

Philips Affiniti 50 Ultrasound Machine - Refurbished

SKU: MP11705



Categories: [New](#)



Description

Overview

Application training for the Philips Affiniti 50

KPI's on-staff sonographer can provide onsite applications training or remote training via video conference at a set price plus travel costs. A pre-recorded video training course is included in the sale, lease or rental of the Philips Affiniti 50 from KPI ultrasound.

Philips Affiniti 50 Service options

Free technical support is available from KPI during installation and over the course of the standard limited warranty. Technical support is available after the warranty period at an hourly cost per issue.

Philips Affiniti 50 Maintenance

KPI recommends the use of a surge protector along with a dedicated power outlet. Probes should be disinfected after every use with a disinfectant wipe proven not to damage the lens (KPI recommends SonoWipes for this.) KPI recommends one PM visit (preventative maintenance) every year.

Philips Affiniti 50 Dimensions & Weight

Height: (adjustable, maximum) 1626 mm (64 in), (minimum) 1422 mm (56 in) Width: 572 mm (22.5 in) Depth: 983 mm (38.7 in) Weight: (no peripherals) 83.6 kg (184.4 lbs.), approx. 325 lbs. with packaging

Affiniti 50 Specifications

Powerful distributed multi-core processing architecture Up to 4,718,592 total digital channels Image presentation: Depth from 1 cm to 30 cm (transducer-dependent) Up to 280 dB digital broadband acoustic beamforming

Philips Affiniti 50 Electrical power

Voltage: 100V-240V Frequency 50/60 Hz Power consumption:

Revisions

Philips Affiniti 50 Revisions

Philips first launched the Affiniti 70 in 2014 as their new high-end shared service ultrasound machine, replacing the older HD15. As of 2016, the Affiniti 70 has not yet had a major revision, and only minor software updates have been released. The Affiniti series has had one of the most trouble-free launches in Philips history, being built from what was learned in the first year of fixes for the premium Epiq line.

All revisions of the Philips Affiniti 50

Philips Affiniti 50 (Rev 1.0)

Common configurations of the Affiniti 50

- **Philips Affiniti 50 with 3 transducers**
This is a General imaging (GI) and Women's health configuration C6-2 Convex C9-4v Endovaginal L12-4 Linear
- **Philips Affiniti 70 with 3 transducers**
This is a Shared Service Cardiac – GI configuration S4-2 Cardiac Sector L12-4 Linear

Probes

All Philips Affiniti 50 Probes / Transducers

Endocavitary: C9-4v [4 – 9 MHz] 128 elements, 10mmR, 181° field of view Endocavitary: C10-4ec [4 – 10 MHz] 128 elements, 8mmR, 147° field of view Bi-plane Endocavitary: BP10-5ec [5 – 10 MHz] 96 elements, 8.8mmR, 150° field of view PureWave Endocavitary: C10-3v [3 – 10 MHz] 128 elements, 11.5mmR, 163° field of view Convex: C6-2 [2 – 6 MHz] 128 elements, 10mmR, 63.7° field of view Convex: C8-5 [5 – 8 MHz] 128 elements, 14mmR, 122° field of view 4D Convex: V6-2 [2 – 6 MHz] 192 elements, 55mmR, 100° x 85° volume field of view 4D Endocavitary: 3D9-3v [3 – 9 MHz] 128 elements, 26.1mm, 156° x 85° volume field of view 4D Linear: VL13-5 [5 – 13 MHz] 192 elements, 38.4mm, 38 mm x 30° volume field of view Linear: L18-5 [5 – 18 MHz] 288 elements, 38.9mm, ultra-fine pitch Intraoperative Linear: L15-7io [7 – 15 MHz] 128 elements, 23mm, Linear: L12-5 50 [5 – 12 MHz] 256 elements, 50mm, fine pitch Linear: L12-3 [3 – 12 MHz] 160 elements, 38mm, fine angle steering Linear: L12-4 [4 – 12 MHz] 128 elements, 34mm, fine angle steering Cardiac Sector: S4-2 [2 – 4 MHz] 80 elements, 5mm PureWave Cardiac Sector: S5-1 [1 – 5 MHz] 80 elements, 20.3mm Pediatric Cardiac Sector: S8-3 [3 – 8 MHz] 96 elements, 15.4mm Neonatal Cardiac Sector: S12-4 [4 – 12 MHz] 96 elements, 9.78mm Pediatric TEE transesophageal: S7-3t [3 – 7 MHz] 48 elements, 5mm xMATRIX TEE transesophageal: X7-2t [2 – 7 MHz] 2,500 elements Pedoff (CW Transducer): D5cwc [5 MHz] Deep venous and arterial applications, non-imaging Pedoff (CW Transducer): D2cwc [2 MHz] Adult cardiology applications, non-imaging Pedoff (PW Transducer): D2td [2 MHz] Transcranial Doppler applications, non-

