# Sign Tower **TN** series

Thank you for purchasing HANYOUNG product Please check whether the product is the exactly same as you ordered. Before using the product, please read this instruction manual carefully. Please keep this manual where you can view at any time

#### HANYOUNGNUX CO.,LTD

1381-3, Juan-Dong, Nam-Gu Incheon, Korea. TEL:(82-32)876-4697

FAX:(82-32)876-4696 http://www.hynux.net

#### PT. HANYOUNG ELECTRONIC INDONESIA

INDONESIA JL,CEMPAKA BLOK F 16 NO.02 DELTA SILICON II FACTORY INDUSTRIAL PARK

LIPPO CIKARANG CICAU, CIKARANG PUSAT BEKASI 17550 INDONESIA

HEAD OFFICE

TEL: 62-21-8911-8120~4 FAX: 62-21-8911-8126



# Safety information

Before using the product, please read the safety information thoroughly and use it properly. Alerts declared in the manual are classified to Danger, Warning and Caution by their criticality

⚠ DANGER	DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury
⚠ WARNING	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury
	CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury

# <u>∕!\</u> Danger

· Be sure to turn off power before connecting wires or changing bulb.lt can cause shock.

# /!\ Warning

- If there is a concern about a serious accident caused by a malfunction or abnormality of this product, please install an external protection circuit and devise a scheme for preventing an accident.
- Please check for the correct voltage before installing it. Over voltage will cause a break down of product
- Please be cautions that contact with chemicals such as thinner or benzene can cause of deformation of the product or color of change.
- If you are concerned about serious accident due to the malfunction of products, please install the external safety equipment.

# ∠!\ Caution

- The contents of this manual may be changed without prior notification.
- If the user use the product with methods other than specified by the manufacturer, there may be bodily injuries or property damages.
- This product is only suitable for indoor use. Please keep it away from damp place,
  Please refer to the "Wiring Diagram" when you wire the product, Incorrect wiring will cause a break down of product.
- · Applying a strong shock on the outside of product may cause a break down of product
- Please be cautions that contact with chemicals such as thinner or benzene can cause of deformation of the product or color of change
- · When replacing bulb, please use the same specification bulb as indicated in the manual
- · End of unused lead wire must be insulated.
- · For the install place, please choose place that has sufficient strength and vibration
- Please use fuse (250 V 1A) for the power line.
- · Please make sure that the product should be grounded with the unit desired to be installed.
- · When mounting/dismounting the product onaunit, please conduct operations after turning off the power of the main unit.
- · If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may protection provided by the equipment may be impaired
- The symbol regarding to the safety is attached to the main unit and power lead wires.

### Suffix code

Model	Model Code			Description			
HY-					HY series sign tower		
	TN				Continuous light only		
	TWN				Continuous light, flashing light	Dulle to an	
	TBN				Continuous light, buzzer	Bulb type	
Function	TWBN				Continuous light, flashing light, buzzer		
FUNCTION	TLN				Continuous light only		
	TWLN				Continuous light, flashing light	LED to the	
	TBLN				Continuous light, buzzer	LED type	
	TWBLN				Continuous light, flashing light, buzzer		
		12			12 V d.c (Incandescent lamp / LED lamp)		
Power sup	ply	24			24 V d.c (Incandescent lamp / LED lamp)		
voltage		110			110 V a.c (Incandescent lamp / LED lamp)		
		220			220 V a.c (Incandescent lamp / LED la	mp)	
1		1		1 stack (Red)			
Stacking modules 2 3 4 5			2		2 stack (Red, green)		
			3		3 stack (Red, yellow, green)		
			4		4 stack (Red, yellow, green, blue)		
			5		5 stack (Red, yellow, green, blue, white)		
Bracket selection					None (L type bracket standard)		
				S	Plastic bracket installation (ST-011)		
				М	MP-60 Plastic bracket installation (Bar type)		

### Characteristic

- Ø55 cylinder type
- Applied the socket type LED lamp
- $\cdot$  1  $\sim$  5 stacking structure and 5 kinds of colors
- · Continuous light only, continuous light, flashing light, Buzzer (selected by the external signal)

# Specification-

#### ■ HY-TN (Bulb type)

■ HT-TN (Builb type)							
Model	HY-TN 🗌 🗌	HY-TWN 🗌 🗌	HY-TBN 🗌 🗌	HY-TWBN 🗌 🗌			
Function	Continuous light only	Continuous light, flashing light	Continuous light, Buzzer	Continuous light, flashing light, Buzzer			
Diameter	Ø55						
Number of stacks	1 $\sim$ 5 stack						
Flashing time	-	60 times/1min	-	60 times/1min			
Buzzer melody type	-	- Single melody, beeping					
Buzzer melody volume	-	_	80 dB (1 m distance)				
Power supply voltage	12 V d.c, 24 V d.c, 110 V a.c, 220 V a.c 50/60 Hz						
Light source	Incandescent lamp (BA 15S)						
Ambient Temperature	-5 ~ 50 °C						
Ambient Humidity	35 ~ 85% R.H.						
Radiating angle	360。						
Lens material	SAN						
Pipe material	Aluminum						
Lens color	Red, Yellow, Green, Blue, White						
Degree of protection	IPX0 (In door)						
Cetification	(€						
IK code	IK06						

