

GRAPHIC OPERATION TERMINAL

GOT1000

START-UP GUIDE

GT11 Series to FX



GOT1000 Startup Guide

GT11 Series-to-FX Connection

Ver. A

Overview:

This document provides a simple guide and reference for setting up the GT11 Series Graphic Operation Terminal (GOT) hardware and firmware for use with an FX Series PLC.

Hardware Introduction:

The GT11 Series are 5.7", 320 x 240 dot resolution, three built-in communication channel GOT1000 Series touch panel interfaces. GT11 Series terminals also have Compact Flash card interfaces and a Reset button built-in. The models that are connectable to FX PLCs are the following:

Model	Display Type	Comm. IF	Power
GT1155-QTBD	256 Color TFT	USB (slave)	24V DC
GT1155-QSBD	256 Color STN	RS-232C	
GT1150-QLBD	16-gradient Grayscale STN	RS-422	

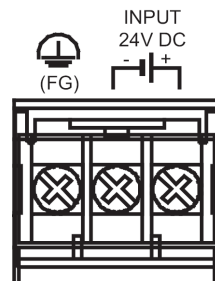
For new GT11** Series terminals, included in the box should be the GT11** (A), and a sealed plastic bag (B) containing 1 rubber Dust-/Water-Proof Packing, 4 metal Mounting Brackets, and 4 M4 Mounting Screws.



Cabling:

Power

All GT11 Series GOTs require an external 24V DC power supply to be connected to the Power Terminals on the back of the GOT.



Communication

For the GT11 terminal to communicate with an FX Series PLC, a communication cable is required to connect the built-in communication interfaces with the Programming Port (RS-422 8-pin Mini-DIN) or other

communication channel of the FX (RS-422 8-pin Mini-DIN or RS-232C 9-pin D-sub). The cable names and details for each case are illustrated below:

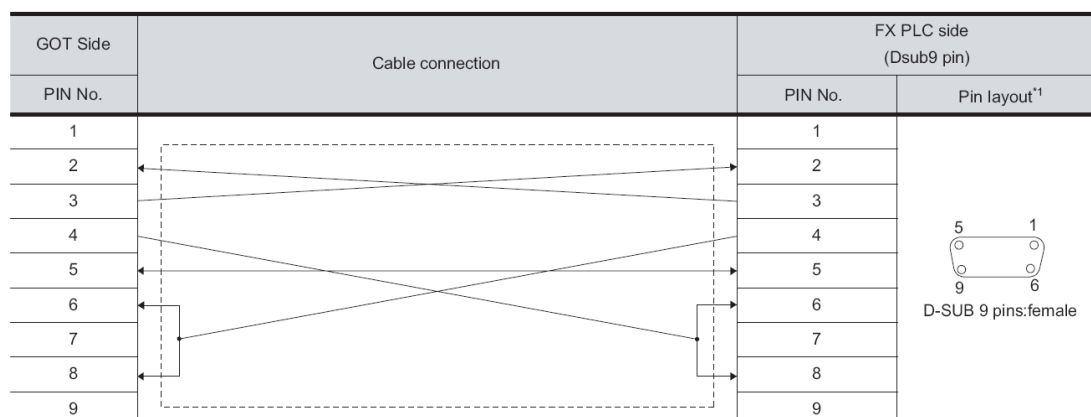
Connection to an RS-422 FX communication channel

Cable Name	Length	FX Comm. Equipment
GT01-C10R4-8P	1m	Programming Port FX3U-422-BD FX2N-422-BD FX1N-422-BD
GT01-C30R4-8P	3m	
GT01-C100R4-8P	10m	
GT01-C200R4-8P	20m	
GT01-C300R4-8P	30m	

Connection to an RS-232C FX communication channel

Cable Name	Length	FX Comm. Equipment
GT01-C30R2-9S	3m	FX3U-232-BD FX3U-232ADP(-MB)* FX2N-232-BD FX2NC-232ADP* FX1N-422-BD

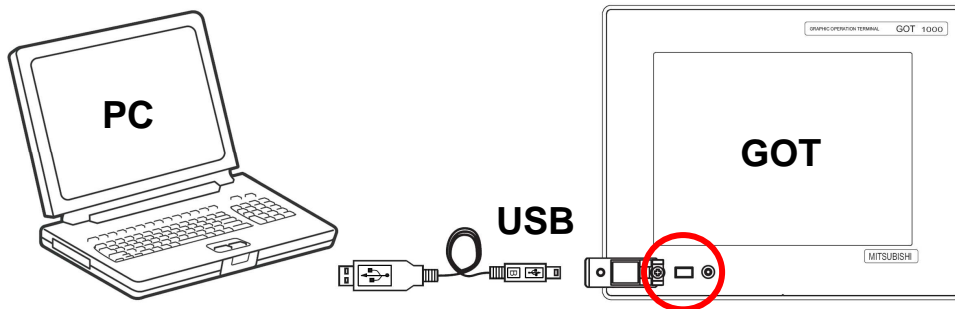
* - Special Adapters require an additional FX**-CNV-BD or, for the FX3U only, a Communication Expansion Board.



