SPECIFICATION

MODEL：YF-6005P(GPIB)

1. Input Voltage： **1** ϕ **2** ω， **220** V ±10%.
2. Input Frequency：50 / 60Hz ±5%。
3. Output Voltage：Auto 0 ~ 150.【0~150V、150~300V auto change】
   HIV 0 ~ 300V.
4. Voltage Setting：0 ~ 150V 【0.1V / STEP】
5. Voltage Resolution：0.1V
6. Load Regulation： 0.5-**1** %
7. Voltage stability：＜ 0.1%
8. Frequency Setting：45.0 ~ 500.0Hz (0.1HZ / Step)
9. Frequency stability：＜ 100PPM
10. Distortion： **1** %
11. Capacity： **0.5** KVA.
12. Output Current： **0** ~ **150** ， **4.2** A.
    0 ~ **300** ， **2.1** A.
13. Timer Setting：0.1S ~ 9999S.
14. Current above limit setting：0.1A ~ Rating
15. 30 groups memory function：Read / Write、Output Voltage、Frequency.
16. Power factor：＞ 0.8
17. Auto Testing Program：Include 10 testing program and will run step by step automatically. (Voltage、Frequency、Time)
18. Starting Angle：0 ~ 359° (GP-IB Series).
19. Accuracy of Phase Angle Setting：＜ 0.5° (45-65Hz).

20. Dimension： ☑ 430 × 515 × 198 【500VA】

☐ 430 × 550 × 240 【1KVA ~ 3KVA】

☐ 430 × 550 × 460 【5KVA】

☐ 480 × 600 × 940 【10KVA ~ 15KVA】

☐ 600 × 730 × 1255 【20KVA ~ 30KVA】

21. Working Environment：Ambient Temperature：0 ~ 40℃.

Humidity：10 ~ 90%

22.Connects with GP-IB. Have Talk、listen function.

23. Protection：Input NFB Switch、Over Load、Short Circuit Protection、Over Temperature、Alarm (Sound)

24. Meter Specification

METER	RANGE	RESOLUTION	ACCURACY
VOLTAGE	0 ~ 600.0V	0.1V	± 0.5%
AMPERE	0 ~ 32.00A 28.0~ 400.0A	0.001A 0.1A	± 0.5% ± 0.5%
POWER	0 ~ 3.200KW 2.80 ~ 50.00KW	1W 10W	± 1%
FREQUENCY	45.0 ~ 500Hz	0.1Hz	± 0.1Hz
TEST TIME	0 ~ 999.9S	0.1S	± 0.02S
POWER FACTOR	0.00 ~ 1.00	0.01	1%

◆ GP-IB SERIES ONLY

PANEL INSTRUCTION

A. CONTROL INPUT FUNCTION KEY INSTRUCTION：

1. **V. SET**：Voltage Setting Key.
   Press once, use numeral key setting output voltage.
   Press twice, use "▲" "▼" key adjustment to voltage.

2. **F. SET**：Frequency Setting Key.
   Press this button to setting frequency.

3. **PROG**：Auto Program Setting Key.
   Setting 10 groups voltage、frequency、999999 time to circulating test.

4. **CONFIG**：Local **CONFIG** Function Key. Use "▲" " ▼" key change select.
   Voltage high/low select.
   Reading 30 groups memory.
   Save 30 groups memory.
   No execute **PROG** work time.
   Data lock & unlock.
   Whether executive PROG.
   Setting starting phase angle.
   Timer：S、M、H.
   Setting GPIB add.

5. **OUT**：Output Start Key.

After setting finish, press this button the machine has output.

6. **QUIT**：Disable Output or Disable Setting Number and Reset.

In to setting select, press this button will jump out setting condition.

Key in error number, press this button to key in again.

When the machine running, press this button will stop.

When the machine overload、alarm(sound), press this button will stop alarm.

