

Adjusting Procedure

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Document : 7-850390-A
Subject : Adjusting procedure Amplifier unit Keyence IL1000
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Machine type:
 ZEVA^m 6846

Abstract:

This procedure described the setting of Amplifier unit Keyence IL-1000 item 7-47608, that will be used in combination with Sensor Laser Keyence IL-100 Item 7-47604 for the Board Warpage Compensation option in the ZEVA^m machine



Figure 1: Item 7-47608 Amplifier unit Keyence IL-1000

Settings:

1. Layout setting and mode of the Amplifier unit

DIN rail mount type (IL-1000/IL-1050)

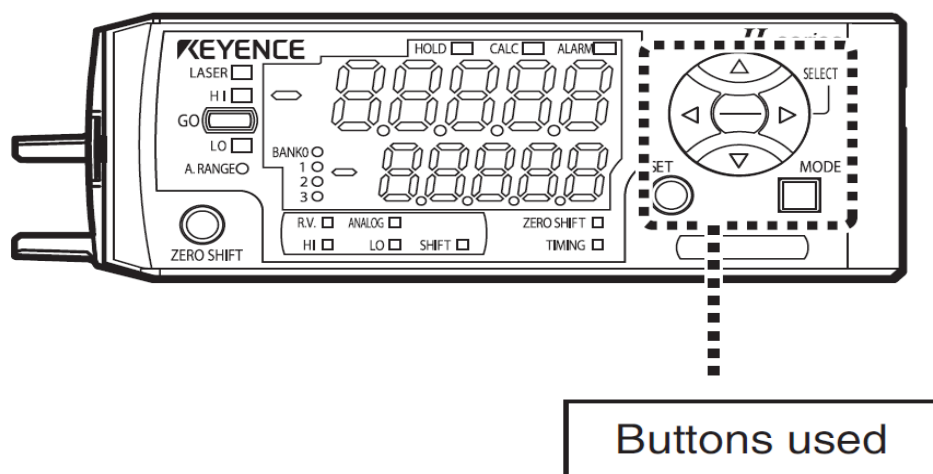
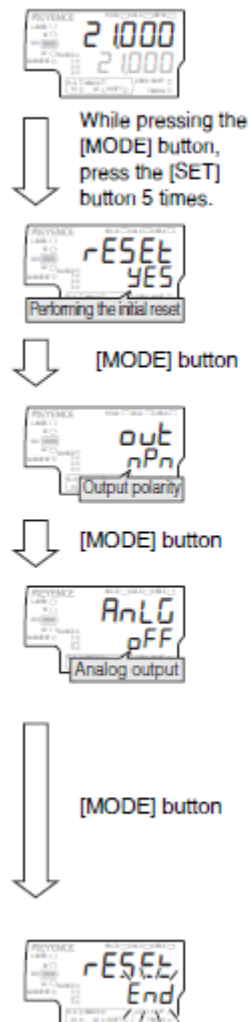


Figure 2: Lay-out unit Keyence IL-1000

2. Main screen settings:

- In steps 3, Select setting value Pnp > PNP out
- In steps 4, Select setting value AnPr > Analog output after the judgment values in converted to the range from 4 to 20mA

Main screen



1 While pressing the [MODE] button on the main screen, press the [SET] button 5 times.

[rESEt] is displayed on the main display (upper level).

2 Press ▲/▼ button to select [YES] and press the [MODE] button.

If [no] is selected at this point, only the output polarity and analog output settings can be changed without performing the initial reset.

3 Press ▲/▼ button to select the output polarity and press the [MODE] button.

Setting value	Description
nPn	NPN output
PnP	PNP output

4 Press ▲/▼ button to select the analog output and press the [MODE] button. (only for IL-1000 / IL-1500 only)

Setting value	Description
oFF	Not output
0-5 V	Analog output after the judgment value is converted to the range from 0 to 5 V.
-5-5 V	Analog output after the judgment value is converted to the range from -5 to 5 V.
1-5 V	Analog output after the judgment value is converted to the range from 1 to 5 V.
AnPr	Analog output after the judgment value is converted to the range from 4 to 20 mA.

