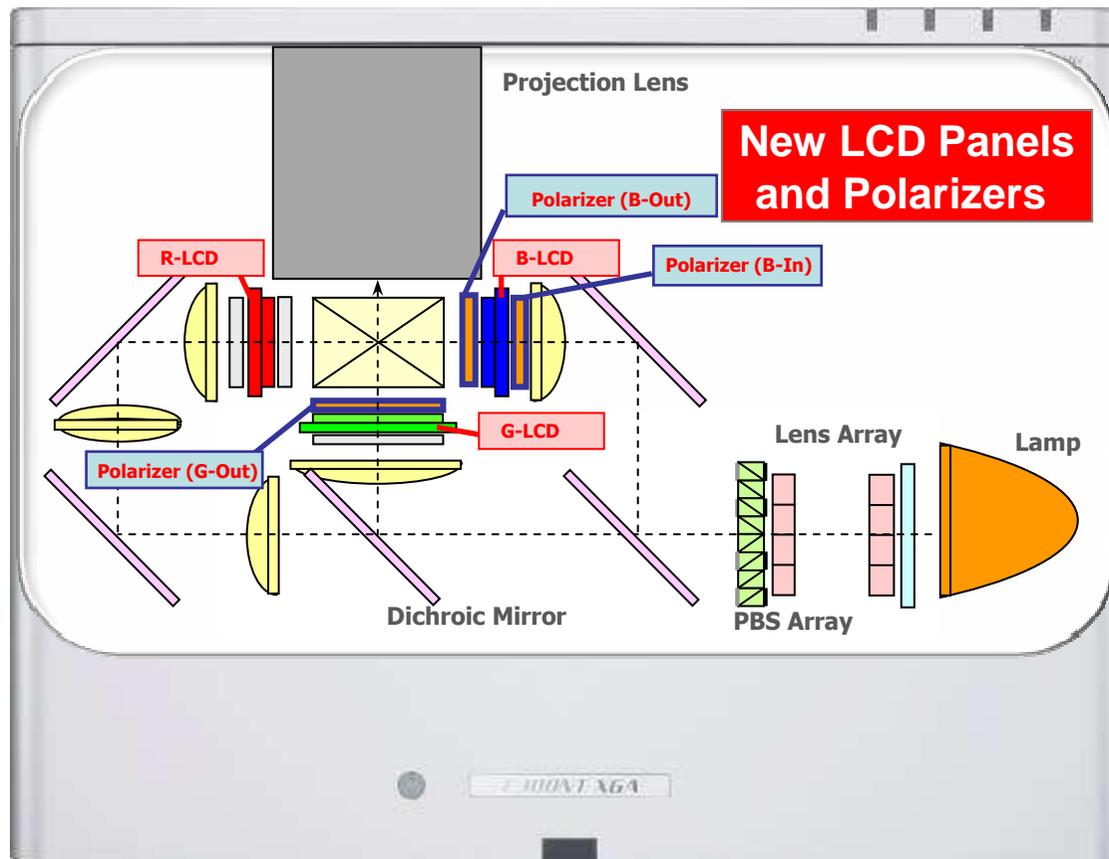
Long Lasting Brightness -The Optical block

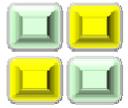
NEW

Now using new Inorganic materials for LCD Panels & Polarizers

Consists of LCD Panels

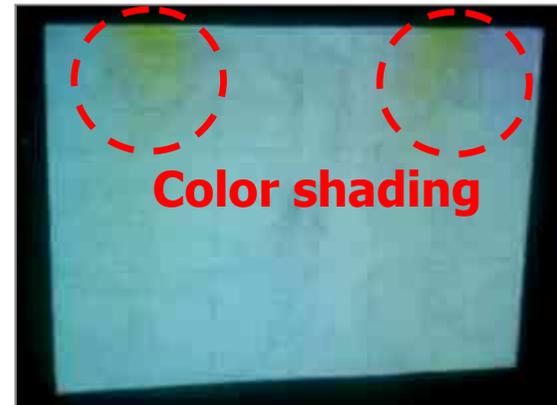
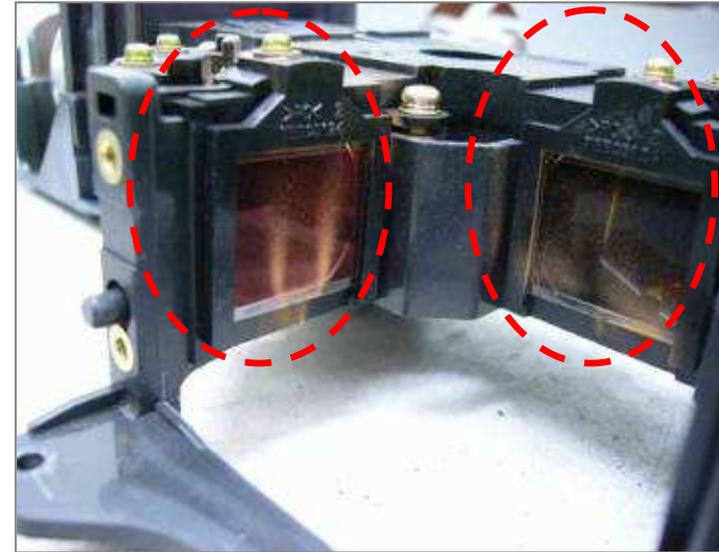
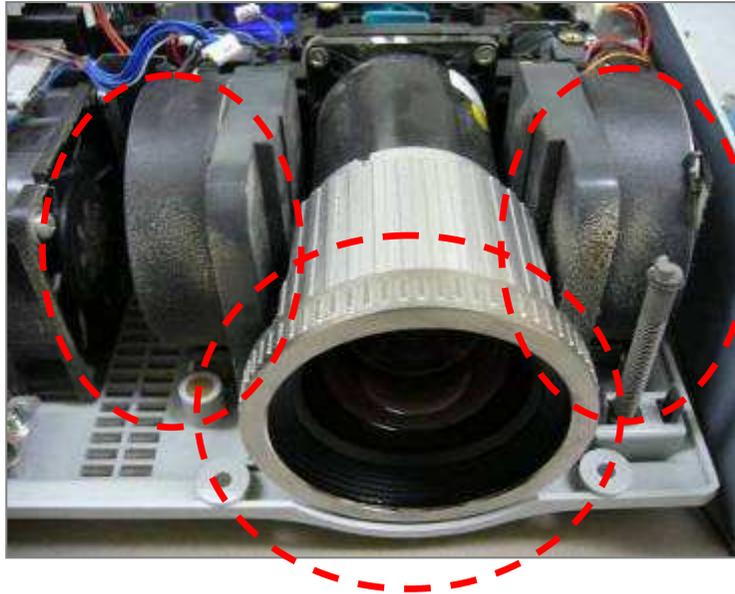
- 1) 3x LCD Panels for "Red" "Green" "Blue"
- 2) Each panel has 2x Polarizer : Total 6x Polarizer





