

Touch

LS산전: xp. Builder

M2I: TOP Design studio

GT-Designer 3

PLC

XG-5000 / GX-works2


OMRON: CX-Programmer

Siemens: Tia Portal

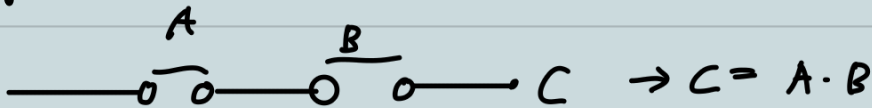
발전소/화학단지 가장 많이 씀 (통선에 강함)

기본회로 6가지

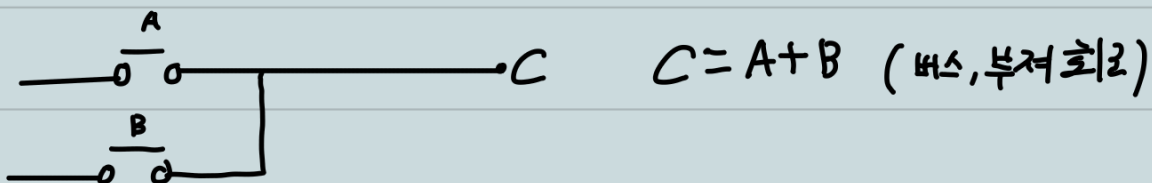
1. A점점   $\rightarrow C$  (NO)

2. b점점   $\rightarrow C$  (NC)

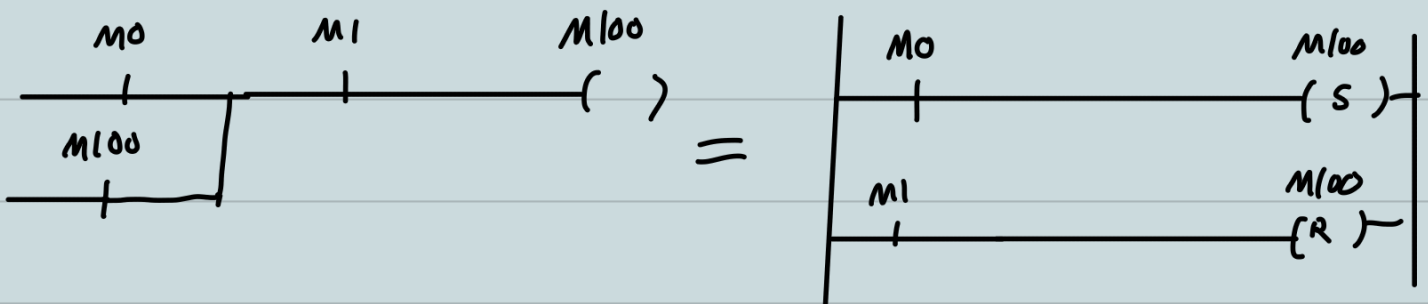
3. and 회로



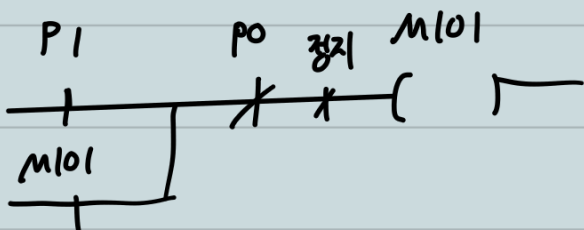
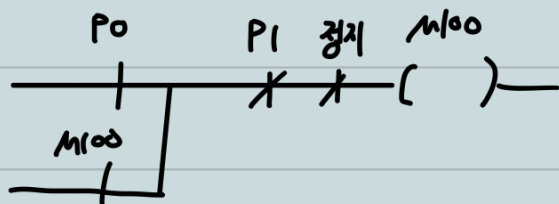
4. or 회로



5. 자기유지 회로 (self-holding)



## 6. 인터록 회로



P.104 적산타이머, TMON, TRTG

카운터 종류 4개 알았.

