

Programmer for mas production of PIC

# MR.GANG

User's Manual

**COMFILE**  
TECHNOLOGY

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## Introduction...

Thank you for choosing “MR.GANG”. This product for mass production can handle PIC 12/14/16 family.

This product operate stand alone(not connected to PC), and adopt a method of copy from master-chip to blank-chip.

This product has strong good point, low cost and high reliance, and guarantee of continuous upgrade.

We provide upgraded Form-ware for new device as soon as possible.

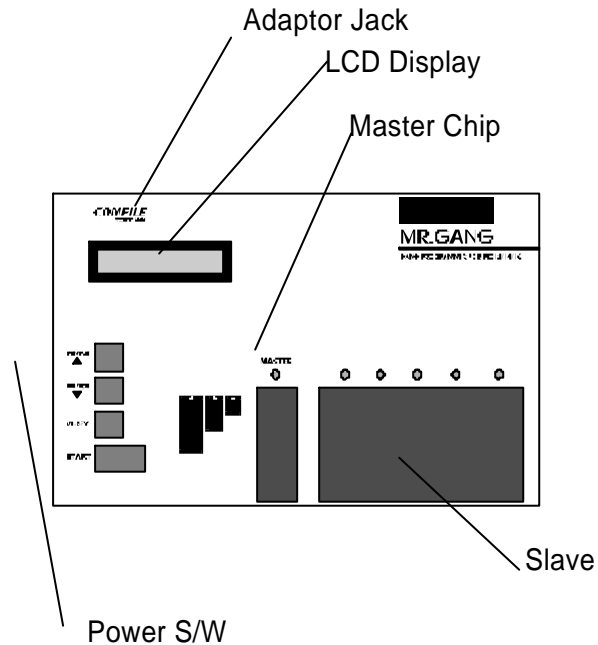
Thank you.

# Chapter 1

## Introduction and Installation

## 1. System Layout

This is introduction of System's Layout



## 2. Usable Device

This system can handle PIC 12/14/16 family and take advantage of upgrade Firm-ware. There are device list, now using current version (V3.1) (cf. PIC16C54/A/B means 54 and 54A and 54B)

PIC12C508/A, 509A, PIC12CE518, 519

PIC12C671, 672, PIC12CE673, 674

PIC16C52, 54/A/B/C, 55/A, 56/A, 57/C, 58/A/B, 505

PIC14C000

PIC16C554/A, 558/A, PIC16C62/A/B, PIC16C63/A

PIC16C64/A, 65/A/B, 66, 67

PIC16C620/A, 621/A, 622/A

PIC16CE623, 624, 625

PIC16C642, 662

PIC16F627, 628

PIC16C71, 710, 711, 712, 715, 716, 717

PIC16C72/A, 73/A/B, 74/A/B, 76, 77

PIC16C770, 771, 773, 774

PIC16C745, 765, PIC16C781, 782

PIC16C84, F84/A

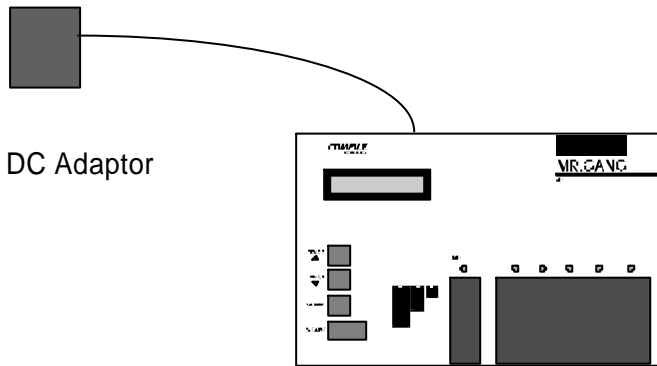
PIC16C923, 924, 925, 926

PIC16F870, 871, 872, 873, 874, 876, 877

PIC16F72, 73, 74, 76, 77

### 3. Installation

MR.GANG(the rest omitted GANG) is connected to the source of electric power(AC) using adopter in the system(16V, 800mA).



# Chapter 2

# Operating Manual

## 1. Master-chip

Need to master-chip for operate. Master-chip is Non-Code-Protection chip, is written by such as PRO ENGINE -2, connectable to PC.

It is had better to check in the master-chip's IDCODE. In MR.GANG compare with CheckSum owing to IDCODE conformation.

Preparatory master-chip has attached sticker in chip's top side for CheckSum. CheckSum is only way to certify error existence.

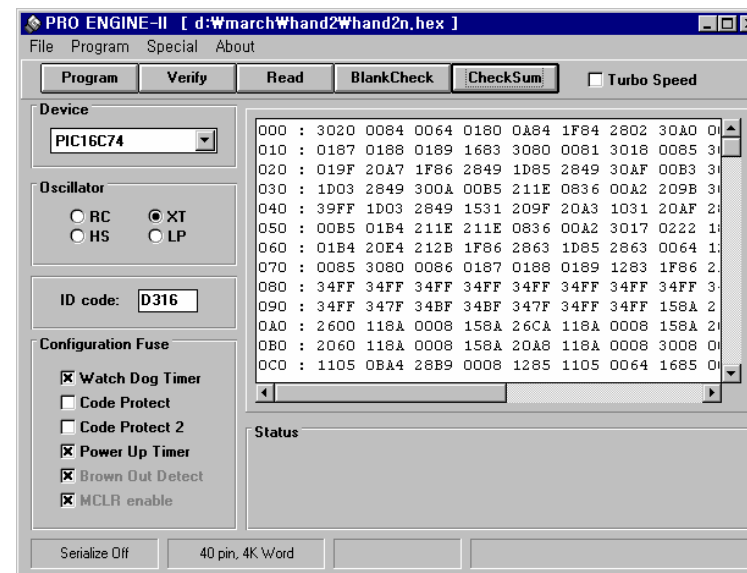
User ought to confirm CheckSum in master-chip and CheckSum on LCD in GANG lighter .(Beep outbreak because of change of CheckSum.)