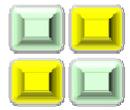
Long Lasting Brightness -Dust effect

Dust effects brightness, picture quality and causes over heating.



(Real Life Example) **Over 50% brightness deterioration after 500hrs**

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Long Lasting Brightness -Dust Resistance

Dust Resistant Technology

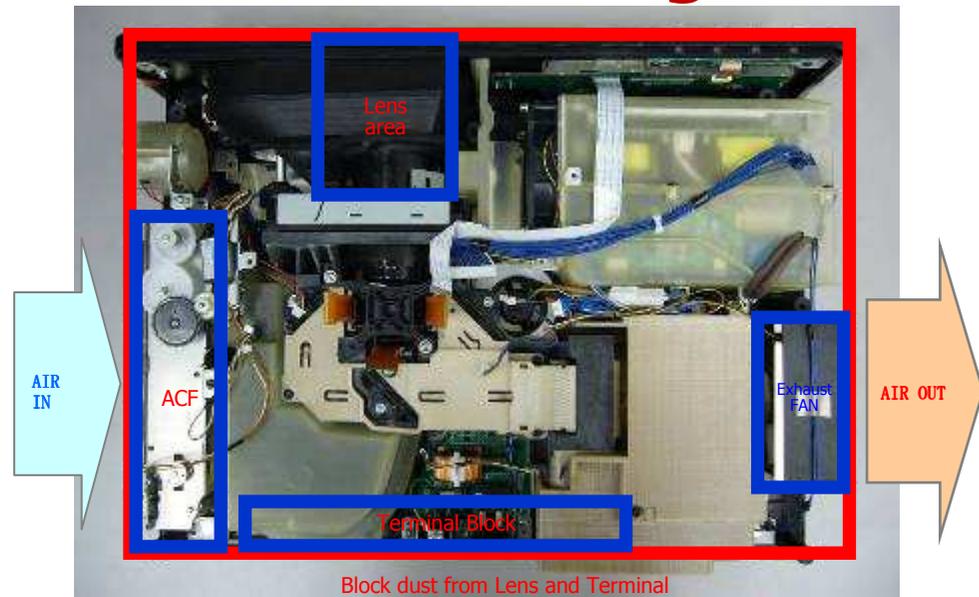
ACF (Auto Cleaning Filter)*



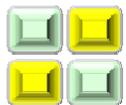
Automatically refreshes filter material to prevent dust from entering



Sealed design



Designed to shut out dust



Long Lasting Brightness -ACF

NEW

- No need to climb up to the ceiling to replace the filter
- New Auto Cleaning Filter (ACF) has a typical replacement cycle of over 10,000 hours



ACF Cartridge



Cleaning Brush
Rotates!

