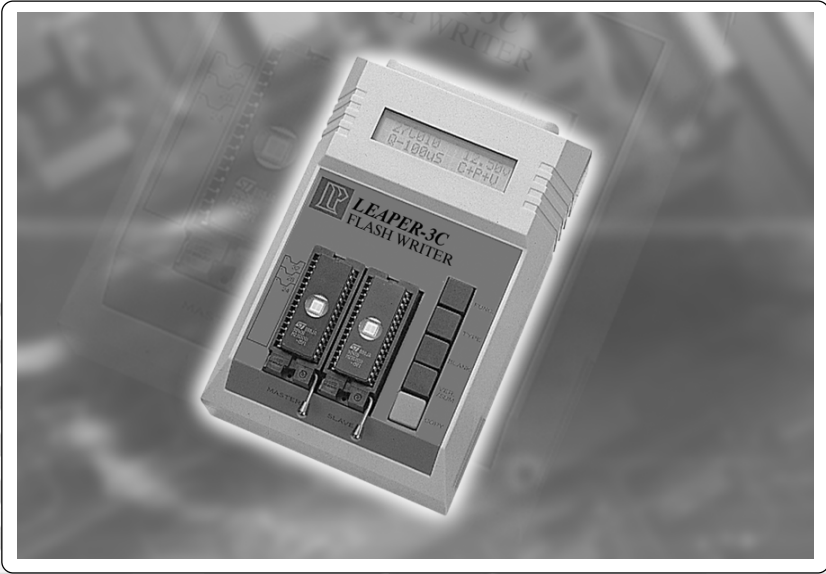




LEAPER-3C HANDY FLASH WRITER



LEAPER-3C is specially designed for FLASH series, integrating powerful hardware and software to perform high quality. It is the best choice to program FLASH series device.

The most attraction of the LEAPER-3C is following 4T products policy, i.e. Light, Thin, Short, Tiny. Concerning the concept of environmental protection, the LEAPER-3C avoids unnecessary over-package. LEAPER is doing her responsibility for the earth.

Features

- Small, portable, light & usable with batteries
- Stand-Alone FLASH programmer
- Only one source is needed to copy with.
- Two operation modes: stand-alone & PC mode
- Support Windows 95/98/NT/2000/ME/XP

Stand-Alone mode

- 5 Function keys
Functions
Type
Blank check
Verify & check sum
Program
- IC parameters are adjustable such as programming algorithm, Vpp voltage, and impulse width.

PC based mode

- Connect with PC by USB port to transmit data and execute functions such as :
Type/ Read/ Blank Check/ Program/Verify/Erase/ Disk/ Help/ Process/Parameter
- C parameters are adjustable such as programming algorithm, Vpp voltage, and impulse width.
- File formats supported:
Binary and machine code, Intel HEX, Motorola HEX

Physical & Environmental Specification

- Display: LCD with 16 x 2 characters
- Dimension : 16cm × 11cm × 4.5cm
- Weight : 0.5Kgs
- Temperature : +5°C to +45°C
- Humidity : up to 90% non-condensing
- Altitude : up to 5000m

Safety Standard

Meet CE requirement

Standard Accessories

- Main unit
- CD ROM (installation program and user's manual are included)
- USB cable
- 12V/500mA power adaptor

Optional accessories

- Various PLCC, TSOP, VSOP converters

Supported Devices

- EPROM
27C64-27C080
- EEPROM
28C256-28C040
- FLASH EPROM
29C256-29C040
- 29EE/LE512-29EE/LE020
- 28F256-28F020A
- 28SF/VF 040
- 29F010-29F040
- 29F001-29F002
- 39SF/VF512-39SF/VF040
- 49F512-49BF040
- 49F/LV001-49F/LV002

FLASH Writer Devices List

27CXX

27C64	27C128	27C256	27C512
27C010	27C020	27C040	27C080

28FXX

28F256	28F256A	28F512	28F010
28F010A	28F020	28F020A	

AMD

AM29F010	AM29F010A	AM29F010B	AM29F002B
AM29F002T	AM29F002NB	AM29F002NT	AM29F002BB
AM29F002BT	AM29F002NBB	AM29F002NBT	AM29F040
AM29F040B	AM29LV010B	AM29LV001BB	AM29LV001BT