7. ▲：Upward Key

Change Display or Setting Choose

8. ▼：Downward Key

Change Display or Setting Choose

9.**ENTER**

B. Display Function Instruction：

1. RMT：Computer on-line instruction.
2. AUTO：Auto Change High / Low Select.
3. LOW.V：Voltage 0V ~ 300V Display.
4. LOCK：Lock Display.
5. RUN：Running Auto Program Function.
6. O/P：output Display.
7. HI.V：Voltage 0V ~ 600V Display.
8. I-LIM：I-Limit

【CONFIG】EXPLANATION

FUNCTION INTRODUCE：

◆ RANGE：When setting Auto. The voltage from low switch to high, or high switch to low. The load include instant cut of electricity (about 2~ 4m sec.). If setting HIGH will not have the appearance of thing.

◆ MEMORY：If want into the MEMORY IN, please setting the terms first. When into the MEMORY RD please key in require number than press ENTER key.

◆ TIME SET：Key in require time. When the time's up. The input will stop. If the time setting 0. The time function no avail, become timer
(If in RUN PROG the function is no avail)

◆ DATA LOCK：To avoid touch other key.

◆ If you need use above function. Please press ▲▼ and input require data than press ENTER key.

PANEL INSTRUCTION OF FUNCTION

1、Turn on the power. **L.C.D.** monitor will show below data：

FIRST：(press "▼")

V = 000.0	F = 060.0	V=Voltage【V】 F=Frequency【Hz】
I = 0.000	P = 000.0	I=Current【A】 P=Watt【W】

SECOND：(press "▼")

V = 000.0	F = 060.0	V=Voltage【V】 F=Frequency【Hz】
I = 0.000	PF = 00.0	I=Current【A】 PF=Power Factor

THIRD：(press "▼")

V = 000.0	F = 060.0	V=Voltage【V】 F=Frequency【Hz】
I = 0.000	I p = 000.0	I=Current【A】 Ip=Current Crest Value

FOURTH：(press "▼")

V = 000.0	F = 060.0	V=Voltage【V】 F=Frequency【Hz】
I = 0.000	S = 000.0	I=Current【A】 S=Time【S】
		M=Time【M】
		H=Time【H】

FIFTH：(press "▼")

V = 000.0	F = 060.0	V= Voltage【V】 F= Frequency【Hz】
I = 0.000	Lp 000000	I= Current【A】 Lp=PROG

In function control area press "▼". Will show the first time data.

V = 000.0	F = 060.0
I = 0.000	P = 000.0

VOLTAGE SET

In function control area press **V.SET** key. The **L. C. D** monitor will show below data：

VOLT. SET＝110.0
0.0 TO 600.0

VOLT. SET = Voltage Setting

0.0 TO 600.0V

In Numerical Value input the data, than press **ENTER**. The **L. C. D monitor** will show below data：

V=000.0 F =050.0	V=Voltage【V】F=Frequency【Hz】
I=0.000 P = 000.0	I=Current【A】P=Watt 【W】

Ps. Because the Voltage no turn on. So can't see the voltage data.

If press **OUT** key. The monitor will show the voltage data.

VOLTAGE ADJ

In function control area press twice **V.SET** key. The **L. C. D** monitor will show below data：【V → v】

v=110.0	F =050.0
I=0.000	P =000.0

v=Voltage【V】F=Frequency【Hz】

I=Current【A】P=Watt 【W】

In function control area press "▲" "▼". Can change the voltage value.

From function control area press **V.SET** key again, will return the first data.

Ps. The unit has output voltage

FREQUENCY SET

In function control area press **F.SET** key，**L. C. D** monitor will show below data：

FREQ. SET = 050.0
45.0 TO 500.0

FREQ. SET = Frequency Setting

45.0 Hz to 500.0 Hz

In Numerical Value input the data, than press **ENTER** key.

