



Tech Info Library

Apple Extended Keyboard II: Specifications (10/94)

Article Created: 15 June 1990

Article Reviewed/Updated: 10 October 1994

TOPIC -----

This article provides specifications for the Apple Extended Keyboard II.

DISCUSSION -----

Description

The "Apple Extended Keyboard II" is the replacement for the existing Apple Extended Keyboard (M0115). In addition to the features of the existing keyboard, the Apple Extended Keyboard II provides a foot to adjust the height of the keyboard and a double-sided template to label the function keys.

Packing List (M0312)

Apple Extended Keyboard II

1.0 m (3 ft.) ADB cable

Double-sided overlay to identify function keys

Owner's guide

Warranty statement

System Requirements

Any Apple personal computer with an Apple Desktop Bus interface

Technical Specifications

Total 105 keys, including:

- 18-key numeric pad
- 15 function keys
- Four arrow cursor-control keys in inverted T-style layout
- Six cursor-control keys (Home, Page Up, Page Down, Forward Delete, End, and Help)

Size and Weight

Front Height: 0.75 in. (19 mm)
Rear Height: 1.6 in. (41 mm)
Keyboard angle: 14 degree maximum, 6 degree minimum
Width: 18.7 in. (475 mm)
Depth: 7.7 in. (195 mm)
Weight: 4.8 lbs (1.8 kg)

Product Details

The keyboard has 15 function keys (F1-F15) and 6 cursor-control keys (home, Page Up, Page Down, Forward Delete, End, and Help).

F1-F4 are labeled on the overlay as follows; F1=undo, F2=cut, F3=copy, and F4=paste. These are not predefined default values; however, developers are being encouraged to use these definitions as appropriate. The remaining 11 function keys can also be defined by the user. An overlay is provided for users to mark the key's function.

The remapping facility is available for a specific application or globally for all applications.

The function keys are operative by using a macro-utility program or by using an MS-DOS application with the appropriate coprocessor card.

The Caps Lock LED is operative in the Macintosh environment. The Num Lock and Scroll Lock are operative in some Macintosh applications. Developers are being encouraged to support these LED's in their applications.

The keyboard has an adjustable foot in the rear of the keyboard. The height of the keyboard is adjusted with a lever in the rear of the keyboard. It can be adjusted with a tilt from the unextended 6 degree to a maximum of 14 degrees from horizontal.

Article Change History:

10 Oct 1994 - Clarified LED functionality within the Macintosh environment.

Support Information Services

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Keywords: specsht

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Tech Info Library

Apple Extended Keyboard II - ISO Layout: Specifications

Revised: 8/5/92
Security: Everyone

Apple Extended Keyboard II - ISO Layout: Specifications

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This article last reviewed: 4 December 1989

--Description:

The "Apple Extended Keyboard II - ISO layout" is a keyboard specially designed for the European market. The layout complies with ISO 1091 standard on the "Layout of printing and function keys."

--Packing List (M0312Z):

Apple Extended Keyboard II - ISO layout
1.0 m (3 ft.) ADB cable
Double-sided template to place over function keys
Owner's guide
Warranty statement

--System Requirements:

Any Apple personal computer with an Apple Desktop bus interface
International Macintosh System Software: Version 6.0.3 or later
US Macintosh System Software: Version 6.0.4 or later

--Technical Specifications:

Total 106 keys, including
18-key numeric pad
15 function keys
4 arrow cursor-control keys in inverted T-style layout
6 cursor-control keys (Home, Page Up, Page Down, Forward Delete, End, and Help)

--Size and Weight:

Front Height: 19 mm (0.75 in.)
Rear Height: 41 mm (1.6 in.)

Keyboard angle:	14 degree maximum
	6 degree minimum
Width:	475 mm (18.7 in.)
Depth:	195 mm (7.7 in.)
Weight:	1.8 kg (4.8 lbs)

--Product Details:

The keyboard has 15 function keys (F1-F15) and 6 cursor-control keys (home, Page Up, Page Down, Forward Delete, End, and Help).

