

LG20

Initial Setup Manual



INITIAL SETUP FLOW



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Preparations before making the initial settings (1/2)

By confirming the conditions of use in advance, the settings operation can be performed easily.
Let's start with the basic settings.

Basic Settings Items

Items	Indication default	Description	Settings
Destination country 		Please select the region to be used. (Displayable units)	STD: General Area  US: U.S.A.  JPN: Japan 
Measuring unit resolution 		Set the resolution output from the measurement unit to be used for each axis. The resolutions that can be selected are length. Expanded selections increase the number of options.	0.1μm to 100μm *See Tables 1, 2 and 3

Table1: Length scale output resolution

Measuring Unit	Output resolution	connection cable	Adapter *
SR-1711 SR-1711R	0.5μm	HK-**C HK-**CR	SZ05-T01
SR801/ MSS-101 SR801R	0.5μm	HK-1**C HK-2**C	SZ05-T01
SR801/ MSS-101 SR801R	0.5μm	CE07-**C	SZ51-MS01 + SZ70-1
SR10 / SR30 / SR50 SR50-R	0.5μm	HK-4**C HK6-**CR	SZ05-T01
SR118	0.5μm	CE05-**C CH02-**	DZ51 + SZ70-1
SR108 SR107	0.5μm		SZ51-MS01 + SZ70-1
SR128	0.5μm	CH01-**C	SZ70-1
SR128 / SR127	0.5μm	CH01-LW**C	SZ51-MS01 + SZ70-1
SR138R(GB-ER)	0.5μm	CH04-03C	

Table 2: Digiruler output resolution

Measuring Unit	Output resolution	Adapter/ conversion cable	Adapter *
SL110 SL130	10μm	PL20B	SZ70-1
SL110 SL130	10μm	PL20C	
SJ300	1μm	CH33-**CPD/CED	
SJ700	5μm		SZ70-1
SJ700A	5μm		

Table3: Digital gage output resolution

Measuring Unit	Output resolution	Adapter/ conversion cable	Adapter *
DG	0.5μm		SZ05-T01
DG-B	0.5μm	DZ-51	SZ70-1
DL310B/330B	10μm	DZ-51	SZ70-1
DK series	0.1μm or 0.5μm	CE29-**	

* For adapter information, refer to Appendix 2 Adapter Connection in this Manual

Preparations before making the initial settings (2/2)

Check the usage conditions for Detailed Settings.

(Since the settings conditions can be changed later, use the default values to skip items for which the conditions have not been confirmed)

Detailed Settings Items

Items	Indication default	Description	Settings
Display resolution and polarity 		Sets the resolution to be displayed for each axis. A value lower than the input resolution cannot be set. Selects the value for each axis, including the polarity (+/-). The default value is set by the basic settings.	Length: 0.1 to 100μm
Display switching 	Upper axis Middle axis Lower axis 	Each display axis can be selected for the length measurement unit input axis.	Input axis: IN-1: 1st input axis IN-2: 2nd input axis IN-3: 3rd input axis IN - -: No display
Axis label 	Upper : X Middle : Y	Display axis label selection NOTE: Can be used with LG20-1 and LG20-2.	Upper axis: "X" or "Z" Middle axis: "Y" or "Z"
Compensation value 		Settings of linear compensation and segmented error compensation	Err OFF : off Lin Err : linear compensation ±600μm/m
Flicker control 		Flickering of the smallest displayed digit can be suppressed. Set the level of flicker suppression.	OFF: Function stop 1: Weak 2: Strong
Sleep 		The display turns off when there is no movement of the length measurement unit or key operation for a certain period of time while the power is on. It will return when the length measurement unit is moved or the Key operation is performed again.	OFF: Do not put to sleep 1: 1 minute later 5: 5 minutes later 10: 10 minutes later 30: 30 minutes later 60: 60 minutes later

How to set up Basic Settings (1/3)

Step 1

Configure the basic settings.
Choose one of the following methods of operation.

NOTE:

If you change the basic settings,
Detailed Settings will be reset to the factory defaults.

When the power is turned on for the first time after shipment from the factory

Connect the AC adapter and turn the primary power "on".

