

# UPS

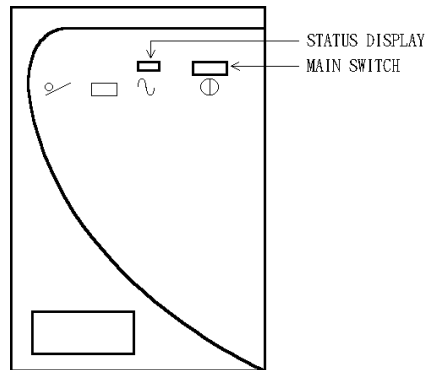
Uninterruptible Power System

BNT-400A/500A/600A

SERVICE'S MANUAL

## 一. PANELS EXPLAIN

### (1). FRONT PANEL



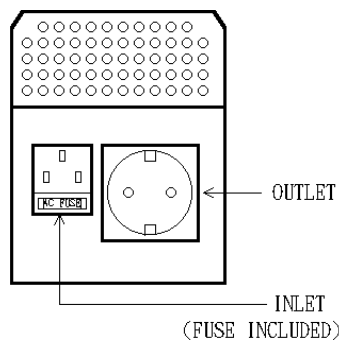
#### 1.1 Main Switch

It is for turn on and turn off the UPS. If push on 1 sec for normal torn on the UPS; If push on till “Bi Bi” sound for turn the UPS and disable the “ No Load Shutdown ” function. If push on more than 3 sec when UPS on will turn off the UPS,

#### 1.2 STATUS DISPLAY LED

It is display the status of ups, if ac input is normal, the LED light always. If battery is in using, the led glitter slowly. If the UPS is OVERLOAD , the led glitter quickly.

### (2). REAR PANEL



#### 2.1 INLET

It contain the INPUT PLUG and INPUT FUSE, It trips when the connector loads exceed the protected capacity.

The center plungers of the circuit breakers extend when tripped.

