

Got Questions on getting your D4RF amplifier up and sensing? Contact Ramco today! Our email is nsales@ramcoi.com

Digital Fiber Amplifier with IO-Link Interface

D4RF / D4RF-Y Series

Quick Start



This quick start guide describes the basic setup of this product. For information on menus, settings, and specifications not listed in this guide, refer to the instruction manual included with this product or download the user's manual from the OPTEX FA website.

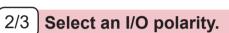
OPTEX FA CO., LTD.

Configure the initial settings.

On the first power on, the initial setting menu will be displayed.



□ Espanol □ 한국어

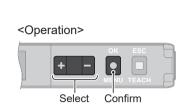


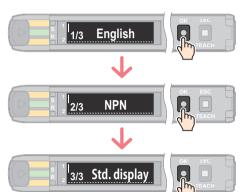
☐ NPN ☐ PNP ☐ Push-pull

Select a light receiving level display mode.

☐ Std. display

☐ Hold display that displays peak/ bottom levels, instead of real-time





To go back to a previous menu, press the [ESC] key.

Easy setup (1-point teach)

Press the [TEACH] key.



Press the [+/−] keys to display [1 point], and then press the [OK] key to confirm the selection.



3 "10%" (+10%) is displayed for the detection margin value. Press the [OK] key.

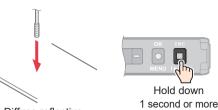
*You can press the [+/-] keys to change the detection margin.



Use cases: When you want to perform teach without a detection object.

 When you are using a diffuse reflective fiber unit.

4 With no detection object present, hold down the [TEACH] key 1 second or more.



Diffuse reflective

5 When the number blinks, teaching has completed successfully.



Threshold blinks

Manually adjust the threshold.

If necessary, you can manually adjust the threshold set for teach.



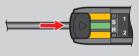


Is the fiber unit inserted correctly?

Insertion status of fibers can be checked with the indicators.

If the fiber is not inserted to the correct position, the light receiving level will be low, and accurate detection will not be possible.





When the fiber is inserted correctly, the fiber insertion indicator turns

Perform teaching.

For stabler detection (2-point teach)

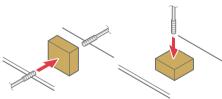
Press the [TEACH] key.



Press the [+/-] keys to display [2 points], and then press the [OK] key to confirm the selection.



3 Set the object for detection in place, and then hold down the [TEACH] key 1 second or more.



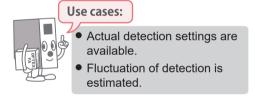
Through-beam Diffuse reflective



1 second or more

4 When the number blinks, the teaching of the first point has completed successfully.

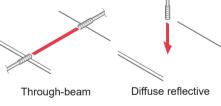




5 The screen for teaching the second point appears.



6 Remove the object for detection, and then hold down the [TEACH] key 1 second or more.





When the number blinks, teaching has completed successfully.



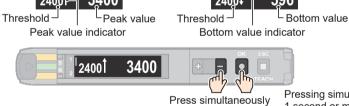
Threshold blinks

*The values for the light receiving level and threshold shown here are examples. These values with a through-beam or diffuse reflective fiber unit vary depending on the presence or absence of the detection object.

Useful Functions

Clear monitoring of the light receiving levels with or without the detection object (Hold Display)

Instead of real-time display of received light amounts, peak or bottom values are displayed. The light receiving levels with or without the detection object can be easily confirmed for threshold adjustment.

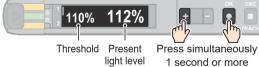


1 second or more

Pressing simultaneously 1 second or more

Percentage display of light receiving level

Light receiving levels can be displayed as a percentage, with 100% being the light receiving level during teaching. This function allows for easy monitoring of differences between multiple amplifiers and daily conditions of operations.



Pressing simultaneously 1 second or more switches the displays

Preventing incorrect operation (Key Lock)

Key operations can be locked to prevent incorrect operation. *In the initial settings, operation via external input is also locked.



Press simultaneously 1 second or more

Pressing simultaneously 1 second or more switches lock and unlock.

Switching status display of outputs 1 and 2

Status display of outputs 1 and 2 can be switched for monitoring and configuration. The output indicators can be used to confirm which output is displayed.



Pressing 1 second or more switches the