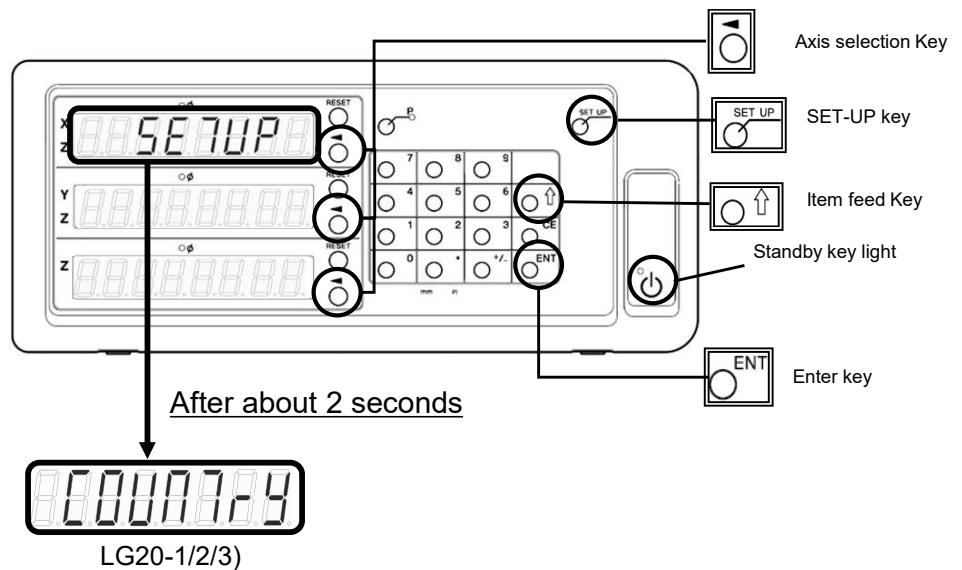
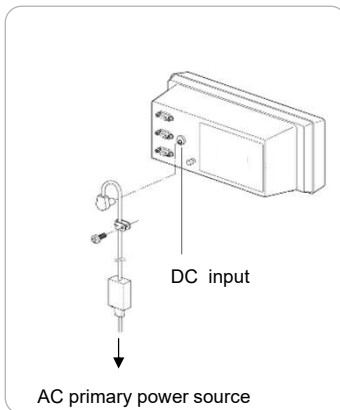
When you want to change the basic settings

AC adapter is energized.

Turn on  key, the LED light changes from "blinking" to "off" and then press and hold  key for 3 seconds.

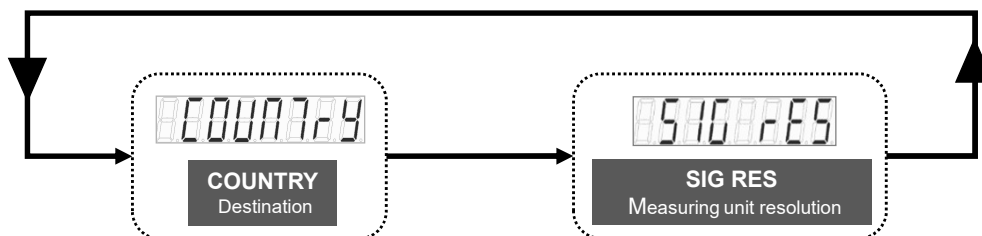
The following display appears

Connecting the AC Adapter



Continued on next page

Pressing  key changes the basic settings mode in the order in which it is set.



COUNTRY (destination country):
Please select your region

Signal resolution (measuring unit resolution):
Sets the output resolution of the scale to be connected. Supports the input of length and angle display units.

COUNTRY (Destination)

