



ZXSS10 SS1b

SoftSwitch Control Equipment

Guide to Documentation

Version V2.01.50

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Thank you for your cooperation!

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About This Manual

Purpose

This manual provides documentation guidelines to all the manuals of ZXSS10 SS1b SoftSwitch Control Equipment.

Intended Audience

This manual is intended for engineers and technicians who perform operation activities on the manuals of ZXSS10 SS1b SoftSwitch Control Equipment.

Prerequisite Skill and Knowledge

To use this document effectively, users should have a general understanding of telecommunications and data communication technology. Familiarity with the following is helpful:

- ZXSS10 SS1b SoftSwitch Control Equipment and its various components
- User interfaces and ZXSS10 SS1b SoftSwitch Control
- Local operating procedures

What Is in This Manual

This manual contains the following chapters:

TABLE 1 CHAPTER SUMMARY

Chapter	Summary
Chapter 1, ZXSS10 SS1b Documentation Structure	Describes the categorization of the ZXSS10 SS1b SoftSwitch Control Equipment documentation and contents of the SS1b manual series.
Chapter 2, How to Use ZXSS10 SS1b Manuals	Explains the relationship of the manuals included in the documentation and their




Chapter	Summary
	usage by examples.

Conventions

Typographical Conventions

ZTE documents employ the following typographical conventions.

TABLE 2 TYPOGRAPHICAL CONVENTIONS

Typeface	Meaning
<i>Italics</i>	References to other Manuals and documents.
"Quotes"	Links on screens.
Bold	Menus, menu options, function names, input fields, radio button names, check boxes, drop-down lists, dialog box names, window names.
CAPS	Keys on the keyboard and buttons on screens and company name.
Constant width	Text that you type, program code, files and directory names, and function names.
[]	Optional parameters.
{ }	Mandatory parameters.
	Select one of the parameters that are delimited by it.
	Note: Provides additional information about a certain topic.
	Checkpoint: Indicates that a particular step needs to be checked before proceeding further.
	Tip: Indicates a suggestion or hint to make things easier or more productive for the reader.

Mouse Operation Conventions

TABLE 3 MOUSE OPERATION CONVENTIONS

Typeface	Meaning
Click	Refers to clicking the primary mouse button (usually the left mouse button) once.
Double-click	Refers to quickly clicking the primary mouse button (usually the left mouse button) twice.
Right-click	Refers to clicking the secondary mouse button (usually the right mouse button) once.
Drag	Refers to pressing and holding a mouse button and moving the mouse.

How to Get in Touch

The following sections provide information on how to obtain support for the documentation and the software.

Customer Support

If you have problems, questions, comments, or suggestions regarding your product, contact us by e-mail at support@zte.com.cn. You can also call our customer support center at (86) 755 26771900 and (86) 800-9830-9830.

Documentation Support

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Declaration of RoHS Compliance

To minimize the environmental impact and take more responsibility to the earth we live, this document shall serve as formal declaration that the ZXSS10 SS1b SoftSwitch Control Equipment manufactured by ZTE CORPORATION are in compliance with the Directive 2002/95/EC of the European Parliament - RoHS (Restriction of Hazardous Substances) with respect to the following substances:

- Lead (Pb)
- Mercury (Hg)
- Cadmium (Cd)
- Hexavalent Chromium (Cr (VI))
- PolyBrominated Biphenyls (PBB's)
- PolyBrominated Diphenyl Ethers (PBDE's)

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Chapter 1

ZXSS10 SS1b Documentation Structure

Overview

Purpose This chapter describes the categorization of the ZXSS10 SS1b SoftSwitch Control Equipment documentation and contents of the SS1b manual series.

Contents This chapter includes the following topics:

Topic	Page No.
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ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Technical Manual	4
ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Hardware Manual	5
ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Hardware Installation Manual	5
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Topic	Page No.
ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Troubleshooting Manual	14
ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Charging Server Installation Manual	15
<p>The contents are arranged as follows:</p> <p>Chapter 1 Installation Preparations describes hardware, software requirements of ZXSS10 SS1b SoftSwitch Control Equipment Charging Server Installation and software installation flow.</p> <p>Chapter 2 Installing Operating System and Anti-Virus Software Describes the installation of Windows Server 2003, Windows Server 2003 SP2 and Norton Anti-Virus 2001.</p> <p>Chapter 3 Installing Database server and Service Pack Software describes installation of SQL Sever 2000 and SQL Server 2000 SP4.</p> <p>Chapter 4 Installing Charging Software describes Installation of ZXSS10 SS1b SoftSwitch Control Equipment Charging Server.</p> <p>ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Charging Server Configuration Manual</p>	15

Documentation Classification

The set of documentation of the ZXSS10 SS1b SoftSwitch control equipment is provided to the users together with the equipment. The documentation set may provide related manuals of ZTE integrated network management system ZXNM01 since the equipment is operated and configured through the ZXNM01 system.