☞ "10. Analog Output Scaling" (page 4-27)

5 After the initialization is complete, [End] blinks several times on the sub display and the main screen is restored.

Figure 3: Setting values XXX

3. How to go to the setting screen
4. Basic operations on the setting screen
5. Setting screen view (See fig 4)

How to go to the setting screen

Press the [MODE] button for **approx. 2 seconds** on the main screen.
The setting screen appears.

Basic operations on the setting screen

Changing the setting value: ▲/▼ button
Go to the next setting item: [MODE] button or ► button
Return to the previous setting item: ◀ button
Skip the rest of the settings and finish: Press and hold the [MODE] button for **approx. 2 seconds**.

Setting screen view

The setting is displayed on the main display (upper level) and the setting value is displayed on the sub display (lower level).

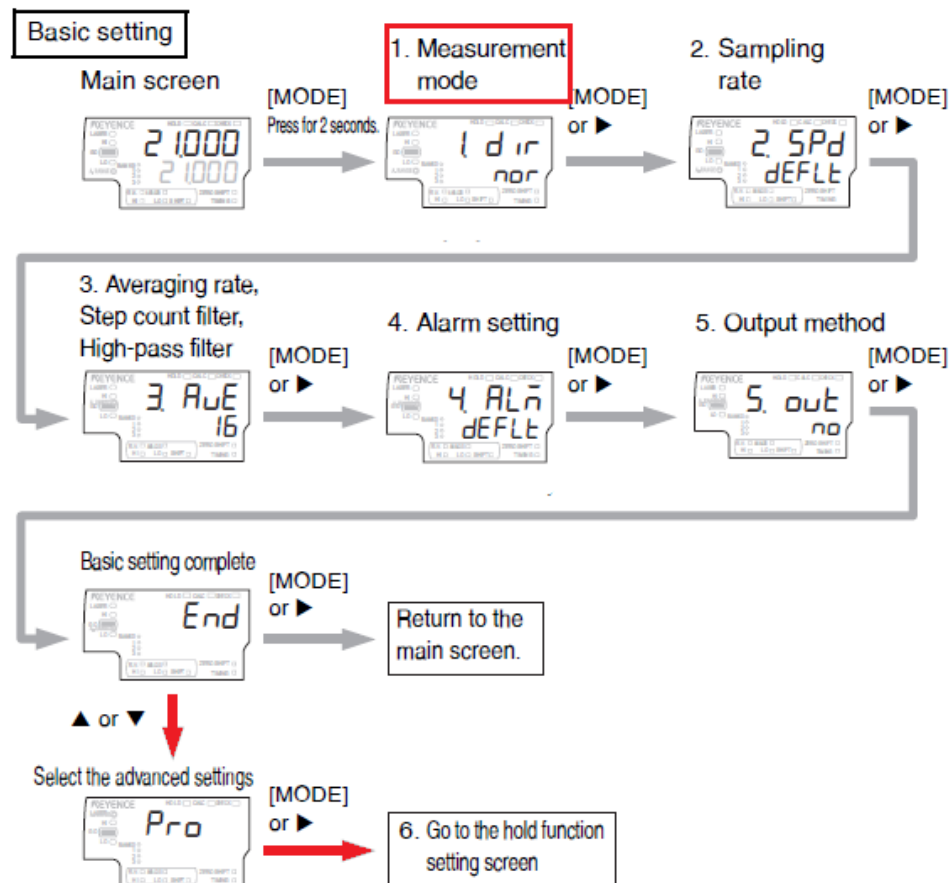


Figure 4: Settings screw view

6. Select step 1. Measurement mode 1 dir
 - Select dir mode rEu instead off mode nor (See Fig 5)

1. Measurement Direction

l d r

Set whether the display value increases or decreases when the object approaches the sensor head.

