

# General Specifications

LL50A Parameter Setting Software  
with Ladder Program Building Function  
and Network Profile Creating Function



GS 05P05A01-01EN

## Overview

The LL50A Parameters Setting Software is designed to build and set parameters, program pattern, ladder programs, and the like of the UTAdvanced digital indicating controllers from a PC. The tuning and monitoring of ladder programs are possible during communication with the controllers.

## Main Features

### A Variety of Connection Methods

In addition to a connection with a Light Loader (dedicated) adapter, connections with a communication terminal on the rear panel and a dedicated cable are available. As for the connection with a dedicated cable, settings can be made when the controller power is not energized.

### Parameter Setting Function

This function allows for setting and changing the parameters of the controller. In case of the UT75A, allows for setting the program pattern.

### Program Pattern Setting

This function allows for setting the program patterns of UP series program controllers. (UP55A, UP35A, and UP32A)

Creates up to 99 program patterns for UP55A and up to 4 program patterns for UP35A/UP32A.

### Tuning Function

This function allows for adjusting the PID parameters while watching the PV, SP, and OUT trend graphs. (Except UM33A)

### Ladder Program Building Function

This function allows for building the input and output signal sequences of the controller using the ladder program. Various calculations are possible using basic and application commands. (Except UM33A)

### Network Profile Creating Function

This function enables to create an Electronic Device Data Sheet for PROFIBUS-DP communication. Excluding the dual-loop type of UT32A (UT32A-D).

## Functions

Parameter setting function	Parameter setting, Display level switching
Program pattern creating	Repeat action, Wait action setting PV event, Time event setting
Ladder program building function	Ladder program building Custom ladder instruction building Program check
Custom display building function	The contents displayed on the screen of UT75A can be customized.
Monitoring function	Tuning, Register monitoring Ladder program monitoring
Network Profile Creating function	Profile creating
Other functions	File management Conserving function of CSV format Communication processing Upload/download Communication comparison Reset to factory default Reset to user default Communication condition setting, Print

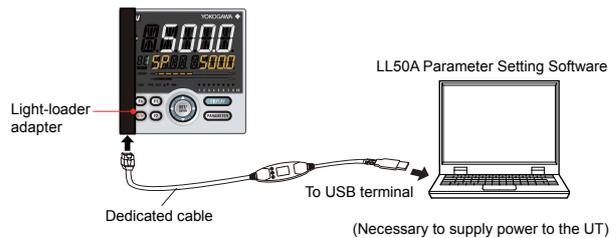
## Applicable Controllers

- UT75A digital indicating controller
- UT55A digital indicating controller
- UT52A digital indicating controller
- UT35A digital indicating controller
- UT32A digital indicating controller
- UP55A program controller
- UP35A program controller
- UP32A program controller
- UM33A digital indicator with alarms (Excluding the UM33A-S)

## Connection between PC and Controller

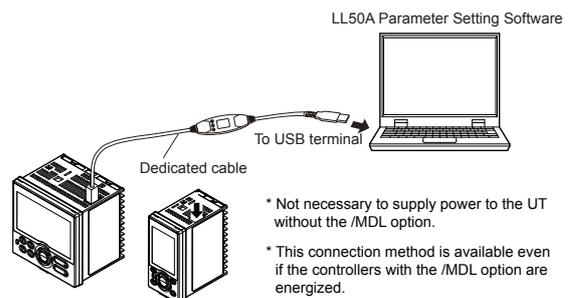
### Connection with a Dedicated Adapter

Connect the dedicated cable to the dedicated adapter and then attach the dedicated adapter to the front of the controller. (The adaptor cannot be used on the controllers with the /MDL option.)

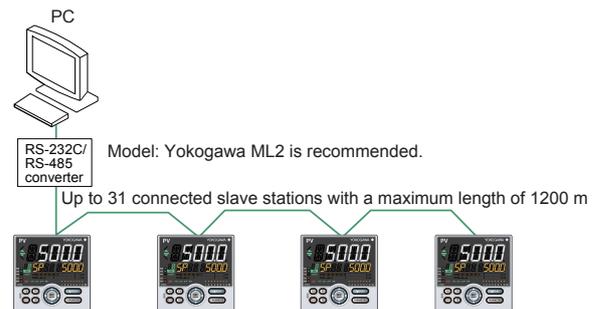


### Connection with Dedicated Cable

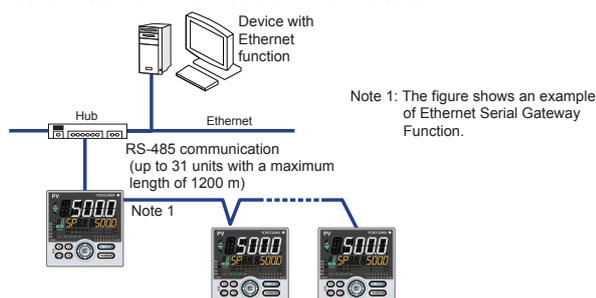
This connection allows for setting parameters, writing ladder programs, and the like when the controller is not energized.