According to their properties and purposes, these manuals can be classified as follows:

- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Guide to Documentation

Technical manuals

The technical category includes Technical Manual and Hardware Manual. As the core of the complete set of user documents, the technical manuals help users build a complete notion of the whole system. The Hardware Manual emphasizes on the detailed description of hardware entities. SS1b includes following technical manuals:

- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Technical Manual
- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Hardware Manual

Installation manuals

Installation manuals are consisting of the Hardware Installation Manual and Software Installation Manual, used to guide the installation personnel to install the hardware and software in a safe, correct and standard manner. SS1b includes following installation manuals:

- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Hardware Installation Manual
- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Software Installation Manual

Operation manuals

Operation manuals consist of the Interface Manual, Command Manual, New Service Manual, Data Configuration Manual and Operation manual. The Interface Manual provides complete, systematical and detailed explanation of system interfaces, which is used as a support manual for Data Configuration Manual and Operation Manual. The Data Configuration Manual and Operation Manual describe operations of tasks to be fulfilled when the system runs normally. The New Service Manual introduces new services provided by the equipment. The Command Manual is compiled for products with MML command. The products consist of narrow-band voice product and data product. For the narrow-band voice product, it describes the name, serial number, level, function, format, parameter description and related MML commands and examples. For the data product, it describes the name, function, mode, format, parameter description, default setting, related command, usage

guide and examples of MML commands. SS1b includes following operation manuals:

- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Command Manual
- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Data Configuration Manual
- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Operation Manual
- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment New Service Manual

Maintenance manuals

The maintenance type refers to the Maintenance Manual, which is intended to guide users in equipment maintenance and troubleshooting.

- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Routine Maintenance Manual
- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Alarm and Notification Handling Manual
- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Troubleshooting Manual

General manuals

- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Charging Server Installation Manual
- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment - Charging Server Configuration Manual

ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Technical Manual

The *ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Technical Manual* provides basic knowledge, system architecture, technical index, interface/protocol, service function, networking and system configuration of the equipment. The contents are arranged as follows:

Chapter 1 SoftSwitch Technology Fundamentals introduces the basic concepts and technologies of the equipment.

Chapter 2 SoftSwitch System Architecture describes the background of the system, compliance standards of the system, equipment appearance and main functions. It also provides the working principles, hardware/software architecture and system features.

Chapter 3 Technical Specifications describes the technical indices of the system and components, such as system indices, interface parameters, and interface input and output indices.

Chapter 4 Interface and Protocol introduces how this product is connected with the network. It provides internal/external interfaces and signaling/protocol, with which the user can be acquainted with the connection the equipment with other products.

Chapter 5 Service Functions describes the functions supported by the product in details.

Chapter 6 Networking Mode and System Configuration exemplifies the connection, networking and configuration of the product with solutions and cases, so that the users can learn about the networking capability, service capability, flexibility and potential value of the product.

Chapter 7 Dual-Homing Technology This chapter describes the redundancy technique in the SS network to achieve reliability.

ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Hardware Manual

This hardware manual provides an overall introduction of the device hardware structure, including cabinet, shelf, board and other components. The contents are arranged as follows:

Chapter 1 Cabinet introduces the cabinet composition of the equipment, as well as the assembly, wiring diagrams and technical specifications.

Chapter 2 Shelf introduces the structure, configuration, and electrical features of the two types of shelf used in the SoftSwitch control equipment.

Chapter 3 Boards introduces the functional principles, meaning of indicators, and the setting of DIP switches and jumpers of the boards.

ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Hardware Installation Manual

The manual describes the hardware installation procedure to guide the installation, debugging and startup of the equipment. The contents are arranged as follows:

Chapter 1 Safety Measures describes the safety precautions and safety symbols involved during equipment installation.

Chapter 2 Installing and Commissioning introduces the installation and commissioning flow of the equipment and related parameters.

Chapter 3 Installation Preparation introduces works to be done before equipment installation, including checking the environment, preparing meters, tools and technical documents and unpacking inspection.

Chapter 4 Installing Cabinet describes cabinets used by the equipment, installation of the cabinets and items to be checked.

