



# The FUS Research Turnkey Solution

Sonic Concepts has 30+ years' experience and expertise serving FUS researchers worldwide in their pursuits of therapeutic ultrasound.

We are known for developing premium FUS transducers, manufacturing turnkey drive electronic systems, and facilitating an acoustic metrology lab suitable for calibrating transducers and systems. Given this expertise, we developed a turnkey FUS system – HIFUPlex™.





**HIFUPlex allows researchers to begin their bioacoustics investigations from day #1.**

**HIFUPlex benefits:**

- adaptable to all types of transmit regimes across various pre-clinical indications.
- designed to assess an ideal range in focal intensities, frequency, power, burst length and type, pulse repetition, and more.
- simple to use offers advanced transmit agility API and is designed for ease of operator use.
- developed to accommodate different budgets by evaluating the tradeoffs between performance and cost.
- integrates every transducer with the drive electronics for optimal performance.

**HIFUPlex de-risks your research.**

1. No need for an acoustic scientist to integrate, develop software, test, and calibrate your system – SCI has already done it.
2. No need for troubleshooting a la carte systems comprising multiple vendors' products – SCI has already done it.
3. No need for a calibrated hydrophone or an automated 3-axis motion controller and test tank – SCI has already done it.
4. No need to worry about supply chain issues – SCI manufactures HIFUPlex based on a Kanban system so planning your research is predictable.





### What's included in a HIFUPlex system?

1. signal generator(s),
2. API software,
3. amplifier(s),
4. power monitoring,
5. matching circuitry,
6. FUS transducer, and
7. acoustic calibration.

### HIFUPlex Types

- **Single Element** Fixed Focus
- **Annular Array** with Axial Focal Steering
- **Sector Array** with Radial Focal Steering
- **2D Array** with 3D Focal Steering

*\*Value Add – Sonic Concepts performs full calibration, our competitors do not.*



## Example HIFUPlex Systems

### HIFUPlex H-101

#### Single Element-Channel Fixed Focus System

H-101 with matching network, RF Wattmeter™, TPO-200 (or -102, -500) drive electronics, Calibration

Select from 25 Standard [Single Element Transducers](#) or select a Special or Custom transducer



### HIFUPlex H-262

#### 8 Element-Channel Axial Focal Steering System

H-262 with matching, TPO-504 drive electronics, Calibration and Focal Steering Scripts

### HIFUPlex H-309

#### 512 Element-Channel 3D Focal Steering System

H-309 with matching, TPO-510 drive electronics, Calibration and Focal Steering Scripts

Select from 20 Standard [2D Array Transducers](#) or select a Special or Custom transducer





With a vision of making peoples' lives better and a guiding philosophy that collaboration and creativity are imperative for true innovation, Sonic Concepts strives to be a global partner in developing custom, non-invasive, therapeutic, focused ultrasound clinical solutions.

We're eager to meet other dedicated pioneers in the focused ultrasound universe with shared intent to bring FUS solutions to market quickly, safely, and profitably.