L. C. D monitor will show below data：

V = 110.0	F = 060.0
I = 0.000	P = 000.0

V=Voltage【V】F=Frequency【Hz】

I=Current【A】P=Watt【W】

FREQUENCY ADJ

In function control area press twice **F.SET** key. The **L. C. D** monitor will show below data：【F → f】

V = 000.0 f = 050.0	V=Voltage【V】f=Frequency【Hz】
I = 0.000 P = 000.0	I=Current【A】P=Watt【W】

In function control area press "▲" "▼". Can change the voltage value.

From function control area press **F.SET** key again, will return the first data.

【CONFIG】SETTING

1.In function control area press **CONFIG** key. **L. C. D** monitor will see below data：

```
V. RANGE = 1
      1=AUTO   2=HIGH
```

If Voltage setting in 1=Auto change range【0~300V, 300~600V】
2=High-end 【0~600V】

2.In function control area press "▼". The **L. C. D** monitor will see below data：

```
MEMORY RD =      0 1
        01   TO   30
```

Choose one from those 30 memories.

3. In function control area press "▼". The **L. C. D** monitor will see below data：

```
MEMORY IN =
        01   TO   30
```

Choose one from those 30 memories.

4. In function control area press "▼" , The **L. C. D** monitor will see below data：

TIMER SET= 000.0
0.0 TO 999.9

Above Time Setting.

(RUN PROG is function no avail)

5.In function control area press "▼". The **L. C. D** monitor will see below data：

OCP. SET= 000.1
0.1A TO RATING

Above limit setting.

6.In function control area press "▼". The **L. C. D** monitor will see below data：

DATA LOCK = 2
1 = YES 2 = NO

Above is meter data lock. To avoid touch other key.

7.In function control area press "▼". The **L. C. D** monitor will see below data：

PROG. SET = 000000 0 TO 999999

Above is an auto control time. 0 is no execution PROG.

8.In function control area press "▼". The **L. C. D** monitor will see below data：

ANG. SET = 90 0 TO 359 DEG.

Above starting phase angle setting. From 0° to 359°

9. In function control area press "▼". The **L. C. D** monitor will see below data：

TIMER = 0 0 = S 1 = M 2 = H

The timer choose：setting 0 = S；1 = M；2 = H

10.In function control area press "▼". The **L. C. D** monitor will see below data :

GPIB ADDR. = 15
0 TO 30

Above is setting GPIB ADDR. From 0 to 30.

【PROG】EXPLANATION

FUNCTION INTRODUCE：

- The machine can execute 10 groups different Voltage、Frequency、Time.
- At the RUN PROG. 【In **CONFIG**】 setting the number of times. It will input execute auto control. At the same time the function display **RUN** will bright.
- Than press **OUT** key. It will into the **PROG**.
- The machine let user to know the **L.C.D.** monitor any data change. For example：the same voltage and the varies frequency. Or the same frequency and the varies voltage.
- The unit can execute 10 groups different parameter (V, F, T). If just execute 3 groups. Setting 0 in nest groups.
- Above is setting **PROG** key. If **L.C.D.** monitor show up you need data. Press **ENTER** key. If completely to finish the setting. Press **QUIT** key to leap **PROG**.

AUTO CONTROL【PROG】

1.In function control area press **PROG**. The **L. C. D** monitor will see below data：

PROG. V 0 = 90.0
0.0 TO 600.0

Above meter input program control first voltage setting is 90V.

2.In function control area press **PROG**. The **L. C. D** monitor will see below data：

PROG. F 0 = 050.0
45.0 TO 500.0

Above meter input program control first Frequency setting is 50Hz.

3.In function control area press **PROG**. The **L.C.D.** monitor will see below data：

PROG. TO = 005.0
0.0 TO 999.9

Above meter input program control first time setting is 5 sec.

4.In function control area press **PROG**. The **L. C. D** monitor will see below data：

PROG. V 1 = 110.0 0.0 TO 600.0

Above meter input program control second voltage setting is 110V.