F1-F4 are labeled on the housing under the keys F1=undo, F2=cut, F3=copy, and F4=paste. These are not predefined default values; however, developers are being encouraged to use these definitions as appropriate. The remaining 11 function keys can also be defined by the user. A template is provide for users to mark the key's function.

The function keys are operative by using a macro utility program or by using an MS-DOS application with the appropriate coprocessor card.

The Caps Lock LED is operative in the Macintosh environment. The Num Lock and Scroll Lock are not operative except by using an MS-DOS application with appropriate coprocessor card. Developers are being encouraged to support these LED's in their applications.

The keyboard has an adjustable foot in the rear of the keyboard. The height of the keyboard is adjusted with a lever in the rear of the keyboard. It can be adjusted with a tilt from the unextended 6 degree to a maximum of 14 degrees from horizontal.

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Tech Info Library Article Number:4478



Tech Info Library

Extended Keyboard II & AppleDesign Keyboard Differences (6/95)

Article Created: 19 June 1995

TOPIC -----

Are there any differences between the Apple Extended Keyboard II and the Apple Design Keyboard?

DISCUSSION -----

The US versions of the AppleDesign Keyboard and the Extended Keyboard II have the same key layout. However, there are some subtle differences in the overall design of the keyboard.

- The Extended Keyboard II has two ADB connections, one on the right side, and one on the left side. The AppleDesign Keyboard has one ADB connection on the underside of the keyboard for a mouse or other pointing device. There is a 6-foot long cable permanently attached at the front of the keyboard for connecting it to the Macintosh.
- The Extended Keyboard II has a multi-position switch at the front of the keyboard for adjusting the keyboard angle to several positions. The AppleDesign Keyboard has two feet on the underside for raising the keyboard angle (that is two keyboard angles).
- The AppleDesign Keyboard is slightly smaller and lighter. For further information, please see the following Tech Info Library articles, "AppleDesign Keyboard: Technical Specifications (8/94)", and "Apple Extended Keyboard II: Specifications (10/94)."

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Keywords: <None>

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Tech Info Library

AppleDesign Keyboard: Technical Specifications (8/94)

Article Created: 2 August 1994

TOPIC -----

This article provides the technical specifications for the AppleDesign Keyboard.

DISCUSSION -----

Keys

- Total of 105
 - 60-key alphanumeric keypad (47 printing keys)
 - 18-key numeric keypad (16 printing keys)
 - 4-key inverted T-style cursor-control keypad
 - 15 programmable function keys
 - 6 special screen-editing keys
 - Escape key
 - Power-on/Reset key

Dimensions

- Height (maximum): 1.6-in. (4.1 cm)
- Width: 18.7-in. (47.5 cm)
- Depth: 6.9-in. (17.5 cm)
- Weight: 2.7 lb. (1.2 kg)
- Keyboard Angle:
 - Maximum: 12 degrees
 - Minimum: 6 degrees
- Height of home row: 1.2-in. (3.0 cm) (in the down position)
- Typical distance between keys: 0.75-in (1.9 cm)

Other Specifications

- Total key travel: approx. 4.5 cm
- Peak tactile force: >0.75 N
- Keyswitch minimum life: 10 million cycles
- Connector: Apple Desktop Bus (ADB) 4-pin minicircular
- Indicators: Three LEDs
- Cable Length: 6 ft. (1.8 m), attached

Power Requirements

- LEDs on: 150 mA typical

Environmental requirements

- Storage temperature: -90 to 140 degrees F (-40 to 60 degrees C)
- Operating temperature: 50 to 104 degrees F (10 to 40 degrees C)
- Humidity: 95% maximum, noncondensing, typical

System Requirements

- Any Apple personal computer with an ADB interface

Product Details

- The keyboard has 15 function keys (F1-F15) and 6 special screen-editing keys (Home, Page Up, Page Down, Forward Delete, End, and Help)
- The function keys are operative with a Macintosh application that supports them, a remapping tool, or an MS-DOS application with the appropriate coprocessor card or software application.
- Remapping tools are available for configuration of the function keys. Macros can be defined for specific applications or globally for all applications. See your authorized Apple representative for details regarding these macro utilities.
- The Caps Lock LED is operative in the Macintosh environment. The Num Lock and Scroll Lock LEDs are used by some third-party applications and in alternate operating systems.