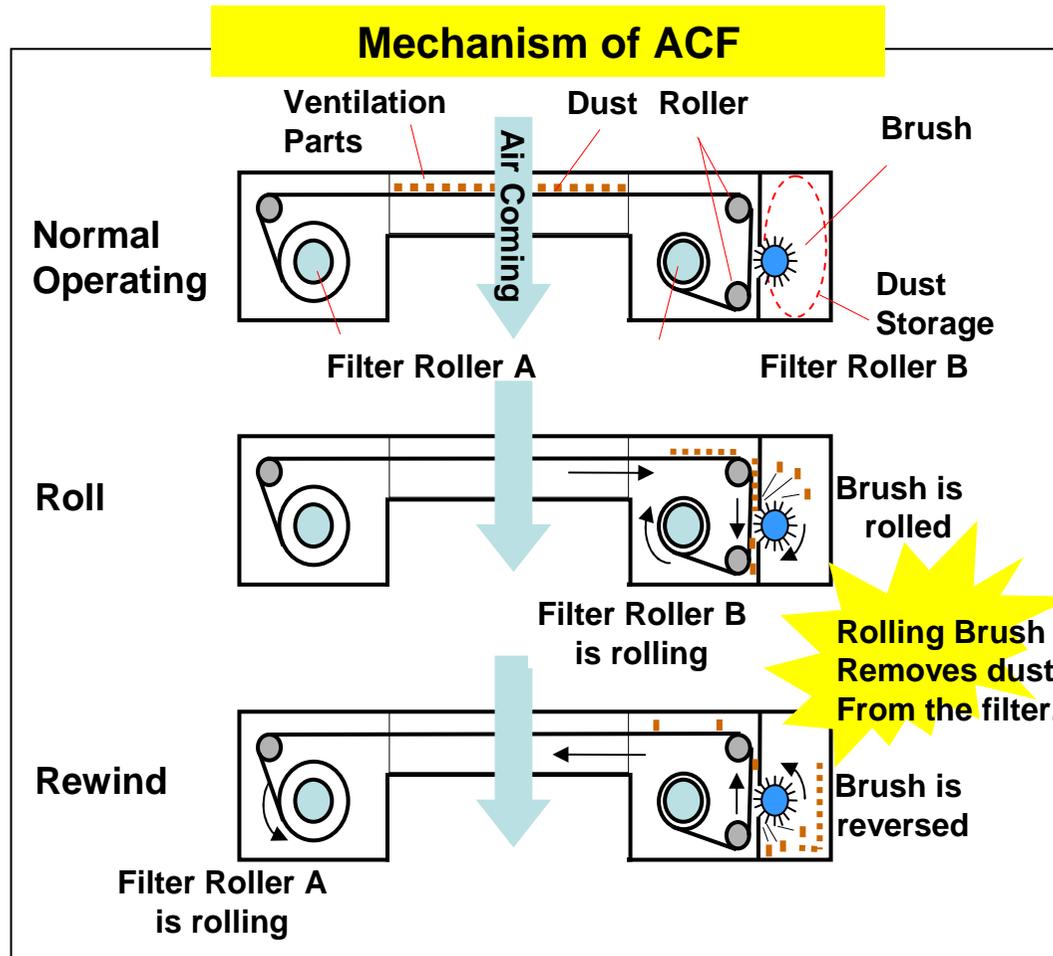


•Actual operation time changes depending on dust environment.

Long Lasting Brightness -ACF mechanism

10,000 hours replacement cycle with an additional built-in sensor for auto filter clogging detection.

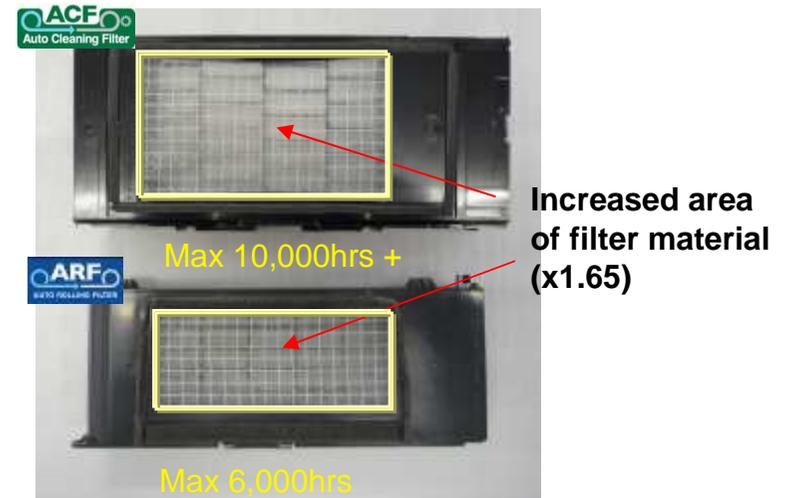
* The actual life time changes depending on the environment.



ACF Cartridge



ACF & ARF comparison



Long Lasting Brightness -Common lamp

Customers can use the same spare lamps.

Replacement lamp is the same for all F series. (No need to hold multiple stocks)

F100 series

3200 lumens XGA
3000 lumens WXGA



F200 series

3500 lumens XGA



F300 series

4000 lumens XGA
3500 lumens WXGA



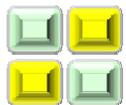
**Common
Lamp**

Option model is the same (ET-LAF100)



**Also easy to replace them.
(no need to take down the projector from the ceiling)**





Long Lasting Brightness -Summary

**Long Lasting Brightness realized
By the following 3 features.**

Long Lasting

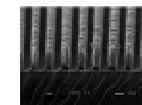
Easy Replacement

10,000H

Inorganic LCD Panel and polarizers



NEW



ACF (Auto Cleaning Filter)



NEW



5,000H

Original Lamp Drive System

Common lamp for F series



F300 Series Key Features



1. High Durability for long lasting brightness



2. Excellent Basic Features



3. Easy Installation and Maintenance





Excellent Basic Features -Daylight View

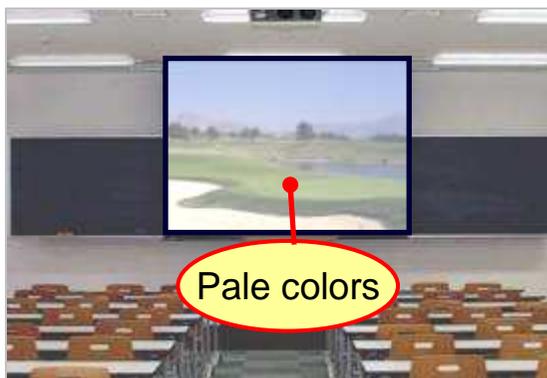
Sharp edges are achieved with the "Edge Enhancer Control" and "Gamma Curve Control".

