Digital counter & timer **GF** series

Please read the safety information carefully before the use, and use the product correctly. The alerts declared in the manual are classified into **Danger** and **Warning** according to their importance.

And the serious injury DANGER Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury

MARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury

The electric shock may occur in the input/output terminal so please never let your body and/or conductive substance to be contacted by the input/output terminal.

Use other than the method specified by the manufacturer may result in personal injury or property damage.
 If there is a risk that a breakdown or abnormality of this product may lead to a serious accident in the system, install an

If there is a risk that a breakdown or abnormality of this product may lead to a serious accident in the system, install an appropriate external protection circuit.
 Since the power switch and fuse are not attached to this unit, install them separately outside. (Fuse rating: 250 V 0.5 A)
 To prevent electric shock and malfunction of the device, do not supply power until all wiring is completed.
 Never disassemble, process, improve or repair this device. there is a risk of abnormal operation or electric shock.
 Turn off the power before attaching or detaching this device. It may cause electric shock, malfunction or failure.
 To prevent damage and breakdown of this device, supply the power voltage appropriate to the rating.
 Since it is not of explosion-proof structure, do not use it in a place with flammable or explosive gas.
 There is a risk of electric shock, so please use this product while it is installed on a panel.

The contents of this manual are subject to change without prior notice or notice.
 Please check if it matches the specifications you ordered.
 Check whether there is any damage or abnormality in the product during transportation.
 Use in a place where corrosive gas (especially harmful gas ammonia, etc.) and combustible gas are not generated.
 Use in a place where vibration or impact is not applied directly to the body.
 Use in a place free from water, oil, chemicals, steam, dust, salt, iron, etc.

Digital counter/time

48(W) X 48(H) mm

72(W) X 72(H) mm

Preset counter/time

4 Digit-display (9999

S 8 Pin plug % GF4A model only

1-Stage output No output (Display only

minal

GF4A Terminal

GF4A-P41/T4

6 Digit-display (999999) ※ GF7A model only

GF4A 8 Pin plug

GF4A-P41S/T4S

NPN Open collector input

PNP Open collector input

CP1 CP2

RESET

Τuv

CP1 CP2

0 V L.

_____12 V

≰ 4.7 kΩ

— 0 V

-12 V

≩ 4.7 kΩ

2-Stage output % GF7A model only

Total counter/time

Description

GF7A Terminal

GF7A-P62/P61/P42/P41/T6

Contact input

CP1 CP2

---Q

Contact input

₀vQ.._

12 V d.c. г

RESET

3 CP1 CP2

6-12 V

≩ 4.7 kΩ

≩ 4.7 kΩ

Obe if a place nee from water, on chemical, steam, dear, de

CAUTION Indicates a potentially hazardous situation which, if not avoided, may result in minor injury or properties damage

INSTRUCTION MANUAL

instruction manual carefully before using this product, and use the product

orrectly. Also, please keep this manual where you can view it any time

Thank you for purchasing Hanyoung Nux products. Please read the

Safety information

\Lambda DANGER

WARNING

▲ CAUTION

Suffix code

Code

4A

Model

Appearance

Display digits

Control output

Terminal structure

Terminal structure

Model

Product composition

Input wiring method

NPN Voltage input

■ When selected as non-voltage input (NPN)

CP1

RESET

When selected by voltage input (PNP)