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Keywords: SPECSHT

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Tech Info Library

Extended Keyboard: Purpose of Num/Caps/Scroll Lock LEDs (10/94)

Article Created: 07 September 1994

Article Reviewed/Updated: 10 October 1994

TOPIC -----

What are the num lock, caps lock, and scroll lock LED's for on my Extended Keyboard and Extended Keyboard II? I've seen the caps lock LED come on but not the other two.

DISCUSSION -----

The three LED's are triggered by an application, or, in the case of the caps lock LED, the activation of the caps lock function. The scroll lock and num lock are illuminated in only a few applications under the Macintosh operating system.

The num lock LED will illuminate to indicate that the numeric keypad is locked into a mode where only numerals will be recognized. Some DOS/Windows applications use the numeric keypad for functions other than entering numerals. The num lock is activated most frequently by spreadsheet applications in the Mac OS environment.

The scroll lock is not implemented in many current Macintosh applications. Some spreadsheet applications take advantage of the scroll lock to move the spreadsheet data up or down in the window. Its original purpose was to pause data scrolling by on screen in terminal emulation applications. This allowed one screen worth of information to be read by the user.

Article Change History:

10 Oct 1994 - Clarified use of the num lock and scroll lock keys.

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Keywords: <None>

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Tech Info Library

Apple Adjustable Keyboard: Description (Discontinued) (5/95)

Article Created: 6 January 1993

Article Reviewed/Updated: 16 May 1995

TOPIC -----

This article describes the Apple Adjustable Keyboard.

DISCUSSION -----

The Apple Adjustable Keyboard has a new ergonomic design that helps your wrists stay in a neutral position for comfort and typing ease. Its main feature is a "split" alphanumeric keyboard that lets you adjust the left- and right-hand sections up to a 30-degree angle to find the typing position that feels right for you.

The Apple Adjustable Keyboard also includes:

- Detachable palm rests to provide a flat surface to rest your hands when you're not typing.
- Volume up, volume down, mute, and record keys, valuable in multimedia applications.
- A separate extended keypad that includes function keys, special keys for document editing, a numeric keypad, and cursor-control keys
- Adjustable feet so you can change the slope of both the main keyboard and the extended keypad.

APPLE ADJUSTABLE KEYBOARD FEATURES

Ergonomic Design

- Split alphanumeric keyboard
- Detachable palm rests
- Slope-adjustment feet

Modularity

- Separate extended keypad can be located on either the right or left side of the keyboard

- Detachable palm rests for minimum desk space requirements

Ease of Use

- Standard ANSI layout eliminates the need to relearn the positions of the keys (ISO layout available for Europe)
- Easily accessible sound keys to modify the sound volume or record without lifting your hands from the keyboard
- Easy connection with any Macintosh through the Apple Desktop Bus port

Flexibility

- Full-featured keyboard for complete compatibility with Macintosh applications
- 111 total keys with 15 function keys and an 18-key numeric keypad

Ordering Information

Apple Adjustable Keyboard

Order No. M1242LL/A

- Main alphanumeric keyboard
- Two keyboards palm rests (left and right)
- Extended keypad
- Keypad palm rest
- Keypad template
- 3-ft. ADB coiled cable
- 1-ft. ADB jumper cable
- 3.5-in. floppy installer disk
- Instruction manual
- Software license agreement and warranty

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Keywords: specsht

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Tech Info Library

Apple Adjustable Keyboard: Specifications (Discontinued) (5/95)

Article Created: 6 January 1993

Article Reviewed/Updated: 16 May 1995

TOPIC -----

This article gives the technical specifications of the Apple Adjustable Keyboard.