Lights OFF Dark environment



No need to turn off the lights!

Lights ON Conventional Projector



VS.

Lights ON Day Light View Technology



Daylight View Technology gives you more Color perception.

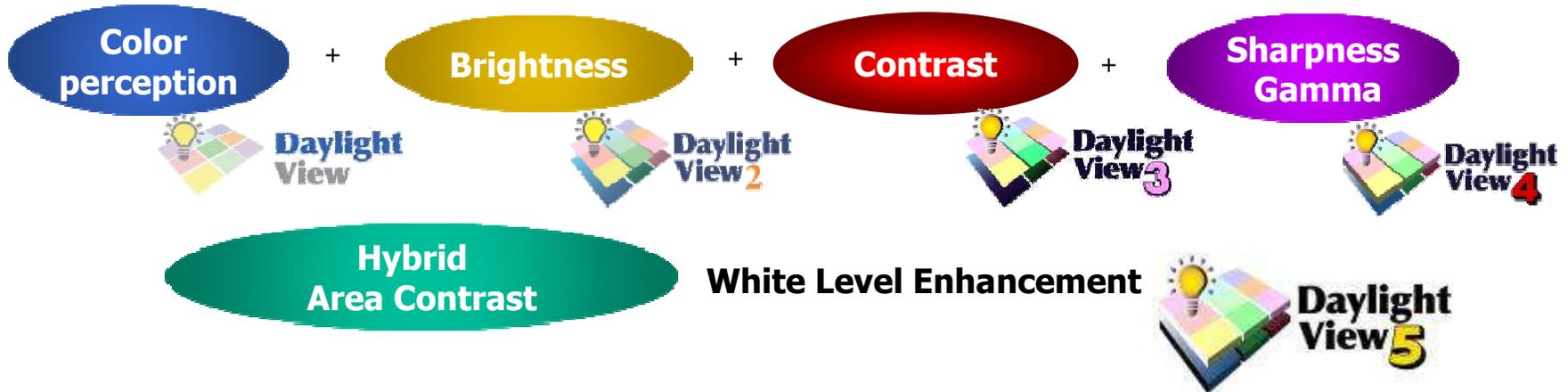
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Excellent Basic Features -Daylight View

Daylight View 5 function adds white level enhancement to increase visibility in lighted environments.