CP1 CP2

RESET INHIBIT

PNP Voltage input

-0-12 V

----0v

\$ 4.7 kΩ

-12 V

≩ 4.7 kΩ

0 V

Model

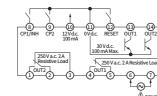
GE

KSA 💮

MF0601KE220302

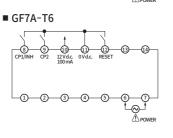
HANYOUNGNUX CO.,LTD

, Gilpa-ro 71beon-gil, Michunoi-gu, heon, Korea TEL : +82-32-876-4697

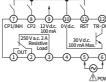


Connection diagram

■ GF7A-P62/P42



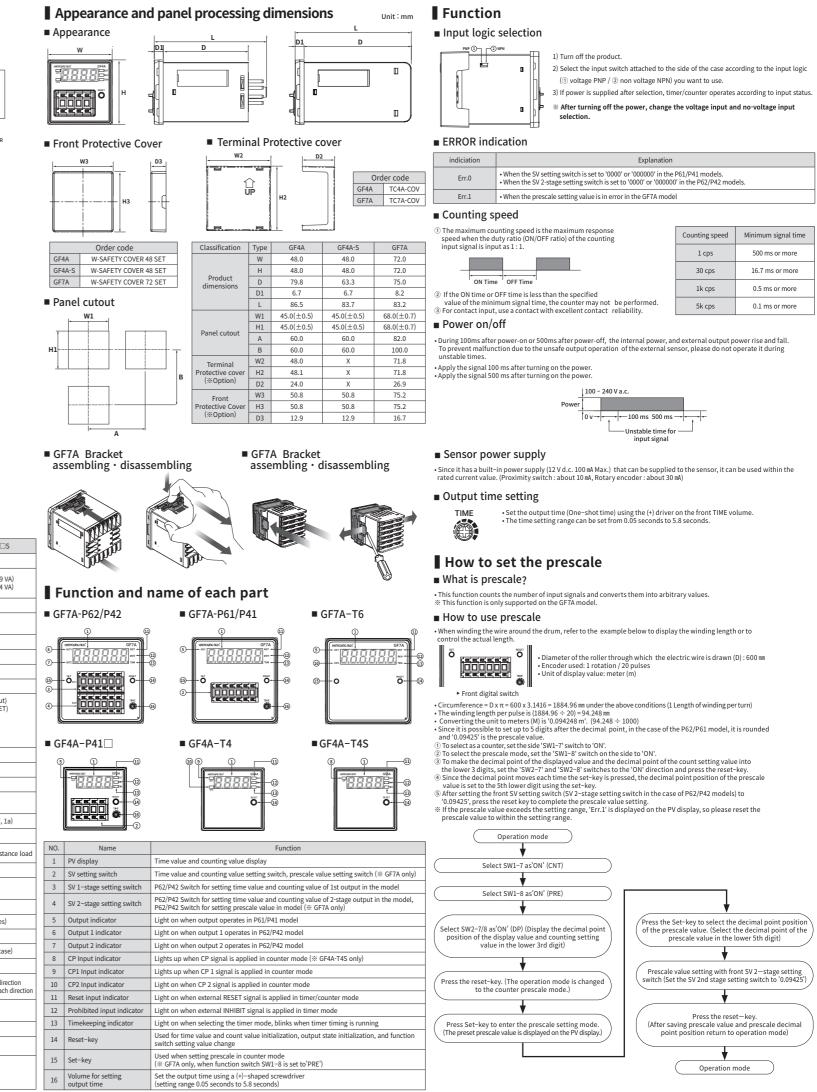




- 12 V d.c. 100 mA C F-0 ®-1 250 V d.c. 5 A

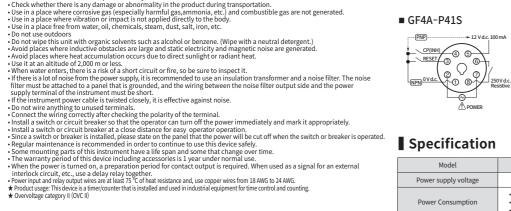
Specification

∎ sh	ecinc	ation			
Model			GF7A	GF4A	GF4A-DDS
Power supply voltage		oltage	100 - 240 V a.c. 50/60 Hz (Voltage fluctuation rate : ± 10 %)		
Power Consumption		ption	 P62 (7.6 VA), P61 (6.6 VA) T6 (5.6 VA) P42 (7.3 VA), P41 (6.6 VA) 	• P41 (6.4 VA) • T4 (5.6 VA)	• P41S (5.9 VA) • T4S (5.4 VA)
Display method			White 7 segment LED		
Character size		ze	• P62/P61/T6 (11.5 X 5.2 mm) • P42/P41 (13.6 X 7.8 mm)		
Counting speed		ed	1 / 30 / 1k / 5k cps	s 30 / 5k cps	
Blackout compensation			10 Years (nonvolatile memory used)		
Return time			500 ms or less		
Timer operation error			Power start : \pm 0.01 % \pm 0.05 seconds or less (ratio to setting value)		
Input			 Input method selection by external switch (voltage input / no-voltage input) Counter (composed of CP1, CP2, RESET), timer (composed of INHIBIT, RESET) Voltage input: HIGH level (S V - 30 Vd.), LOW level (0 V - 2 V d.c.), input resistance (about 4.7 KΩ) No-voltage input: Impedance in case of short cricuit (1 KΩ or less), residual voltage in case of short-circuit (2 V d.c. or less) 		
Min. input signal time		l time	20 ms or more (RESET, INHIBIT input)		
One	e-shot	1st stage	0.5 seconds fixed	-	-
outp	ut time	2st stage	0.05 to 5.8 seconds		
External power supply		supply	12 V d.c. 100 mA max.		
	Contact	1st stage	OUT (SPDT, 1c)		OUT2 (SPST, 1a)
		2st stage	OUT1 (SPDT, 1c), OUT2 (SPDT, 1c)		-