타이머 순서

TON To 20

MOV 명령

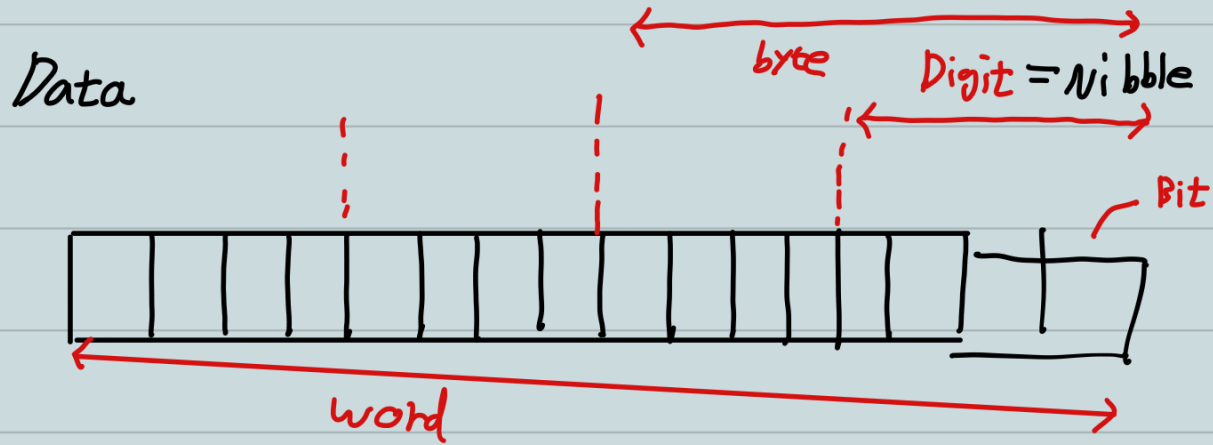
1234를 D0에 넣어라.

MOV 1234 D0

DMOV 123456 D0 : D0, D1에 데이터 들어감.

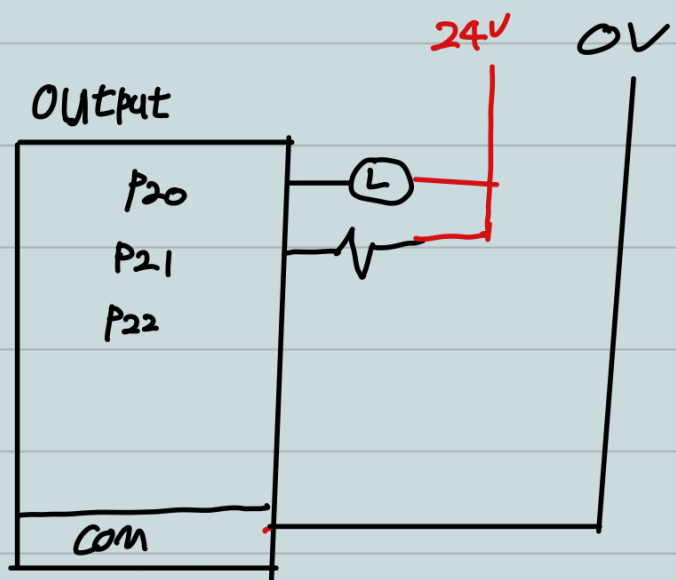
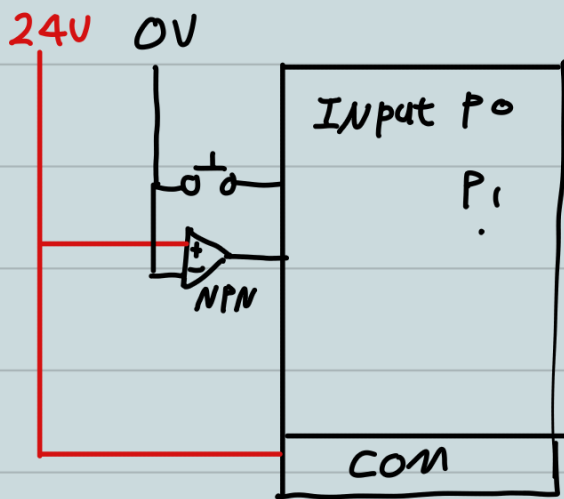
[DIV D0 D10 P100] : D0을 D10으로 나누고 D100에 넣어라

