TOSHIBA
Leading Innovation

M-Power

THE ULTIMATE, INTUITIVE MR INTERFACE

Empowering you to do more

The revolutionary Toshiba M-Power user interface takes MR performance and flexibility to levels higher than ever before. M-Power is able to be customized for site specific scanning requirements by creating the optimal user interface for everyone, regardless of whether they're new to MR or have years of experience. Efficiency is increased with advanced applications which streamline and accelerate processes with quick and easy to use features. With these new techniques now available, its even easier to develop clinical referrals.

Designed by you for the way you work.

Toshiba's next generation M-Power interface lets operators design their own protocols and easily access mTools for greater convenience. Frequently used icons are positioned to reduce the amount of required mouse movement across the interface. This ergonomically, eye-pleasing display increases efficiency and reduces operator fatigue.

Easy to use. Easy to learn.

M-Power makes Toshiba's sophisticated suite of MR software remarkably easy to learn and use, enabling technologists of every skill level to access its full range of functionality. Beginning the first scan with three quick steps reduces the patient's anxiety while they wait for the exam to begin. M-Power allows you to accommodate a higher patient volume while offering a wider range of clinical applications.

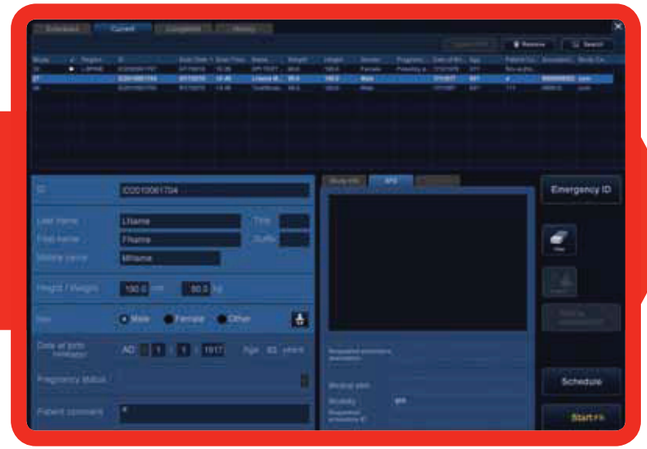
"Toshiba's M-Power interface has an impact on productivity by letting experienced staff perform tasks more easily and reducing the training time required for new technologists."

Meng Law, MD, MBBS, FRACR
Professor of Radiology and Neurological Surgery Director of Neuroradiology Keck School of Medicine, University of Southern California

3-Steps to begin scanning with M-Power.

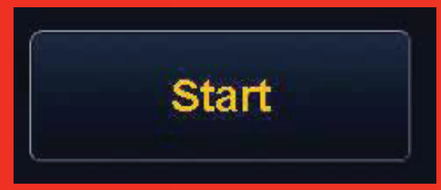
1

Register the patient by selecting their name which is preloaded from the HIS/RIS system.



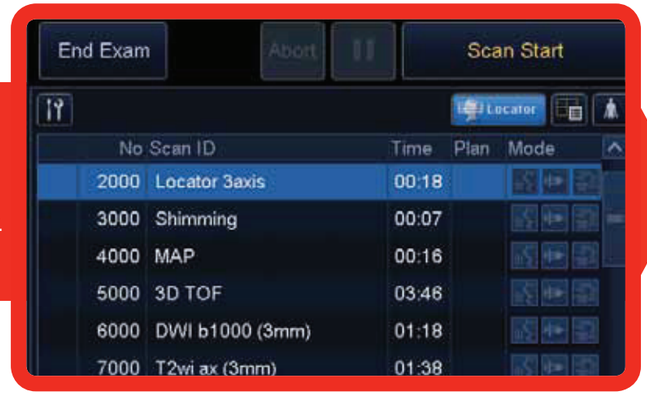
2

Click the "Start" button to automatically load the optimized protocol.



3

Select scan start to automatically begin multiple plane locator.

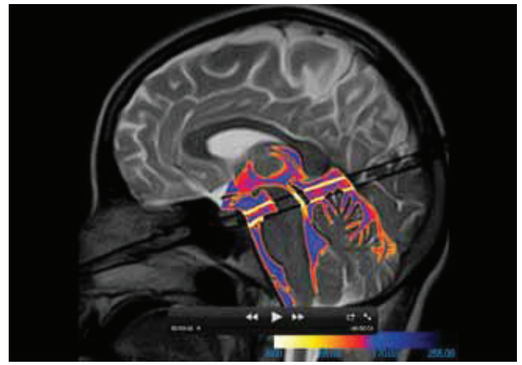


Satisfying the need for speed.

