The Philips Sparq Ultrasound system is a mobile ultrasound system equipped with a simple user interface that is designed for non-traditional ultrasound users. The control panel has a sealed, easy-to-clean tempered glass surface. To reduce unnecessary interaction with the system, the system controls dynamically change, showing only those keys and automation features that are compatible with the exam being performed. Sparq is simply a revolutionary solution with an intuitive design built around our customers' workflow needs.

Control Panel and user interface:

- Easy-to-learn graphical user interface
- Simplicity mode, a one-touch solution that presents only the controls that are used most often
- Transducer centerline and onscreen centerline provides visual guidance for out of plane needle guidance procedures
- Sealed, easy to clean, tempered glass surface
- 17 inch high resolution color monitor mounted on fully articulating arm with tilt and swivel
- Alphanumeric QWERTY keyboard
- 3 TGCs
- 5 USB flash drives on system
- Internal DVD RW drive
- iSCAN control for 2D/Doppler/color Doppler automatic optimization
- AutoSCAN control for 2D continuous and automatic optimization
- Quick Keys
- Transducer selection and tissue specific imaging control
- Sleep Mode allows the user to save battery power when not in use

System Architecture:

- Next generation all-digital compact broadband beamformer with pulse shaping capability.
- High resolution A/D conversion with 170 dB full-time system dynamic range.
- 20,000 digitally-processed channels.
- Supports PureWave technology.
- Multi-variate harmonic imaging including pulse inversion processing.
- One-touch 2D optimization with broadband frequency compounding.
- SonoCT real-time beam-steered compound imaging.
- Advanced XRES adaptive image processing.
- iSCAN one-touch intelligent optimization for 2D and Doppler (if Doppler is purchased).
- AutoSCAN-No touch continuous intelligent optimization for 2D.

- Active native data manipulation.
- Simplicity Mode-one-touch simplified control panel.
- Advanced Imaging Control-allows the flexibility to turn on advanced controls for imaging.

Imaging modes:

- 2D
- M-mode (real-time M-mode)
- Anatomical M-mode
- Color M-mode
- Color Power Angio (CPA) imaging
- Color compare mode
- Dual mode
- 2D and flow optimization signal processing
- Intelligent Doppler – automatically maintains pre-selected 0/60 degree flow angle
- Live compare
- Tissue harmonic imaging (THI)
- High definition write zoom
- Trapezoidal imaging
- Pulse inversion harmonic imaging
- Active native data (allows manipulation of raw image data)
- Optional - Pulsed wave (PW) Doppler
- Optional - Continuous wave (CW) Doppler
- Optional - Pulsed wave tissue/color Doppler imaging
- Optional - Needle visualization – enhances viewing of the needle to assist the user in guiding the needle to the target anatomy

Optional Transducers:
The Sparq ultrasound system offers a wide complement of transducers, designed and optimized for an extensive range of exams and automatic parameter optimization of each transducer for exam type through Tissue Specific Imaging (TSI) software

- L12-4 broadband linear array
- S4-2 broadband sector array
- C6-2 broadband curved array
- C9-4v broadband curved array
- X7-2t xMATRIX array with PureWave technology

Optional Maintenance and Serviceability
- Remote Access for Expedient Clinical and Technical Support
- Flexible Service Agreements
- Clinical Application and Educational Support
- Scheduled Preventative Maintenance and System Optimization
- Utilization Reports provide data to help manage ultrasound assets

Clinical Education

Implementation Onsite Training - One day of basic system training is provided at your site after installation. Ultrasound system or upgrade onsite training provided by a PAS (Product Applications Specialist) for specific system applications or upgrades; not per modality.

Education is provided Monday - Friday during normal business hours.

Note: Philips Healthcare personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation. The training sessions should be attended by the appropriate healthcare professional as identified by the department director. Repeat training for staff non-attendance will not be accepted. Site must be patient-ready to meet training expectations. All onsite training day expires within 90 days from system or upgrade installation date. Exceptions are for 3D Stress onsite training (which expires 9 months from system or upgrade installation date) and Fusion & Needle Navigation onsite training (which expires 180 days from system or upgrade installation date).

All Tuitions must be registered prior to the expiration date. The course chosen must be taken within 90 days of expiration

2   ******   **Critical Care Bundle**   **1**

Critical Care Clinical Option
Included in Critical Care are: Abdominal, Trauma, Adult Echo, Superficial, Access, Peripheral Vascular, Lung, PW, CW, and Physio.

Nerve Clinical Option
Nerve applications that include Nerve 0-4, Nerve 4-6 and Nerve 6+. Includes Quick reports and biopsy guides.

3   ******   **Needle Visualization**   **1**

Allows a view of the needle during procedures

- Enhances viewing of the needle to assist the user in guiding the needle to the target anatomy

Available on L12-4 only.

4   ******   **DICOM Networking**   **1**

Networking capability to support DICOM Media Store and DICOM Print. Also provides Ethernet connectivity to an enterprise data management system or PACS with advanced DICOM features: DICOM Store, Modality Worklist and Performed Procedure Step. DICOM Structured reporting for Cardiac, OB, and Vascular.

5   ******   **Advanced TEE Transducer Pkg**   **1**

The Advanced TEE Transducer package includes the X7-2t, the L12-4 and the S4-2 transducers for use with your Sparq ultrasound system. The available imaging presets are determined by the clinical options purchased with the system.

6   ******   **English Manual**   **1**

Operation Manual

7   ******   **Peripheral Shelf**   **1**

Comes standard with purchase of a color printer; or can be ordered as a stand-alone for customers who desire extra storage space on the cart.