

Need help?

- Questions, Support, Install issues: [Google groups](#)
- Reporting bugs: [torch7 nn cutorch cunn optim threads](#)
- Hanging out with other developers and users (strictly no install issues, no large blobs of text): [Gitter Chat](#)

Torch Package Reference Manual

Torch is the main package in Torch7 where data structures for multi-dimensional tensors and mathematical operations over these are defined. Additionally, it provides many utilities for accessing files, serializing objects of arbitrary types and other useful utilities.

Torch Packages

- **Tensor Library**
 - **Tensor** defines the *all powerful* tensor object that provides multi-dimensional numerical arrays with type templating.
 - **Mathematical operations** that are defined for the tensor object types.
 - **Storage** defines a simple storage interface that controls the underlying storage for any tensor object.
- **File I/O Interface Library**
 - **File** is an abstract interface for common file operations.
 - **Disk File** defines operations on files stored on disk.
 - **Memory File** defines operations on stored in RAM.
 - **Pipe File** defines operations for using piped commands.
 - **High-Level File operations** defines higher-level serialization functions.
- **Useful Utilities**
 - **Timer** provides functionality for *measuring time*.
 - **Tester** is a generic tester framework.

- [CmdLine](#) is a command line argument parsing utility.
- [Random](#) defines a random number generator package with various distributions.
- Finally useful [utility](#) functions are provided for easy handling of torch tensor types and class inheritance.

Useful Links

- [Community packages](#)
- [Torch Blog](#)
- [Torch Slides](#)