몫 D100 나머지 D101

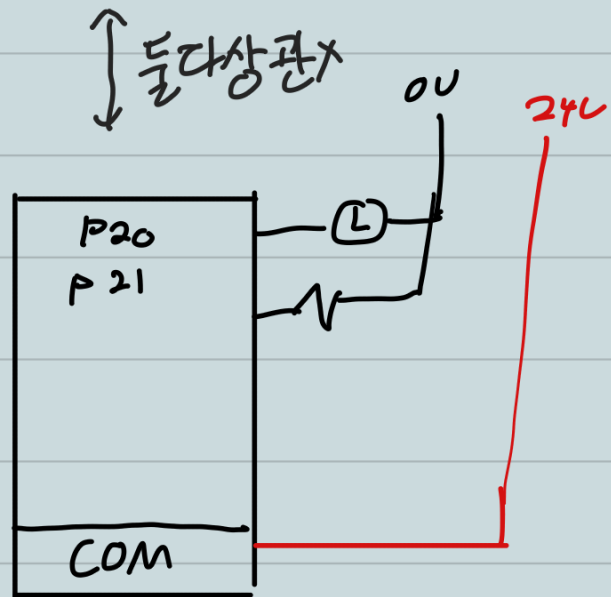
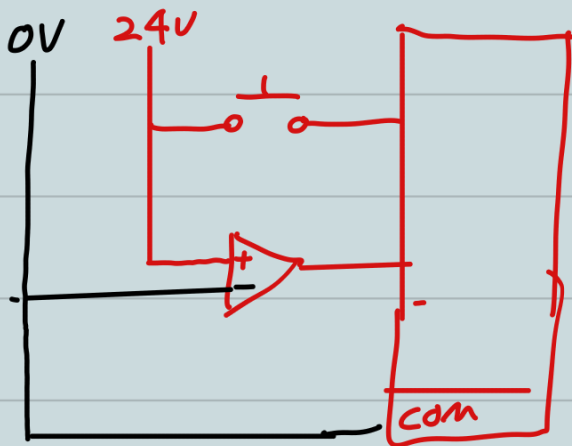


$$\text{Word} = 2 \text{ Byte} = 4 \text{ digit} = 16 \text{ bit}$$

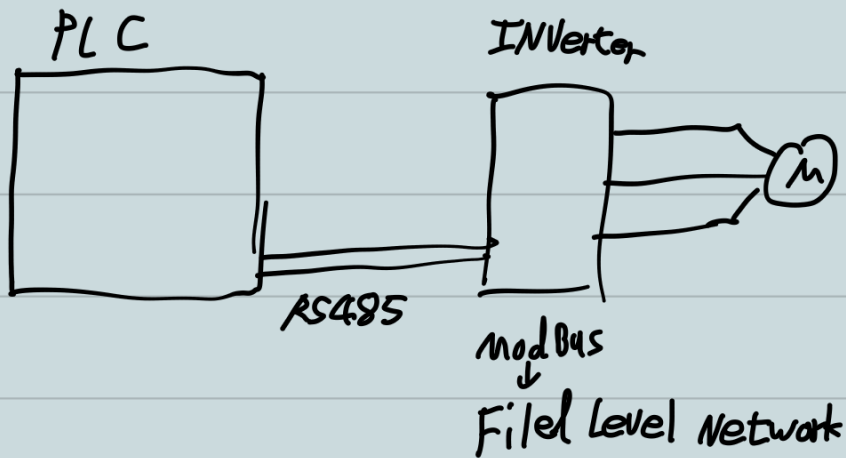
NPN사용시 : 감2K 0V



PNP사용시 : 감2K 24V



Scan time : PLC 프로그램 한번 작동하는데 걸리는 시간.