AMIC

A29001U	A29001T	A290011U	A290011T
A290010	A29002U	A29002T	A290021U
A290021T	A29040	A29040A	

ATMEL

AT49F512	AT49F010	AT49F001	AT49F001N
AT49F001T	AT49F001NT	AT49F020	AT49F002
AT49F002N	AT49F002T	AT49F002NT	AT49F040
AT49F040T	AT49LV512	AT49LV010	AT49LV001
AT49LV001N	AT49LV001T	AT49LV001NT	AT49LV020
AT49LV002	AT49LV002N	AT49LV002T	AT49LV002NT
AT49LV040	AT49LV040T	AT49BV512	AT49BV010
AT49BV001	AT49BV001N	AT49BV001T	AT49BV001NT
AT49BV020	AT49BV002	AT49BV002N	AT49BV002T
AT49BV002NT	AT49BV040	AT49BV040T	AT29C256
AT29C512	AT29C010	AT29C010A	AT29C020
AT29C040	AT29C040A	AT29LV512	AT29LV010A
AT29LV020	AT29LV040A	AT29BV010A	AT29BV020
AT29BV040A	AT28C256	AT28C010	AT28C040

BRIGHT

BM29F040

EON

EN29F002B

EN29F002NB

EN29F002T

EN29F002NT

EN29F040

FUJITSU

MBM29F010

MBM29F002B

MBM29F002T

MBM29F040

MBM29F040A

MBM29F040C

HYUNDAI

HY29F002B

HY29F002T

HY29F040

HY29F040A

IMT

IM29F001T

IM29F002T

MEGAWIN

MM29F040E

MM29LF040E

MOSEL

V29C51001B

V29C51001T

V29C51002B

V29C51002T

V29C51004B

V29C51004T

V29C31004B

V29C31004T

MXIC

MX29F001B

MX29F001T

MX29F002B

MX29F002NB

MX29F002T

MX29F002NT

MX29F022NT

MX29F040

MX29F004B

MX29F004T

MX29LV040

MX29LV004B

MX29LV004B

MX26C1000B

MX26C2000

MX26C2000B

PERFECT

PDT29F010

PE29F002N

PMC

PM29F002B

PM29F002T

PM29F004B

PM29F004T

PM29LV002B

PM29LV002T

PM29LV004B

PM29LV004T

ST

M29F010B

M29F002B

M29F002T

M29F002NT

M29F002BB

M29F002BT

M29F002NBT

M29F040

M29F040B

M29W010B

M29W022BB

M29W022BT

M29W040

M29W040B

M28F101

M28F201

M28W101

M28W201

SST

SST39SF512	SST39SF010	SST39SF010A	SST39SF020
SST39SF020A	SST39SF040	SST39LF512	SST39LF010
SST39LF020	SST39LF040	SST39VF512	SST39VF010
SST39VF020	SST39VF040	SST29EE512	SST29EE512A
SST29EE010	SST29EE010A	SST29EE011	SST29EE020
SST29EE020A	SST29LE512	SST29LE512A	SST29LE010
SST29LE010A	SST29LE020	SST29LE020A	SST29VE512
SST29VE512A	SST29VE010	SST29VE010A	SST29VE020
SST29VE020A	SST28SF040	SST28SF040A	SST28LF040
SST28VF040	SST28VF040A	SST27SF256	SST27SF512
SST27SF010	SST27SF020	SST27VF256	SST27VF512
SST27VF010	SST27VF020	SST27VF040	SST37VF512
SST37VF010	SST37VF020	SST37VF040	

SYNCOMOS

F29C51001B	F29C51001T	F29C51002B	F29C51002T
F29C51004B	F29C51004T	F29C31004B	F29C31004T

WINBOND

W49F020	W49F002A	W49F002U	W29C010
W29C011A	W29C020	W29C020C	W29C040
W29EE512	W29EE010	W29EE011	W29EE020
W29EE040	W27C256	W27C257	W27C512
W27C010	W27C020	W27E256	W27E257
W27E512	W27E010	W27E020	W27E040
W27F257	W27F512	W27F5010	

Standard Accessories

LEAPER-3C Flash Writer main unit x1, USB cable x1, DC 12V/500mA adaptor x1, PC Software, drivers and manuals on CD-ROM x1