5.In function control area press **PROG**. The **L. C. D** monitor will see below data：

PROG. F 1 = 060.0 45.0 TO 500.0

Above meter input program second Frequency setting is 60Hz

6.In function control area press **PROG**. The L.**C. D** monitor will see below data：

PROG. T 1 = 0.1 0.0 TO 999.9

Above meter input program control second voltage setting is 0.1sec.

PS：When the time setting 0 will run this group. Not execute next group.

7.In function control area press **CONFIG**. The L.**C. D** monitor will see below data：

PROG. SET = 000000
0.0 TO 999999

Key in **PROG LOOP** times, then press **ENTER**.

V = 000.0	P 0 = 050.0
I = 0.000	S = 000.0

P=PROG “0”=number, Indicate which data is been processing.

BLOCK DIAGRAM EXPLANATION

1.Function Setting：

Input and condition setting. After through CPU determine analyze and operation execute various control function.

2.Program AC Power Source Input：

According frequency and voltage setting size. To operate digital compose produce standard sine wave. The power magnify through output transformer. Voltage、current analogy and digital feed back.

3.Meter function：

A. FREQUENCY：Output voltage waveform become the same frequency square wave. CPU direct sampling cycle conversion frequency.

B. VOLTAGE：Output voltage through PT coupling ⇨ magnify circuit ⇨ RMS transform ⇨ A/D ⇨ CPU read ⇨ display

C. CURRENT：Output voltage through CT coupling ⇨ magnify and auto change circuit ⇨ RMS transform ⇨ A/D ⇨ CPU read ⇨ display

D. WATT：Voltage signal PWM change ⇨ voltage & current multiply ⇨ magnify & auto change circuit ⇨ most grade wave filter ⇨ A/D ⇨ CPU read ⇨ display。

E. POWER FACTOR：Through CPU direct sums，PF = W / (V×A)

F. PEAK AMMETER：CT signal magnify ⇨ full-wave rectification ⇨ the peak value sampling keep circuit ⇨ A/D ⇨ CPU read ⇨ display

E. HOUR METER：CT to base on inside do precise clock.

4.MONITOR：

Large-scale LCD，16*2 matrix monitor，Except for show the voltage、current、frequency、watt，power factor、peak value ammeter、hour meter. Also can approve the display setting way, and parameter range.

5.EEPROM：

Memory turn on the power parameter、PROG parameter、GPIB parameter and 10 groups memory parameter.

GPIB COMMAND

TYPE	COMMAND	EXPLANATION
LISTEN	ON	OUTPUR DISABLE
LISTEN	OFF	STOP OUTPUT
LISTEN	VSA □ NUM	VOLTAGE SETTING
LISTEN	VSH □ NUM	VOLTAGE SETTING
LISTEN	F R □ NUM	FREQUENCY SETTING
LISTEN	T S □ NUM	TIMER SETTING
LISTEN	ANG □ NUM	STARTING PHASE ANGLE SETTING

PS. NUM → NUMERAL KEY

TYPE	COMMAND	EXPLANATION
TALK	? VO	VOLTAGE READING
TALK	? AM	CURRENT READING
TALK	? PW	POWER READING
TALK	? TM	TIMER READING
TALK	? FR	FREQUENCY READING
TALK	? PF	POWER FACTOR READING
TALK	? PA	PEAK CURRENT READING

