man pages section 6: Demos

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Preface

Both novice users and those familar with the SunOS operating system can use online man pages to obtain information about the system and its features. A man page is intended to answer concisely the question "What does it do?" The man pages in general comprise a reference manual. They are not intended to be a tutorial.

Overview

The following contains a brief description of each man page section and the information it references:

- Section 1 describes, in alphabetical order, commands available with the operating system.
- Section 1M describes, in alphabetical order, commands that are used chiefly for system maintenance and administration purposes.
- Section 2 describes all of the system calls. Most of these calls have one or more error returns. An error condition is indicated by an otherwise impossible returned value.
- Section 3 describes functions found in various libraries, other than those functions that directly invoke UNIX system primitives, which are described in Section 2.
- Section 4 outlines the formats of various files. The C structure declarations for the file formats are given where applicable.
- Section 5 contains miscellaneous documentation such as character-set tables.
- Section 6 contains available games and demos.
- Section 7 describes various special files that refer to specific hardware peripherals and device drivers. STREAMS software drivers, modules and the STREAMS-generic set of system calls are also described.
- Section 9 provides reference information needed to write device drivers in the kernel environment. It describes two device driver interface specifications: the Device Driver Interface (DDI) and the Driver/Kernel Interface (DKI).
- Section 9E describes the DDI/DKI, DDI-only, and DKI-only entry-point routines a developer can include in a device driver.
- Section 9F describes the kernel functions available for use by device drivers.
- Section 9S describes the data structures used by drivers to share information between the driver and the kernel.

Below is a generic format for man pages. The man pages of each manual section generally follow this order, but include only needed headings. For example, if there are no bugs to report, there is no BUGS section. See the `intro` pages for more information and detail about each section, and `man(1)` for more information about man pages in general.

NAME — This section gives the names of the commands or functions documented, followed by a brief description of what they do.

SYNOPSIS — This section shows the syntax of commands or functions. When a command or file does not exist in the standard path, its full path name is shown. Options and arguments are alphabetized, with single letter arguments first, and options with arguments next, unless a different argument order is required.

The following special characters are used in this section:

- [ ] — Brackets. The option or argument enclosed in these brackets is optional. If the brackets are omitted, the argument must be specified.
- . . . — Ellipses. Several values can be provided for the previous argument, or the previous argument can be specified multiple times, for example, "`filename...`".
- | — Separator. Only one of the arguments separated by this character can be specified at a time.
- { } — Braces. The options and/or arguments enclosed within braces are interdependent, such that everything enclosed must be treated as a unit.

PROTOCOL — This section occurs only in subsection 3R to indicate the protocol description file.

DESCRIPTION — This section defines the functionality and behavior of the service. Thus it describes concisely what the command does. It does not discuss OPTIONS or cite EXAMPLES. Interactive commands, subcommands, requests, macros, and functions are described under USAGE.

IOCTL — This section appears on pages in Section 7 only. Only the device class that supplies appropriate parameters to the `ioctl(2)` system call is called `ioctl` and generates its own

	heading. `ioctl` calls for a specific device are listed alphabetically (on the man page for that specific device). `ioctl` calls are used for a particular class of devices all of which have an `io` ending, such as `mtio(7I)`.
OPTIONS	This secton lists the command options with a concise summary of what each option does. The options are listed literally and in the order they appear in the SYNOPSIS section. Possible arguments to options are discussed under the option, and where appropriate, default values are supplied.
OPERANDS	This section lists the command operands and describes how they affect the actions of the command.
OUTPUT	This section describes the output – standard output, standard error, or output files – generated by the command.
RETURN VALUES	If the man page documents functions that return values, this section lists these values and describes the conditions under which they are returned. If a function can return only constant values, such as 0 or –1, these values are listed in tagged paragraphs. Otherwise, a single paragraph describes the return values of each function. Functions declared void do not return values, so they are not discussed in RETURN VALUES.
ERRORS	On failure, most functions place an error code in the global variable `errno` indicating why they failed. This section lists alphabetically all error codes a function can generate and describes the conditions that cause each error. When more than one condition can cause the same error, each condition is described in a separate paragraph under the error code.
USAGE	This section lists special rules, features, and commands that require in-depth explanations. The subsections listed here are used to explain built-in functionality: Commands Modifiers Variables Expressions Input Grammar