Main unit

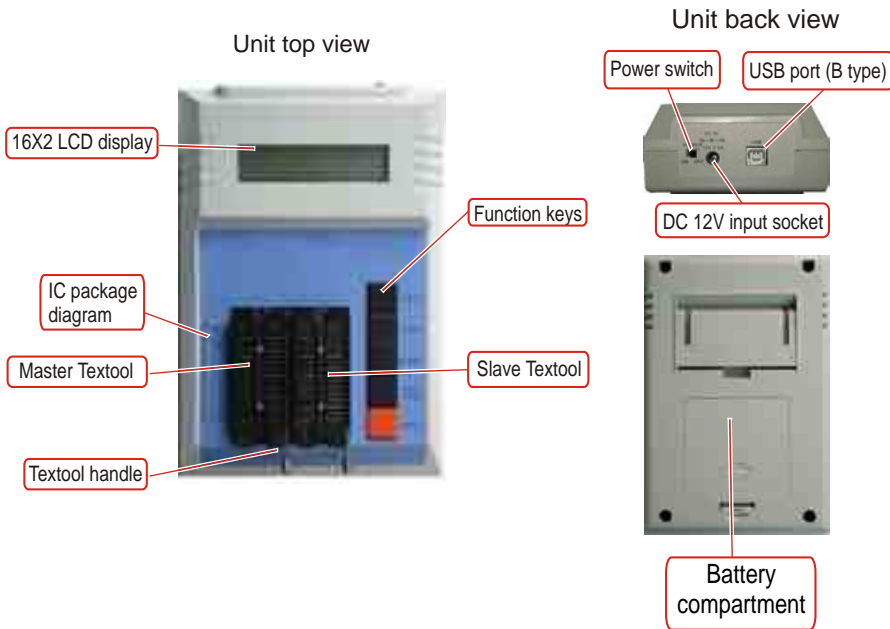


Adaptor



USB cable

Introduction



Attention

1. It is preferred to use an internal USB port of your PC. External USB ports are not recommended because of shared bandwidth and possible compatibility issues of other USB devices.
2. In PC mode operation, the Slave textool is used for all operations. In stand-alone mode, the source IC should be placed in the Master textool and the target IC in the Slave textool.

Install software and driver

1. Set Font Size to [small fonts] (96 dpi) to have the optimal display.
 - 1.1 Click the right button on the desktop. -> Select the [Properties] at the bottom of the function menu.
 - 1.2 Select [Settings] and then click the [Advanced] to set Font Size.
2. Install the software before connecting the Leaper-3C to the PC.
 - 2.1 Insert the software CD into your CD-ROM drive. Normally the installation program will start automatically (if Auto Run is enabled for your CD-drive). Follow the instructions to complete installation.
 - 2.2 If Auto Run doesn't work, click [Setup.exe] in the CD directory to start the installation.
3. Install the driver for the Leaper-3C hardware.
 - 3.1 Make sure the Leaper-3C power is [OFF]. Connect the power adaptor to the Leaper-3C and a power outlet.
 - 3.2 Connect the USB cable to PC USB port and to the programmer USB port.
 - 3.3 Turn the Leaper-3C power to [ON]. Windows will now start the [Found New Hardware Wizard].
 - 3.4 Install Hardware Device Driver
 - > Search for a suitable driver for my device (recommended)
 - 3.5 Select Optional search locations
 - > CD-ROM drives
 - 3.6 Driver Files Search Result
 - > Windows will find a driver for this device ...\\driver\\flashwriter.inf
 - 3.7 Click [Finish] in the Found New Hardware Wizard

The Leaper-3C software and drivers have now been installed and the unit is ready for usage.



[3.3]



[3.4]



[3.5]



[3.6]



[3.7]

LEAP Electronic Co., Ltd.
 Tel : + 886-2-2999 1860
 Fax : + 886-2-2999 9873
 http : //www.leap.com.tw
 Email: service@leap.com.tw

Operation window

Programming source

- Load from PC
- Verify source IC
- Save file
- Read from source IC
- Edit file

The main window is divided into two main sections: **Source** and **Process**.

Source Section: Includes a file path field (File: F:\R.D\Q & A\WICE-8052\out.hex), buttons for Load, Read, Edit, and Save, and fields for Device (ST 29F040B) and DeviceSum (07F6E55F).