Control		Capacity	SPDT : NC (250 V a.c. 2 A, 250 V a.c. 5 A), NO (250 V a.c. 5 A), Resistance load 250 V a.c. 5 A Resist		250 V a.c. 5 A Resistance load
output	Non- contact	1st stage	OUT (NPN Open collector) -		-
		2st stage	OUT1, OUT2 (NPN 2 open collector circuits)		-
		Capacity	30 V d.c. 100 mA max.		
Relay life			Electrical (more than 50,000 times), Mechanical (more than 10 million times)		
Insulation Resistance			100 MΩ or more (based on 500 V d.c. mega)		
Dielectric strength			2,000 V a.c. 60 Hz 1 minute (between the conductive part terminal and the case)		
Noise resistance			Square wave noise by noise simulator $\pm 2{,}000$ V (Pulse width 1 $\mu s)$		
Vibration			 Durability: 10 - 55 Hz (1 minute cycle), Double amplitude 0.75 mm, X · Y · Z 2 hours each direction Malfunction: 10 - 55 Hz (1 minute cycle), Double amplitude 0.5 mm, X · Y · Z 10 minutes each direction 		
Ambient temperature and humidity			−10 ~ 55 °C, 35 ~ 85 % R.H.		
Storage temperature			-20 ~ 65 °C		
Approval			CE		
Weight (g)			• T6:150 g • P41:184 g • P42:190 g • P61:180 g • P62:198 g	• T4 : 100 g • P41 : 108 g	• T4S : 84 g • P41S : 92 g



% Note) When using a contact point, set the counting speed to 30 cps or 1 cps to prevent chattering.

% Note) When using a contact point, set the counting speed to 30 cps or 1 cps to prevent chattering.



GF4A-T4S -(PNP) ·► 12 V d.c. 100 mA -4 6 RESET 3

-1-2-3-4-

■ GF7A-P61/P41

<u>_</u> -@-

■ GF4A-T4

-(13)-

30 V d.c. 100 mA Max.

-6

-(4)--(5)-

16 Volume for setting output time

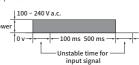
-6-6

/ POWER



indiciation	Explanation
Err.0	 When the SV setting switch is set to '0000' or '000000' in the P61/P41 models. When the SV 2-stage setting switch is set to '0000' or '000000' in the P62/P42 models.
Err.1	When the prescale setting value is in error in the GF7A model