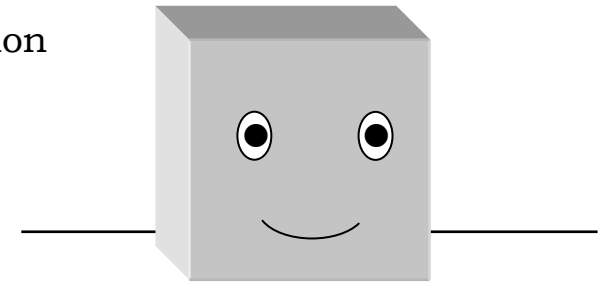
DEMO COMMAND

```
10      DEF SEG = &HD000
20      OUTPUT% = 3 : ENTER% = 6
30      ADDR% = 15
40      O$ = " VSA 220 "
50      CALL OUTPUT%(ADDR%, O%)
60      O$ = " FR 50 "
70      CALL OUTPUT% (ADDR%, O$)
80      FOR I = 1 TO 10
90      PRINT
100     PRINT " TEST"  ; I
110     PRINT
120     O$ = "ANG 90"
130     CALL OUTPUT% (ADDR%, O$)
140     O$ = "ON"
150     CALL OUTPUT% (ADDR%, O$)
160     FOR J = 1 TO 50000!
170     NEXT
180     I$ = "  ? FR"
190     CALL OUTPUT%(ADDR% I$)
200     J$ = SPACE$ (5)
210     CALL ENTER% (ADDR%, J$)
220     PRINT " FR=" ; J$
230     I$ = "  ? VO"
240     CALL OUTPUT% (ADDR%, I$)
250     J$ = SPACE$ (5)
260     CALL ENTER% (ADDR%, J$)
270     PRINT "VO=" ; J$
280     I$ = "  ? AM"
290     CALL OUTPUT% (ADDR%, I$)
300     J$ = SPACE$ (5)
```

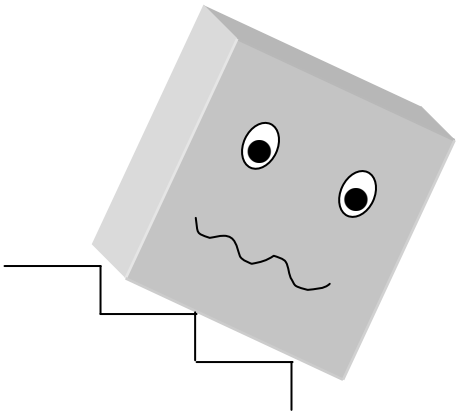
```
310         CALL ENTER% (ADDR%, J$)
320         PRINT “AO=”  ; J$
330         I$ = “  ? PW”
340         CALL OUTPUT% (ADDR%, I$)
350         J$ = SPACE$ (5)
360         CALL ENTER% (ADDR%, J$)
370         PRINT “ kW = “ ; J$
380         I$ = “  ? PF ”
390         CALL OUTPUT% (ADDR%, I$)
400         J$ = SPACE$ (5)
410         CALL ENTER% (ADDR%, J$)
420         PRINT “ PF=” ; J$
430         I$ = “  ? PA”
440         CALL OUTPUT% (ADDR%, I$)
450         J$ = SPACE$ (5)
460         CALL ENTER% (ADDR%, J$)
470         PRINT “ PA= “J$
480         I$= “  ? TM”
490         CALL OUTPUT% (ADDR%, I$)
500         J$ = SPACE$ (5)
510         CALL ENTER% (ADDR%, J$)
520         PRINT “TM=” ; J$
530         O$ = “OFF”
540         CALL OUTPUT% (ADDR%, O$)
550         FOR J = 1 TO 5000!
560         NEXT
570         NEXT
```

LOCATION

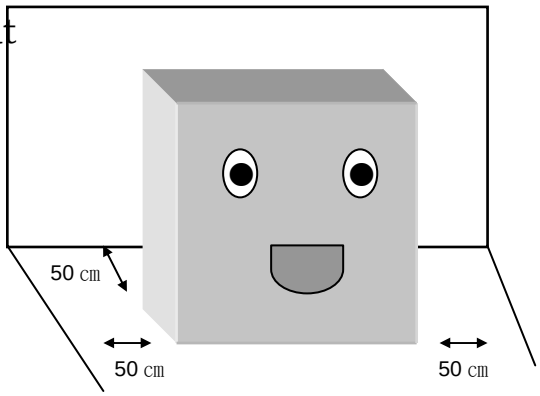
1. Keep the unit clean and
   Vacuum the ventilation
   Intake Periodically.



