



HomeTek Technology Inc.

## **Appendix B**

### **User's Manual**

# ***EzKey Corporation***

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## *Keyboard*

### User's Manual

Model NO. : Ez-3000

## F.C.C. GUIDELINES 1

**WARNING:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, Uses and can radiated radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
  - Increase the separation between the equipment and receiver.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.
- Shielded interface cables must be used in order to comply with emission limits.  
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Bescheinigung des Herstellers/Importeurs

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in Ubereinstimmung mit den Bestimmungen der BMPT-AmtsblVfg 243/1991 funk-entstort ist. Der vorschriftsmaBige Betrieb mancher Gerate (z.B. MeBsender) kann allerdings gewissen Einschränkungen unterliegen. Beachten Sie deshalb die Hinweise in der Bedienungsanleitung Dem Bundesamt fur Zulassungen in der Telekommunikation wurde das Inverkehrbringen dieses Gerates angezeigt und die Berechtigung Zur Uberpru-fung der Serie auf die Einhaltung der Bestimmungen eingeräumt.

**Ezkey Corporation**

**Model : EZ-3000**

**FCC ID : MWIEZ-3000**

- (1) Ezkey Corp. reserves the right to make changes or improvements in the products described in this manual without notice at any time.
- (2) The windows Key Logo is a registered trademark of Microsoft Corporation.
- (3) IBM PC/AT, PS/2 is a registered trademark of International Business Machine Corporation.

## INTRODUCTION

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Thank you for choosing this innovative product. This keyboard is one of the Ez-3000 series products, which are 104/105 keys multimedia enhanced keyboards for IBM PC/AT, PS/2 and its compatibles.

There are software applications to enhanced the keyboard function. Its use is the same as that described in the Personal Computer Guide to Operations Handbook you received with your Personal Computer.

## OPERATION

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- 3.1 PC/AT, PS/2      This keyboard is designed to be AT,PS/2 mode Mode Selection selection is done by auto-switchable.
- 3.2 Mode              There are three LEDs on the keyboard to indicate Indicators 'Caps Lock', 'Num Lock', 'Scroll Lock' and "On-Line Lock".  
The LEDs are 'toggled'. The first depression of the key turns on the LED. The second depression turns the LED off and so on. LEDs are off on power-up or software reset, but will flash during power-on initialization.
- 3.3 Type Ahead      The keyboard has 16 keys type ahead capability. This means that you can depress 16 keys before host can receive. If more keys are pressed before the host allows keyboard output, the additional data is lost.
- 3.4 Typematic        With the exception of the Pause key, all keys are Delay and typematic. When a key is pressed and held down, the Repeat keyboard delays 0.5 sec. and begins sending a make Rate Code for that key at a rate of 10.9 characters per second. (The delay is called typematic Delay and the rate is called Repeat Rate.)

If two or more keys are pressed, only the last key pressed is repeated at the repeat rate. Typematic operation stops only when the last key pressed is released, even if other keys are still held down. If a key is pressed and held down while keyboard transmission is disable, only the first make code is stored in the type ahead buffer. This prevents the type ahead buffer overflow as result of typematic action.

In AT mode, the typematic delay and repeat rate are programmable, this is done by command from host.

The default data:

Typematic Delay = 0.5 sec.

Repeat Rate = 10.9 characters per sec.

- 3.5 Pseudo The 'N' key roll-over capability where 'N' is the total N key number of keys on the keyboard 'N' key roll is the Roll-over number of keys that may be held depressed simultaneously capability and have the keyboard generate the appropriate code for each pressed and released key without keyboard interruption.
- 3.6 Diagnostic The keyboard microprocessor will perform a diagnostic test self-test after Power-up or after the host system signals the keyboard to perform a software Reset. The microprocessor will check its data memory locations, do a sum-check internal RAM check and check for any depressed keys. If the diagnostic test is correct, the keyboard will transmit an 'AA HEX' code. This will be the first transmission following a Power-Up condition. If the diagnostic test was unsuccessful, then the keyboard will transmit an 'FD/FC HEX' code. In either case, after the diagnostic check the keyboard will begin normal operation.

## CABLE AND CONNECTOR 4

The keyboard cable is a 5 ft. long cable. The keyboard cable is connected to the host unit through a 6-pin Din connector.

The following figure lists the connector pins and their signals.

### 5-PIN DIN

DESCRIPTION	SIGNAL	PINS	CONNECTOR
Keyboard Clock	+5VDC Signal	1	
Keyboard Data	+5VDC Signal	2	
		3	
Ground	0	4	
Power Supply	+5VDC	5	

### 6-PIN DIN

DESCRIPTION	SIGNAL	PINS	CONNECTOR
Keyboard Data	+5VDC Signal	1	
		2	
Ground	0	3	
Power Supply	+5VDC	4	
Keyboard Clock	+5VDC Signal	5	
		6	

## TECHNICAL DATA

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### 5.1 Electrical

Input Power: +5 Vdc, 60 mA Max.

Characteristics Power Consumption: 0.3 watts Max.

### 5.2 Mechanical

Total Travel: 3.5 +/- 0.4 mm

Characteristics Pretravel: 2.3 +/- 0.2 mm

Operating Life: 200 million cycles

Dimension: 517 \* 257\* 56 mm (W \* D \* H)

### 5.3 Environmental Specifications

Operating Temperature: -10 C to 50 C

Storage Temperature: -20 C to 60 C

Relative Humidity: under 95% non-condensing