

Assembly Guide

Applicable Model: 08503K

Tools required

1. Soldering iron (20 - 25W)
2. Thin raisin-core solder of ideally 0.8mm diameter
3. Diagonal flush cutter
4. Screw driver

Important Notes

1. Follow the numbered order to install.
2. Only install parts given in the part list.
3. Pay special attention to polarity and orientation for electrolytic capacitors, headers, and connectors (see detailed photos).

Part List

Descriptions	Qty	Ref.
Connector, USB mini-B	1	J10
E-cap, 100uF/16V	3	C5, C9, C10
E-cap, 470uF/25V	2	C3, C4
Connector, DC005, 2mm core	1	J1
Header, 5 X 2, 2.54mm	2	J6, J8
Header, 16 X 1, 2.54mm	1	
LCD, 1602A, white-in-blue	1	LCD1
Pushbutton, lockable	1	SW1
Pushbutton, non-lockable	20	SW2-21
Rotary encoder, w/ pushbutton	1	SW22
BNC connector, panel mount	1	J4
Metal lead	1	
Knob cap	1	
Panels, front and back	1 each	
Standoff, M3 x 12	4	
Standoff, M3 x 12 + 6	4	
Screw, M3 x 5	8	
PCB, SMD pre-soldered	1	

Tech Support: Forum: www.jyotech.com/forum
Email: support@jyotech.com

A. Install Components at Back

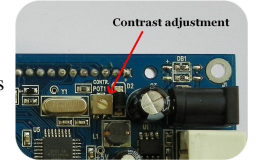
Important Note: Cut left-over leads after soldering for all E-caps

5
Short ends go into PCB

2, 3
Pos (the longer) lead goes into sq. pad

Powering up the first time

1. Check and make sure part polarity and soldering are correct and good.
2. Connect 15V DC power supply (current capacity > 200 mA) to J1. Push SW1 to turn the unit on.
3. You should see LCD backlight up. The screen may appear blank due to incorrect contrast setting. You need to adjust the trimmer POT1 (see photo) for correct contrast.
4. Use keypad to test various functions.



B. Install Components at Front

6a
Long ends go into PCB

6b
Place LCD and solder short ends at top

6c
Turn over and solder long ends at back

7, 8

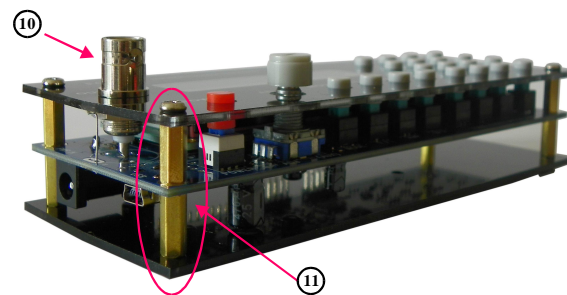
Important Note: Do the first time power-up check after finishing components at front side. Please see instructions at top-right corner of this sheet. If everything goes normal proceed to step C below for installation of panels

!!! IMPORTANT NOTE:

For all the push-buttons, the side with two dips must face the end where power connector locates.

Installed with this side facing power connector at left
WARNING: Reversed installation will cause keypad no function!

C. Mount Panels



10a
BNC connector

10b
Cut wing off spring washer

10c
Solder metal lead and bend to shape

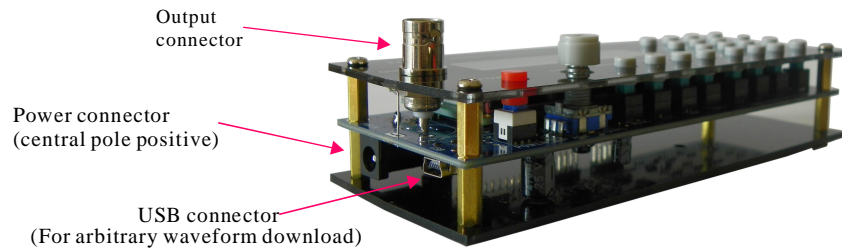
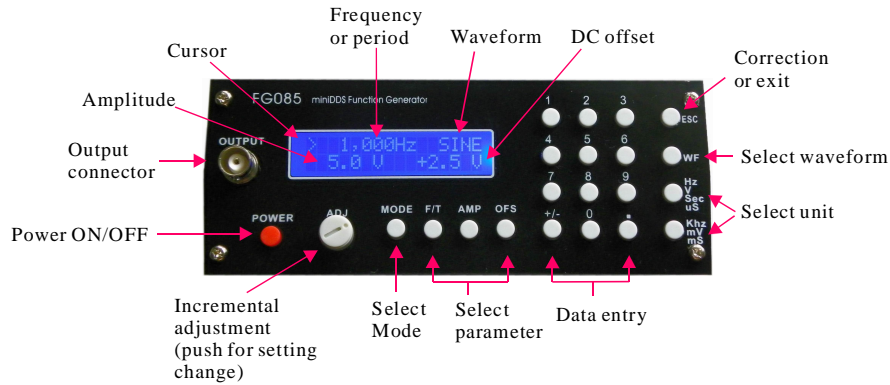
10d
Mount to panel with lead at edge

