MRI Console

40 G – 9.4 T
(0.5 – 400 MHz)

RS²D

REINVENT
SYSTEMS
FOR SCIENCE
& DISCOVERY

POWERED BY CAM4

SEE THE DIFFERENCE.

Applications

Compact electronic design powered by the Cameleon4™

A highly configurable, and flexible console for clinical (humans),
and preclinical imaging (non-humans).

Cameleon4

- Latest FPGA SoC technology
- Embedded Linux on dual core ARM processor

Transmitter

- 120 dB amplitude control
- Amplitude and phase modulation with 200 ns delay

GPIOs

- 5 General purpose input/output for RF amplifier blanking, coil controls, sequence triggering, etc.

Receiver

- 2.3 dB of noise figure
- 60 dB gain control
- Simultaneous (^{1}H and X nucleus) multi-channel observation

Gradient

- 24-bit amplitude resolution
- 5.4 µs time resolution
- Analog gradient channels
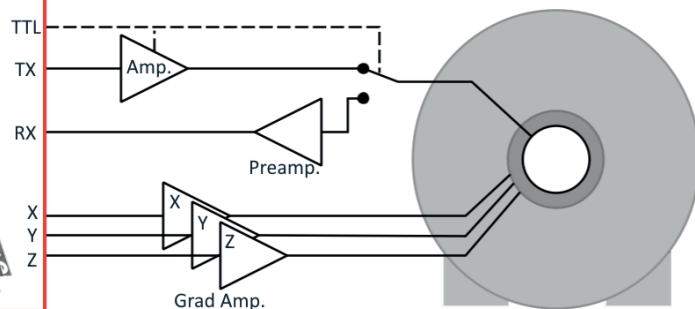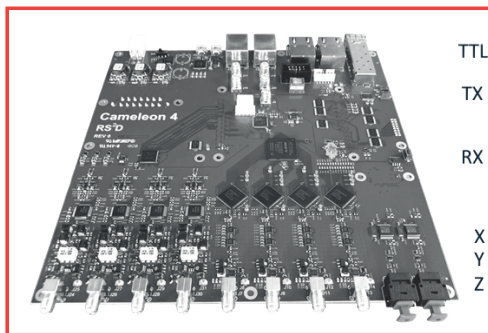- Eddy current compensation

Configuration

- 2 Transmitters (Tx)
- 4 Receivers (Rx) 5 - 400 MHz
- 4 Gradients (X, Y, Z, B0)
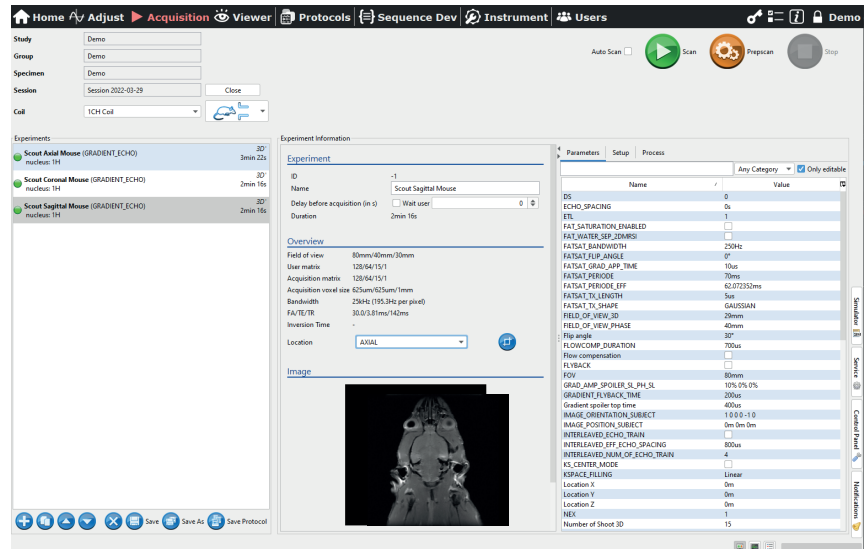- 5 GPIOs
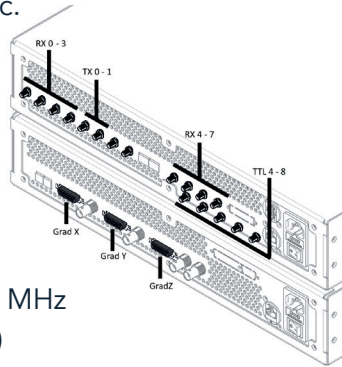
Options

- 4 Rx Low-field (0.5 - 5 MHz)
- 4 Rx High-field (5 - 400 MHz)