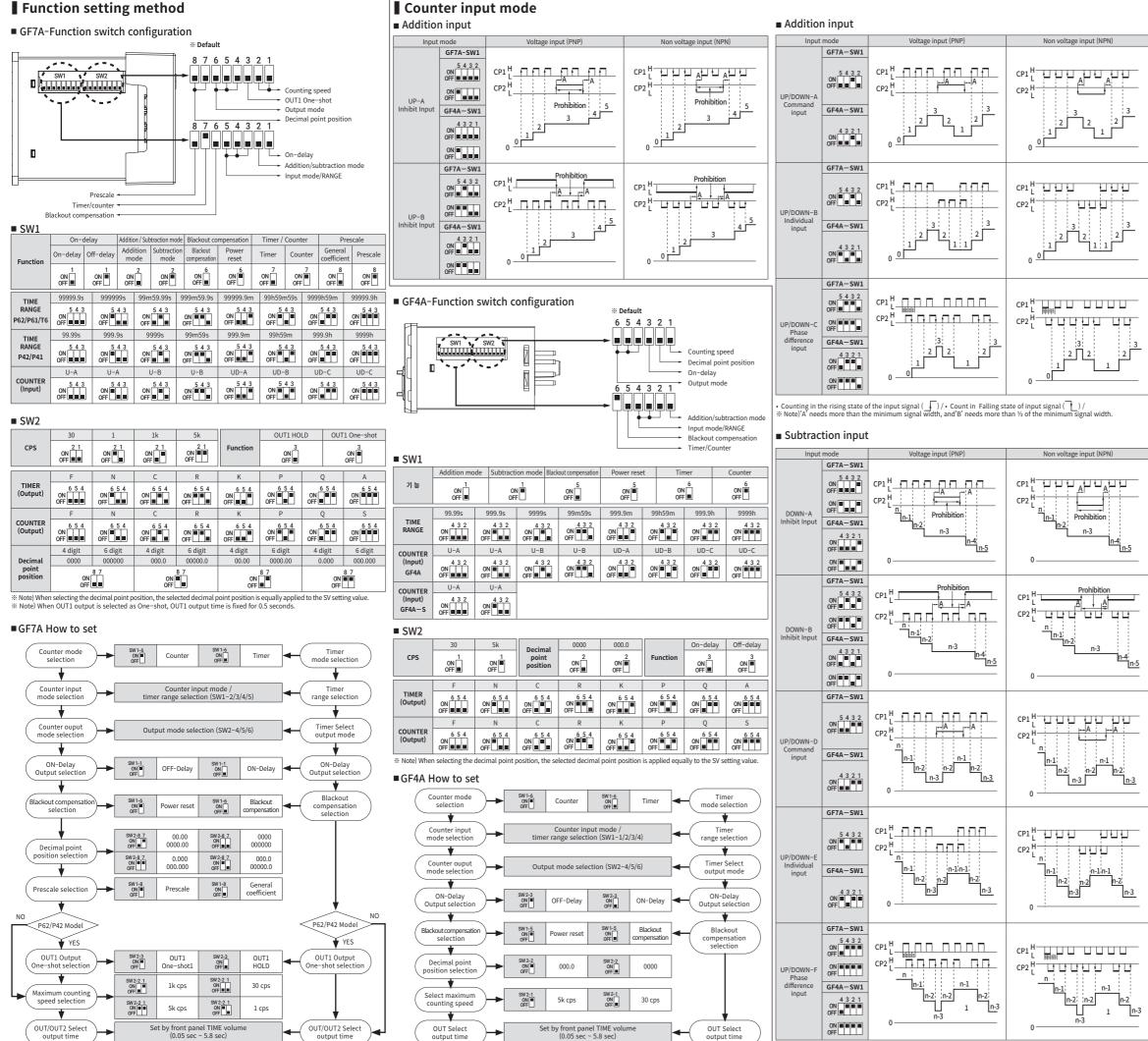




Counting speed	Minimum signal time
1 cps	500 ms or more
30 cps	16.7 ms or more
1k cps	0.5 ms or more
5k cps	0.1 ms or more

Function setting method

Press the reset-ke



Press the reset-key

 Counting in the rising state of the input signal () / · Count in Falling state of input signal () / · % Note) A needs more than the minimum signal width, and B needs more than ½ of the minimum signal signal width % For P61/P41 models, SV and OUT operate as SV2 and OUT2. * Apply reset signal to the front reset key or external RESET terminal

Output mode