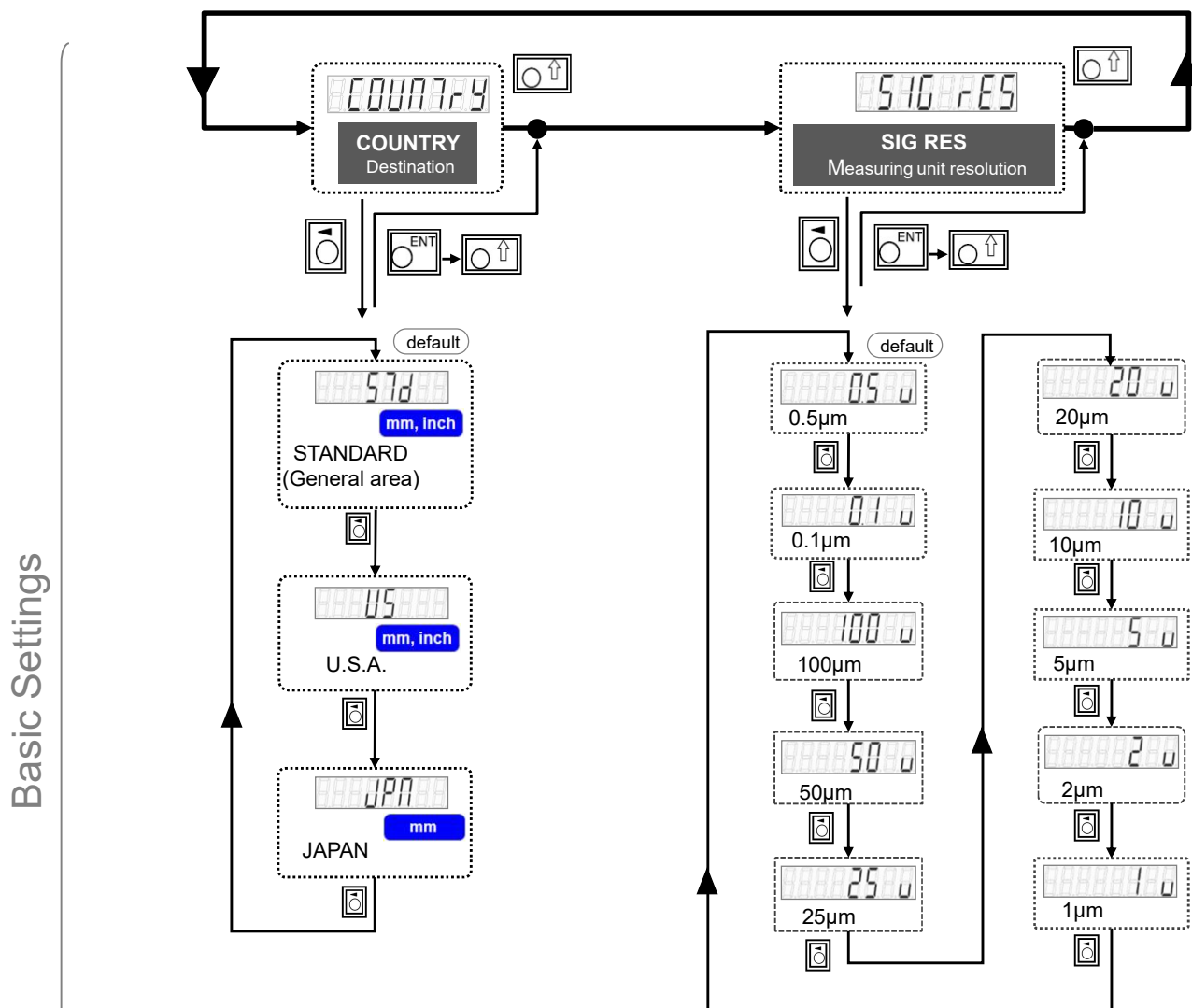
Symbol	Destination	Unit
STD 	General area	
US 	U.S.A.	
JPN 	Japan	

How to set up Basic Settings (2/3)

Step 2

Enter the settings confirmed in "Preparations before making initial settings (1/2)". Repeat steps (1), (2), and (3) to make the basic settings.

- (1) Use  key to change the basic settings item.
- (2) The settings selection can be switched with  key on the right side of the counter display.
- (3) To define the new value, press  key.



Display method:

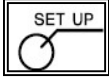
- For each setting item, the current setting contents are displayed after about 1 second. If there is no change in the contents, move to the next section with  key.

How to set up Basic Settings (3/3)