MRI software

All-in-one software

- Patient registration
- Calibration and acquisition
- Processing and viewer
- Storage and export
- Protocols and pulse sequence libraries
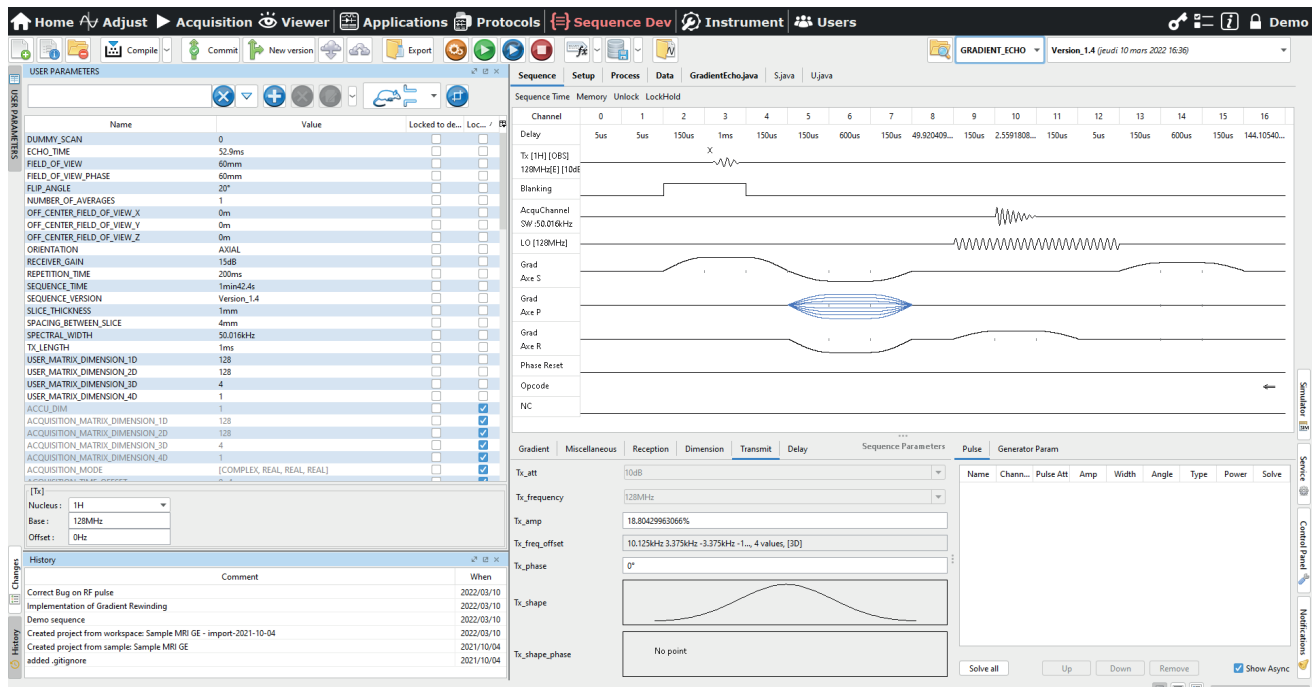- Pulse sequence development

Processing

- 2D and 3D reconstruction
- B0 and B1 mapping
- T1 and T2 mapping
- Report edition

Sequence development

- Graphical and intuitive sequence editor
- Java code for advance calculations
- Compatible with common integrated development environment (IDE)
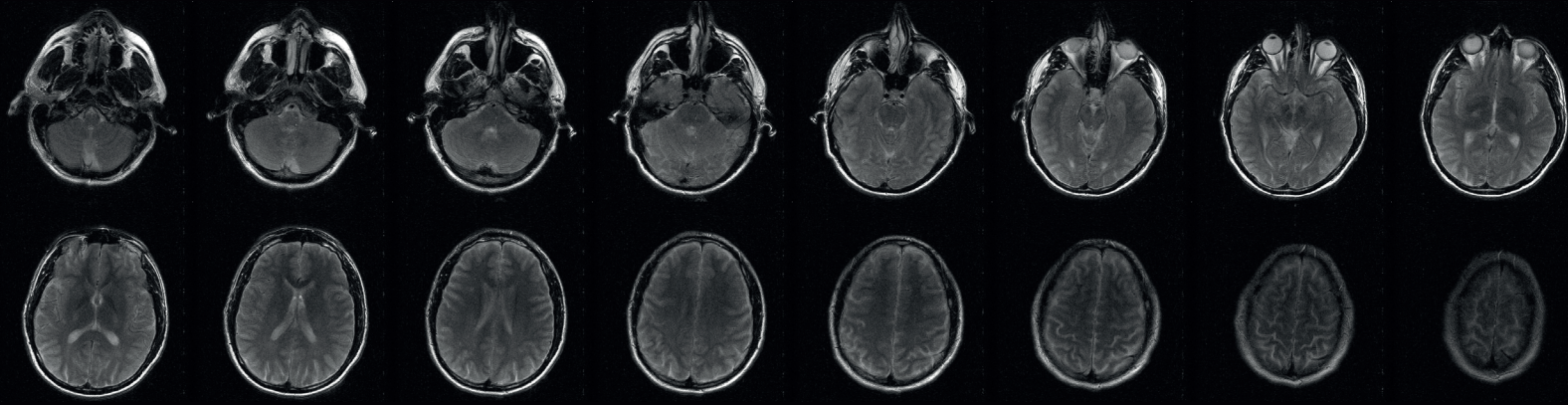- One-click acquisition and raw data visualization

3 Programming levels

- Diagram-only pulse sequence
- Pulse sequence with graphics and Java
- Pulse sequence with advanced Java calculation

Sequence versioning

- Integrated viewer for version comparison
- Based on Git and compatible with common Git versioning software
- Share sequences on server or in the cloud

The MRI console is a modular spectrometer with a wide range of applications, including academic, industrial, and medical at various field strengths.

Third-party software integration tools and the list of MRI Pulse sequences are available upon request.

RS^{2}D proposes services and solutions for developing pulse sequences, MRI architecture designs, and complete systems.