Toshiba MR systems with M-Power facilitate faster throughput by using efficient tools and proprietary protocols. This significantly enhances workflow from patient registration to patient completion or diagnosis. The ability to optimize the M-Power user interface with mTools, along with Atlas Compass and new sequences, increases staff efficiency. Space requirements are reduced as a result of the ability to multi-task on a single console.

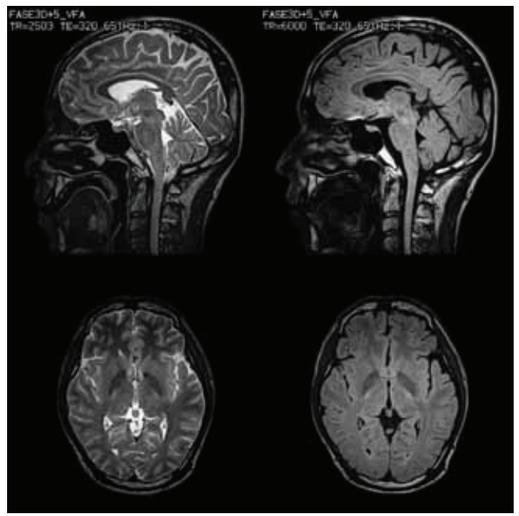
Atlas Compass

Atlas Compass is a premium coil detection tool that provides unparalleled productivity and image quality by completely automating the selection of coil elements within a predetermined range. Automatic coil detection reduces repeat exams due to improper coil selection. Atlas Compass gives users greater flexibility with a wide array of options for element direction which includes an adjustable sensitivity range.



CSF Flow

M-Power automates the process for observing Cerebral Spinal Fluid (CSF) flow using Toshiba's CSF Time-SLIP (Spatial Labeling Inversion Pulse) protocol. This technique captures a series of images in a continuous acquisition by utilizing an optimally placed tag pulse which is advanced to image CSF flow.



mVox

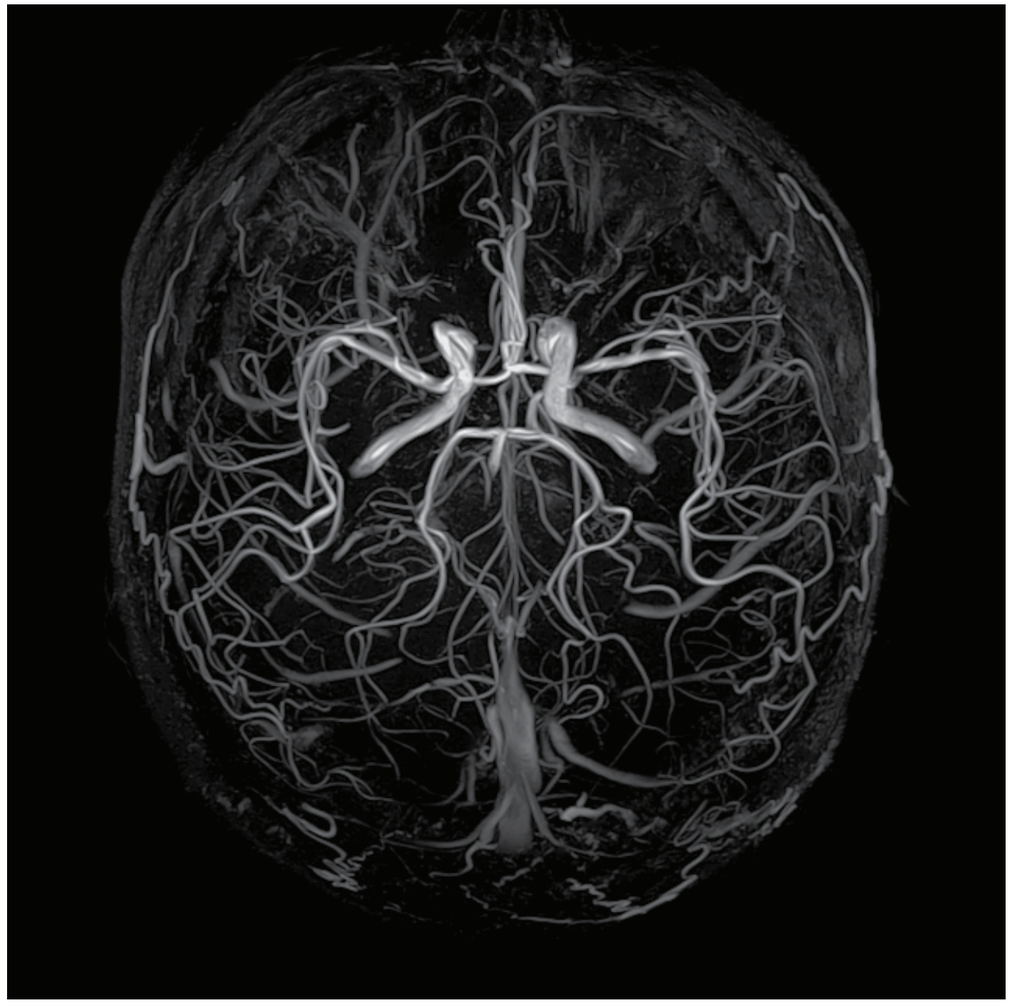
mVox acquires more information in less time by performing 3D isotropic volume T2W or FLAIR imaging. Limiting the number of sequences run per examination increases throughput and efficiency for neuro, body and orthopedic applications by preserving isotropic resolution in all reformatted planes.

mTools

Personalize your workflow with the ability to drag and drop your most frequently used scanning tools into the mTool bar.