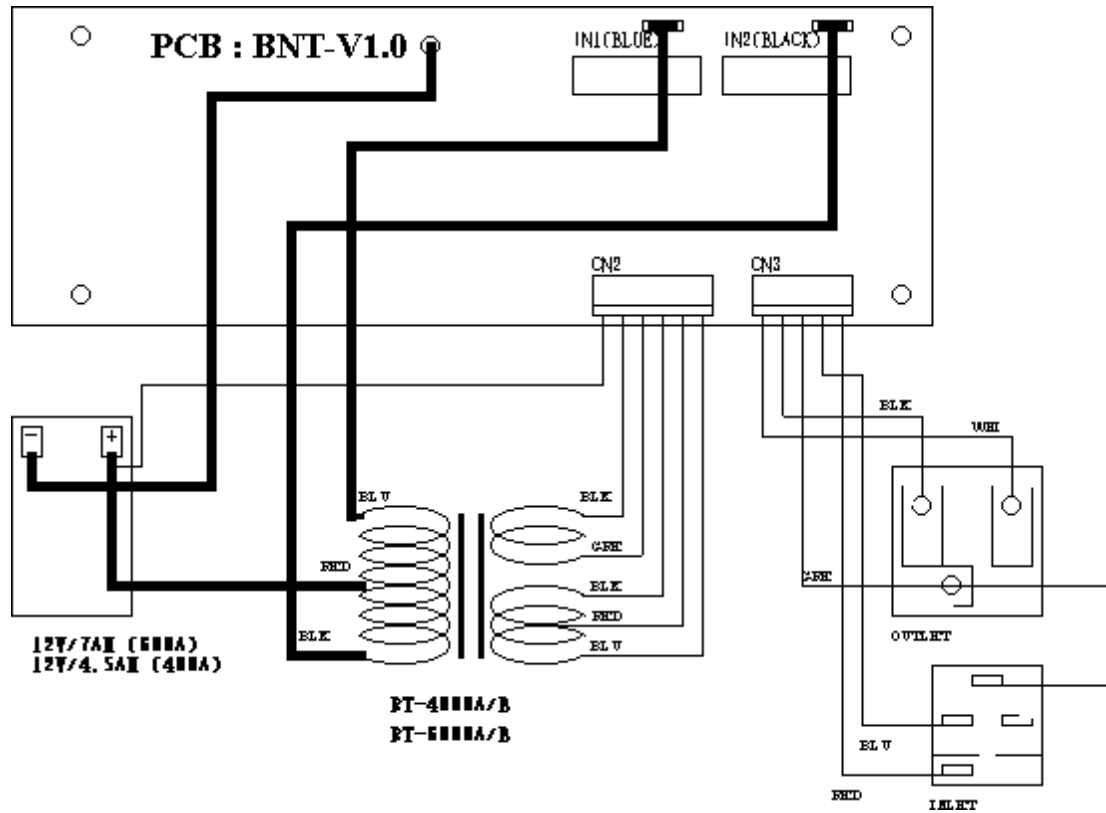
#### 2.2 OUTLET

UPS output. When line input is normal, the output bypass to Line . When Line input is bad, the output supplied by battery.

## 二. MAIN STRUCTURES OF BNT-400A/500A/600A SERIES

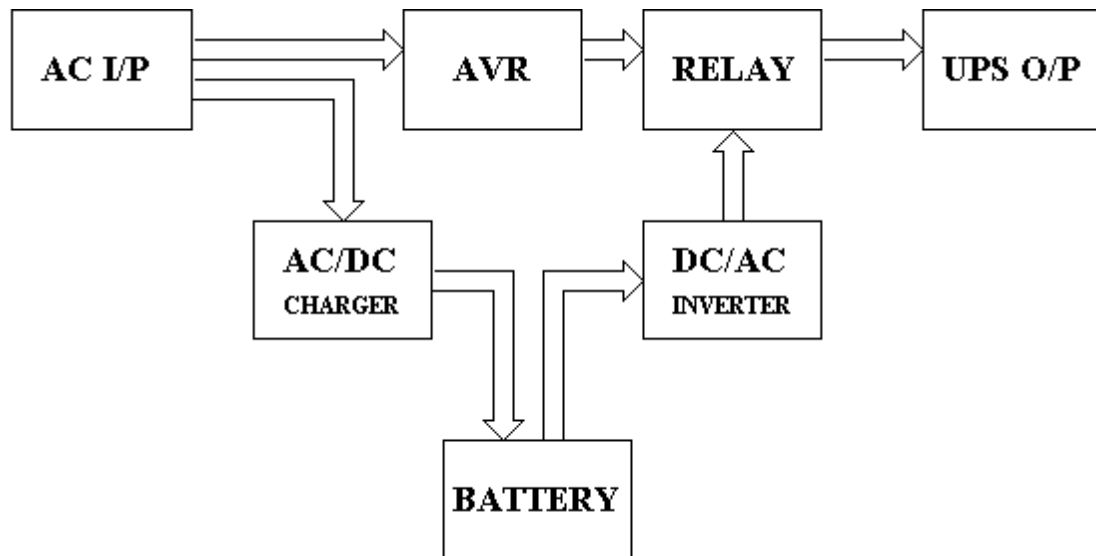
MODE NAME	BNT-400A/500A/600A	
	115V	220V
PCB	BNT-V1.1 115V	BNT-V1.1 220V
CPU	BNT-V1. x	
TRANSFORMER	RT-4000A/RT-6000A /RT-7000A	RT-4000B/RT-6000B /RT-7000B
BATTERY	12V-4.5AH / 12V-7AH / 12V-7AH	
REAL PANEL	INPUT SOCKET, OUTPUT SOKET	
FRONT PANEL	STATUS LED, POWER SWITCH	