Step 3

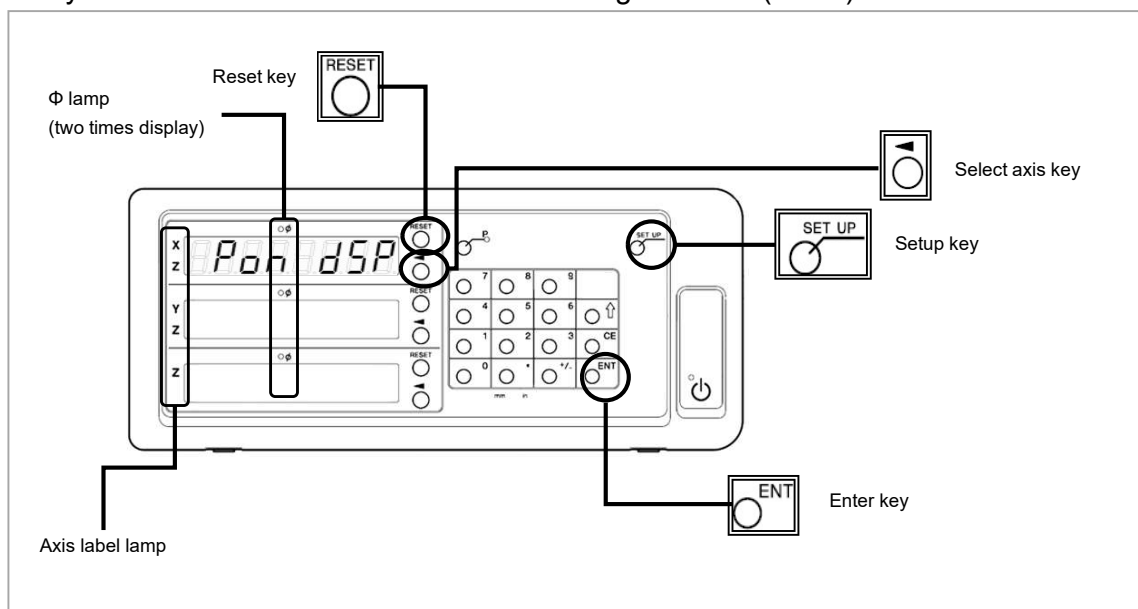
Once you have completed the basic settings, exit this mode and move to Detailed Settings mode.

How to Exit Basic Settings Mode

- ① Press  key or  key.
- ② The display changes to .
- ③ Pressing  key displays .
- ④ Press  key. The display will be .
- ⑤ Press  key. The display returns to normal.

This completes the basic settings.

Key to be used at the end of the basic settings mode (LG20)



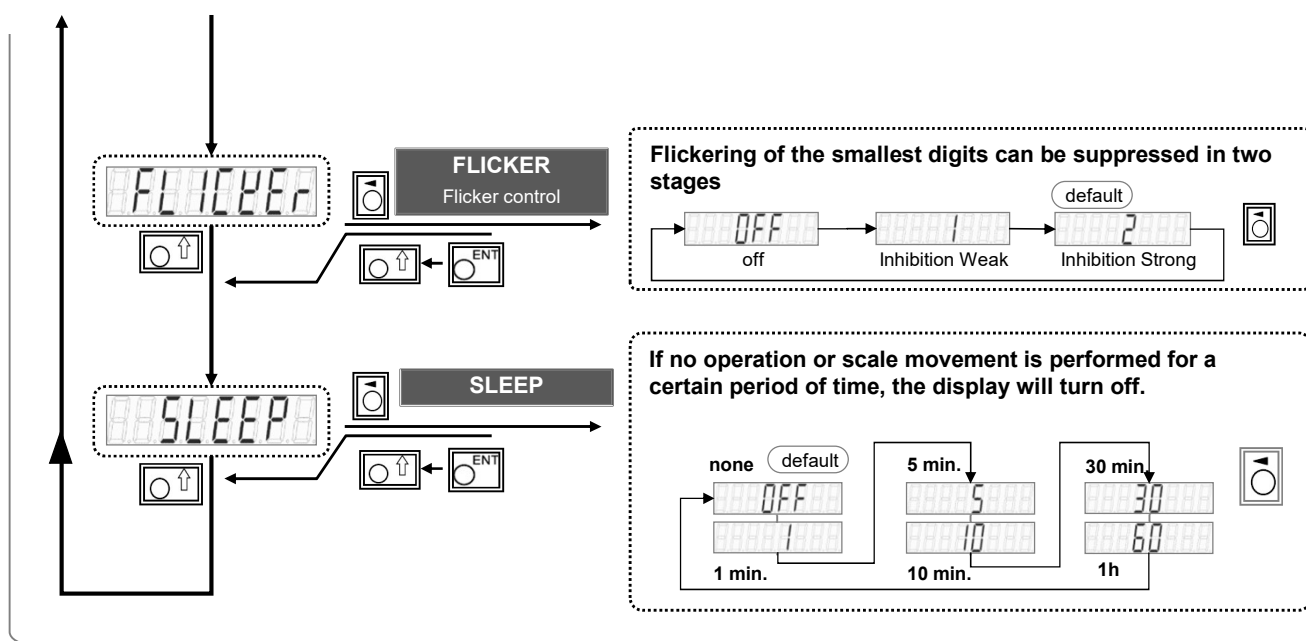
How to set up Detailed Settings (1/1) (continued from Basic Settings)

Step 4

Make the detailed settings.