Chapter 5 Installing Power Cable and Grounding Cable describes the routing and installation procedure of power cables and grounding cables.

Chapter 6 Installing Cable inside Cabinet describes types of cables used inside and outside the cabinet, and their installation.

Chapter 7 Hardware Installation Check describes how to check the installed parts.

Chapter 8 Power-on/-off describes the method of plugging/unplugging boards, checks prior to power-on and the power-on/-off steps.

ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Software Installation Manual

The manual describes software to be installed on the background of the equipment, how to install it and how to check the installation. The contents are arranged as follows:

Chapter 1 Installation Preparations describes the Hardware, software requirements and Software installation flow of ZXSS10 SS1b SoftSwitch.

Chapter 2 Installing Operating System and Anti-Virus Software describes the installation of Windows Server 2003, Windows Server 2003 SP2 and Norton Anti-Virus 2001.

Chapter 3 Installing Board Software describes installation of board BOOTROM program and installation and setting of board software.

Chapter 4 Installing Database and Service Pack Software describes installation of SQL Sever 2000 and SQL Server 2000 SP4.

Chapter 5 Installing EMS Server and Client Describes installation of EMS server and client.

ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Data Configuration Manual

The manual introduces tasks to be fulfilled for configuring the SoftSwitch control equipment through the EMS system.

It includes the following chapters:

Chapter 1 Generic Configuration introduces the common configuration.

Chapter 2 Configuring Digit Analysis Selector (DAS) provides procedure to configure DAS and different office codes.

Chapter 3 Configuring H.248/MGCP IAD provides the procedure to configure of H.248 and MGCP based IAD.

Chapter 4 Configuring SIP Terminal/ IAD provides the procedure to configure SIP Softphone, SIP IP phone.

Chapter 5 Configuring H.323 Terminal provides the procedure to configure configuration of H.323 Softphone, IP phone.

Chapter 6 Configuring Multi-Service Gateway (MSG) provides the procedure to configure multi-service gateway (Trunk Gateway, Access Gateway, Signaling Gateway).

Chapter 7 Configuring Signaling Gateway (SG) provides the procedure to configure stand-alone signaling gateway.

Chapter 8 Configuring Access Gateway (AG) provides the procedure to configure access gateway (AG) equipment.

Chapter 9 Configuring H.323 Gatekeeper (GK) provides the procedure to configure external H.323 Gatekeeper.

Chapter 10 Configuring Other SS provides the procedure to configure local SS with the remote SS.

ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Operation Manual

The manual introduces tasks to be fulfilled during routine operation of the equipment.

It provides detailed operation guide for maintenance tasks, such as data observation, file management, traffic measurement and operator authority management. It also features complete and clear operation index.

Chapter 1 Dynamic Data Management describes query and block/unblock operations of user circuit state, trunk circuit state and equipment state in the control area; it also introduces management of signaling office direction and TID state.

Chapter 2 Querying System Data introduces the query of gateway clusters, gateways and nodes; query of number analysis, route, office direction and trunk group, as well as universal query.

Chapter 3 Tracing Signaling Protocol introduces how to trace protocols H248, MGCP, SIP, SCTP, M3UA, SS7UP, SCCP, Q.931, IUA, V5UA and V5L3 and how to browse results.

Chapter 4 System Diagnostic Test describes how to detect board, network, protocol and data, and how to generate a resource report.

Chapter 5 Alarm Management introduces how to browse alarms and how to modify alarm control.

Chapter 6 Traffic Management introduces registration, browse and deregistration of traffic measurement, and how to define objects and count entities.

Chapter 7 File Management describes file operations such as load, download, deletion and rename.

Chapter 8 Command Line Terminal This chapter explains how to use command line interface to execute commands by entering commands rather than using GUI.

ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment New Service Manual

The manual introduces how to provide new services with the equipment. The contents are arranged as follows:

Chapter 1 SS Side Service Registration describes how to enable, modify and disable the service authority of a user at the carrier side.

Chapter 2 Subscriber Side Service Registration introduces how to use supplementary services and precautions at the subscriber side.

Chapter 3 Group Services Registration describes the way to use group services.

ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Command Manual

This command manual introduces all types of MML commands used in the operations and maintenance, providing you with a real-time help. It is one of the tool manuals necessary for the device commissioning and maintenance.

The ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Command Manual consists of seven volumes in terms of the command type and one command index manual.

- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Command Manual Index
- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Data Configuration Command Manual (volume 1)
- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Data Configuration Command Manual (volume 2)
- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Data Configuration Command Manual (volume 3)
- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Data Configuration Command Manual (volume 4)
- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Protocol Command Manual

- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment OSS Command Manual
- ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Operation, Maintenance and Charging Command Manual

Below is the content of each volume.

Data Configuration (volume 1)

Chapter 1 Introduction describes the MML command interface, command format and common information of input/output.

Chapter 2 Command Index introduces the list and index of MML commands to provide you a shortcut to access them.

Chapter 3 Dynamic Data Management describes the configuration command for dynamic data management.

Chapter 4 Subscriber Management Commands describes the configuration command for user management data.

Data Configuration (volume 2)

Chapter 1 Introduction describes the MML interface, command format and common information of input/output.

Chapter 2 Command Index introduces the list and index of MML commands to provide you a shortcut to access them.

Chapter 3 Supplementary Services Commands describes the configuration command for supplementary service data.

Chapter 4 Office Configuration Commands describes the configuration command for office configuration data.

Data Configuration (volume 3)

Chapter 1 Introduction describes the MML interface, command format and common information of input/output.

Chapter 2 Command Index introduces the list and index of MML commands to provide you a shortcut to access them.

Chapter 3 Route Management Commands describes the configuration command for route management data.

Chapter 4 Number Management Commands describes the configuration command for number management data.

Data Configuration (volume 4)

Chapter 1 Introduction describes the MML interface, command format and common information of input/output.

Chapter 2 Command Index introduces the list and index of MML commands to provide you a shortcut to access them.

Chapter 3 Protocol Data Configuration Commands describes MML command of protocol data type.

Protocol volume

Chapter 1 Introduction introduces the MML interface, command format and common information of input/output.

Chapter 2 Command Index introduces the list and index of MML commands to provide you a shortcut to access them.

Based on data configuration, Chapter 3 and the following chapters describe MML commands of each protocol, including the command name, function, level, format, and parameters, as well as examples.

Chapter 3 H.248 Commands introduces commands of the H.248 protocol.

Chapter 4 MGCP Commands introduces commands of the MGCP protocol.

Chapter 5 SCCP Commands describes name, code, level, function, format, parameter description of IP commands in detail.

Chapter 6 SCTP Commands introduces commands of the SCTP protocol.

Chapter 7 M3UA Commands introduces commands of the M3UA protocol.

Chapter 8 SIP Commands introduces commands of the SIP protocol.

Chapter 9 SS7UP Commands introduces commands of the SS7UP protocol.

Chapter 10 DSS1 Commands introduces commands of the DSS1 protocol.

Chapter 11 TCAP Commands describes name, code, level, function, format, parameter description of TCAP commands in detail.

Chapter 12 BICC Commands It describes name, code, level, function, format, parameter description of BICC commands in detail.

Chapter 13 IUA Commands introduces commands of the IUA protocol.

Chapter 14 V5UA Commands describes name, code, level, function, format, parameter description of V5UA commands in detail.

Chapter 15 V5L3 Commands describes name, code, level, function, format, parameter description of V5L3 commands in detail.

Operation Support Volume

Chapter 1 Introduction describes the MML interface, command format and common information of input/output.

Chapter 2 Command Index introduces the list and index of MML commands to provide you a shortcut to access them.

Chapter 3 System Management Commands introduces the name, function, level, format and parameters of the command for system management. Each command is provided with an example for reference.

Chapter 4 System Control Commands introduces the name, function, level, format and parameters of the command for system control. Each command is provided with an example for reference.

Chapter 5 IP Commands introduces the name, function, level, format and parameters of related commands. Each command is provided with an example for reference.

Operation, Maintenance and Charging

Chapter 1 Introduction describes the MML interface, command format and common information of input/output.

Chapter 2 Command Index introduces the list and index of MML commands to provide you a shortcut to access them.

Chapter 3, Right Management Commands describes name, code, level, function, format, parameter description of right management commands in detail.

Chapter 4 Log Management Commands introduces related commands, operator authority management and log management.

Chapter 5 Traffic Measurement Commands introduces related commands used for functions such as browse, registration and deregistration of a traffic measurement task.

Chapter 6 Alarm Management Commands introduces commands for alarm query.

Chapter 7 Signaling Trace Commands introduces related commands used for trace, browse and deregistration of protocols.

Chapter 8 Billing System Commands introduces charging commands.

Chapter 9 Diagnose System Commands describes name, code, level, function, format, parameter description of diagnose system commands in detail.

ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Routine Maintenance Manual

The manual describes safety precautions for equipment operation, routine maintenance item, alarms and common fault handling. The contents are arranged as follows:

Chapter 1 Safety Instruction introduces precautions for equipment operation and some safety symbols.

Chapter 2 Overview introduces categories of routine maintenance items, some common methods and notes during maintenance.

Chapter 3 Routine Maintenance describes routine maintenance items and methods of the equipment. The equipment maintenance may be performed daily, weekly, monthly, quarterly or half-yearly.

Chapter 4 Notification Message introduces possible notification messages of the maintenance system and the method for the maintenance personnel to react.

Chapter 5 Alarm Message and Handling introduces possible alarms occur in equipment operation, handling methods for different levels of alarms, alarm cause codes and their descriptions.

Chapter 6 Troubleshooting introduces possible failures during operation and the handling procedure. At a failure, the system will prompt an alarm, according to which the maintenance personnel can locate the fault.

Chapter 7 Emergency Plan introduces a recovery plan to protect against equipment down.

ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Alarm and Notification Handling Manual

The manual describes safety precautions for equipment operation, routine maintenance item, alarms and common fault handling. The contents are arranged as follows:

Chapter 1 Safety Instruction introduces precautions for equipment operation and some safety symbols.

Chapter 2 Overview introduces categories of routine maintenance items, some common methods and notes during maintenance.

Chapter 3 Routine Maintenance describes routine maintenance items and methods of the equipment. The equipment maintenance may be performed daily, weekly, monthly, quarterly or half-yearly.

Chapter 4 Notification Message introduces possible notification messages of the maintenance system and the method for the maintenance personnel to react.

Chapter 5 Alarm Message and Handling introduces possible alarms occur in equipment operation, handling methods for different levels of alarms, alarm cause codes and their descriptions.

Chapter 6 Troubleshooting introduces possible failures during operation and the handling procedure. At a failure, the system will prompt an alarm, according to which the maintenance personnel can locate the fault.

Chapter 7 Emergency Plan introduces a recovery plan to protect against equipment down.

ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Troubleshooting Manual

The manual describes safety precautions for equipment operation, routine maintenance item, alarms and common fault handling. The contents are arranged as follows:

Chapter 1 Overview introduces troubleshooting prerequisites, fault classification, troubleshooting flow and troubleshooting methods.

Chapter 2 Foreground Fault describes foreground fault and relevant troubleshooting

Chapter 3 Data and Traffic Fault describes fault generated due to wrong data configuration and its troubleshooting

Chapter 4 Background Fault describes background fault and its troubleshooting

Chapter 5 Emergency Recovery describes the emergency recovery solution.

ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Charging Server Installation Manual

The ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Charging Server Installation Configuration Manual describes the installation procedure of the charging server.

The contents are arranged as follows:

Chapter 1 Installation Preparations describes hardware, software requirements of ZXSS10 SS1b SoftSwitch Control Equipment Charging Server Installation and software installation flow.

Chapter 2 Installing Operating System and Anti-Virus Software Describes the installation of Windows Server 2003, Windows Server 2003 SP2 and Norton Anti-Virus 2001.

Chapter 3 Installing Database server and Service Pack Software describes installation of SQL Sever 2000 and SQL Server 2000 SP4.

Chapter 4 Installing Charging Software describes Installation of ZXSS10 SS1b SoftSwitch Control Equipment Charging Server.

ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Charging Server Configuration Manual

The ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Charging Server Data Configuration Manual describes the data configuration and operation of the charging server.

Chapter 1 Charging Overview introduces the charging system briefly.

Chapter 2 Charging Principles introduces principles of the charging system.

Chapter 3 Starting/Closing the Service Processes of the Background Charging System introduces how to start/close the server of the background charging system.

Chapter 4 O&M Interfaces of the Background Charging System describes how to log in to the O&M interface of the background charging system, as well as its main menu, functions and common menus and buttons.

Chapter 5 Charging Archives Management introduces how to use the charging telephone file management.

Chapter 6 User_defined Report introduces how to use the user-defined report.

Chapter 7 Query Charging Information introduces how to query charging information.

Chapter 8 Settling and Totaling introduces how to settle and sum up the charges.

Chapter 9 Set Charging Requirement introduces how to set charging requirements.

Chapter 10 Format Conversion introduces how to convert format of bill.

Chapter 11 Log Management introduces how to manage the charging log.

Chapter 12 Transferring Charging Data introduces how to transfer charging data.

Chapter 13 Immediate Charging (Server) describes interfaces of the immediate charging server, including immediate charging and user management.

