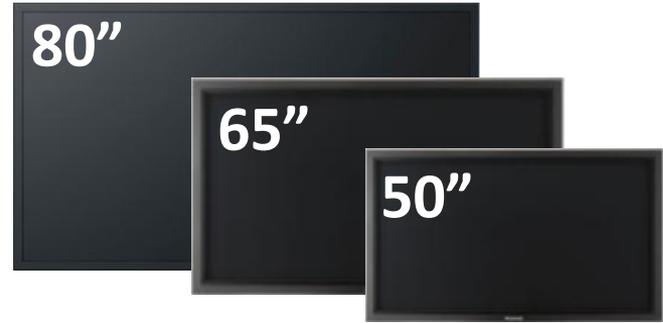


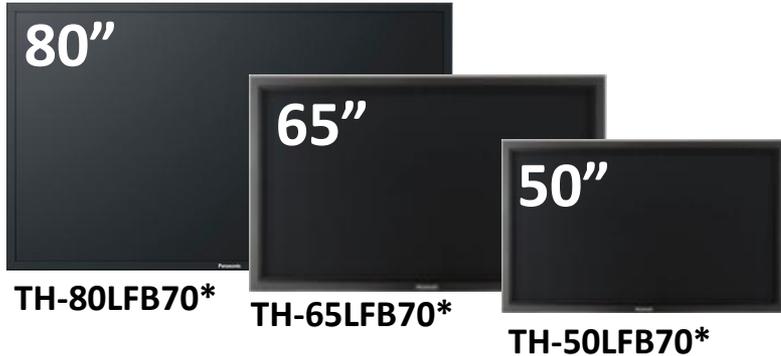
Panasonic

Multi-touch Screen LED Display LFB70 Series



Product Outline

Multi-touch Screen LED Display LFB70 Series



	TH-80LFB70	TH-65LFB70	TH-50LFB70
Screen Size	80-inch	65-inch	50-inch
Panel type	LCD VA Panel/E-LED		
Number of Pixels	H 1920 x V 1080 pixel		
Brightness	350 cd/m2		
Contrast Ratio	5,000:1	4,000:1	5,000:1
Response time	4ms (G to G)	6.5 ms (G to G)	6.5 ms (G to G)
Viewing angle	176 degree	178 degree	176 degree
Panel Life (hours)	Approx. 50,000	Approx. 30,000	Approx. 50,000
Touch panel	Infrared blocking detection method		
Protection glass	Yes/Anti-Glare		
Power Consumption	350W	(T.B.D.)	(T.B.D.)
Built-in Speaker	20W [10W+10W]	20W [10W+10W]	20W [10W+10W]



Product Feature

Quick and Easy to use

- **Multi-touch screen** ensures ease of use and quicker operation
- Smooth Workflow from Start to Finish with **Built in whiteboard function**
- Improved interactive features with **specialized software for Windows and Mac PC**

Total Solution Flexibility

- **Miracast™ compatible**, the next generation of wireless technology
- **Wireless display** from iOS, Windows, or Mac PC
- **USB Memory Viewer** for PC-less presentation
- **DIGITAL LINK** offers transmission of Video, Audio and Control Signals for up to 100 m [328.1 ft] with a Single LAN Cable

Variety of Useful Features

- Output equipped for a **secondary display** application
- Expand and Customize with **Function slot, "SLOT2.0"**
- Built in 20W (10W+10W) Speaker
- Full HD display incorporates an LED backlight for clear image
- **Durable front glass** with anti-reflection surface



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Quick and Easy to Use

LFB70

All-in-one-Concept “PC-less Display Solution”



***Smooth Workflow from Start to Finish
with simple touch operation and built in Whiteboard function***



Quick and Easy to use PC-less operation and annotation



BD player



Document camera



Android



iOS



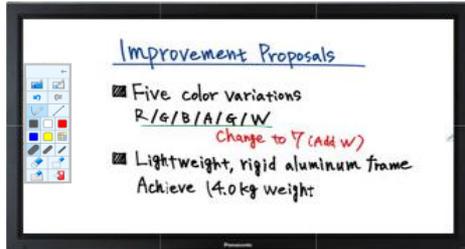
Windows



Mac

Compatible wireless display

Use as a Whiteboard



Write on the document



No need Remote Control

Up to 4 points without PC

Direct Annotation on various input source

No need to install any software! Draw and write directly on video, images and documents from various devices.

