# AFOLUX Touch Monitor

7"~19" AFOLUX Multimedia Touch Monitor

The innovative yet elegant AFOLUX Multimedia monitors with built in speakers are easily implemented in diverse applications including motor vehicles, surveillance devices and digital signage solutions.

Five Video Inputs   **Remote Contorl for OSD Functions**   **Built-in Speakers**   **Touch Screen**   **IP 64 Compliant**   **Stand**

Ambient Light Sensor   **PIP Function**   **smart OSD**

Features

- 7"~19" TFT LCD Monitor
- Elegant design with durable and light plastic construction
- Multiple video inputs are suitable for more applications
- Built-in speakers
- Ambient light sensor (ALS) detects ambient light for automated screen adjustments to optimize viewing. (For AFL-15M/17M/19M only)

- IEI patent smartOSD function
- Remote control for OSD functions
- Picture-in-Picture (PIP) function
- Supports panel, wall, rack or VESA stand mounting (Optional)
- Supports RS-232 or USB touch screen panel (Optional)
- IP 64 compliant plastic front panel
- RoHS compliant
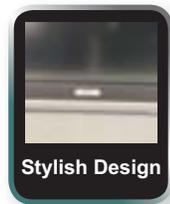
Stylish Design

Stylish Design

The clean and refreshingly simple looks of the AFOLUX monitors provide an aesthetic interface for public area applications (e.g. ATMs) and industrial solutions (e.g. operator terminal).

Light Weight Construction

Light Weight Construction

Light weight construction ensures the AFOLUX can be rack mounted, panel mounted and mounted on a VESA stand.
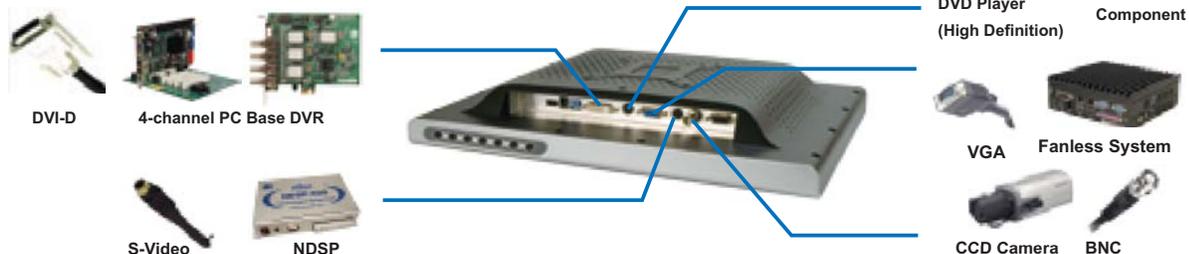
Only Half Weight of DM Series

DM-150GS 6kgs

AFL-15M 3.2kgs

High Quality Audio Built-in

High Quality Audio Built-in

Two built-in speakers deliver dual 1.5/3 watts sound for your multimedia enjoyment.

5 Video Inputs

5 Video Inputs

The AFL-15M/17M/19M have multiple video inputs through common video connectors including VGA, DVI-D, S-Video, component and BNC video input interfaces.
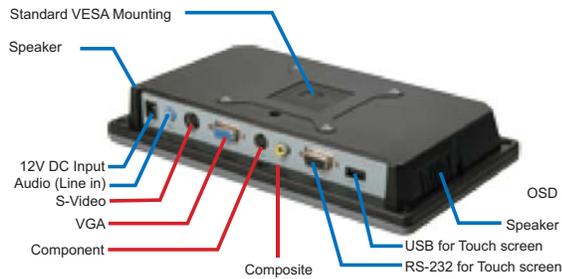The 5-in-1 system connects to a wide range of devices and most electronic appliances.
(The AFL-07M/08M/10M/12M has a 4-in-1 system with VGA,S-Video, Component and Composite)

DVI-D   **4-channel PC Base DVR**

S-Video   **NDSP**

DVD Player (High Definition)   **Component**

VGA   **Fanless System**

CCD Camera   **BNC**

1 Application Server Platform

2 Single Board Computer

3 IBX Series POS PC

4 AFOLUX POS Panel PC

5 Video Capture Card

6 KAMIO RISC

7 IOVU Open HMI

8 VITO Universal Controller

9 DINO BLADE

10 **LCD Product Series**

11 Embedded System

12 Industrial Computer Chassis

13 Power Supply

14 Peripherals

AFL-07M/08M/10M/12M
4-in-1 Multiple Video Input System

Standard VESA Mounting
Speaker
12V DC Input
Audio (Line in)
S-Video
VGA
Component
Composite
USB for Touch screen
RS-232 for Touch screen
Speaker