NEW



Original image



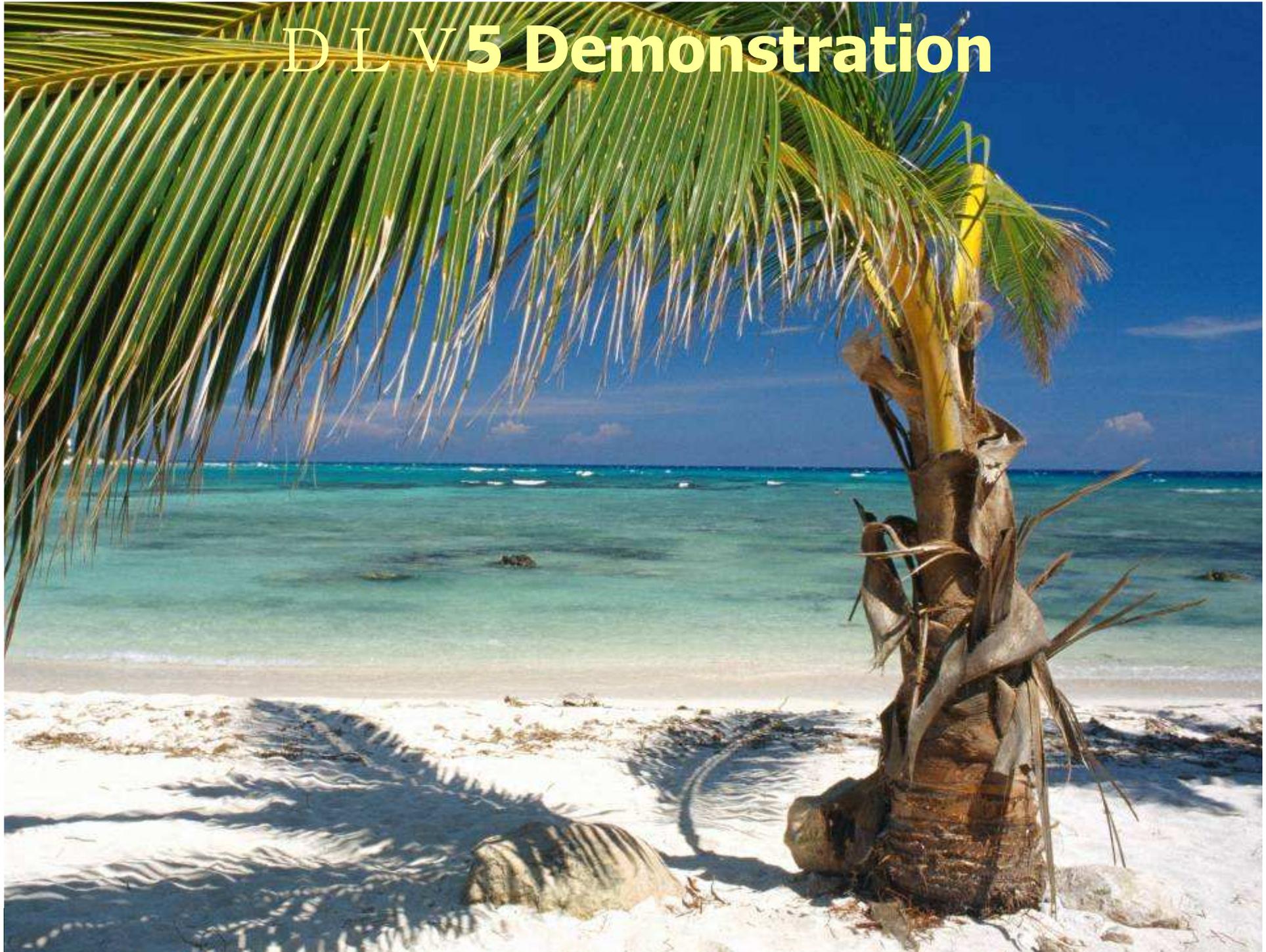
Daylight View 5



DLV5 Demonstration



DLV5 Demonstration





Excellent Basic Features -Why Wide?(PT-FW300NT/FW300)

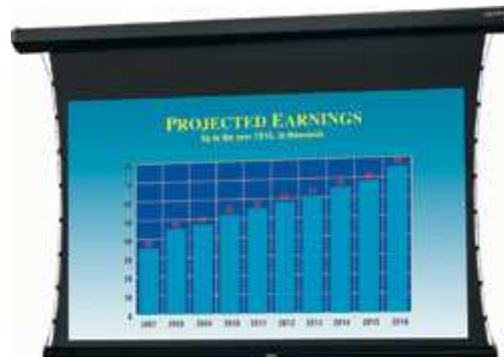
No question about it, WIDE has now become the standard aspect for all things AV.

Ever growing Market Requirements

- Personal Computers are now majority **WIDE**
- More and more presentations now including **WIDE** aspect Moving Pictures.
- Blu-ray is now the de-facto HD movie source.



(Reference) Wide model screens also increasing





Excellent Basic Features -Why Wide?(PT-FW300NT/FW300)

Wide aspect enables images to be effectively projected into a larger screen



By projecting a wide source to a 4:3 screen, only 75% of the screen is used



When the ceiling height is limited a wide screen gives a larger picture



Excellent Basic Features -Why Wide?(PT-FW300NT/FW300)

Side By Side Function

WIDE IMAGES FOR A WIDE RANGE OF APPLICATIONS



Wide applications *



- PC & PC
- PC & Visualizer
- PC & Wireless PC
- PC & DVD



* NO motion picture x 2

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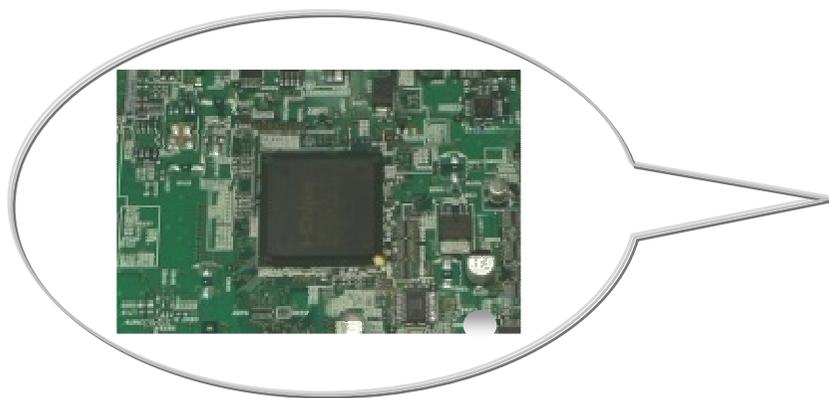


Excellent Basic Features -Picture quality

High Picture Quality

NEW

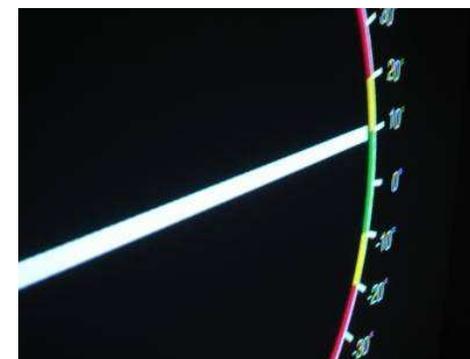
- High performance IP conversion for high quality image.
- 1080p input is now also available.