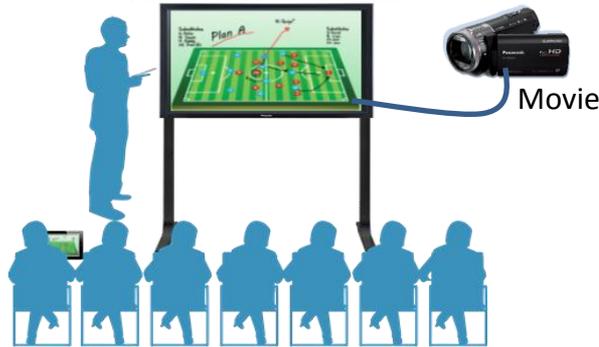


Various Applications

Playback movies from a camcorder

- ✓ Discuss sports strategy
- ✓ Video educations

Capture movie!



Playback photos & documents from a USB stick

- ✓ Annotation on images or movies
- ✓ PC-less presentation

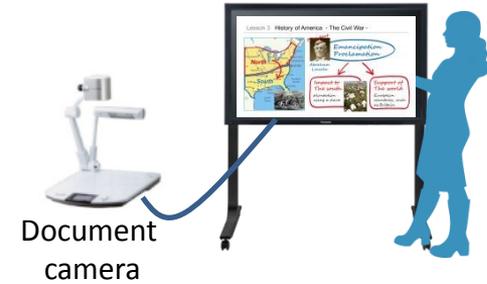
Zoom-in/Zoom-out!



Connect to a visualizer to display teaching materials

- ✓ Share documents or materials immediately

Direct annotation!



*Easy to capture movies! Use the Zoom In/Out function for effect!
Write comments on top of contents for more effective presentations -lessons*



Quick and Easy to use

LFB70

PC based Whiteboard software for Effective presentation

- **No-install version**, and can be start-up directly from external memory.
- Smooth operation with **up to 6 point touch**.

<Supported OS>

Windows(Whiteboard soft Ver.5)

Windows XP/Vista/7/8/8.1

Mac(Whiteboard soft Ver.1)

