



# Phased Array Transducer

## User Guide

| Type 8827 |



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# Phased Array Transducer Type 8827

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<b>Introduction</b>	<b>1</b>
Scanning Plane	1
<b>General Information</b>	<b>2</b>
Caring for the Transducer	2
<b>Cleaning and Disinfection</b>	<b>2</b>
<b>Starting Scanning</b>	<b>3</b>
Connecting the Transducer	3
Changing Frequency	3
Using a Transducer Cover	3
Changing Orientation	3
<b>Disposal</b>	<b>4</b>

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## Introduction

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This is the user guide for Phased Array Transducer Type 8827 and must be used together with *Transducer Care, Cleaning & Safety* which contains important safety information.

8827 is suitable for cardiac and transcranial\* scanning.

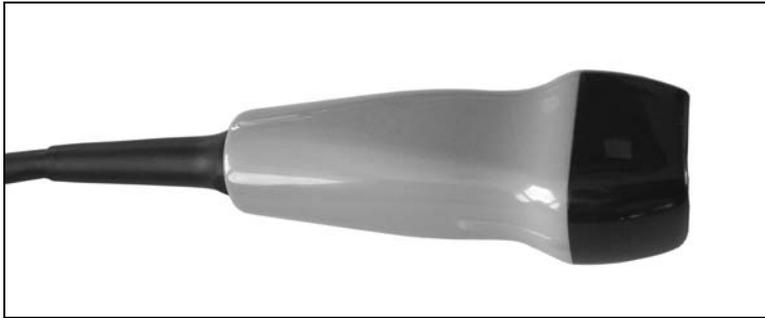


Fig. 1. Phased Array Transducer Type 8827

**FDA WARNING for the United States of America**  
*Type 8827 is **not** for fetal use.*

## Scanning Plane

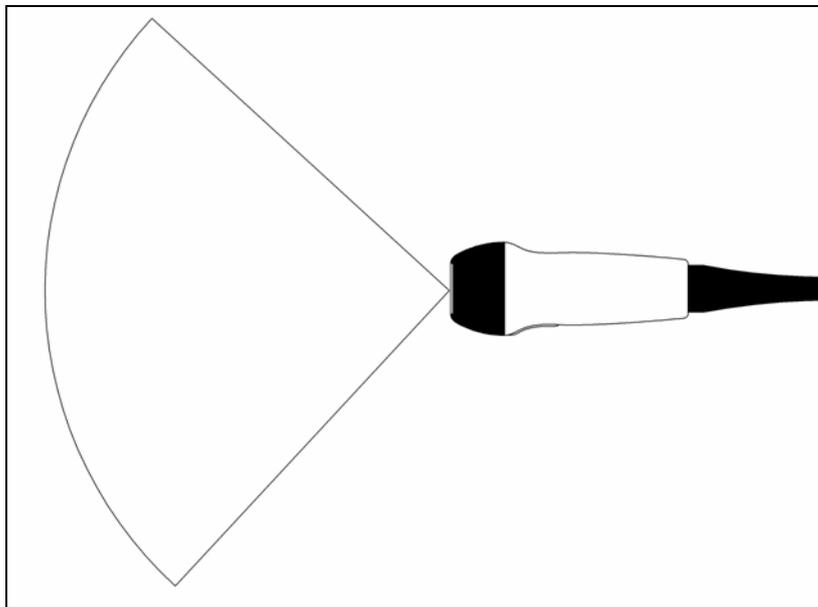


Fig. 2. Scanning plane of Type 8827

The marker on the narrow side of the transducer is designed for orientation purposes. While scanning the user can place his thumb on the marker and relate the image on screen to the physical position of the transducer.

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\* Approval pending. See the Product Data sheet for more details.

## General Information

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Product specifications for this transducer can be found in the Product Data sheet that accompanies this user guide.

Acoustic output data and data about EMC (electromagnetic compatibility) for this transducer are on the Technical Data CD that accompanies this user guide. A full explanation of acoustic output is given in your scanner user guide.

### WARNING

*If at any time the scanner malfunctions, or the image is severely distorted or degraded, or you suspect in any way that the scanner is not functioning correctly:*

- *Remove all transducers from contact with the patient.*
- *Turn off the scanner. Unplug the scanner from the wall and make sure it cannot be used until it has been checked.*
- *Do not remove the scanner cover.*
- *Contact your B-K Medical representative or hospital technician.*

### WARNING

*Always keep the exposure level (the acoustic output level and the exposure time) as low as possible.*

## Caring for the Transducer

The transducer may be damaged during use or processing, so it must be checked before use for cracks or irregularities in the surface. It should also be checked thoroughly once a month following the procedure in *Transducer Care, Cleaning & Safety*.

## Cleaning and Disinfection

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To ensure the best results when using B-K Medical equipment, it is important to maintain a strict regular cleaning routine.

Full details of cleaning and disinfection procedures can be found in *Transducer Care, Cleaning & Safety* that accompanies this user guide. A list of disinfectants and disinfection methods that the transducer can withstand are listed in the Product Data sheet.

Sterile covers are available. See the Product Data sheet for more details.

### WARNING

*Users of this equipment have an obligation and responsibility to provide the highest degree of infection control possible to patients, co-workers and themselves. To avoid cross contamination, follow all infection control policies for personnel and equipment established for your office, department or hospital.*

### Caution

*Keep all plugs and sockets absolutely dry at all times.*

# Starting Scanning

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All equipment must be cleaned and disinfected before use.

## Connecting the Transducer

### WARNING

*Keep all plugs and sockets absolutely dry at all times.*

The transducer is connected to the scanner using the array Transducer Socket on the scanner. To connect, the transducer plug's locking lever should first be in a horizontal position. Align the plug to the scanner socket and insert securely. Turn the locking lever clockwise to lock in place.

When connected the transducer complies with Type BF requirements of EN60601-1 (IEC 60601-1).

## Changing Frequency

The Multi-Frequency Imaging (MFI) facility enables you to select the scanning frequency. See the applicable scanner user guide for instructions. The selected frequency is displayed at the top of the screen.

## Using a Transducer Cover

The transducer should be enclosed in a transducer cover or a standard condom. See the Product Data sheet for a list of available transducer covers.

### WARNING

*Because of reports of severe allergic reactions to medical devices containing latex (natural rubber), FDA is advising health-care professionals to identify their latex-sensitive patients and be prepared to treat allergic reactions promptly.*

Apply gel to the tip of the transducer. This improves the screen images by preventing image artifacts caused by air bubbles.

Pull the transducer cover over the transducer.

Gel also creates a good acoustic contact between the skin and the transducer; therefore, apply a small amount to the outside of the cover prior to scanning. Re-apply the gel frequently to ensure good screen images.

### WARNING

*Use only water-soluble agents or gels. Petroleum or mineral oil-based materials may harm the cover material.*

## Changing Orientation

To change the orientation of the image on the monitor, refer to the applicable scanner user guide for instructions.

## Disposal

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When the transducer is scrapped at the end of its life, national rules for the relevant material in each individual land must be followed. Within the EU, when you discard the transducer, you must send it to appropriate facilities for recovery and recycling. See the applicable scanner user guide for further details.

**WARNING**

*For contaminated disposals such as transducer covers or needle guides, follow disposal control policies established for your office, department or hospital.*