DISCUSSION -----

Compatibility

- Plugs directly into any Apple Desktop Bus port on your Macintosh
- Requires Macintosh system software version 6.0.7 or later

General

- Total number of keys: 111 (ANSI), 112 (ISO)
- Required voltage: $5 \pm 10\%$ V DC
- Storage temperature: -40° to 116.6° F (-40° to 47° C)
- Operating temperature: 50° to 104° F (10° to 40° C)
- Operating humidity: 95% maximum, noncondensing at 77° to 104° F (25° to 40° C)
- Two cables: 3-ft. (1.0 m) coiled cord and 13.4-in. (340 mm) cable
- Total weight: 3 lb. 12 oz. (1.7 kg) keyboard and keypad with palm rests

Characteristics of Typing Keys

- Typical distance between keys: 0.75 in. (19.05 mm)
- Total key travel: 0.138 in. (3.5 mm)
- Peak tactile force: 0.69 ± 0.25 N
- Travel to peak tactile force: $0.06 + 0.008/-0.016$ in. ($1.5 + 0.2/-0.4$ mm)
- Keyswitch minimum life: 10 million cycles

MAIN KEYBOARD

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Keyboard Array

- ANSI version: 68 keys total (47 printing keys)

- ISO version: 69 keys total (48 printing keys)
- Escape key
- Power-on key
- Volume up, volume down, mute, and record keys
- Green LED indicator for Caps Lock
- Two ADB 4-pin minicircular connectors

Size and Weight

- Height (rear): 1.48 ± 0.04 in. (37.5 ± 1 mm) with flip feet closed
- Width: 15.18 ± 0.04 in. (385.6 ± 1 mm)
- Depth: 6.26 ± 0.04 in. (159 ± 1 mm)
- Weight: 2 lb. 5 oz. (1.055 kg) without palm rests; 2 lb. 7 oz. (1.223 kg) with palm rests

Keyboard Slope

- 5° with flip feet closed; 12.5° with flip feet open

Keyboard Opening Angle

- 30° maximum, 0° minimum

Height of Home Row

- 1.77 in. (30 mm) minimum

Power Requirements

- LED off: 7 mA
- LED on: 19 mA

EXTENDED KEYPAD

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Keypad Array

- 43 keys total
- 18-key numeric keypad
- 15 function keys
- Four cursor-control keys in inverted-T layout
- Six special screen-editing keys
- Two ADB 4-pin minicircular connectors

Size and Weight

- Height: 1.48 ± 0.04 in. (37.5 ± 1 mm) with flip feet closed
- Width: $9.78 \pm .04$ in. (248.3 ± 1 mm)
- Depth: $5.66 \pm .04$ in. (143.7 ± 1 mm) front to back
- Weight: 14 oz. (.405 kg) without palm rest; 1 lb. 1 oz (.481 kg) with palm rest

Power Requirements

- Maximum: 7 mA

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Keywords: SPECSHT

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Tech Info Library

Apple Adjustable Keyboard: Keypad Access & Key Caps DA (8/93)

Article Created: 31 August 1993

TOPIC -----

I have a Macintosh Centris 650 and an Apple adjustable keyboard. How do I use the Key Caps to access the both the keyboard and the keypad? Is there some kind of toggle switch?

DISCUSSION -----

Install the Hardware System Update 2.0 (HSU 2.0) on any system that will have an Apple Adjustable Keyboard attached. After the HSU 2.0 is installed, all that is needed to switch from the keyboard to the keypad and vice versa in the Key Caps DA is to touch a key on the respective device.

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Keywords: <None>

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Tech Info Library Article Number: 13111



Tech Info Library

Apple Desktop Bus Mouse II: Description and Specifications

Article Created: 6 January 1993

TOPIC -----

This article describes and gives specifications for the Apple Desktop Bus Mouse II.

DISCUSSION -----

Description

The Apple Desktop Bus Mouse II has a sleek, rounded, ergonomic shape that makes it comfortable to grab and move objects on screen.

