

Ubuntu Linux 16.04 (64-bit)

SOF0004 (Ubuntu16 amd64)

Your robot is equipped with a 64-bit onboard computer. **Ubuntu GNU/Linux 16.04 LTS (“xenial”) for amd64 architecture** has been installed on this computer as its operating system (OS). All drivers and software necessary to operate your robot and its accessory devices have also been installed and configured. This includes but is not limited to:

- ARIA, core C++ robot software development library, with documentation, examples and source code included. (Installed in `/usr/local/Aria`)
- Other Adept MobileRobots libraries, such as ARNL, SONARNL or MOGS for intelligent localization/positioning and autonomous navigation. (Installed in `/usr/local/Arn1.`) ARNL and MOGS are only provided if optional navigation packages were purchased.
- Any additional SDKs for use with any optional equipment ordered with the robot
- The MobileEyes, Mapper3 and MobileSim tools. (Available in the applications launcher menu, and in respective subdirectories of `/usr/local`)
- All drivers for the onboard computer such as networking, wireless networking (wifi), video, sound, etc.

Account Passwords:

A default password of **mobilerobots** has been set for the **root** administrator account, and for the example **guest** account. You may use these accounts to log after connecting keyboard, mouse and monitor, or remotely via **ssh** (secure shell).

We recommend adding additional user accounts as desired (use the `adduser` command or User Accounts application in System Settings (click the “+” button at the bottom of the list to add a new user, click “-” to remove a user account)).

We recommend changing the root administrative password and guest password. Passwords may be set by running the `passwd` command or using the User Accounts application in the System Settings (click on the masked password next to the “Password” field).

Network Configuration:

The wired (LAN) and wireless (wifi) interfaces have been configured for our testing before shipping the robot. You may configure wireless and wired network settings by starting graphical/desktop mode (see below), opening the System Settings tool from the launcher panel, and opening Network.

http://robots.mobilerobots.com/wiki/Default_Network_Configuration

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Remote Login:

After configuring networking, you can remotely log in to the Ubuntu system using **ssh**. To connect via ssh from a Windows system, use the **Putty** application. Files may be browsed, edited and transferred using the **WinSCP** application. To connect via ssh from a Linux or Mac OSX system, use the `ssh` command in a terminal window. From Linux, files may be browsed, edited and transferred using `scp`, `sftp` or enter an “ssh://...” URL as location in the file browser.

Installing and Updating Software

Software can be installed using the “Ubuntu Software Center” application or the **apt-get** command line tool, or by downloading an Ubuntu or Debian package from a trusted website and installing it. Software packages must be built for **Ubuntu 16.04** (xenial) or compatible, for the **amd64** (64-bit) architecture (the package file name will end with “_amd64”). Downloaded can be installed using the **dpkg** command-line tool, or by opening it in the file manager.

System software can be automatically updated using the “Software Updater” application, or apt-get command-line tool. Upgrade options can be set via the “Software & Updates” application. We recommend regularly installing updates to fix bugs and potential security problems.

Graphical (Desktop) and Text Modes:

By default, your Ubuntu system will boot into graphical mode. To boot into text-only mode instead, select text mode from the initial boot menu.

The boot manager (grub) may be reconfigured to start in text mode by default. Rename `/etc/grub.d/11_amr_linux_textmode` to `/etc/grub.d/09_amr_linux_textmode` to place it after graphical mode entries in the list:

```
sudo mv /etc/grub.d/11_amr_linux_textmode /etc/grub.d/09_amr_linux_textmode
```

Then run update-grub2 (as root):

```
sudo update-grub2
```

More Information:

For more information on how to operate your robot and its devices, refer to the robot operations manual and any other manuals provided for individual devices. In addition, MobileRobots maintains an online knowledge base with additional help, tips and information. This site also provides downloads of all robot and device manuals, as well as downloads of software updates. You may also join the users’ community forums and contact MobileRobots support through this site:

<http://robots.mobilerobots.com>

See the Linux category for all pages about Linux:

<http://robots.mobilerobots.com/wiki/Category:Linux>