Process Section: Includes checkboxes for Erase, Check, Prog, Verify, and Prot, a progress bar showing 0%, 50%, and 100%, and a large green **PASS** indicator.

Program process & options

- Erase
- Blank check
- Program
- Verify
- Protect / security

Exit program

IC manufacturer, type number

Device verify Check SUM

Programming status

Run

Stop

Progress bar

Source file editing

8bits HEX display 16bits HEX display Buffer & file information

The editing window shows a grid of data with columns for 8 Bits, 16 Bits, and Buffer Information. The Buffer Information column includes columns for hexadecimal (0-F) and ASCII (A-Z, a-z, space, tab, carriage return, line feed).

Address of data Click and enter new address.

HEX code Display Click to enter hexadecimal data.

ASCII code Display Click to enter text.

Exit edit window

Select IC number

8/16/32 Bits

Load file

Save file

Get data block checksum

Data block - Move/Copy/Swap

Data block - Fill

Confirm changes

Cancel changes

Set data block range by load file size

Set data block range by maximum size of buffer

Set data block range by selected IC size

Stand-Alone Operation Mode

Main frame

LCD Display	Keypad	Function Descriptions
IC number IC Checksum ↓ ↓ 29F010 E700 C+P+V 5.00V	FUNC.	Select IC Vendor
↑ ↑ Programming Voltage Procedure	TYPE	Switch IC Number
	BLANK	Blank Check to SLAVE
	VER./SUM	Read Checksum of MASTER and verify with SLAVE
	COPY	Copy MASTER to SALVE

Blank Check

LCD Display	Keypad	Function Descriptions
IC number IC Checksum ↓ ↓ 29F010 **** Checking >	FUNC.	Select Prog. Procedure
↑ ↑ Status	TYPE	Switch IC Number
	BLANK	No function
	VER./SUM	Confirm IC brand
	COPY	No function

O.K. → 29F010 ****
Checking PASS

ERROR → 29F010 ****
Checking FAIL

Read & Verify Checksum

LCD Display	Keypad	Function Descriptions
IC number Previous IC Checksum ↓ ↓ 29F010 26AF Verify >	FUNC.	Select Prog. Procedure
↑ ↑ Status	TYPE	Switch IC Number
	BLANK	No function
	VER./SUM	Confirm IC brand
	COPY	No function

O.K. → 29F010 5612
Verify PASS

ERROR → 29F010 12EF
Verify FAIL

COPY

LCD Display	Keypad	Function Descriptions
IC number Previous IC Checksum ↓ ↓ 29F010 26AF Verify >	FUNC.	Select Prog. Procedure
↑ ↑ Erase, Check, Program, Verify & Protect according to Prog. Procedure	TYPE	Switch IC Number
	BLANK	No function
	VER./SUM	Confirm IC brand
	COPY	No function

O.K. → 29F010 1A36
COPY PASS

ERROR → 29F010 1312
Verify FAIL

Wrong procedure

Select IC Vendor

LCD Display	Keypad	Function Descriptions
Select IC Vendor ↓ Select Vendor AMD	FUNC.	Select Prog. Procedure
↑ IC brand	TYPE	Switch IC Number
	BLANK	No function
	VER./SUM	Confirm IC brand
	COPY	No function

Programming Procedure

LCD Display	Keypad	Function Descriptions
Select Prog. Procedure ↓ Select Procedure C+P+V	FUNC.	Flash - to select IC Vendor 27CXXX- to select Algorithm
↑ Prog. Procedure	TYPE	Switch Prog. Procedure
	BLANK	No function
	VER./SUM	Confirm Prog. Procedure
	COPY	No function

Programming Algorithm

LCD Display	Keypad	Function Descriptions
Select Prog. Algorithm ↓ Select Algorithm Q-100uS	FUNC.	Select Prog. Algorithm
↑ Prog. Algorithm	TYPE	Switch Prog. Algorithm
	BLANK	No function
	VER./SUM	Confirm Prog. Algorithm
	COPY	No function

** Only 27Cxxx **

Programming Voltage

LCD Display	Keypad	Function Descriptions
Select Prog. Voltage ↓ Select Voltage 12.70V	FUNC.	Select IC Vendor
↑ Prog. Voltage	TYPE	Switch Prog. Voltage
	BLANK	No function
	VER./SUM	Confirm Prog. Voltage
	COPY	No function

** Only 27Cxxx **