PLC 종류

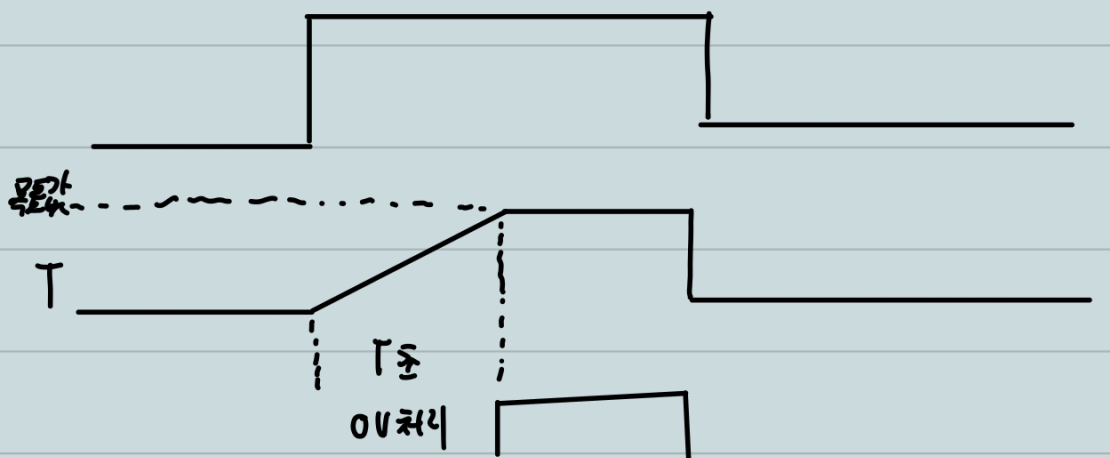
Ladder

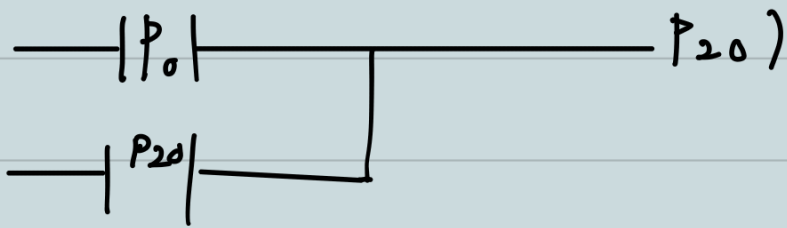
SFC

dbL

FBD

ON delay : 설정시간 내에 목표값 도달 시 ON





keep 레지스터

↳ 정전시 Bit 모뎀값이 데이터삭제되지안 / 클럭에는 전 데이터러를 기억함

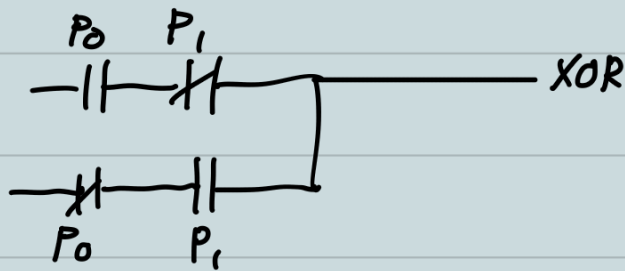
XOR

0

1

1

0



INPUT 쪽 배선 : 스위치, 센서, 코일값 OUT put 배선 : 코일, Lamp, 부저,

SOL . . .

실권하는공압완중 전기력배선X

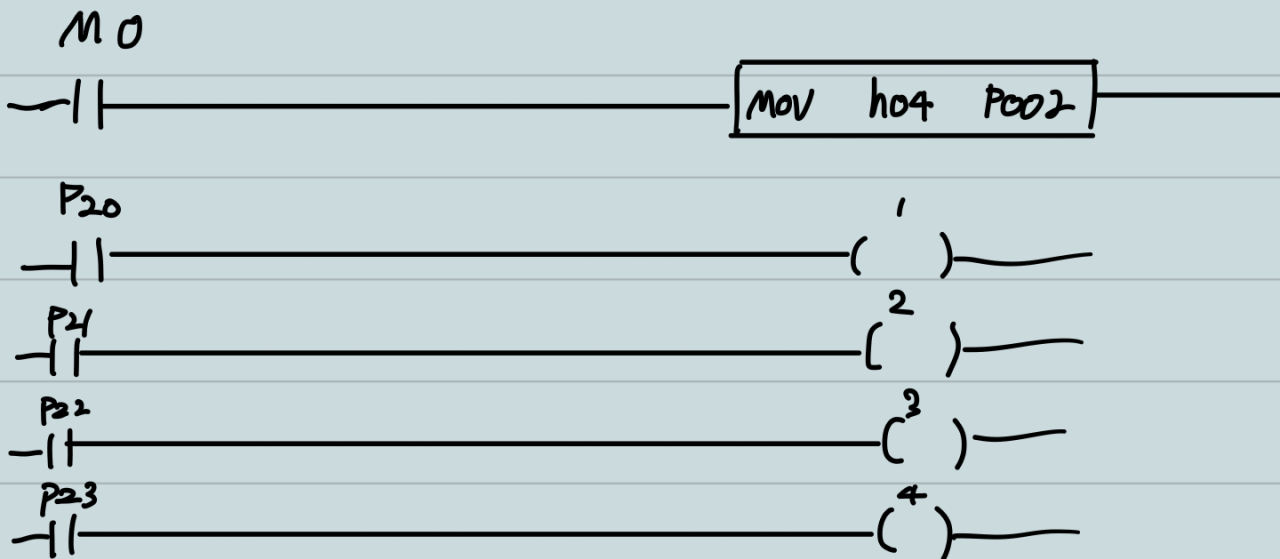
PLC 메모리

- 프로그램 메모리
- 시스템 메모리
- data 메모리

연산 결과가 bit로 출력될때

$[= P_{10} 1234] \text{ --- } [M_{100}]$   
내부결재이, 코일

데이터를 받을 경우.


$$M_{O_2} \uparrow \Rightarrow \text{농도} \uparrow \Rightarrow P_{O_2} \uparrow \Rightarrow \text{살음}$$

출력이므로 16개의 데이터를  
보낼수있음.

0 1 0 0

8 4 2 1

$$P_{23} P_{22} P_{21} P_{20}$$

	/0	/6	BCD	BIN
/4	14	E	0001 0100	1110

접점 ON-OFF

릴레이, 전자접촉기 (Magnet Contactor)

PLC 입력