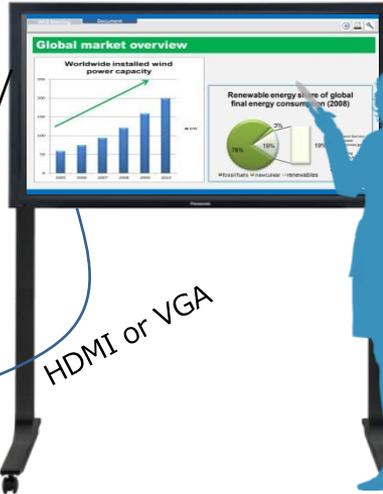
Mac OS X v10.6.8/10.7.5/10.8.5/11.9



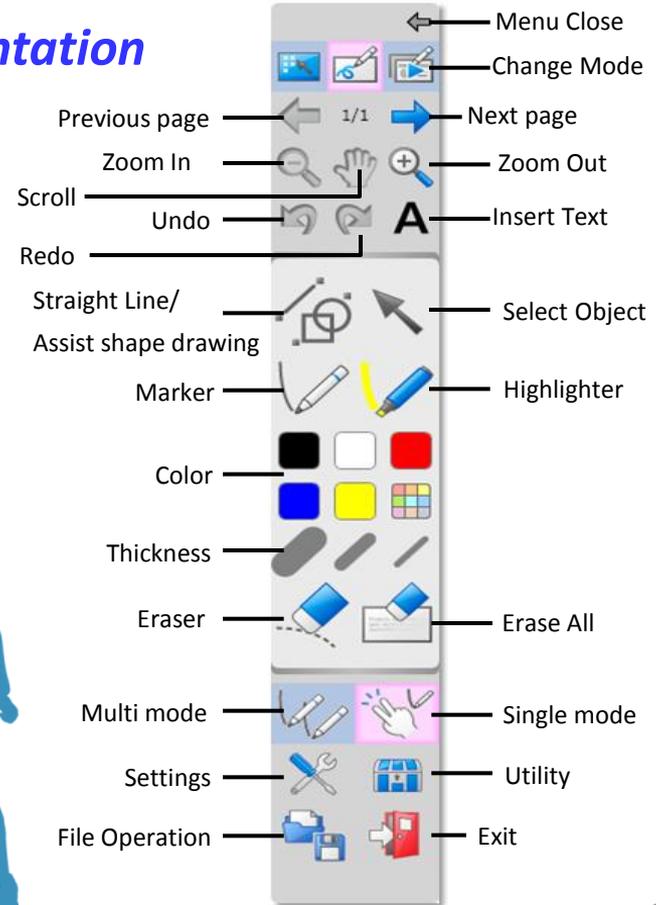
Whiteboard Software



USB cable



HDMI or VGA



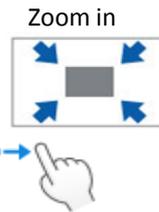
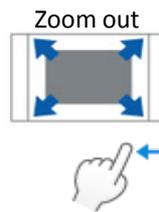
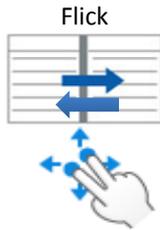
Quick and Easy to use

LFB70

Whiteboard software Ver.5" for Windows

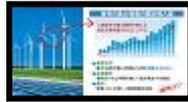


● gestures supported **NEW**



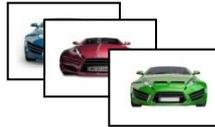
● Annotate, save and share

Save and share the meeting contents with annotation



● Insert up to 5 pictures

You can read the JPEG and BMP files and overwrite it



● Capture/ Recording

- Capture images and paste it,
- Possible to record including audio

● Smooth operation(Single mode) **NEW**

There is no need to switch between pen and fingertip operation.



● Multi mode **NEW**

It is possible to draw simultaneously up to 6 pens
Gestures don't work



● Presentation tool **NEW**

Zoom/Spotlight/shade/
fade-out maker



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Total Solution Flexibility

LFB70
LFC70

Panasonic's Wireless Solution



Simple and easy display from any device, any OS with variety of Panasonic Wireless Application



Total Solution Flexibility

Wireless and Network Capability

NEW

Miracast™

Seamless HD video and audio transmission from Miracast-certified devices

The first Miracast certified LCD display



Pre-installed
Intel WiDi ver 3.5 or above
Panasonic



Miracast compatible
Android devices ver 4.2 or above

- No need to install software or application
- HDCP 2.0 compliant
- High quality image (H.264)
- High quality audio (LPCM/AAC/AC3)

*Able to easily share contents from your devices
for effective meetings and lectures!!!*

List of Miracast certified devices:

<http://www.wi-fi.org/wi-fi-certified-miracast%E2%84%A2>

LFB70/LFC70 series



Total Solution Flexibility

Wireless and Network Capability

Panasonic Application



Panasonic Wireless Projector for iOS (V3.1.0)

More effective and interactive presentation at meetings or classes!!!

Note: Displays doesn't support for Android



iOS 7 compatible



documents



Marker function



Pointer function



Full screen display
for wide model



Motion Capture
display



One shot
display



Multi-Live mode



Cloud document
support



Download
Free of Charge



Total Solution Flexibility

Wireless and Network Capability

Panasonic Wireless Application

◆ Wireless Manager ME6.0.2



- **Windows 8 and Mac OSX V10.8** compatible
- **Faster and smoother** wireless display
- **Multi-display** from multiple PCs
- Able to display from **max. 8 displays** from single PC



Connects up to 16 pcs at once



Able to display up to 8 projectors from a single PC



Total Solution Flexibility

No need to carry PC thanks to **USB Memory Viewer function**



Simply insert USB memory device into the USB port!



New GUI for easier and simpler operation!!!