EXAMPLES	This section provides examples of usage or of how to use a command or function. Wherever possible a complete example including command-line entry and machine response is shown. Whenever an example is given, the prompt is shown as `example%`, or if the user must be superuser, `example#`. Examples are followed by explanations, variable substitution rules, or returned values. Most examples illustrate concepts from the SYNOPSIS, DESCRIPTION, OPTIONS, and USAGE sections.
ENVIRONMENT VARIABLES	This section lists any environment variables that the command or function affects, followed by a brief description of the effect.
EXIT STATUS	This section lists the values the command returns to the calling program or shell and the conditions that cause these values to be returned. Usually, zero is returned for successful completion, and values other than zero for various error conditions.
FILES	This section lists all file names referred to by the man page, files of interest, and files created or required by commands. Each is followed by a descriptive summary or explanation.
ATTRIBUTES	This section lists characteristics of commands, utilities, and device drivers by defining the attribute type and its corresponding value. See `attributes(5)` for more information.
SEE ALSO	This section lists references to other man pages, in-house documentation, and outside publications.
DIAGNOSTICS	This section lists diagnostic messages with a brief explanation of the condition causing the error.
WARNINGS	This section lists warnings about special conditions which could seriously affect your working conditions. This is not a list of diagnostics.
NOTES	This section lists additional information that does not belong anywhere else on the page. It takes the form of an aside to the user, covering points of special interest. Critical information is never covered here.
BUGS	This section describes known bugs and, wherever possible, suggests workarounds.

REFERENCE

Introduction

Name Intro – introduction to games and demos

Description This section describes available games and demos.

REFERENCE

Games and Demos

Name x_buttontest – Xview demonstration and test program for SunButtons

Synopsis

```
/usr/demo/BUTTONBOX/x_buttontest
```

Description `x_buttontest` is an Xview application that displays a window with thirty two buttons, corresponding to those on the SunButtons buttonbox. To determine if the buttonbox has been set up correctly, select the Diagnostic button on the panel. If the buttonbox is functional and correctly interfaced, each of the buttons will light in sequence for about 1 second. Then "OK." is sent to the standard output of the demo program. `x_buttontest` is now in its (default) interactive mode. Pressing a button on the buttonbox highlights the corresponding button on the screen. Additionally, `x_buttontest` sends a `BDIOBUTLITE` ioctl to the buttonbox in response to each key press and key release, so that the button light is illuminated while the button is held down.

If the serial communications become confused, as can happen when both the buttonbox and the dialbox are operated at the same time, one or more button lights may remain on after the button is released. Clicking on the Reset button on the panel will unconditionally turn all the button lights off.

Attributes See `attributes(5)` for descriptions of the following attributes:

ATTRIBUTE TYPE	ATTRIBUTE VALUE
Architecture	SPARC

See Also `bdconfig(1M)`, `attributes(5)`, `x_dialtest(6)`, `bd(7M)`, `streamio(7I)`

Name x_dialtest – Xview demonstration and test program for SunDials

Synopsis

```
/usr/demo/DIALBOX/x_dialtest
```

Description `x_dialtest` is an Xview application that displays a window with eight dials, corresponding to the dials on the SunDials dialbox. To determine if the dialbox has been set up correctly, turn a dial on the dialbox. If the dialbox is functional and correctly interfaced, turning a dial by hand will make the corresponding dial in the window turn a similar amount.

The dials do not have any notion of absolute angular position. It is changes in current angular position that are sent to the host application. Thus there is no notion of resetting the position of the dials on the dialbox hardware.

The Diagnostic button on the panel is a demo mode of the `x_dialtest` program. The pointer of each of the dials in the window is rotated one full circle and then disappears in turn. When all eight dials have been rotated, the display dial pointers are reset to their previous rotational positions. The only diagnostic done on the dialbox is a firmware self check. If this self check passes, then "OK." is sent to the standard output of the demo program.

The Ram Dump button on the panel arranges to place some firmware data into the file `ram_dump.dat` in the current directory. It is intended for factory diagnostics use and is not publicly documented further.

Attributes See `attributes(5)` for descriptions of the following attributes:

ATTRIBUTE TYPE	ATTRIBUTE VALUE
Architecture	SPARC

See Also `bdconfig(1M)`, `attributes(5)`, `x_buttontest(6)`, `bd(7M)`, `streamio(7I)`