IP conversion circuit



Interlaced image



Progressive image



F300 Series Key Features



1. High Durability for long lasting brightness



2. Excellent Basic Features



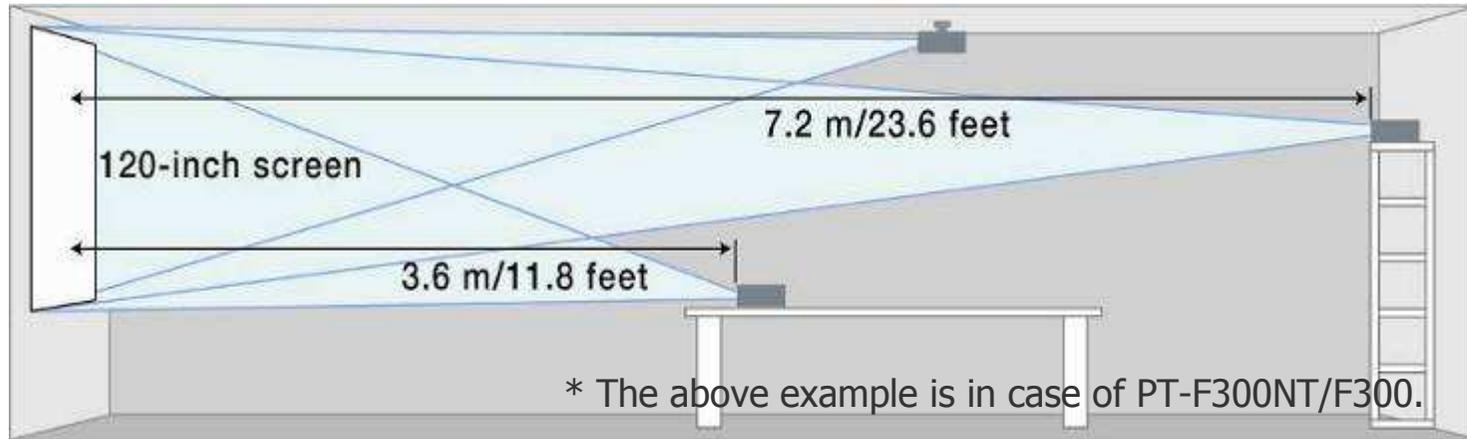
3. Easy Installation and Maintenance



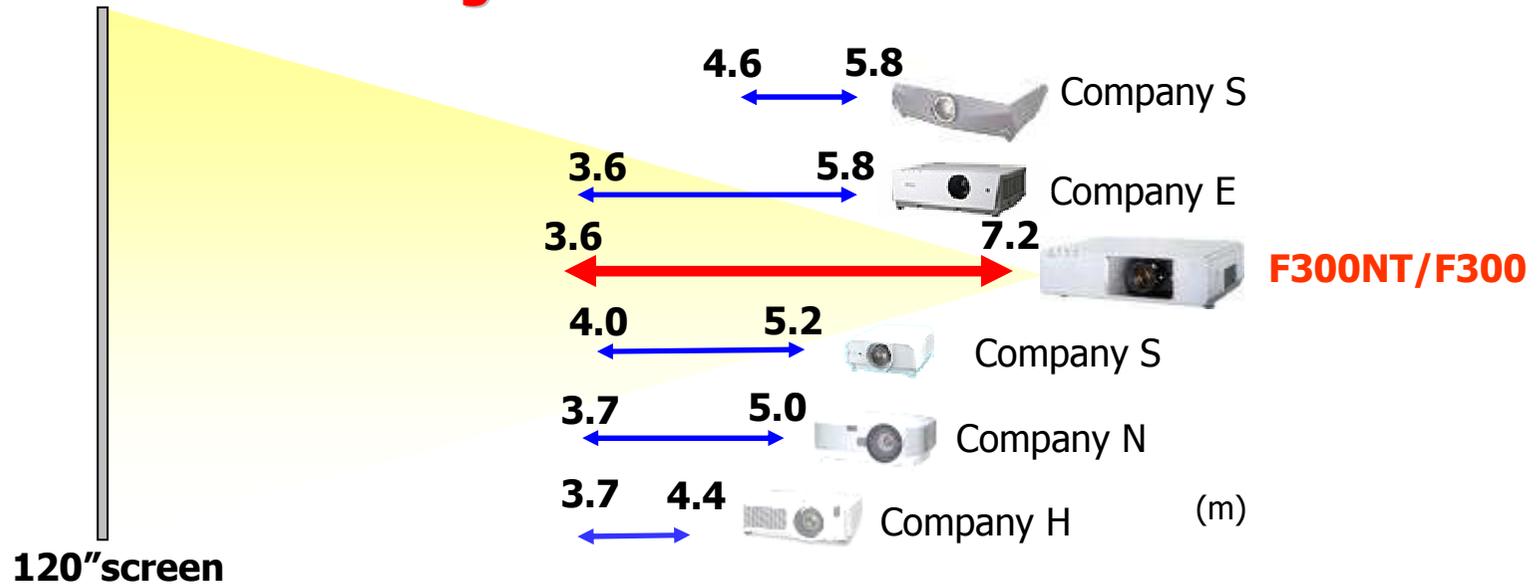


Installation Flexibility -2x zoom Lens shift

- F300 can be installed in various places



- F300 can cover whole range of throw ratios



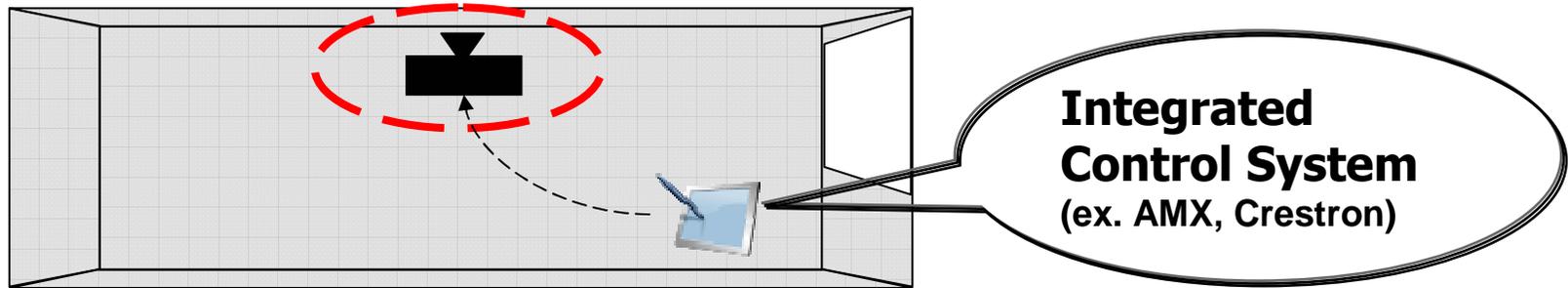
Same mounting position saves cost !