AFL-15M/17M/19M
5-in-1 Multiple Video Input System (DVI-D Added)

Standard VESA mounting
Speaker
speaker
OSD KEY PAD
USB for Touch screen
12V DC IN
Audio (Line in)
DVI-D
Component
RS-232 for Touch screen
BNC Connector
S-Video
VGA
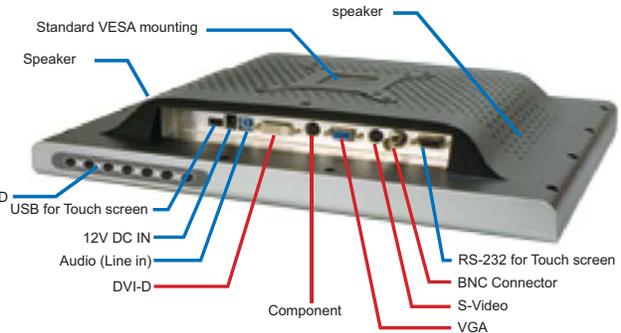
PIP Functions

PIP Functions

PIP enables a second video/image to be viewed in a small on-screen window. Images from other sources including DVR and DVD devices can also be viewed in the PIP window.

The small onscreen window can be easily resized and moved to a specified onscreen location. Alternatively, "picture-outside-picture" (POP) can be implemented by dividing the screen into two equally sized portions with two different outputs being displayed on either screen.

Main Source Setting
PIP Zone

PIP Settings :
- Three sizes including small, medium and large
- Four positions including upper left, lower left, upper right and lower right.
- Independent PIP widow color controls (brightness, contrast, hue and saturation)
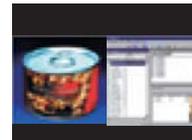- A blend function makes the PIP transparent

Picture In Picture
(Video on Video)

Side by Side
(Video & Video)

Picture In Picture
(Video on Graphics)

Side by Side
(Video & Graphics)

Main screen and sub screen can't display BNC/S-Video or VGA/YPbPr inputs at the same time

Full OSD Functions

Full OSD Functions below the monitor

Integrated OSD functions under the front panel enables convenient monitor configuration. Image, display ,PIP, color and system configurations can all be set with the hidden OSD.
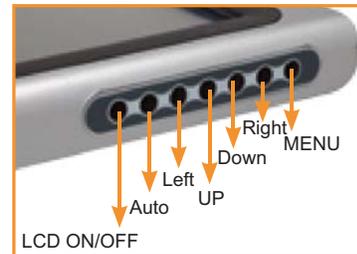
Image
System
Color
PIP
Display

Right
MENU
Down
Left
UP
Auto
LCD ON/OFF

OSD Keypad is designed for AFL-15M/17M/19M

OSD Lock Secures Your Settings
Prevents changes to monitor settings and maintains an optimized image.
(For R11 revision models and above)