**warning** : It is very important to administration of master-chip and CheckSum in operate.

Almost of writing error is owing to wrong administration of master-chip's CheckSum.

## 2. To make master-chip

It is better fine to make master-chip is using PRO ENGINE-2. Because PRO ENGINE-2 and MR.GANG have same computation formula. (From time to time, when using other company's ROM writer, the result is different. Because the CheckSum computation formula is different from the others.)



First, act PRO ENGINE-2, load HEX file and setting device. First, setting fuse(RC, XT, Watch Dog, Timer, etc.). Code Protection is must set OFF. Push the CheckSum button, the

present CheckSum is move to IDCODE.

**warning** : First setting fuse and then push CheckSum.  
Because CheckSum has include fuse value.

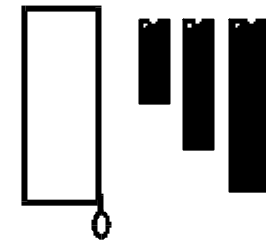
To be completed this way, to put in device and push PROGRAM to writing.

After writing process, it had better confirm chip's operating in the target board.

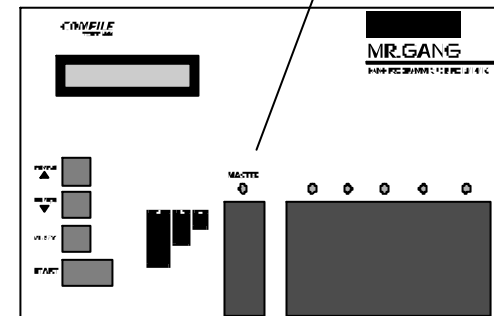
### 3. Master Setting

Power to MR.GANG and allocate to master-chip at it's position.

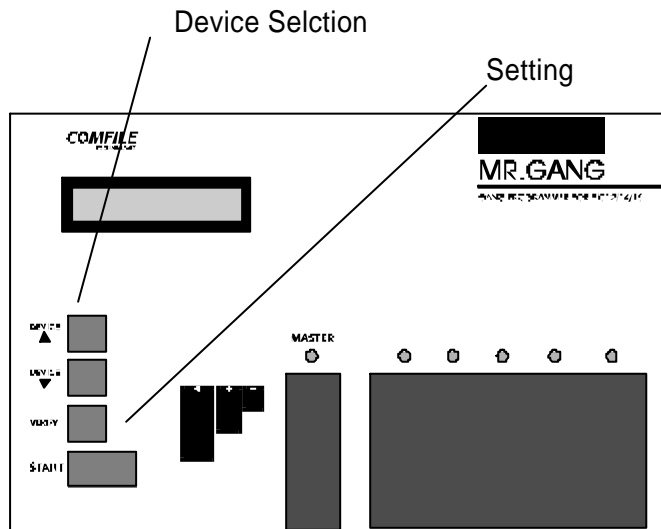
Yet, the device's number 1 pin is upward. In that aspect, allocate to TexTool's top point.



Put Master Chip



Select device to push the device select key (DEVICE SELECT). (If you choose wrong device, master-chip has capability of damage. So you select device carefully.)  
Be careful, because PIC16C74 and PIC16C74A is different device. (Printed "A" the back, which device has same spec. but different writing fuse.)



After select device, do master setting by pushing PROGRAM button.

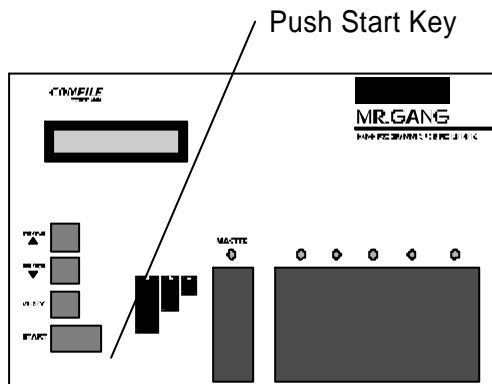
After MASTER CHECK instantly displayed in LCD Monitor, CheckSum is displayed. Yet, check the CheckSum and Master's CheckSum are same.

After select device, do master setting by pushing PROGRAM button.

After MASTER CHECK instantly displayed in LCD Monitor, CheckSum is displayed. Yet, check the CheckSum and Master's CheckSum are same.

## 4. Programming

Progress writing after master setting. Considering of direction attach blank-chip to 5 TextTool.



If push START key, writing progress is going on.

Writing is Progressed in Master condition check → blank check → PROGRAM → Certification → FUSE PROGRAM → Fuse Certification

## 7. Warning

The set of warning is as follows, when using to MR.GANG.

1. Master-chip has attached sticker written CheckSum, and compare with number of LCD monitor.
2. Choose of device is ought to accurate.
3. Ought to check up first written chip operation.

That's all of the using MR.GANG.

Thank you.

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