### 三、THE ATTACHED CONNETION DIAGRAMS OF BNT-400A~600A

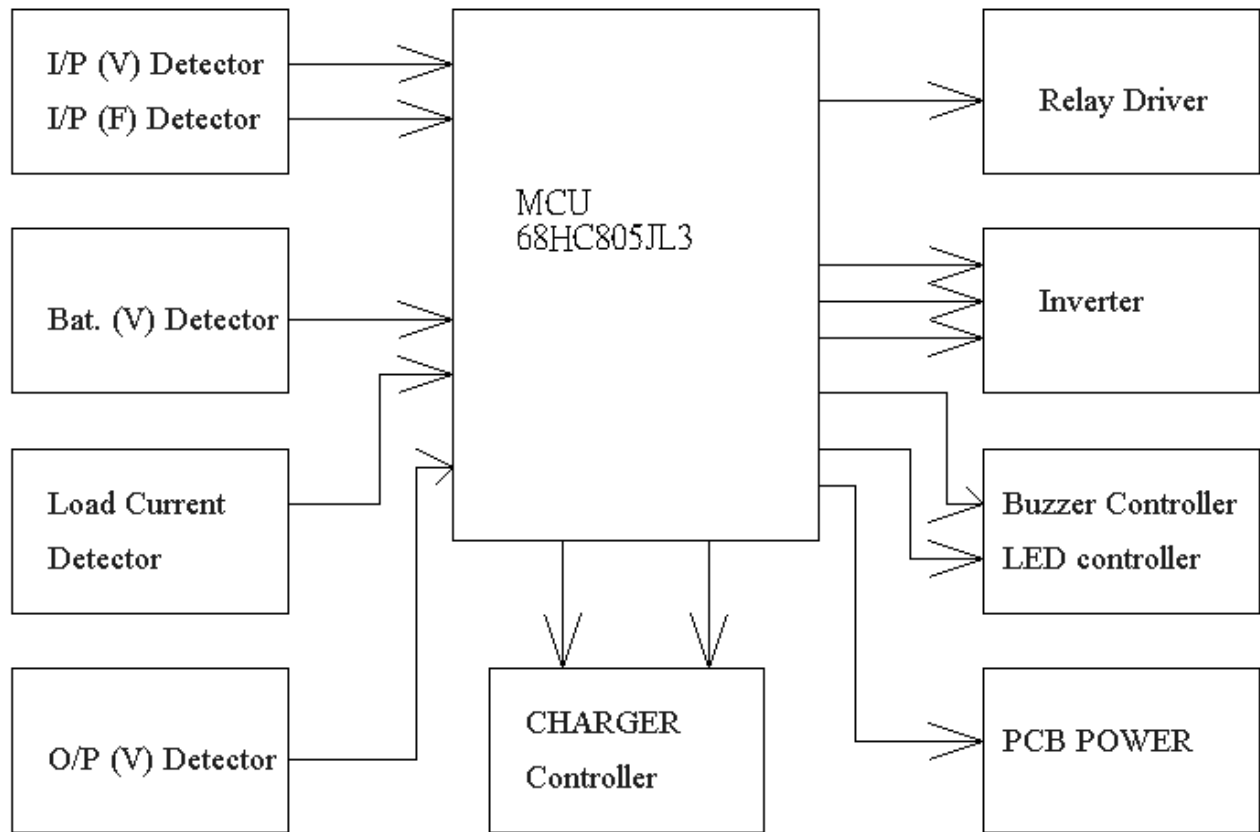


#### 四、FUNCTION BLOCK DIAGRAM

##### 1. Main structure



## 2. Control circuit



**五、TROUBLE SHOOTING FOT BNT SERIES:**

PROBLEM	POSSIBLE CAUSE	ACTION TO TAKE
UPS not on & LED not light	Power switch not ON	Push on the switch
	Battery voltage less than 10V	Recharge the ups at least 8 hours
	PCB failure	Replace the PCB, call for service
UPS always at battery mode	AC FUSE burn out	Replace the AC fuse in inlet
	Line voltage too high, too low or black out	Normal condition
Back up time too short	Battery not fully charged	Recharge the UPS at least 8 hours
	Battery too old	Replace Battery, call for service
	PCB failure	Replace PCB, call for service
Buzzer continuous beeping	Overload	Remove the noncritical loads

## 六、BNT-400A/500A/600A 零件差異表

機型		BNT-400A	BNT-500A	BNT-600A
變壓器		RT-4000A	RT-6000A	RT-7000A
電池		12V-4.5AH	12V-7AH	12V-7AH
CASE		97*260*135	97*320*135	97*320*135
PCB	FUSE1	30A	40A	30A
				30A
	Q3, 5	X	IRF-Z44V	IRF-Z44V
	Q4, 6	IRF-Z44V	IRF-Z44V	IRF-Z44V
	R10, 13	X	120	120
	R33	0.82/2W	0.68/2W	0.68/2W
	R54	158K	110K	94.1K