- The mouse button is enlarged to make clicking and dragging easier.
- The tracking ball is located in the front of the mouse, for more precise control when doing precision work.

The low-power Apple Desktop Bus Mouse II uses the ADB interface and works with all Apple II and Macintosh computers with an ADB interface.

FEATURES

Ergonomic design

- Rounded shape
- Large single-button design
- Forward ball placement for fine movements with less effort
- A complete ergonomic solution when used with the Apple Adjustable Keyboard

Flexibility

- Can be daisy-chained directly from any other ADB device or plugged directly into an ADB port on your computer
- Low power consumption for PowerBook use

Ordering Information

Apple Desktop Bus Mouse II
Order No. M2706LL/A

TECHNICAL SPECIFICATIONS

System Requirements

- Any Macintosh or Apple II computer with an Apple Desktop Bus interface

Tracking

- Mechanical

Shaft Encoding

- Optical
- 200 pulses per in. (7.87 per mm)

Power Consumption

- Maximum: 10 mA

Size and Weight

- Height: 1.3 in. (33 mm)
 - Width: 2.4 in. (62 mm)
 - Depth: 4.2 in. (106 mm)
 - Weight: 0.29 lb. (0.13 kg)
- Copyright 1993, Apple Computer, Inc.

Keywords: SPECSHT

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Tech Info Library

ADB Mouse: Sticking In The Down Position (9/95)

Article Created: 8 September 1995

Article Reviewed/Updated: 15 September 1995

TOPIC -----

Sometimes my mouse seems to stick in the down position. For instance, I can click the scroll arrow in a window, and the window keeps scrolling until I click the mouse again. How can I correct this problem?

DISCUSSION -----

The symptoms you are describing could be caused by either hardware or software problems. Attempt to eliminate software first, then troubleshoot your hardware.

Try these steps in the order presented. If a step fails to correct the problem, proceed to the next one.

Step 1

Restart your computer. Many times simply restarting fixes the problem.

Step 2

Restart and turn off all extensions. If the problem goes away, troubleshoot your extensions.

Step 3

Shut down your computer, but leave the power supply to the computer turned on. Switch off any SCSI devices and completely disconnect all Apple Desktop Bus (ADB) cables and devices attached to your computer. Wait at least 10 seconds, reattach the ADB cables and devices, and restart your computer.

WARNING:

Do not disconnect ADB devices while the computer is turned on.

Step 4

Zap (reset) the PRAM (Parameter RAM) by holding down the Command-Option-P-R keys at startup.

Step 5

Replace the ADB cables and devices.

Article Change History:

15 Sep 1995 - Made minor corrections.

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Keywords: <None>

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Tech Info Library

ADB Mouse: Apple Has No Teflon Pad Replacement Kit

Article Created: 17 December 1991

Article Last Reviewed:

Article Last Updated:

TOPIC -----

Is there a replacement kit for the teflon pads on the bottom of an ADB mouse?

DISCUSSION -----

As of July 1991, Apple no kit for replacing the teflon pads on the ADB mouse. We are not aware of any third party that offers these items.
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Keywords: <None>

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Tech Info Library Article Number: 9581



Tech Info Library

Macintosh Apple Desktop Bus Device ID Numbers (5/95)

Article Created: 17 May 1995

TOPIC -----

I just got a new keyboard and trackball for my Macintosh computer. These devices came with installation software. I am supposed to enter the Apple Desktop Bus (ADB) device ID number for my keyboard and mouse, but I cannot find this information anywhere in the User's Guide that came with my Macintosh computer. What are the ADB ID numbers?

DISCUSSION -----

Some third party vendors of ADB devices use software that ask the user for the ADB ID numbers of the keyboard and mouse.

Keyboard

On all Macintosh computers the primary keyboard (including built in keyboards for PowerBooks) is ADB device 2.

Pointing Device

The primary pointing device (whether it is a mouse, a trackball, or a trackpad) is ADB device 3.

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Keywords: supt,hts

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