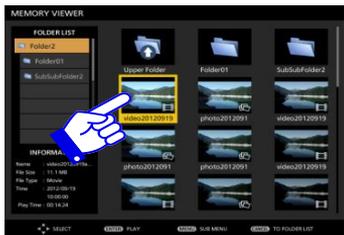
Supported Files format

- Video: MOV, AVI, MP4, MPG, WMV
- Still image: JPEG, BMP,

You can now play full HD video* files as well as still images from your USB memory stick!!!

Easy operation & Annotation by Touch UI

Select contents



Page operation
Zoom IN/Zoom OUT



Able to display function menu by touch operation



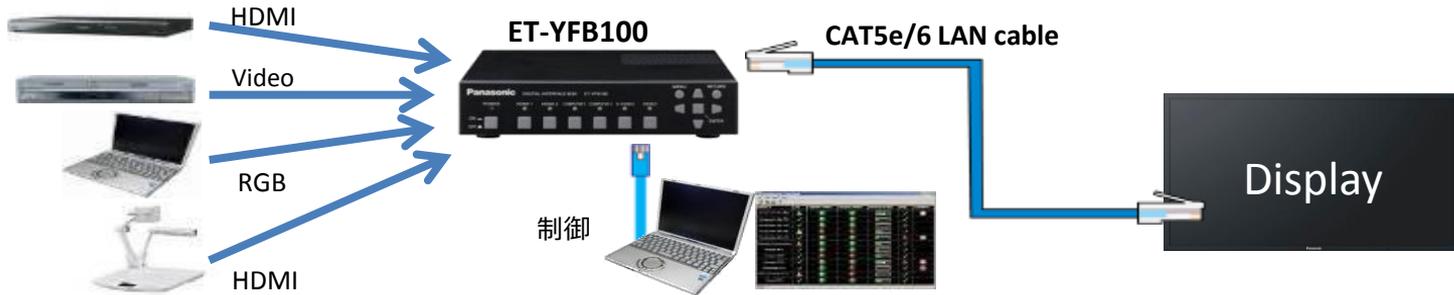
- Thumbnail display
- Annotation mode
- Capture mode
- Slide show start



Total Solution Flexibility

Single cable solution with Digital Interface Box (ET-YFB100)

- Single Line Transmission :Video(Analog/Digital) , Audio, Control Command
- Long distance wiring up to **100m (328ft)**



Cost Effective

Long Distance

High Quality

Connect with 3rd party* transmitter without receiver.



DigitalMedia
8G+



XTP
Systems



ENOVA
DVX



*3rd party's original function may not be available due to their original protocol



Product Feature

Quick and Easy to use

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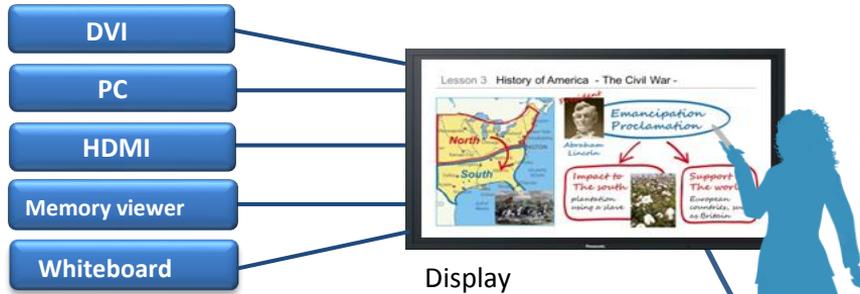


Variety of Useful Features

Secondary Display can be used at a large meeting room or a lecture hall through a VGA cable

- You can show contents with annotation and operation, like zoom-in/out via secondary display or projector.

*No HDCP supported signal



Projector, etc.



Not support	Panasonic APP
Miracast™	VIDEO
Component	DIGITAL LINK

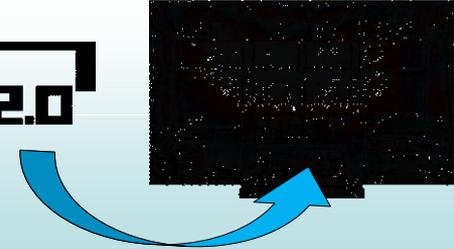
<Out put>
Terminal: D-sub15 pin
Format: 1920x1080 / 60p only



Variety of Useful Features

Functions can be added according to usage purpose to expand the range of applications.