*If you have already completed the basic settings and want to reconfigure only the advanced settings, you can do the same.





Step 5

When the Detailed Settings are complete, switch to the normal display.

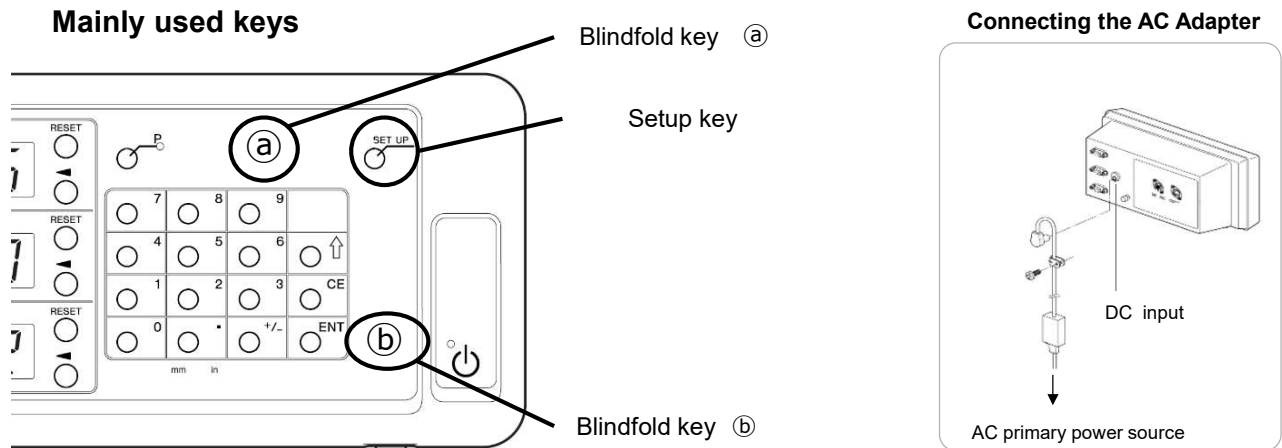
Press  key.

This completes the initial settings..

Factory Default (All Clear)

To set the factory settings (all clear), perform the following operations.
Make preparation such as taking NOTES in advance for necessary items.
Also, do not perform any operation other than the explanation.

CAUTION: IF YOU DO THIS, ALL SETTINGS WILL BE THE FACTORY DEFAULT SETTINGS.



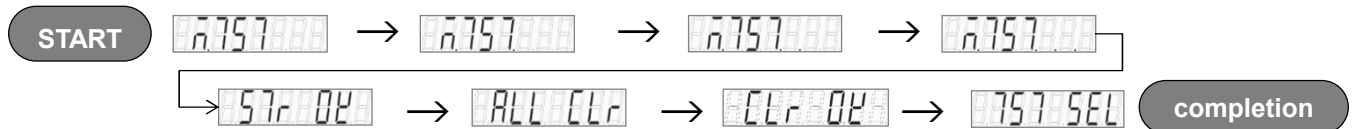
1. Hold down the Blindfold key (a) and  key at the same time to start the power supply.

Connect the AC adapter to the DC-IN input on the back of the counter and turn on the primary power supply.

