701ServerSQL & 701ClientSQL Installation and Operation Overview

Important: Before installing or upgrading to version 10.X, please read
▸New Software Version 11 of 701ServerSQL and 701ClientSQL

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1. 701ServerSQL / 701ClientSQL Software Download Links

▸ 701ServerSQL
▸ 701ClientSQL

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2. Three Installation Modes and Common Scenarios:

Starting from SOYAL 701 software version 11XX, you can choose between database mode or file system mode during installation. There are three installation modes available; select one carefully based on your site environment and requirements:

System Mode Comparison Table			
System Mode	Option 1: Traditional File System	Option 2: Database System	Option 3: Multi-Computer Operation Mode
	(Select one of the three modes.)		
Installation& Maintenance Difficulty	Easy	Requires database knowledge	Requires expertise in networking and database permission settings
Operation Mode	701ServerSQL & 701ClientSQL installed on the same computer		One 701ServerSQL computer & multiple 701ClientSQL computers
Installation Tutorial Videos	▸ Single-computer file system operation	▸ Single-computer database system operation	▸ Supports multiple remote 701ClientSQL
Notes	Versions 9XX and earlier only support the old file system	Applicable from version 11XX: database SQL installation requirements	Applicable from version 11XX: when Server PC and Client PC are on different computers and need to share data, this function only supports SQL database mode

(1) Starting from version 11XX, the software supports multi-area mode. Therefore, after upgrading from version 9XX to 11XX, door groups must be reconfigured.
(2) Installation manual ▸ SOYAL 701 Software Installation Guide
(3) 701ServerSQL and 701ClientSQL downloads are available on the SOYAL official website ▸ Software Resources Download Area

Installation Selection Guide(Three Modes)

System Requirements			Manage hardware and human-machine interface on the same computer	One computer manages hardware while multiple computers manage human-machine interfaces	
Computer management			Manage hardware and human-machine interface	Only manage hardware	Only manage human-machine interface
Software installation required	701ServerSQL		Installation required	Installation required	X
	701ClientSQL		Installation required	X	Installation required
Data Access Modes	A. File System		X	X	X
	B.MariaDB	MariaDB	Installation required	Installation required	X
		ODBC Connector (32-bit version installation file)	Installation required	Installation required	Installation required
		ODBC 32 DSN (701Server)	Installation required	Installation required	Installation required
	C. MSSQL	MSSQL	Installation required	Installation required	X
		ODBC Connector (X86version installation file)	Installation required	Installation required	Installation required
		ODBC 32 DSN (701ServerSQL)	Installation required	Installation required	Installation required

*If you encounter error 0X0007b during installation, you must first install Microsoft Visual Studio 2015—2019, 2022 Redistributable Package.
(Note: Only the latest shared version 2015—2019, 2022 is valid. Older versions such as 2013 and earlier are not supported.)
https://aka.ms/vs/17/release/vc_redist.x64.exe

Frequently Asked Questions (FAQ)

Q1: In a multi-PC environment, can multiple Client PCs with 701ClientSQL installed perform data operations such as adding, modifying, and deleting?

Ans: Yes. 701ClientSQL supports multi-tasking synchronous editing functions across multiple workstations.

Q2: When multiple Client PCs operate on the same database simultaneously, is the data updated in real-time? Is there a risk of operations interfering with one another (e.g., data being overwritten)?

Ans: 701ClientSQL does not feature auto-refresh/active updating. Users must manually reload or re-read the data to see changes. In a multi-user environment, it is highly recommended that only one user is granted editing permissions, while others are set to "Read-Only" to prevent data from being accidentally overwritten.

Q3: Regarding the role of the Server PC, must it aggregate data from all controllers within the entire area? Additionally, can 701ClientSQL be installed and operated on the same Server PC?

Ans: There can only be one 701ServerSQL host per system. It is responsible for the real-time data transmission of all controllers throughout the entire area. Every Client PC communicates with the controllers exclusively through this single ServerSQL host. Yes, 701ClientSQL can be installed on the same PC to perform local operations.

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3. Software Operation :

Before using version 10.X, please read the following article (includes enabling multi-area mode, enabling [Show Detailed Station Number], and editing door number settings):

▸ Three Steps Required for 701Server & 701Client software update to 10.3 Version

3-1 Complete operation manuals:

- ▸ 701ServerSQL Manual
- ▸ 701ClientSQL Manual

4. Related Resources:

Q: If the operation level screen displays garbled text, please refer to the following troubleshooting link.

▸701ClientSQL Error: "The specified sender address is invalid or not recognized" When Card Reader is Offline

Q: Preparation steps for migrating old data to a new computer.

▸Preparations for computer replacement and data migration.