Installation Flexibility - Emulation function

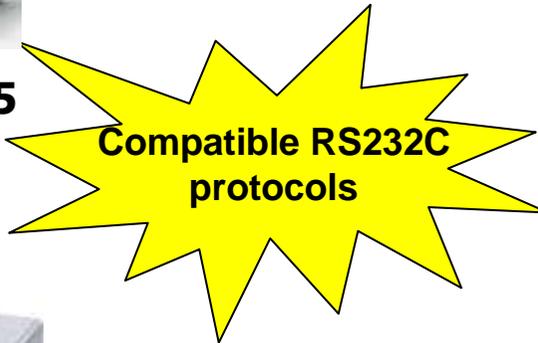
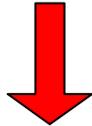
When replacing Panasonic to Panasonic projectors no need to upgrade the RS232C software!

NEW



Old Panasonic models

Ex. L735

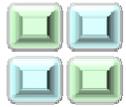


F300 series

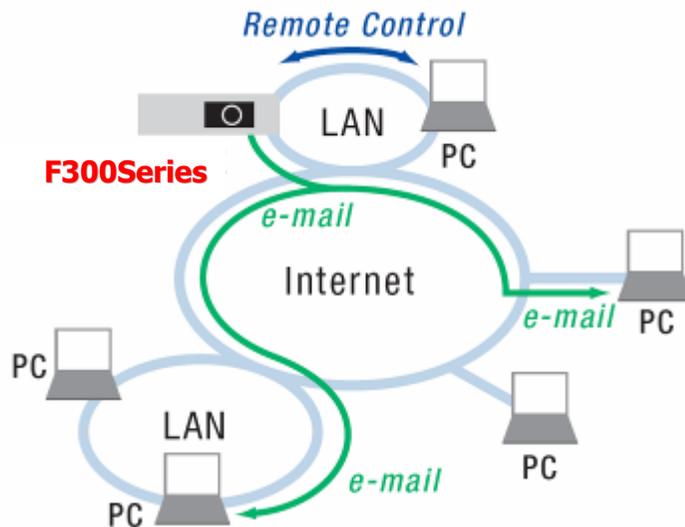
Use the "EMULATE" Function.

<input checked="" type="radio"/> DEFAULT
D3500
D4000
D/W5K series
L730
L780
L735
L785
LB/W80

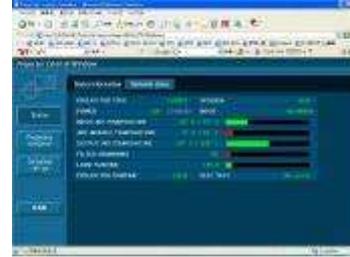
* Choose from the menu the projector you will replace



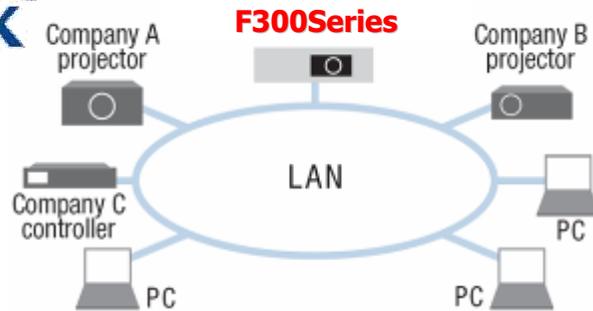
Installation Flexibility - Networking via LAN



- Web browser control
- E-mail status transmission



PJLink™



Multi Projector Monitoring & Control Software

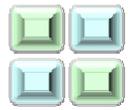
Enables the user to control and monitor multiple projectors via LAN. When problem occurs, there will be a notice given.



RS232C commands via LAN

Now possible to use RS232C commands over a LAN.

- Control multiple projectors via RS232C
- Easier to install LAN cables



Installation Flexibility -Wireless(PT-FW300NT/F300NT)

Wireless Manager ME 5.5

NEW

For Windows



For Macintosh



User-friendly Wireless Design

- Interactivity in the interface
- To Assign shortcut for optional function
- Prevent misconnection to other projector with the new “Projector Signal Map”

Projector Signal Map



- Let the user know which projector he/she will use
- Prevent misconnection to other projectors

* All the network operation can also be used with a wired LAN system.

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Installation Flexibility - Wireless (PT-FW300NT/F300NT)

Selective Area Transmission

Draw randomly on any area and project only that image



Multi Live Mode

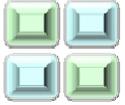
Up to 16 PCs can connect at once.