⇒ The model name of the counter is displayed 

2. When you press the Blindfold key (a),  is displayed,
followed by .

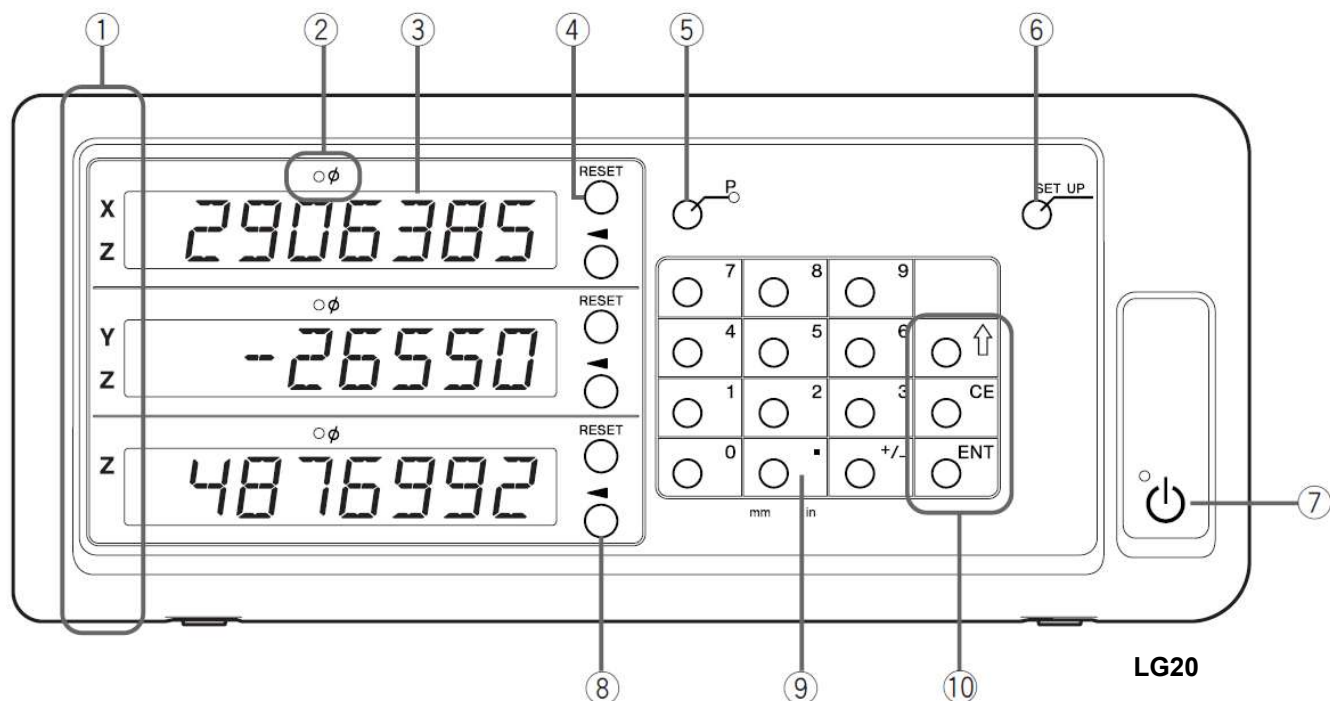
3. Pressing the Blindfold key (a) changes the display as shown below.



4. Turn off the primary power supply of the AC adapter.

Appendix 1

Front panel



No.	Name	No.	Name
①	Axis label	⑦	Standby key
②	Φ lamp	⑧	Axis select key
③	Counter display	⑨	Numeric key
④	RESET key	⑩	Function key
⑤	P key		
⑥	SETUP key		

Alarm indication

Display	Status	Display	Status
	Measurement unit not connected		Storage data error
	Speed over (NOTE)		
	Overflow		
	Power failure		

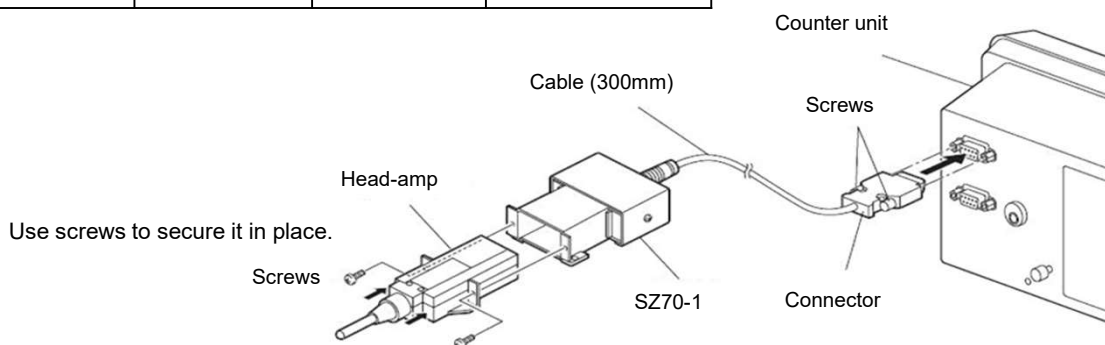
NOTE: When using an adapter connection (SZ**), no speed override indication is shown, but rather an error message.