*1 The pin layout shows the engagement face.

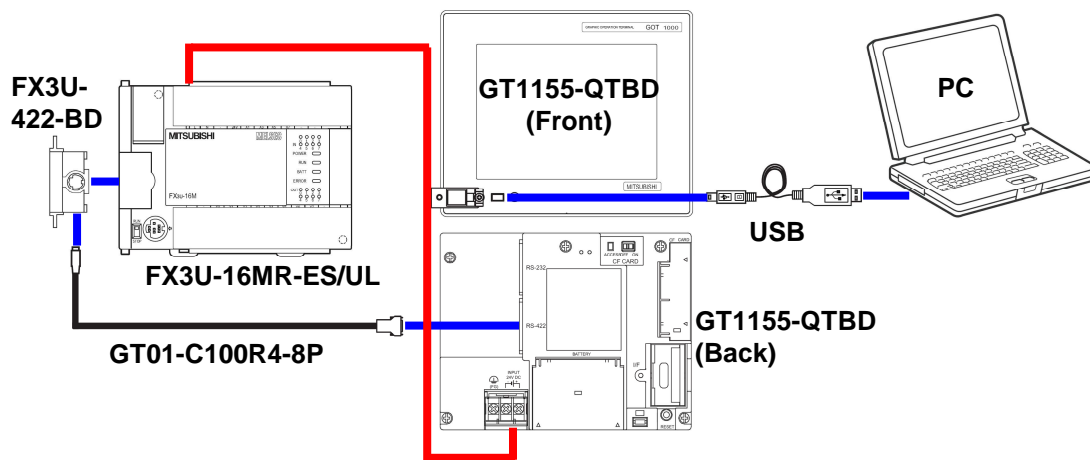
Programming Cables:

The GT11 Series GOTs come pre-installed with an OS only without any project data. To download a project from a PC running GT Designer2 to the GOT, a programming cable is required to connect the PC to one of the communication interfaces. For a new out-of-the-box GOT, the easiest way to connect to the GOT is through the USB Mini-B type port on the front panel with a standard USB cable. After setting up the GOT communication settings from the GOT main menu or with GT Designer2, the RS-422 and RS-232C interfaces can also be used for program transfer. Connection via USB is shown below.



Example Connection Diagram:

The following is an example of an FX-to-GOT-to-PC connection, where the blue lines indicate data communication and the red line indicates power from the FX3U 24V DC service power supply.



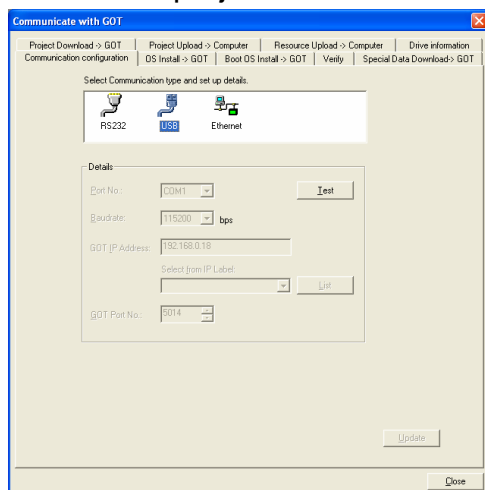
Firmware Updates:

To make sure the GT11 Series GOT is able to use the latest functions and features, it is the responsibility of the user to check and update the firmware (Standard monitor OS) of the GOT.



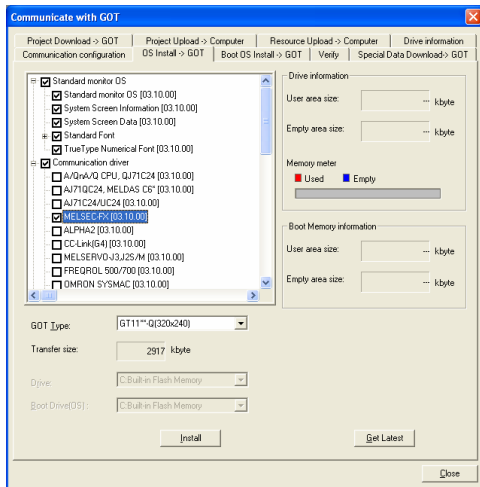
Launch the latest copy of GT Designer2 and start a new project for the GOT model “GT11**-Q(320x240)” with the

“MELSEC-FX” Controller Type. Select “Yes” to set the Communication Setting and make sure the Standard I/F-1 or Standard I/F-2 CH No. is set to 1, depending on RS-422 or RS-232C connection, before selecting “OK”. The “Screen Property” window that pops up for making a new screen can be either canceled or accepted for the following steps.