Multiple Projection

Multiple Projection to up to 8 Units





Installation Flexibility -Others

Other Valuable Features

•Direct Power Off

Turn off the projector immediately after use!
Built in capacitor provides power to cool the internal parts



•Security Features

Security Anchor
User Password protection & Control Panel Lock
Start Up Text Imposing

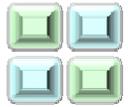


•Easy Operate Remote Control

- ◆2 LED receiver: wider transmission range
- ◆Function Button to assign shortcuts for frequently used 3 functions. (Aspect ratio change, Picture mode selection, Daylight View function)



PT-FW300NT



Installation Flexibility -New interfaces

Support Various Interfaces

NEW



- LAN(RJ-45) interface for all models
- DVI-D input added
- 1080p input compatibility
- “Audio Out in Standby mode” added

Installation Flexibility - Audio in Standby mode

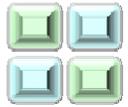
NEW

- You can control speaker systems connected to F300 even in stand-by mode. (Without turning the projector On)
- Use the remote control for volume control



* A feature requested by a school in the USA

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Installation Flexibility - Additional features

Menu Lock function for limited access

NEW

The image shows two screenshots of the PT-FW300NT menu. The first screenshot shows the main menu with the SECURITY section highlighted. The MENU LOCK option is currently set to OFF. An arrow points from this option to the word 'ON'. A second arrow points from 'ON' to a second screenshot showing the MENU LOCK PASSWORD screen. This screen has a keyboard overlay with letters, numbers, and symbols, and buttons for OK and CANCEL. Below the keyboard are labels for RETURN, ENTER, SELECT, and DELETE.

Administrator has FULL access
(all menu settings)

Users only with limited access
(remote controller)

Eco Friendly

Panasonic Uses Manufacturing Methods that Minimize the Impact on the Environment

Compliance with the RoHS*
Directive



Highly Advanced Chemical Substance
Test Instruments

Test room



Test equipment to
measure Chromium (Cr)



Atomic Test Equipment



Molecular Test Equipment

Lenses Contain a Minimal
Amount of Lead



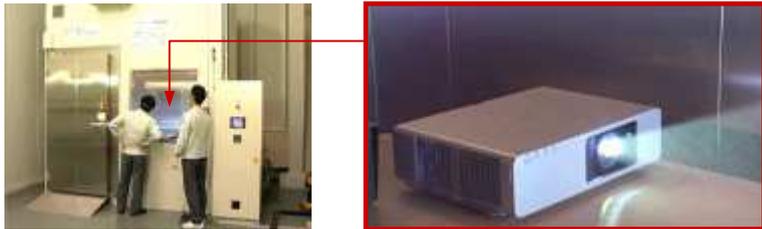
All Panasonic projector lenses pass
the criteria of the RoHS Directive.

* Restriction of Hazardous Substances (regulation in European Union)

Panasonic Projectors Provide Customers with Reliability and Stable Operation

Reliability Is Verified from a Variety of Angle

■ Dustproof Test



Dusty environments are simulated for a variety of world locations.

■ Drop Test



Dropping accidents during transportation are reproduced.

■ Earthquake Test



A safety test is conducted by reproducing an earthquake with an intensity of 6 (based on Richter magnitude scale measurements).

■ Lifetime Running Test



The lamp electrodes are analyzed by X-ray.

■ Environmental Testing



Operating tests are conducted in an environment that matches the customer's environment.
(Temperature, humidity, air pressure)

High-level Production Management is Conducted to Provide High-quality Products

Flexible production with advanced process technologies and cell production



We aim for the highest levels of performance and quality.

Improvements are quickly reflected, based on market opinion



Panasonic Projectors Have Attained ISO 9001 and ISO 14001 Certification

Our product quality and environmental management systems have attained ISO 9001 and ISO 14001 certification. Panasonic's corporate actions reflect this careful attention to quality and the environment, and this includes continuous improvements to our production stance.



Detailed Specifications

		PT-F300NT	PT-F300	PT-FW300NT	PT-FW300
Resolution		XGA(1024x768)		WXGA(1280x800)	
Brightness		4000 lm		3500 lm	
Air Filter		ACF(10,000h)			
Lamp replacement cycle		5000h (ET-LAF100)			
Daylight View		DLV5			
Wired LAN		Yes			
Wireless LAN		Yes	No	Yes	No
2x Zoom lens & lens Shift		Yes			
Terminals	Computer 1 In	HD D-sub15P			
	Computer 2 In /Computer 1 Out	HD D-sub15P			
	DVI-D In	DVI-D 24-pin			
	Video/S-Video	RCA pin /Mini Din4P			
	Audio In	M3,RCA pinx2			
	Audio Out	M3			
	Serial(RS-232C) In	D-sub9P			
	Remote In	D-sub9P			
LAN		RJ-45			
Dimensions		W 432 x H 128.5 x D 323 mm (17" x 5-1/16" x 12-23/32")			

Thank you very much!



Appendix

Side By Side Compatibility Matrix : NO motion picturex2

		Video	S-Video	DVI		Computer1		Computer2		Network	
				Motion picture	Still Image	Motion picture	Still Image	Motion picture	Still Image	Wireless LAN	Wired LAN
Video			No	No	Yes	No	Yes	No	Yes	Yes	Yes
S-Video		No		No	Yes	No	Yes	No	Yes	Yes	Yes
DVI	Motion picture	No	No			No	Yes	No	Yes	Yes	Yes
	Still Image	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Computer1	Motion picture	No	No	No	Yes			No	Yes	Yes	Yes
	Still Image	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes
Computer2	Motion picture	No	No	No	Yes	No	Yes			Yes	Yes
	Still Image	Yes	Yes	Yes	Yes	Yes	Yes			Yes	Yes
Network	Wireless LAN	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
	Wired LAN	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		