Affiniti 50 Transducers: 4D & Matrix

The Philips Affiniti 50 supports four advanced single crystal PureWave transducers; the [1 – 5 MHz] C5-1 convex, the [2 – 9 MHz] C9-2 convex meant for pediatric work, the [3 – 10 MHz] C10-3v endovaginal, and the [1 – 5 MHz] S5-1 cardiac sector probe. The Affiniti 70 also supports two transesophageal or TEE probes, the [3 – 7 MHz] S7-3t pediatric and the [2 – 7 MHz] X7-2t adult. The X7-2t is an xMatrix transducer but on the Affiniti 70 it only functions in 2D mode. The Epiq line and the CX50 however can use the full xPlane and 4D functions of the X7-2t. The Philips Affiniti 70 also has the [5 – 10 MHz] biplane endocavitary probe that allows scanning in 2 planes without moving the transducer. Another specialty transducer is the [7 – 15 MHz] L15-7io intraoperative linear, also known as a “hockey stick” probe for its distinctive shape that allows it to fit into tight surgical applications or small parts scanning.

Popular Philips Affiniti 50 Probes

The popular probes for the Affiniti 50 are several thousand dollars less expensive than the popular single crystal probes of the Affiniti 70. The [2 – 6 MHz] C6-2 is the most popular convex probe for the Affiniti 50 while the [4 – 9 MHz] C9-4v is the most popular endovaginal. The [4 – 12 MHz] L12-4 is the most popular linear on the Affiniti 50 because it is affordable, and strong in both vascular and MSK imaging. For cardiac scanning the [2 – 4 MHz] S4-2 sector probe is the most commonly selected.

Competitors

How the Affiniti 50 compares with other Philips systems

The Philips Affiniti 50 was launched in 2014 as the successor to the immensely popular HD11xe. The Affiniti 50 improves upon the HD11xe with a 21.5” monitor compared to 17”, a touchscreen for navigation, improved processor speed and more transducers. The Affiniti 50 was designed from the Epiq series and looks very similar to them, being only smaller in the size of the lower body of the ultrasound machine. The monitor, touchscreen and keyboard are identical to the Epiq line of systems. The Affiniti 70 is positioned just above the Affiniti 50 in price and includes Shearwave elastography, single crystal probes, and an articulated monitor arm. The ClearVue 850 is positioned just below the Affiniti 50 in price and features but uses a completely different probe set and was built from a completely different, more economical platform.

Philips Affiniti 70 vs Affiniti 50

The Affiniti 50 and 70 were launched at the same time and look virtually identical on the outside, with only a minor color difference in the main body. The Affiniti 70 is positioned just above the Affiniti 50 in price and sacrifices the PureWave transducers and ShearWave elastography, another difference is the L12-3 high quality linear transducer that is not available on Affiniti 50. If you are willing to pay for the more expensive single crystal probes or the shearwave elastography then the Affiniti 70 is an excellent deal, but if not then the Philips Affiniti 50 is the most feature-rich midrange ultrasound machine available.

Other brands competing with the Affiniti 70

The closest competitor to the Philips Affiniti 50 from GE would be the Logiq P6 premium, as both are shared service ultrasound machines capable of all applications. However the Voluson P8, and Vivid S5 would be similar competitors in women’s health, and cardiac respectively. The Affiniti 50 feels superior to the Logiq P6 in speed, resolution, monitor size and it has a touchscreen. The Affiniti 50 menus seem cleaner and more modern as well. The H60 would be the closest competitor from Samsung, though its strength is much more lopsided in 4D and women’s health with only minor support for cardiac and general imaging compared to the more robust Affiniti 50. Most importantly the Affiniti 50 has noticeably better image quality than competing systems from other brands. The Siemens X300 PE offers a few probe choices such as ICE that are not available on the Affiniti 50, and offers the same breadth of applications support as the Affiniti 50, but does not have the touchscreen, large monitor or quite the same feature depth as the Affiniti 50.