AFOLUX All-in-one Monitor Selection Guide

Note: The smartOSD function is supported by revision 11 models and above

Model	AFL-07M-R11	AFL-08MH-R11	AFL-10M-R11	AFL-12M-R11	AFL-15M-R11	AFL-17M-R11	AFL-19M-R11
Display Size	7"	8.4"	10.4"	12.1"	15"	17"	19"
Max Resolution	800 x 480 (WVGA)	800 x 600 (SVGA)	800 x 600 (SVGA)	1024 x 768 (XGA)	1024 x 768 (XGA)	1280 x 1024 (SXGA)	1280 x 1024 (SXGA)
Brightness (cd/m²)	350	450	400	450	350	300	300
Contrast Ratio	400:1	500:1	500:1	700:1	400:1	800:1	800:1
LCD Color	262K	262K	16.2M	262K	262K	16.7M	16.7M
Pixel Pitch (mm)	0.1905(H) x 0.1905(V)	0.213(H) x 0.213(V)	0.264(H) x 0.264(V)	0.240(H) x 0.240(V)	0.297(H) x 0.297(V)	0.264(H) x 0.264(V)	0.294(H) x 0.294(V)
Viewing Angle (H/V)	140º/100º	120º/100º	120° / 100°	160º/160º	120º/100º	160º/160º	
Backlight MTBF (Hrs)	50000	50000					
Input Video Signal Connector	1. Composite (NTSC/PAL) 2. YPbPr 3. S-Video 4. VGA				1. BNC Connector (NTSC/PAL) 2. YPbPr 3. S-Video 4. VGA 5. DVI		
Audio In	AMP 1.5W + AMP 1.5W (internal speaker)				AMP 3W + AMP 3W (internal speaker)		
Extension	IR Sensor (Remote Control)				1. Ambient Light Sensor 2. IR Sensor (Remote Control)		
Construction Front Panel	ABS and PC Plastic front frame						
Contruction Chassis	Aluminum Chassis						
Power Adapter	36W				60W		
On Screen Display (OSD)	Remote Control for OSD Functions				1. OSD Keypad below the Front Panel 2. Remote Control for OSD Functions		
Smart OSD	Yes						
User's Controls	Image (Brightness, Contrast ,Sharpness), Display (Auto Adjust, Phase , Clock,Display Control) PIP(Pip On/Off, Pip Input Select, Pip Size, Pip Position ,Pip Color Controls, Blend) Color (Auto Color, Color Tmperature, sRGB) System (Audio, Factory Reset , Information, Input select, Misc)				OSD Buttons: Power, Left, Up, Down, Right ,Menu OSD:Image (Brightness, Contrast ,Sharpness), Display (Auto Adjust, Phase, Clock,Display Control) PIP(Pip On/Off, Pip Input Select, Pip Size, Pip Position ,Pip Color Controls, Blend) Color (Auto Color, Color Tmperature, sRGB) System(Audio, Factory Reset , Information, Input select, Misc)		
Mounting	Panel / Wall mounting (VESA 75 x 75mm)		Panel / Wall mounting (VESA 75 x 75mm / 100 x 100mm)		Wall mounting (VESA 100 x 100mm)		
Dimension (WxHxD) (mm)	226 x 140 x 40.18	233.86 x 183.86 x 41.09	276 x 227 x 50.7	304 x 246 x 49.5	393.06 x 308.06 x 61	428 x 350 x 65	469.94 x 382.46 x 67
Operation Temperature (°C)	0~+50°C						
Net Weight (Kg)	0.88	1.14	1.33	2.12	3.2	5.0	5.6
Safety / EMC	CE / FCC / UL / CCC						
Front Panel Protection	IP 64 Compliant						

Industrial Grade Compliance

VESA Mounting Standards

The AFL-M series has four mounting holes compliant with the VESA mounting standard (75mm x 75mm/100mm x 100mm) on the rear panel for stand mounting and other mounting methods.

Stand KIT

Easy Stand

STAND-A08 (for 7" and 8.4")
(Support up to 5 kg)
STAND-A12 (for 10.4" and 12.1")
(Support up to 5 kg)
STAND-A19 (for 15" ,17" and 19")
(Support up to 7.5 kg)

STAND-A08   STAND-A12   STAND-A19   Forward & Back Tilt

Comfortable Stand

STAND-B19 (for 15",17" and 19")
(Support up to 7.3 kg)

STAND-B19   Height Adjustment(13 cm)   Right/Left Pan (270°)
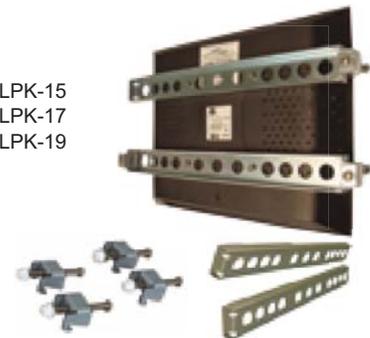
Portrait/Landscape   Forward & Back Tilt(+25°/-5°)

Panel mount kits

AFLPK-08 (for 7" and 8.4")
AFLPK-12 (for 10.4" and 12.1")

AFLPK-15
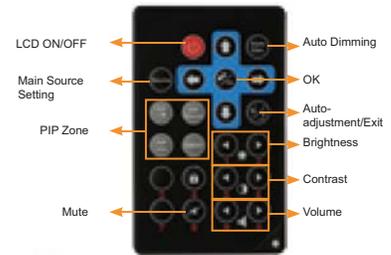AFLPK-17
AFLPK-19

Wall mount kits

AFLWK-12
AFLWK-19

Remote Control for OSD Functions

Remote Control for OSD Functions

Hot-keys on the remote control include PIP zone, main source setting, auto-dimming, brightness, contrast and volume. Remote control hot-keys ensure easy configuration of the AFOLUX.