Chapter 14 Immediate Charging (Client) describes interfaces of the immediate charging client, including the immediate bill, bill query, charging console setting, and operator setting.

Chapter 15 Charging Operations introduces common operations of charging.

Chapter **2**

How to Use ZXSS10 SS1b Manuals

Overview

Purpose This chapter describes the relationship of the manuals included in the documentation and their usage by examples.

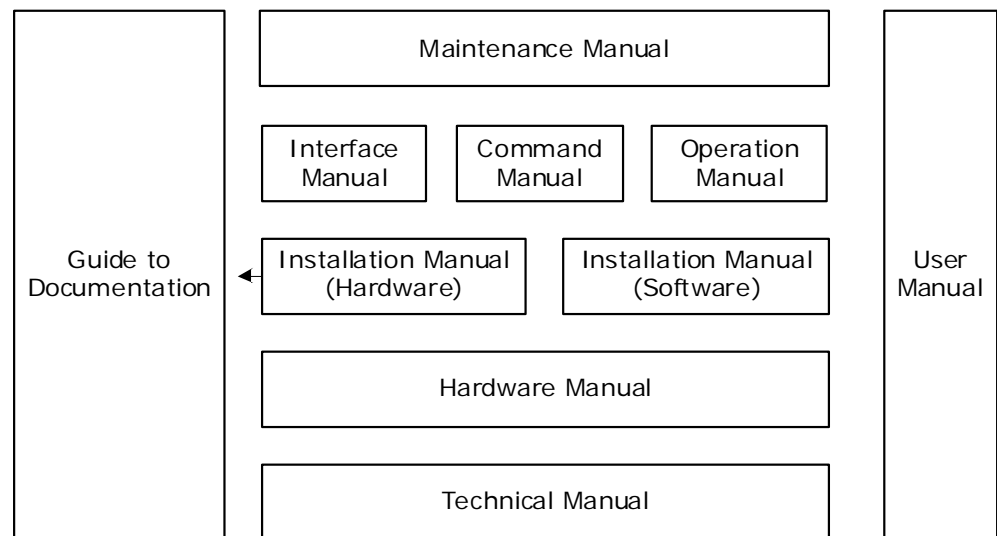
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Relationship among the Manuals

Chapter 1 gives the organization of each manual. Although these manuals have different focuses, they are related with one another. A good understanding of their relationship will help you better use these manuals. The relationships are shown in Figure 1.

FIGURE 1 RELATIONSHIP OF THE MANUALS



As a fundamental system description manual, the *Technical Manual* is the basis for the use of other manuals.

The *Hardware Manual* describes in detail the hardware architecture and functions of the whole system.

The *Hardware Installation Manual* and *Software Installation Manual* are used to guide the hardware and software installation of the equipment.

The Man-Machine Interface Manual, Operation Manual and Command Manual are the guides to the device operations. The Man-Machine Interface Manual describes the GUI windows and the requirements of parameters and configurations in all the windows. The Operation Manual tells you how to accomplish a specific operating task when the device is running normally. During the operations, the operators should convert the definite operating task to the GUI operation that can be understood and accepted by the system, and then perform a serial of operations step by step in the windows. For the usage and descriptions of the windows, see the Man-Machine Interface Manual. The Command Manual for the narrow-band voice service products

describes the name, s/n, level, function, format, parameter description, related commands and example of the MML commands. The Command Manual for the data products describes the name, function, mode, format, parameter description, default, related commands, usage guideline and example of the MML commands.

The *Maintenance Manual* is to help the maintenance personnel in conducting routine maintenance. It provides fundamental references for fault analysis and location, and explains the maintenance information occurring on related interfaces.

In using the documentation, please first read the *Guide to Documentation* to get a general idea of the documentation architecture, and the functions, contents and usage of the manuals.

Using the Operational Manual

How to use the ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Configuration Manual to configure a trunk gateway?

1. Refer to chapter 7 in the manual.
2. Configure the TG according to the configuration flow in the text. For detailed operation of menus and interfaces, see the *ZXNM01 Integrated Network Management System Interface Manual for SoftSwitch Control Equipment*.

Using the Command Manual

How to use the ZXSS10 SS1b (V2.01.50) SoftSwitch Control Equipment Command Manual to display the trunk circuit state in a trunk group?

1. Refer to Chapter 3 in the manual: command No.: 4103 Show the trunk circuit state".
2. Perform the operations according to all the commands and referring to the example of each command described in the section.

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