



# Phased Array Transducer 5P1

## User Guide

| Type 8837 |



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For Professional Users Only

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If you have comments about the user documentation, please write to us at the email address above. We would like to hear from you.

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## Introduction

This is the user guide for Phased Array Transducer 5P1 Type 8837 and must be used together with *Care, Cleaning & Safety*, which contains important safety information.

## Indications for Use

Phased Array Transducer 5P1 Type 8837 is designed for basic cardiac examinations, abdominal imaging and transcranial imaging.



*Figure 1. Phased Array Transducer 5P1 Type 8837.*



**WARNING** (FDA for the United States of America)

Type 8837 is **not** for fetal use.

## Imaging Plane

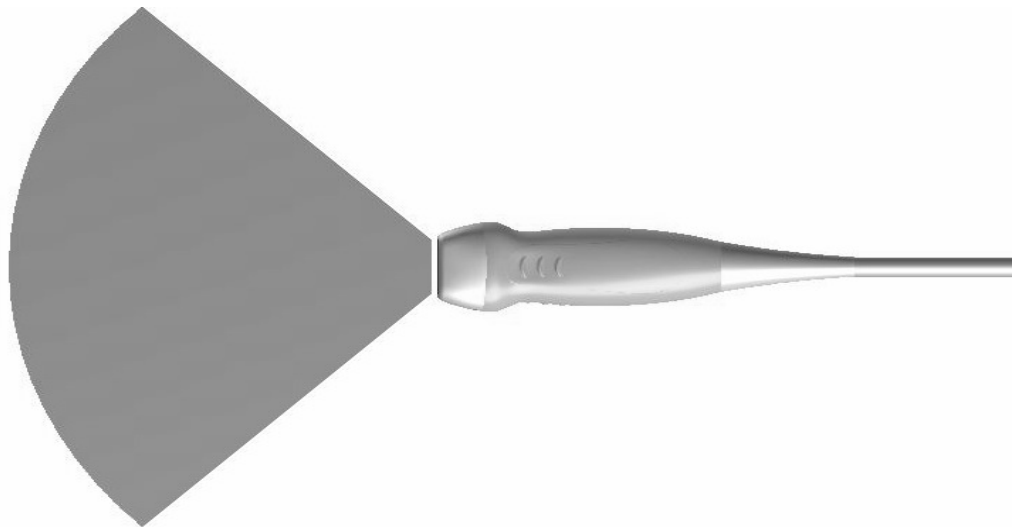


Figure 2. Imaging plane for Phased Array Transducer 5P1 Type 8837.

The 8837 is a phased array transducer. The transducer has a penetration depth up to 287 mm (depending on system) and a 19.2 x 13.5 mm array size.

## General Information

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 in Technical Data (BZ2100) that accompanies this user guide. A full explanation of acoustic output data is given in your system user guide.



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

- Remove all transducers from contact with the patient.
- Turn off the system. Unplug the system from the wall and make sure it cannot be used until it has been checked.
- Do not try to repair the system yourself.
- Contact your BK Medical representative or hospital technician.



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

## Service and Repair



**WARNING** Service and repair of BK Medical electromedical equipment must be carried out only by the manufacturer or its authorized representatives. BK Medical reserves the right to disclaim all responsibility, including but not limited to responsibility for the operating safety, reliability and performance of equipment serviced or repaired by other parties. After service or repairs have been carried out, a qualified electrical engineer or hospital technician should verify the safety of all equipment.

## 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 *Care, Cleaning & Safety*.

## Cleaning and Disinfection

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

Full details of cleaning and disinfection procedures can be found in *Care, Cleaning & Safety*, which 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 information.



**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.

## Starting Imaging

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 system using the array transducer socket on the system. To connect, the transducer plug's locking lever should first be in a horizontal position. Align the plug to the system 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 multifrequency Imaging (MFI) facility enables you to select the imaging frequency. See the applicable system 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 sterile gel to the tip of the transducer or fill the cover with 1 to 2 ml of sterile water. 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 imaging. 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 system user guide for instructions.

## Disposal

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 system 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.