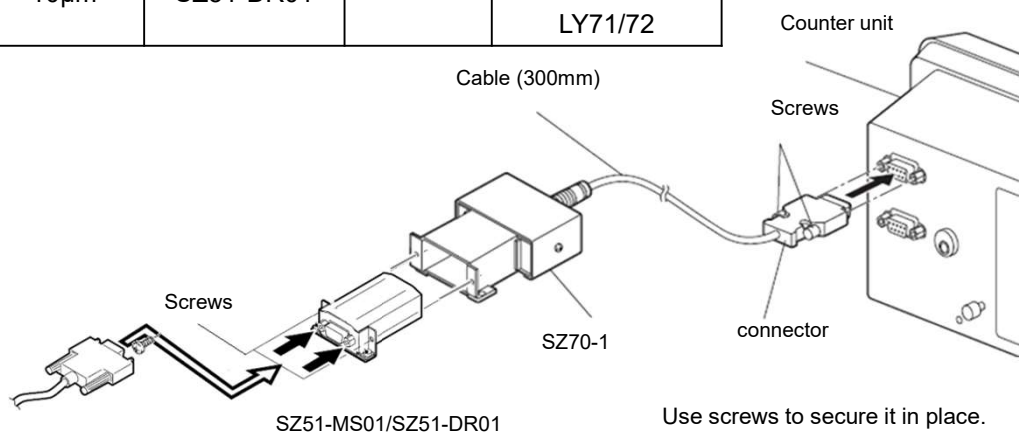
Appendix 2-1

Adapter connection (Length scale)

Scale/ Head	Resolution	Adapter	Counter
SR128(GB-A)	0.5μm	SZ70-1	LG20 LH70/71/71A/72 LY71/72
PL20B	10μm		
SJ700	5μm		

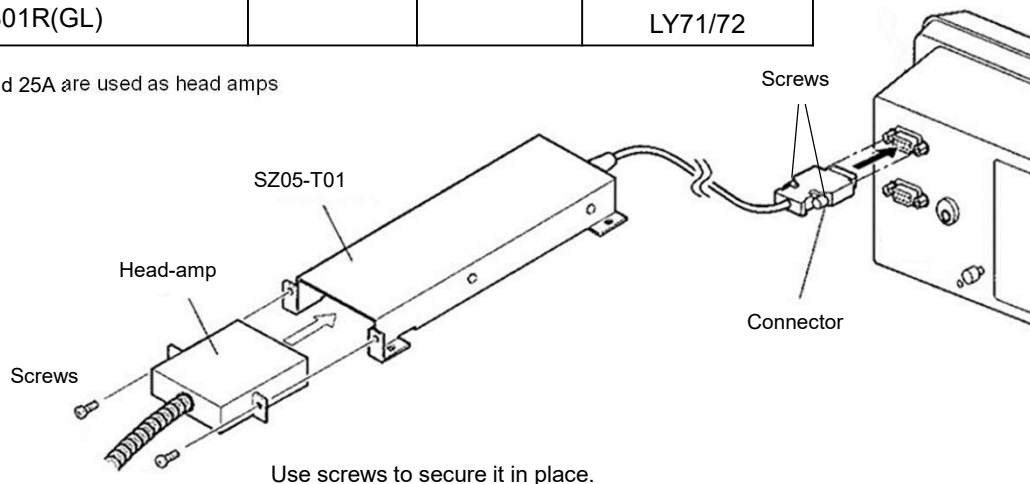


Scale/ Head	Resolution	Adapter 1	Adapter 2	Counter
SR108(GB)	0.5μm	SZ51-MS01	SZ70-1	LG20 LH70/71/71A/72 LY71/72
PL20A	10μm	SZ51-DR01		



Scale	Resolution	Adapter	Counter
SR-1711(GP), SR10A/741(GS), SR50A(GF,GF-R), SR30A(GM), SR801/801R(GL)	0.5μm	SZ05-T01	LG20 LH70/71/71A/72 LY71/72