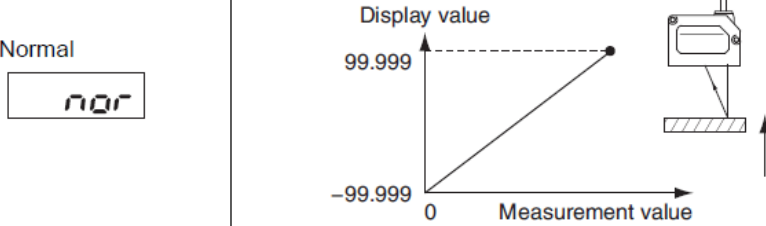
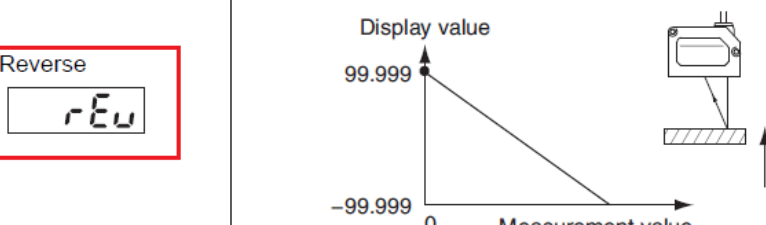
Measurement increase/decrease direction	Description	Default value
Normal 	The display value increases when the object approaches the sensor head.	0
Reverse 	The display value decreases when the object approaches the sensor head.	