LCD ON/OFF
Main Source Setting
PIP Zone
Mute

Auto Dimming
OK
Auto-adjustment/Exit
Brightness
Contrast
Volume

Ambient Light Sensor

Ambient Light Sensor

The AFOLUX 15M, 17M and 19M models with a mbient light sensor ensures your monitor performs optimally in all lighting conditions.
The ambient ALS can be turned on or off according to the users preference and the operational environment.
Some of the AFL benefits include:

■ Reduces cost of operation by reducing the power usage
■ Extends backlight life
■ Provides comfortable viewing

Higher Ambient Illuminance

Lower Ambient Illuminance

ALS is placed on the front side ,where there is an opening for light

Superior Image Quality–Functions

Advanced patented imaging technology on the AFOLUX LCD controller ensures the IEI AFOLUX has superior video quality.

Multi-function Touch Monitors

The AFOLUX multimedia touch monitors with the advanced LCD monitor controller supports resolutions up to and including WUXGA. The monitors are mid-range cost effective LCD TVs with PC and HDTV connectivity.

High Definition Multi-function Touch Monitor

With VGA/YPbPr video input, the AFOLUX multimedia monitors can accept 1080i high resolution images.
Advanced patented imaging technology on the AFOLUX LCD controller includes Response Time Compensation (RTC) and Directional Correlation Deinterlacing (DCDi) and ensures the IEI AFOLUX has superior video image quality.

Response Time Compensation

Motion blur in motion videos is prevented by RTC technology that enables the LCDs to respond as fast as CRTs.
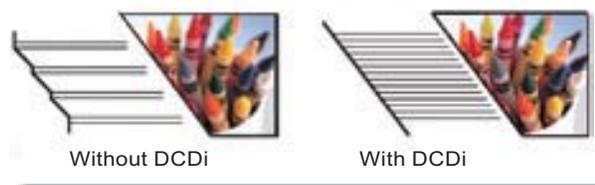
DCDi Technology

Jagged edges on diagonal lines caused by interpolation are eliminated with the DCDi video mode algorithm.

Without RTC
With RTC

Without DCDi
With DCDi

Industrial Grade Compliance

The touch panel with PIP assists production management

Industrial Grade Compliance
IP 64 Compliant

The IP 64 compliant AFL-xxM series front panel guarantees the highest level of ingress protection against dust and low pressure water spray. The AFOLUX monitors can with stand any industrial environment where dust and drizzle is encountered.

RS-232 or USB Touch Panel

AFL-xxM series supports 4/5 wire resistive touch screen via an RS-232 or a USB interface. The optional touch panel can withstand the demanding requirements of harsh industrial environments and outdoor applications such as POS, kiosks, retail, transportation, gaming, and surveillance.

BNC Second Source-Surveillance Image

VGA Main Source-Production Management Software

Best Choices for Multimedia Applications

60 W DC/DC converter module can be easily mounted in the vehicle equipment to supply DC power source.

IDD-930160-KIT(Optional)

AFL-07M/08M/10M Transportation

Small size industrial –grade LCDs are ideal for in-vehicle systems in trucks, public transport vehicles, and police cars. AFL in-vehicle LCDs used in car navigation systems and as monitors for rear-seat entertainment systems are able to withstand vibrations caused by the motion of the vehicle.

- **Wide Screen for AFL-07M**
- **Multiple Video Input**
- **Internal Speakers (1.5W/1.5W)**
- **Remote Control for OSD Functions**

Car   Bus   Train

AFL-12M/15M Retail Solution

Our touch solutions provide reliable interaction making them ideal for use in retail applications. The touch function will speed up the point of sale transactions , and self-service viable.

- **Internal Speakers (1.5W/1.5W)**
- **Superior Image Quality**
- **Multiple Video Input**
- **Remote Control for OSD Functions**

POS   Outdoor KIOSK   KIOSK

AFL-17M/19M Advertising and Gaming Platform

The AFOLUX monitors deliver superior picture quality and 160°/160° wide viewing angles make it the best platform for advertising and gaming.

- **160°/160° Wide Viewing Angles**
- **Remote Control for OSD Functions**
- **Superior Image Quality**
- **Internal Speakers (3W/3W)**
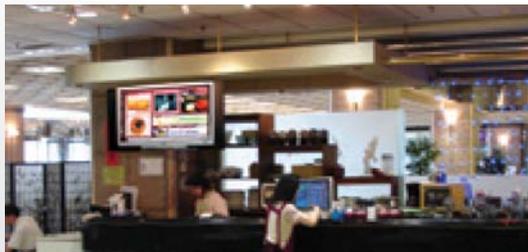
Digital Signage   Gaming Machine