11
Standoff mounting (4 places)

10e
Install panels and solder up at back

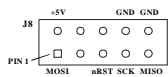
Visit www.jyotech.com for detailed and update-to-date documents

Panel & Connectors

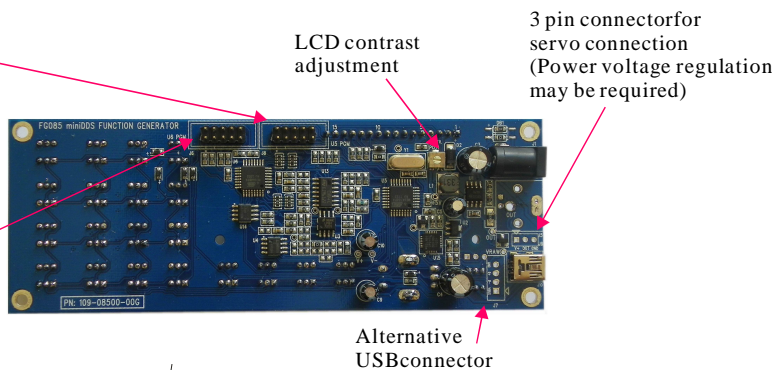
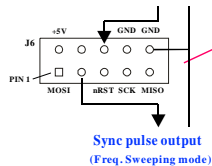


Headers & Adjustment

U5 program port



U6 program port



Operating

1. Constant Waveform (CW) Mode

Function	Operations
Set Frequency or Period	[F/T] + [Data Entry Keys *] + [Unit Key]
Set Amplitude	[AMP] + [Data Entry Keys *] + [Unit Key]
Set Offset	[OFS] + [Data Entry Keys *] + [Unit Key]
Incremental Adjustment	Select parameter and turn [ADJ] dial (Incremental step size can be set to any value).
Select Waveform	Press [WF] key
Set duty cycle	[.] + [Data Entry Keys *] + [Unit Key]

2. Frequency Sweeping Mode

Function	Operations
Set sweep parameters	Turn [ADJ] to select parameter. Press [F/T] to change. Use buttons [1], [2], [3], and [4] for quick access.
Set Amplitude	[AMP] + [Data Entry Keys *] + [Unit Key]
Set Offset	[OFS] + [Data Entry Keys *] + [Unit Key]
Select Waveform	Press [WF] key
Bi-dir. Sweeping	Press [+/-] key to toggle bi-dir. Sweep on/off

3. Servo Position Mode

Function	Operations
Set Pulse Width	[F/T] + [Data Entry Keys *] + [Unit Key]
Set Amplitude	[AMP] + [Data Entry Keys *] + [Unit Key]
Incremental Adjustment	Select parameter and turn [ADJ] dial
Change Settings	Push [ADJ] (refer to detailed manual)

* Note: Use [ESC] to correct or cancel input

4. Servo Run Mode

Use [WF] key to start and hold servo running.

5. Mode Selection

[MODE] + { Turn [ADJ] to select } + [MODE]

Tips

- Under CW mode [ADJ] incremental step can be changed to any value**
To do this type in the step size you want by digits and end with [Hz] or [mS] buttons. [Hz] button sets the step for frequency. [mS] button sets the step for time.
- Quick access parameters in Frequency Sweeping mode**
Under frequency sweeping mode you can use digit buttons [1], [2], [3], and [4] to access Start Frequency, Stop Frequency, Sweep Time, and Time Step Size respectively.
- Toggle Trigger Function on/off**
Under CW and frequency sweeping mode press [ADJ] dial to enable or disable trigger function.