Go to the “Communication” menu and select “To/From GOT” to bring up the

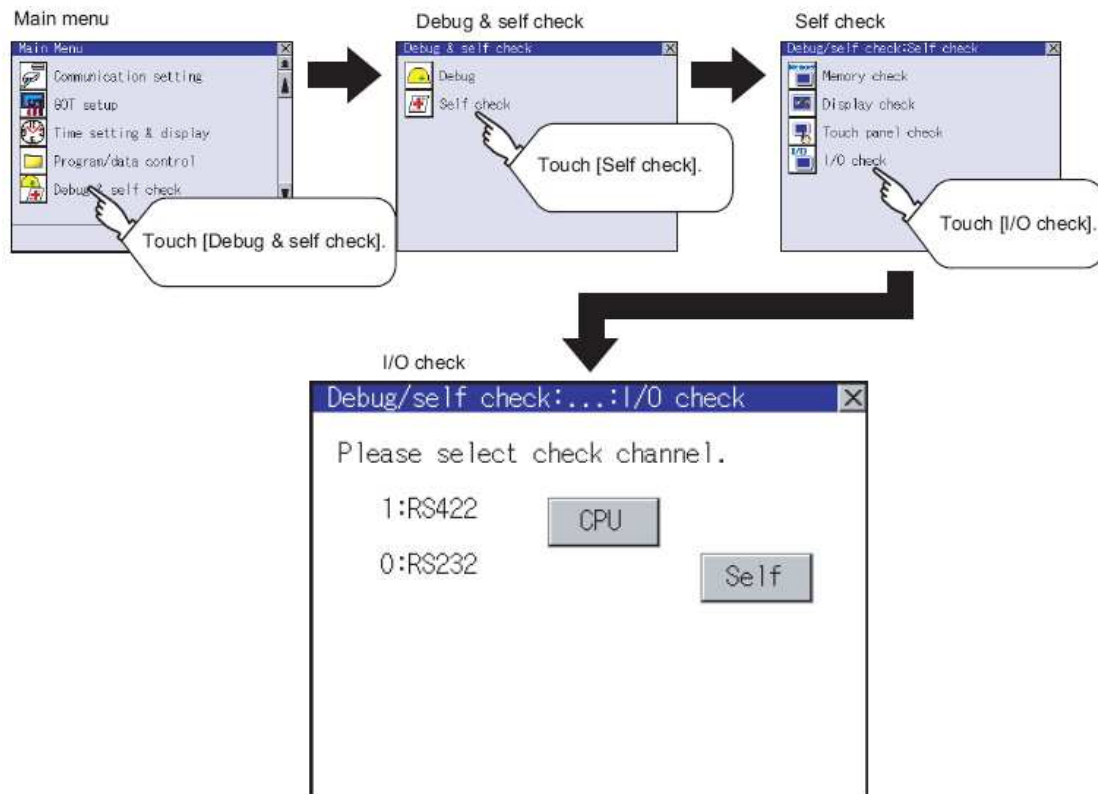
“Communicate with GOT” window. Go to the “Communication configuration” tab and select “USB”. With the GOT power ON, use the “Test” button to verify that the PC and GOT can communicate properly.



Go to the “OS Install -> GOT” tab in the “Communicate with GOT” window of GT Designer2 and select “Standard monitor OS” and “Communication driver” – “MELSEC-FX [**.**.**.]**” from the data selection tree. Use the “Install” button to initiate the data transfer and update the firmware. Once the firmware update has been completed the GOT will automatically reboot and all features will be up to date. Note that new project data will need to be downloaded to the GOT.

Confirm Communication

Before downloading project data to the GOT, the I/O Check function can be used to verify that the GOT is communicating properly with the PLC. After pressing the “CPU” button, if no error is shown, communication has been set up correctly.



Manual References:

Refer to the following manuals for more detailed explanations. For any further questions, please contact your local Mitsubishi Product Provider.

GT11 User's Manual (JY997D17501)

GT11 General Description (JY997D17401)

GOT1000 Series Connection Manual 1/3 (SH(NA)-080532ENG)

- Sections 3.1.5, 3.1.6, 3.1.7, 3.2.1, 3.2.2