## RS-485 Communication Terminal Connection



## Ethernet Communication Connection



An Ethernet connection is also possible using controllers with an RS-485 communication function and an Ethernet/RS-485 converter (Yokogawa VJET is recommended).

## ■ Operating Environment

### PC (System Requirements)

Item	Windows 11 <sup>*1</sup> Japanese / English	Windows 10 <sup>*1</sup> Japanese / English	Windows 8.1 <sup>*1</sup> Japanese / English
Edition	Pro 64 bit	Pro 32 bit/64 bit	Pro 32 bit/64 bit
Version <sup>*1</sup>	21H2 or later	20H2 or later	Update
CPU	Intel processor that supports 64 bit and 1 GHz or faster with 2 or more cores	Intel processor that supports 32 bit /64 bit and 2 GHz or faster speed (recommended)	2GHz or faster Intel processor (recommended)
Recommended main memory capacity	8 GB or more	8 GB or more	2 GB or more
Recommended storage free capacity	32 GB or more	32 GB or more	16 GB or more
Display	Display compatible with OS	Display compatible with OS	Display compatible with OS
Communication port	Communication with a dedicated cable: USB port (1 channel) RS-485 communication: RS-232C port (1 channel) (RS-232C/485 converter required, YOKOGAWA ML2 recommended) Ethernet communication: 10BASE-T/100BASE-TX		
Peripherals	Printer (paper size for print: A4-size, or letter-size on the English version.) LL50A connection cable (dedicated, included with tool) Ethernet connection cable (necessary for Ethernet communication, compliant with 10BASE-T/100BASE-TX standard)		

\*1: Yokogawa will also stop supporting OSs that Microsoft Corporation no longer supports.

### Dedicated Adapter (L3502LP)

Communication method:

Non-contact, two-way, serial optical communication on the controller side

Power supply:

Supplied from the USB bus power

Rated input voltage: 4.75 to 5.25 V DC, 100 mA DC (including the dedicated cable)

Ambient temperature: 0 to 50°C

Ambient humidity: 20 to 90%RH (No condensation)

Transport and storage conditions:

-20 to 70°C, 5 to 90%RH (No condensation)

Dust-proof and drip-proof: Unsupported

### Dedicated Cable (A1059UR)

USB serial converter is embedded

Compliant with the USB Specification Rev. 1.1

USB Series "A" plug on the PC side

Dedicated plug (5-pin) on the adapter side

Cable length: About 2.7 m

Note: Directly insert the USB plug into a USB port on the PC.

## ■ EMC Standard

CE marking: EN61326-1 Class A, Table 2  
(For use in industrial locations)  
RCM: EN55011 Class A Group 1 compliant  
KC: Electromagnetic wave interference prevention  
standard, electromagnetic wave protection  
standard compliance

## ■ Environment Standard

EU RoHS directive: EN IEC 63000

## ■ Package Items

LL50A Installation Manual: One  
Dedicated cable (A1059UR) and dedicated adapter  
(L3502LP): One

## ■ Model and Suffix Codes

Model	Suffix code	Description
LL50A	-00	Parameter Setting Software with Ladder Program Building Function

## ■ Items to Specify when Ordering

Clearly state the model and suffix code.

### LL50A Parameter Setting Software

Download the latest version of the software from the following URL;  
<https://www.yokogawa.com/ns/ll50a/download/>

### User's Manual

Product user's manuals can be downloaded or viewed at the following URL. To view the User's Manuals, use Adobe Acrobat Reader of Adobe Systems Incorporated.  
<https://www.yokogawa.co.jp/ns/ut/im/>

## ■ Basic Conditions and Individual Contracts at the Time of Purchase

The warranty for this product is defined in the basic conditions and individual contracts at the time of purchase. The individual conditions are as follows.

- Warranty period of software**  
 The software warranty period is one year.  
 Please refer to the following URL for the procedure to update the software and the method to download the software.  
<https://www.yokogawa.com/ns/ll50a/download/>
- Handling of non-conforming products**  
 If Yokogawa verifies a non-conformity of the product that is attributable to Yokogawa within the warranty period, we will deliver an equivalent product.  
 Yokogawa can not provide a free evaluation of non-conforming products.  
 The investigation of the non-conforming products will be performed at the expense of the customer.

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- DeviceNet is a registered trademark of Open DeviceNet Vender Association, Inc.
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