Features

Tissue Harmonic Imaging : Yes

Spatial Compounding(=CrossXbeam) : Yes

Speckle Reduction (=SRI) : Yes

Auto Image Opt(B mode) : Yes

Auto Image Opt(Doppler): Yes

Write Zoom: Yes

Triplex Mode: Yes

Needle Enhancement or Needle Recognition :Yes

Auto NT Measurement (=Sono NT) :Yes

Auto Follicle 2D Measurement:Yes

Auto Follicle 3D Measurement:No

Auto IMT:Yes

Auto IMT (Real Time):No

Automated B/M/D Measurement:Yes

Automated LH Measurement(Automated Function Imaging(AFI), Cardiac Motion Quantification(CMQ), or Auto EF(Ejection Fraction):Yes

Live Dual (B/BC) Mode:Yes

SmartExam or Scan Assistant:Yes

Independent Steer & Lockable Wheels:Yes

Fusion:No

Raw Data File:Yes

Flexible Report:Yes

Barcode Reader:Yes

Gel Warmer:No

Transducers

Convex (1~6Mhz):Yes

Convex (2~9Mhz):No

Single Crystal Convex (1~6Mhz):No

Single Crystal Convex (2~9Mhz):No

2D Array 3D Convex (1~6Mhz):Yes

Micro Convex (5~8Mhz):Yes

Single Crystal Endocavity_Straight Type (3~10Mhz):No

Endocavity_Curved Type (5~8Mhz):Yes

3D Convex (2~6Mhz):Yes

3D Convex Light Weight (2~7Mhz):No

3D Endocavity (3~10Mhz):Yes

3D Micro Convex (3~9Mhz):No

3D Linear (4~18Mhz):Yes

Linear (>14Mhz):Yes

Linear (3~12Mhz):Yes

Linear (Yes

Single Crystal Linear (>14Mhz):No

Single Crystal Linear (3~12Mhz):No

Single Crystal Linear (No

Linear 50mm:Yes

Linear 25mm:No

Hockey stick (Yes

Hockey stick (>13Mhz):Yes

T or L shape Intra Operative:Yes

Phased Array Adult (1~5Mhz):Yes

Yes
Imaging Modes
2D, M mode:Yes
M-color Flow Mode:Yes
Anatomical M-mode:Yes
Trapezoidal Mode:Yes
Color, Power Angio, Pulse Wave Doppler:Yes
Bi-directional Power (=HD FLOW):Yes
SCW Doppler:Yes
Tissue Doppler(Velocity) Imaging:Yes
Freehand 3D:Yes
Live 3/4D OB/GYN:Yes
HD Live:No
STIC (Spatio-Temporal Image Correlation):Yes
Live 3D Echo:No
Stress Echo:Yes
Strain and Strain Rate (Cardiac):Yes
B Flow:No
Panoramic Imaging (=Logiq view):Yes
Contrast Imaging - Cardiac:Yes
Contrast Imaging - General Imaging:Yes
Strain-based Elastography:Yes
Shear Wave Elastography:No
Applications
Abdominal:Yes
Women's Health Care (GYN & Breast):Yes
OB:Yes
Fetal Echo:Yes
Vascular:Yes
TCD(Transcranial):Yes
Small Parts (Breast, Thyroid, Testis...):Yes
MSK/Anesthesiology:Yes
Pediatrics:Yes
Urology (Renal, Prostate...):Yes
Echocardiography_Adult:Yes
Interventional Cardiology:Yes
Echocardiography_Pediatric:Yes
Echocardiography_Neonate:Yes
Stress Echocardiography:Yes
Transesophageal Echo_Adult:Yes
Transesophageal Echo_Pediatric:Yes
Internal Medicine w/ Shared Service:Yes
Surgery:Yes
Interventional Radiology:Yes
Contrast Imaging _ General Imaging (Low MI):Yes
Contrast Imaging _ Cardiac (High or Low MI): Yes
Bowel Imaging:Yes
Strain Elastography:Yes
Shear Wave Elastography:No