SLOT 2.0



HD-SDI with Audio Terminal Board
TY-FB10HD



HD-SDI Terminal Board
TY-FB9HD



Dual Link HD-SDI Terminal Board
TY-FB11DHD



Dual HDMI Terminal Board
TY-FB10HMD



BNC Dual Video Terminal Board
TY-FB9BD



DVI-D Terminal Board
TY-FB11DD



Plug-in PC
PLUGTHA54

Variety of Useful Features

Able to project two images simultaneously with **picture-in-picture*2** mode

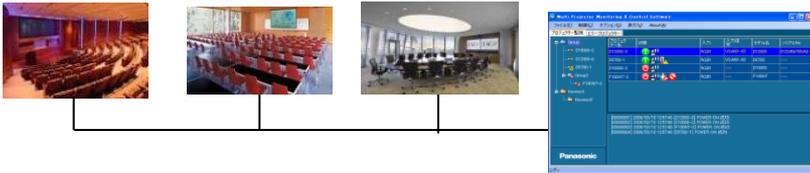


- *The Following combinations are not supported.
- Any input combination of Whiteboard, Miracast™ and Panasonic Wireless Manager.
 - Any input combination of HDMI, DIGITAL LINK, DVI, COMPONENT, or PC.
- *Memory Viewer is not supported.

Built-in **20W(10W+10W)**speaker



Able to check status of the display and remotely control display with **Control over LAN**



Compatible with 3rd parties' control software such as **Crestron Connected™, AMX DD, and PJ Link™**



Optional Accessory

31th Oct, 2013

	TH-80LFB70/LFC70	TH-65LFB70/LFC70	TH-50LFB70/LFC70			
Mobile Stand	 <p>TY-ST80LF70</p>	 <p>TY-ST65PB2</p>	 <p>TY-ST50PB2</p>			
Pedestal	 <p>TY-ST65P20</p>		 <p>TY-ST42P50</p>			
Wall-hanging bracket	 <p>TY-WK70PV50</p>	 <p>TY-WK65PR20</p>	 <p>TY-WK42PR20</p>  <p>TY-WK42PV20</p>			
Ceiling-hanging bracket	N/A	N/A	 <p>TY-CE42PS20</p>			
Function Board	     					
	<p>PLUG in PC PLUGTHA54(Windows7) *America & Europe only</p>	<p>HD-SDI TY-FB10HD (w/Audio) TY-FB9HD</p>	<p>Dual Link HD-SDI TY-FB11DHD</p>	<p>Dual HDMI TY-FB10HMD</p>	<p>Dual Video TY-FB9BD</p>	<p>DVI-D TY-FB11DD</p>

LFB70/PB2/PB1 Spec Comparison

2013/11/1

		LFB70	PB2	PB1
Panel	Device	LCD(LED)	PDP	PDP
	Size Line-up	80/65/50	65/50	103/85
	Contrast Ratio	5,000:1	5,000,000:1	2,000,000:1
Interactivity	Touch Technology	IR Blocking	Plasma Light Detection	Plasma Light Detection
	Touch Points	6	4	4
	Finger Touch	Yes	Yes (Optional)	Yes (Optional)
	Pen	Stylus Pen	Dedicated Electronic Pen	Dedicated Electronic Pen
	Pen Identification	No	Yes	Yes
	Remote less control	Yes	No	No
	Wireless Manager ME	Yes	Yes (Optional)	Yes (Optional)
Network connectivity	MIRACAST	Yes	No	No
	DIGITALLINK	Yes	No	No
	E-mail sending	Yes	No	No
	Memory Viewer	Yes	No	No
	Picture in Picture	Yes	Yes	Yes
	Secondary Display	Yes	No	No
Others	Function Slot (SLOT2.0)	Yes	Yes	Yes
	Built-in Speaker	Yes	Yes	Yes
	Portrait Installation	No	Yes	Yes



