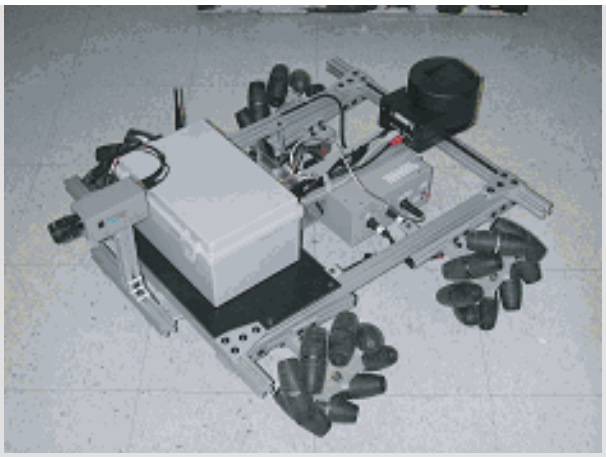
# MobileBaseUnit



Cybernet has developed a Mobile Base Unit to allow Legacy Mobile platforms to be controlled with JAUS compliant Operator Control Interfaces. This allows non-JAUS mobile platforms to be upgraded and achieve JAUS compliance without a complete redesign of the robot's control package.

Ø Designed for legacy retrofits
Ø Full CPU on board, with range of I/O ports
Ø MBU translates JAUS OCU commands to native platform commands

Features

- 32-bit Digital StrongARM SA-1110 RISC processor
- 235 (Dhrystone 2.1) MIPS @ 206 MHz
- <450 mW @ 2.0V/206 MHz
- Power and memory management functionality
- SA-1111 StrongARM companion chip, providing both host and client USB connection
- Compact Flash or Ethernet: 10BT (daughter board adapter option)
- One (1) PCMCIA (Type II) slot
- Three (3) Serial Ports:

o COM1: RS232
o COM2: RS232, TTL or IrDA
o COM3: RS232 or RS485/422

Our Mobile Base Unit currently employs Linux as the host operating system. Linux was chosen for its robustness and stability. To provide a communication channel between OCU and MBU we have implemented a custom implementation compliant with the JAUS v3.0 standard. Within this channel we implement platform specific controls that provide a bridge between existing legacy systems and modern JAUS compliant controllers. The current MBU has been fitted to two separate platforms, the Cybernet Omnidirectional Platform and the Remotec Mini-Andros. To retrofit a different platform, only the backend specifics must be reprogrammed. This modular architecture allows for a quick time-to-market for any legacy system needing JAUS compliance.