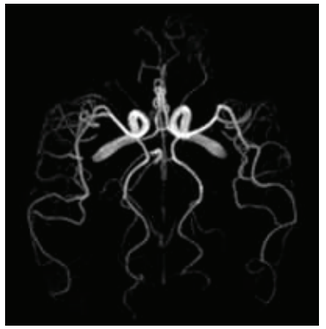
Optimizing efficiency in 3 Dimensions.

Toshiba MR systems with M-Power can automatically apply advanced 3D post-processing for MIP, MPR and SVR to achieve greater workflow efficiency.



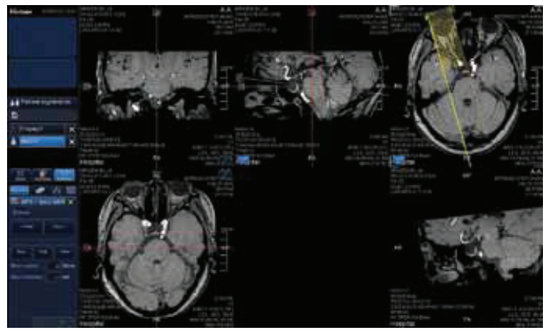
Maximum Intensity Projection (MIP)

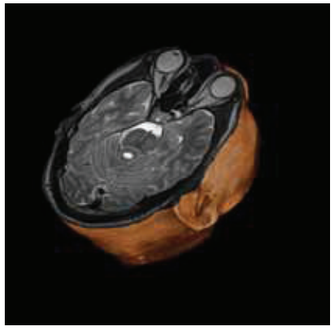
Automated MIP post-processing can be applied by selecting the 3D process on the operator console. Images can then be optimized manually with an easy-to-use-cutting tool, previewed and saved as a DICOM data set.



Multi-Planar Reformation (MPR)

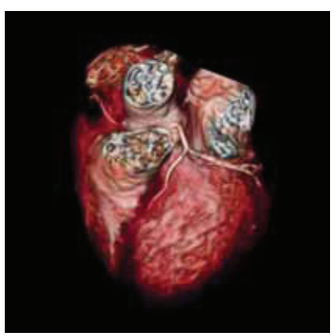
M-Power can automatically reformat an isotropic volume data set in any plane including user-selectable oblique planes.





Surface Volume Rendering (SVR)

Eliminating the need for a separate workstation, M-Power can conveniently use the automated SVR post-processing program to create advanced 3D volume rendered images.



Advanced post-processing as easy as 1-2-3.

Advanced post-processing applications have been developed with a streamlined workflow for operators at all experience levels. fMRI, Spectroscopy, Diffusion Tensor Imaging and Diffusion Tractography applications can be accessed on the main console using the following simple, three-step process. These optional applications can be added as your clinical practice grows.

1 Quick and easy data load

2 Preview automated results

3 Display results

Functional MRI

Functional MRI (fMRI) measures the Blood Oxygen Level Dependency (BOLD) effect, which relates a body function or thought to a specific location in the brain. fMRI post-processing with M-Power uses original T-value scoring which is the gold standard for measuring blood oxygen levels.

STEP 1 Load the fMRI data set by selecting one image from the sequence.

STEP 2 Preview the area in the brain that was activated with the automatic detection software.

STEP 3 Review and save the paradigm result and the minimum, average and maximum blood oxygen level results.

Preview screen of finger tapping technique.

The result screen of the processed data for fMRI demonstrates the areas in the brain of activation from finger tapping.

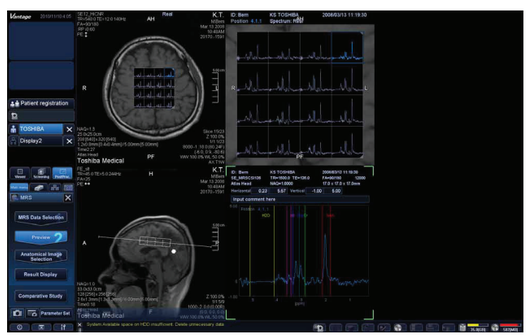
Spectroscopy

Spectroscopy is an imaging technique that measures metabolite concentration in the body. Single and multi-voxel spectroscopy can be applied automatically using protocols optimized for use with M-Power.