Options

|	AFL-07M	AFL-08MH	AFL-10M	AFL-12M	AFL-15M	AFL-17M	AFL-19M
Panel Mounting kits	AFLPK-08		AFLPK-12		AFLPK-15	AFLPK-17	AFLPK-19
Wall Mounting kits	AFLWK-12				AFLWK-19		
Rack Mounting Kits	AFLRK-07	AFLRK-08	AFLRK-10	AFLRK-12	AFLRK-15	AFLRK-17	N/A
LCD Monitor Stand	STAND-A08/STAND-100-RS/STAND-150-RS		STAND-A12/STAND-100-RS/STAND-150-RS		STAND-A19/STAND-B19/STAND-210-RS		

Packing List

Item	Part No.	Remark
Power Cord	32000-000002-RS	Length:180cm
VGA Cable	32000-036200-RS	Length:180cm
Audio Cable	32000-036500-RS	Length:180cm
Component Cable	32000-083700-RS	Length:10cm
Component Extend Cable	32000-088100-RS	Length:170cm
DVI Cable	32000-086600-RS	Length:180cm for AFL-15M / 17M / 19M
36W Power Adapter	63000-FSP0361AD101C-RS	for AFL-07M / 08M / 10M / 12M
60W Power Adapter	63000-FSP0601AD101C-RS	for AFL-15M / 17M / 19M
User's Manual CD-ROM	7B000-000087-RS	
Remote Control	7Z000-8T00322ICP01G-RS	
Touch Pen	XTR104-0002-RS	for Touch Screen Models
Touch Screen RS-232 Cable	32000-000098-RS	Length:180cm for Touch Screen Models
Touch screen USB cable	32000-045801-RS	Length: 150cm for touch screen models

Remote Control Touch Pen
Component Extend Cable Component Cable

Optional 60W DC/DC Converter Module Spec (P/N:IDD-930160-KIT)

Input Voltage	9~30VDC
Input Current	Max. 8A at 6VDC
Output	12V@5A
Max. Total Output	60W
Performance Characteristics	Noise & ±Ripple:<320mV, Line Regulation: <120mV , Load Regulation: <120mV
Transient toggle rate	250Hz (50% duty ratio)
Transient current step	From 0% to 50% and 50% to 100% of max current
Efficiency	typ. 95% (Vin=12V, 80% of full load)
Dimensions	42mm x 103mm x 31mm
Mounting Kit	12mm x 80mm
Cable Length	180cm
Operating Temperature	-40°C~85°C

IDD-930160-KIT
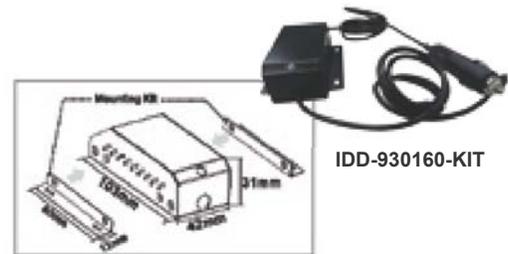
Ordering Information Note: The smartOSD function is supported by revision 11 models and above

AFL-07M/T-R-R11	7" 350cd/m² WVGA LCD monitor, plastic front panel, gray color, with 7" RS-232 and USB touch screen, RoHS
AFL-08MH/T-R-R11	8.4" 450cd/m² SVGA LCD monitor, plastic front panel, gray color, with 8.4" RS-232 and USB touch screen, RoHS
AFL-10M/T-R-R11	10.4" 400cd/m² SVGA LCD monitor, plastic front panel, gray color, with 10.4" RS-232 and USB touch screen, RoHS
AFL-12M/T-R-R11	12.1" 450cd/m² XGA LCD monitor, plastic front panel, gray color, with 12.1" RS-232 and USB touch screen, RoHS
AFL-15M/T-R-R11	15" 350cd/m² XGA LCD monitor, plastic front panel, gray color, with 15" RS-232 touch screen, RoHS
AFL-15M-USB/T-R-R11	15" 350cd/m² XGA LCD monitor, plastic front panel, gray color, with 15" USB touch screen, RoHS
AFL-17M/T-R-R11	17" 300cd/m² SXGA LCD monitor, plastic front panel, gray color,with 17" RS-232 touch screen, RoHS
AFL-17M-USB/T-R-R11	17" 300cd/m² SXGA LCD monitor, plastic front panel, gray color,with 17" USB touch screen, RoHS
AFL-19M/T-R-R11	19" 300cd/m² SXGA LCD monitor, plastic front panel, gray color, with 19" RS-232 touch screen, RoHS
AFL-19M-USB/T-R-R11	19" 300cd/m² SXGA LCD monitor, plastic front panel, gray color, with 19" USB touch screen, RoHS