Figure 5: Screen view setting - Measurement Direction

7. Select step 5 out
 - Select the advance settings mode instead of Basic setting complete (See fig 6)

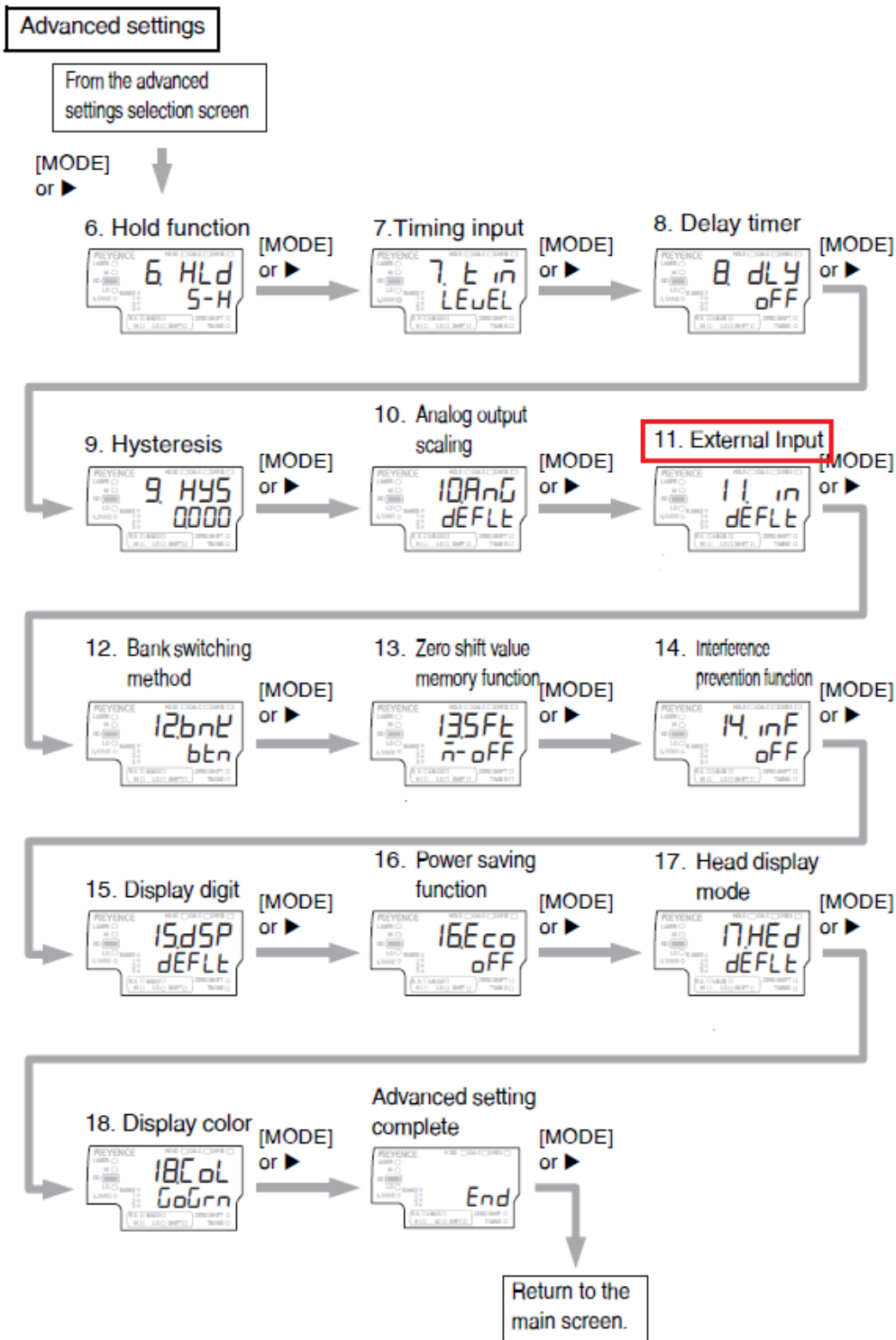


Figure 6: Screen view Advance settings

8. Select step 11 External Input
 - Select 11 USr setting instead of in dEFLt (See fig 7)

11. External Input

11 in

You can select functions to be assigned to four external inputs (External input 1 to 4).

📖 "Power/Input-output cable" (page 2-7)

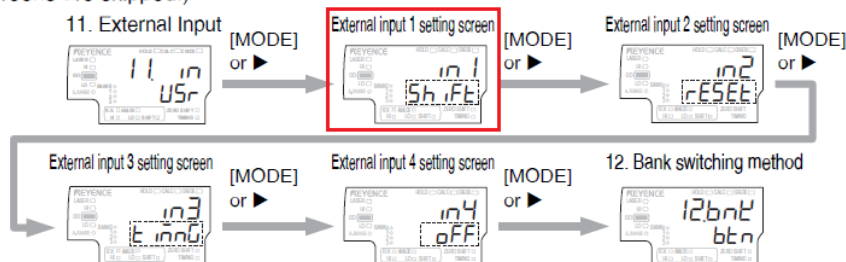
External Input	Description	Default value
Default setting dEFLt	Functions for the external inputs remain the same as the factory default setting.	○
User setting USr	Functions for the external inputs are changed from the factory default setting.	

Figure 7: External Input into USr setting

9. External Input setting screen
10. Select in '1' > Shift > L-StP Laser emission stop input (See Fig 8)
 - External Input 9 (Pink wire)

External input setting screen

When the user setting is set, each function of the external input 1 to 4 can be set. Functions that can be set differ for each external input. (When the default is set, these four screens are skipped.)



Press ▲ / ▼ button on each setting screen to specify functions.

External Input 1 (Pink wire)

Setting value	Description	Default value
Sh .Ft	Zero shift input	○
bnL-A	Bank A input	
bnL-b	Bank B input	
L-StP	Laser emission stop input	
oFF	Not use	

External input 3 (Pink/Purple wire)

Setting value	Description	Default value
t innB	Timing Input	○
bnL-A	Bank A input	
bnL-b	Bank B input	
L-oFF	Laser emission stop input	
oFF	Not use	

External Input 2 (Yellow wire)

Setting value	Description	Default value
rESEt	Reset input	○
bnL-A	Bank A input	
bnL-b	Bank B input	
L-StP	Laser emission stop input	
oFF	Not use	

External Input 4 (Purple wire)

Setting value	Description	Default value
oFF	Not use	○
bnL-A	Bank A input	
bnL-b	Bank B input	
L-StP	Laser emission stop input	

Figure 8: External Input setting screen

Important: More information, please contact local service agent or ITW EAE helpdesk

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- E-mail help desk USA > vsustsc@itweae.com
- E-mail help desk Asia > aphelpdesk@itweae.com