TENTATIVE

Competitor Comparison

		LFB70	SHARP AQUOS BOARD	NEC	Samsung	Philips
Panel	Size Line-up	80"/65"/50"	70"/60"	65"/42"	65"/46"/40" (TS) 82"/70"/32"(TSn)	65"/55"/42"
Interactivity	Touch Technology	IR Blocking	70/60 : IR Blocking	IR Camera	IR	IR
	Touch Points	Up to 6	Up tp 10	Up to 4	?	2(42")
	Finger Touch	Yes	Yes	Yes	Yes	Yes
	Pen	Stylus Pen (Included)	Electronic or Stylus	Stylus Pen	Stylus Pen	-
	Driver Installation	No required	Required	?	?	Required
	PC-less Interactivity	Yes	Yes	No	No ?	No
	PC-less Email	Yes	Under confirmation	No	No	No
	Remote-control less	Yes	Yes	No	No	No
	PC Interactive Software (Windows)	Yes (Ver.5)	Yes	Yes (eBeam)	Yes	No
	PC Interactive Software (Mac)	Yes	No	No	Yes	No
Annotation on external input	Yes	No	No	No	No	
Network connectivity	Wireless Display	PC/iOS/Android	Optional	No	No	No
	Viewer	Yes (USB) (PNG/JPG, AVI/WMV/MPG/MP4/MOV)	Yes (PDF/PPT/Excel)	No	No	No
	Input signal automatic detection	Yes	(Yes)	Yes	No	No
	HD BaseT	Digital Link	No	No	No	No
	Picture in Picture	Yes	Yes	Yes	Yes	Yes
	Display out	Yes (RGB)	Yes (DP)	Yes (DVI)	Yes	Yes
Others	Function Slot (SLOT2.0)	Yes	No (Only PC)	Open Pluggable (OPS)	No	No
	Built-in Speakers	Yes	Yes	Yes	Yes	Yes



Specification

	TH-80LFB70 / TH-80LFC70	TH-65LFB70 / TH-65LFC70	TH-50LFB70 / TH-50LFC70
Screen Size/Panel type	80-inch/Edge-LED	65-inch/Edge-LED	50-inch/Edge-LED
Effective Display area(WxH)	1771 x 996 mm	1,428 x 803 mm	1,095 x 616 mm
Number of Pixels [HxV]	1920x1080 pixel	1920x1080 pixel	1920x1080 pixel
Brightness	350 cd/m2	350 cd/m2	350 cd/m2
Contrast Ratio	5,000:1	4,000:1	5,000:1
Response time	4ms (Gray to Gray)	6.5ms(G to G)	6.5 ms (G to G)
Viewing angle	176 degree	178 degree	176 degree
Panel Life	Approx. 50,000 hours	Approx. 50,000 hours	Approx. 30,000 hours
Touch panel(LFB only)	Infrared blocking detection method		
Protection glass Thickness	Approx. 4 mm/Anti-Glare	Approx.3.5 mm/Anti-Glare	Approx. 2.5 mm/Anti-Glare
Terminal	HDMI IN(2), DVI-D IN, Video IN, Component/RGB IN, PC IN, Audio IN(2), VGA OUT, LAN control, RS232C IN, USB Memory Viewer Terminal, External Speaker out		
Power Requirements	U model:110-127V AC, 60Hz E/W model:220-240V AC, 50/60Hz	U model:110-127V AC, 60Hz E/W model:220-240V AC, 50/60Hz	U model:110-127V AC, 60Hz E/W model:220-240V AC, 50/60Hz
Power Consumption	(T.B.D.)	(T.B.D.)	(T.B.D.)
Built-in Speaker	20W [10W+10W]	20W [10W+10W]	20W [10W+10W]
External Speaker	8Ω, 20W [10W+10W] (10%THD)	8Ω, 20W [10W+10W] (10%THD)	6Ω, 16W [8W+8W] (10%THD)
Dimensions(WxHxD)	1,868x1,093x104 mm (LFB) 73.6" x 43.1" x 4.1"(LFB)	1517 x 892 x 106 mm(T.B.D.) 59.8" x 35.2" x 4.2"	1,185 x 705 x 103 mm 46.7" x 27.8" x 4.1"(T.B.D.)
Weight	Approx. 84kg (183.0 lbs.)	(TBD)	(TBD)