STEP 1 Load the MRS information by selecting the automated spectrum of the area imaged.

STEP 2 Preview either the single voxel spectrum or multi-voxel spectrum that was automatically processed from the scan data.

STEP 3 Review and save the anatomical information and the spectrum with labeled metabolites.



Preview the automated results of the spectrum of metabolites.

Review and save the automated results for multi-voxel spectroscopy.

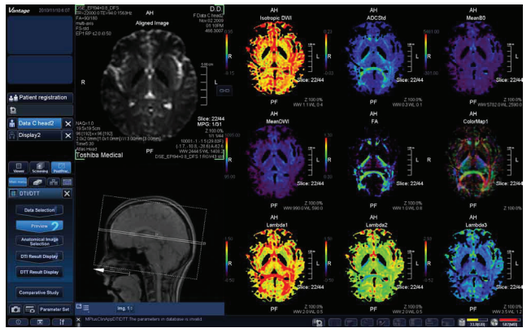
Diffusion Tensor Imaging and Tractography

Diffusion tensor imaging enables the detection of diffusion and anistrophy which can provide a clear image of white matter and diffusion. Diffusion tensor tractography* is a unique tool for evaluating brain structures and assessing axonal fiber architectures in vivo.

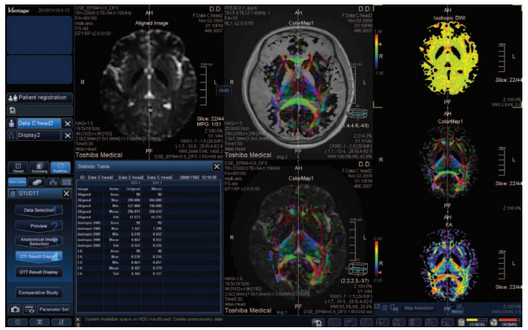
STEP 1 Load diffusion weighted study.

STEP 2 Preview the diffusion tensor image and up to 9 user selectable maps.

STEP 3 Review and save results for DTI and DTT.



Preview the user selectable maps and anatomical image.



Review and save in a DICOM format the results for Diffusion Tensor Imaging.

Review and save in a DICOM format the results for Diffusion Tensor Tractography.

Maintaining your edge with M-Power

Requiring minimal training and experience to use, Toshiba's comprehensive training resources make getting up to speed with M-Power even easier. Classroom instruction at the Toshiba Institute for Advanced Learning located in Irvine, CA, includes hands-on experience using M-Power on fully functional MRI systems. Additional on-site training and follow-up visits by Toshiba professionals help technologists maintain their competence in order to facilitate consistent scanning and faster diagnoses.

Available with version 2.0 software.

LEADING INNOVATION

For more than 130 years, Toshiba has been a world leader in developing technology to improve the quality of life. Some 50,000 global patents demonstrate that rich history of leading innovation. It might surprise you to learn some of the things we've invented.

1875 Founding of Toshiba
1915 First X-ray tube
1989 First helical CT scanner
1993 First one-million-pixel CCD
1997 First open, superconducting magnet
1998 Quietest 1.5T MRI System
1998 First generation of non-contrast MRA
2000 First all-digital multipurpose x-ray
2001 2nd generation of non-contrast MRA
2003 First 64-slice CT scanner
2003 Ultra-short 1.5T MRI system
2005 3rd generation of non-contrast MRA
2006 First 128 element MRI system
2006 4th generation of non-contrast MRA
2007 First dynamic volume CT scanner
2007 First 71 cm aperture in an open MRI
2011 Quietest wide bore 3T

AWARD-WINNING SERVICE AND SUPPORT

Developed with customer input, Toshiba's innovative support programs have resulted in greater satisfaction when using our MR systems as reflected in customer surveys time after time.

InTouch Center™

A centralized service facility that provides applications and service support expertise for Titan customers 24 hours a day, seven days a week.

InnerVision® Plus

Monitored around the clock, remote system diagnostics help identify problems and provide potential solutions before care is interrupted or an engineer can arrive.

InTouch Agreements

Tailored to meet specific customer requirements, these range from an a la carte approach that helps manage risk to full security agreements that provide complete system protection.

Technical Assistance

Customer support specialists are available 24/7 to identify and resolve technical issues in real time. Application specialists are also available to assist staff with protocol and image quality issues.

Local Customer Teams

A single call mobilizes a local team of Toshiba Customer Engineers. Averaging 10 years of experience with Toshiba and 105 hours of specialized training per year, they can quickly resolve almost any performance issue.

Parts Support

A complete inventory of Vantage Titan product parts is ready for shipment when and where they're needed, any time day or night.

Made for Life™