#### ■ HY-TLN (LED type)

III ILIV (LLD type)							
Model	HY-TLN 🗌 🗌	HY-TWLN 🗌 🗌	HY-TBLN 🗌 🗌	HY-TWBLN 🗌 🗌			
Function	Continuous light only	Continuous light, flashing light	Continuous light, Buzzer	Continuous light, flashing light, Buzzer			
Diameter	Ø55						
Number of stacks	1 $\sim$ 5 stack						
Flashing time	-	60 times/1min	_	60 times/1min			
Buzzer melody type	-	- Single melody, bee					
Buzzer melody volume	- 80 d		80 dB (1	(1 m distance)			
Power supply voltage	12 V d.c, 24 V d.c, 110 V a.c, 220 V a.c 50/60 Hz						
Light source	LED (BA 15S)						
Ambient Temperature	-5 ~ 50 °C						
Ambient Humidity	35 ~ 85% R.H.						
Radiating angle	360。						
Lens material	SAN						
Pipe material	Aluminum						
Lens color	Red, Yellow, Green, Blue, White						
Degree of protection	IPX0 (In door)						
Cetification	(€						
IK code			IK06				

### Lamp specification

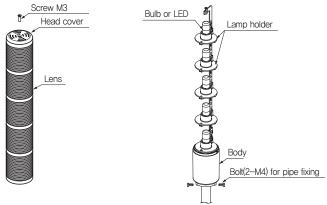
#### ■ Bulb (BA 15S)

		100)					
	Power supply voltage		12 V d.c	24 V d.c	110 V a.c	220 V a.c	
	Lamp capacity		5 W				
	Light source type		Bulb				
		1stack	0.42 A	0.21 A	0.07 A	0.04 A	
co		2stack	0.84 A	0.42 A	0.14 A	0.08 A	
	Current consumption	3stack	1,26 A	0.63 A	0.20 A	0.11 A	
	consumption	4stack	1.68 A	0.84 A	0.27 A	0.14 A	
		5stack	2.10 A	1.05 A	0.33 A	0.17 A	

#### ■ LED (BA 15S)

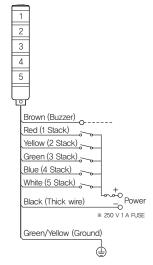
Power supply voltage		12 V d.c	24 V d.c	110 V a.c	220 V a.c		
Lamp capacity		1.2 VA	1.2 VA	2 VA	4 VA		
Light source type		LED					
	1stack	96 mA	48 mA	18 mA	18 mA		
	2stack	192 mA	96 mA	36 mA	36 mA		
Current consumption	3stack	288 mA	144 mA	54 mA	54 mA		
Consumption	4stack	384 mA	192 mA	72 mA	72 mA		
	5stack	480 mA	240 mA	90 mA	90 mA		

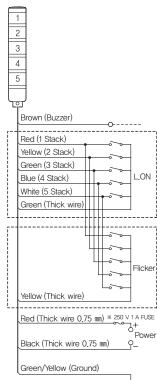
### Part name and function



# Connection diagram

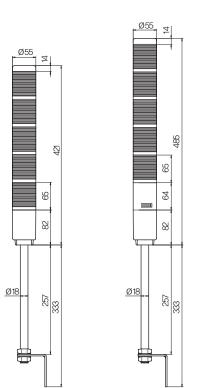
- $\bullet \ \ \text{When controlling more than 2 sign towers at the same } \ \ \text{time, please use independent contact.}$
- With the 110 V, 220 V a.c specification of TWN type and TWBN type, please do not connect the yellow and green wire to the power line (red and black)
- When operating the Buzzer, please connect the wire (for buzzer) to the L.ON wire or flashing wire. Able to select as continuous melody and single melody.
- When operating the buzzer and indicator at the same time, please connect the brown wire of buzzer to the signal input wire of indicator which is indicator that users want to operate the buzzer. Single melody when light is flashing and continuous melody when light is continuously ON.
- With the 12 V d.c and 24 V d.c specifications, thick wire is 0.75 mm and black wire is (-).
- Please connect the ground wire (GRN/YEL) to the ground of the main unit, (Only for AC type)





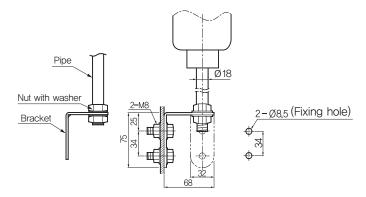
(1)

# Appearance and Panel cutout -

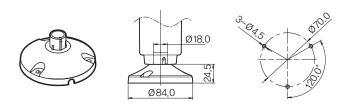


[Unit:mm]

#### ■ L type supporter



## ■ ST-011 Plastic bracket installation



#### ■ MP-60 Plastic bracket installation (Bar type)