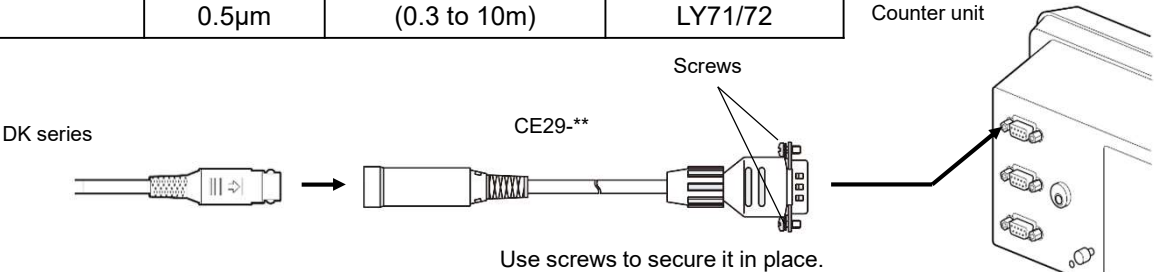
* HA13A, 15A, 23A and 25A are used as head amps



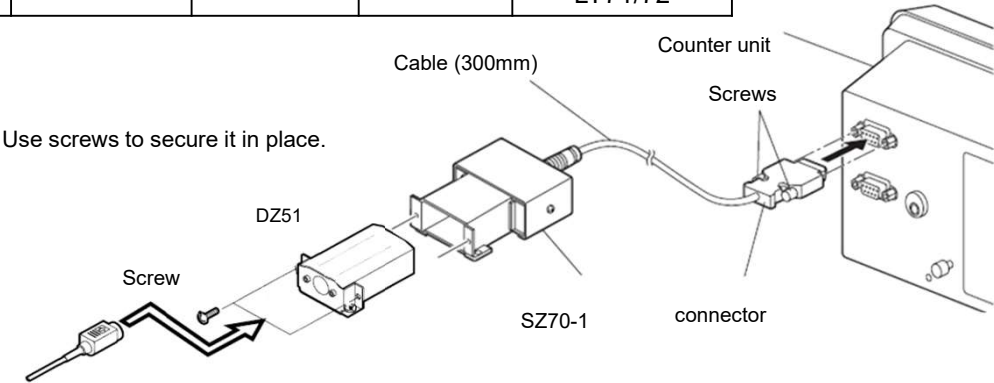
Appendix 2-2 Adapter connection (Digital gauge)



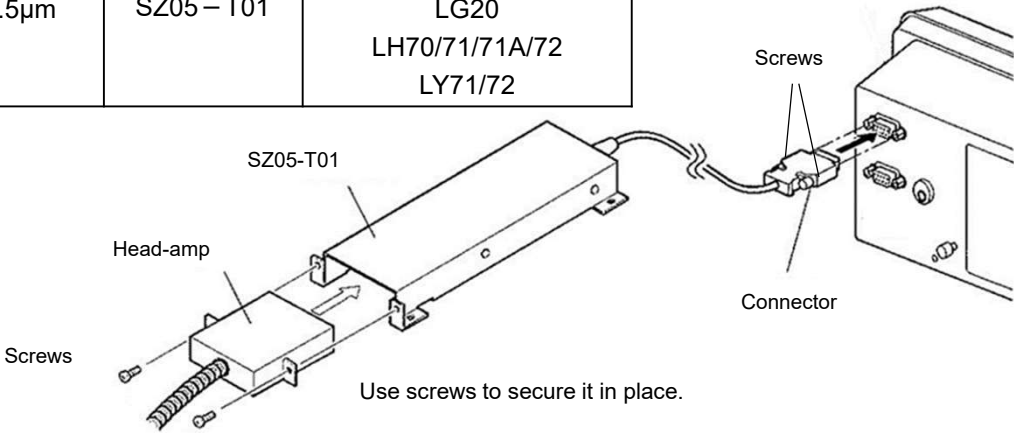
Gauge	Resolution	Connection cable	Counter
DK- **	0.1µm or 0.5µm	CE29- ** **: 003/01/03/05/10 (0.3 to 10m)	LG20 LH70/71/71A/72 LY71/72



Gauge	Resolution	Adapter 1	Adapter 2	Counter
DG-B	0.5µm	DZ51	SZ70-1	LG20
DL310B/330B	10µm			LH70/71/71A/72 LY71/72



Gauge	Resolution	Adapter	Counter
DG	0.5µm	SZ05 – T01	LG20 LH70/71/71A/72 LY71/72



Gauge	Resolution	Adapter	Counter
DE12BR/30BR	0.1µm	SZ70-1	LG20 LH70/71/71A/72 LY71/72

