

Tekkotsu Development Framework for AIBO

Tekkotsu is a free, open-source framework for rapid development of new AIBO applications. The code is released under the GPL and can be downloaded from the Tekkotsu.org web site, along with tutorials and demo programs.

Tekkotsu Services

- **Vision processing** (uses CMVision)
- **Motion primitives** (walk from CMPack; poser; keyframed playback; LED flashing; emergency stop)
- **Wireless** interfaces; **Sound** playback with mixing
- **Mapping and localization**
- **Remote monitoring** via a Matlab interface; **Teleoperation**
- **Utility functions**: timers, mutex, event logging, profiling, self-righting after falls, battery monitor, etc.
- **Documentation** generated automatically by Doxygen

To Learn More

- Visit **tekkotsu.org** to see videos and screen shots of Tekkotsu demos
- Download the source code, online documentation, and runnable demos from **tekkotsu.org**
- Contact the developers directly at **info@tekkotsu.org**

Architectural Overview

- Three processes: Main, Motion, Sound
- Event-based interface for all services
- Flexible state machine formalism for describing behaviors
- Notification for both sensor events and action completions (motions, sounds)
- Modular “plug and play” organization:
- To invoke a service, subscribe to its event classes
- To create a new service: define a new class
- Makes full use of C++ inheritance and templates to support customization