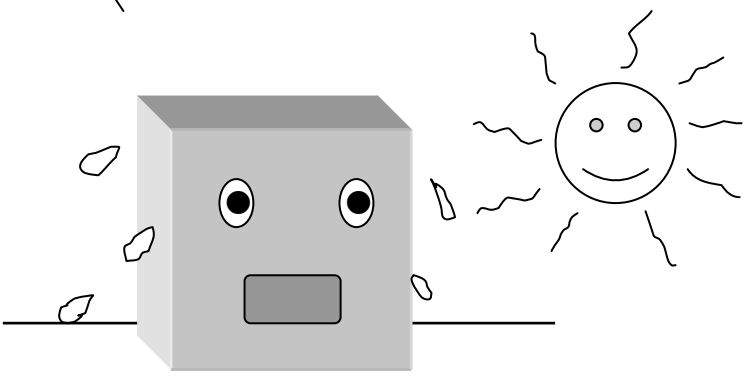
2.Never leave the unit on an
   Uneven surface



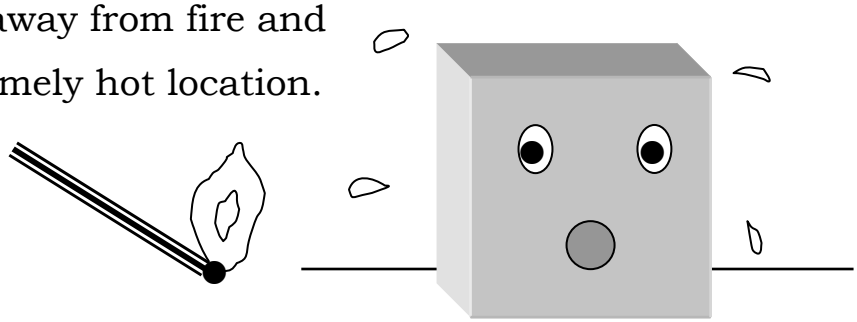
3.Position the unit to allow at
  least 50 ㎝ clearance
  Between the rear panel
  And the wall.
  Keep the ventilation intake
  Open.



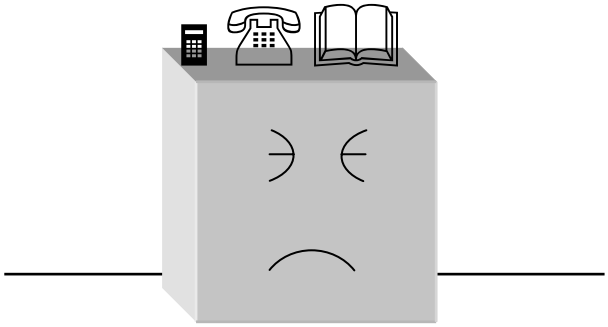
4. Avoid direct sunlight,
   Rain and high humidity.



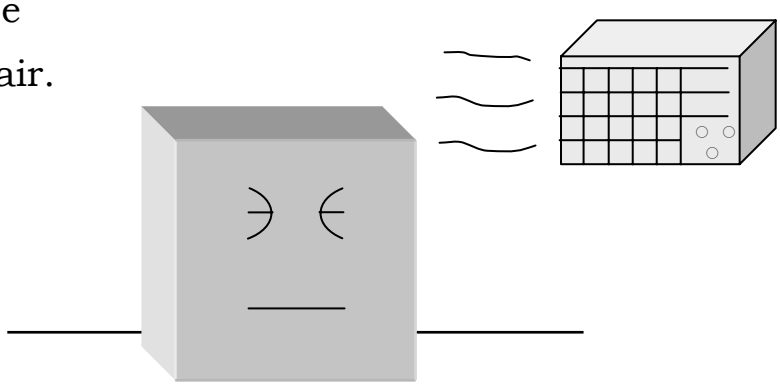
5. Stay away from fire and
Extremely hot location.



6. Do not stack materials on
Top of the unit.



7. The unit should not be
Exposed to corrosive air.



8. The normal operating
temperature in 0 ~ 40℃
and humidity is 10 ~ 90%.