ALAXALA   AX3660S

Quick Start Guide

AX36S-Q002-70

Please carefully read the Quick Start Guide and store it.

- Before you use the equipment, carefully read the Manual and make sure that you understand all safety precautions.

- After reading the Manual, store it in a convenient place for easy reference.

AlaxalA

■ Relevant products

This Manual applies to the models in the AX3660S series.

■ Export Restrictions

Before exporting the product, confirm all relevant restrictions, such as the Foreign Exchange and Foreign Trade Law of Japan, and the export control laws and regulations of the United States, and carry out all required procedures.

If you require more information, please contact your ALAXALA sales representative.

■ Trademarks

Ethernet is a registered trademark of FUJIFILM Business Innovation Corp.

Other product and company names mentioned in this document are the trademarks of their respective owners.

■ Please carefully read the Quick Start Guide and store it.

Before using the product, carefully read this Guide and make sure that you understand all safety precautions.

After reading this Guide, keep it in a convenient place for easy reference.

■ Notes

The information in this Guide is subject to change without notice.

■ Notice

Note that our company takes no responsibility whatsoever for any issues with use of the Unit in any manner inconsistent with the information noted in this Manual.

■ Radio Interference

Applicable products:

AX3660S-24T4X

AX3660S-24T4XW

AX3660S-48T4XW

AX3660S-48XT4QW

AX3660S-24X4QW

AX3660S-48X4QW

This is a Class A product. In a domestic environment, this product might cause radio interference, in which case the User may be required to take appropriate steps.

VCCI-A

Applicable products:

AX3660S-16S4XW

AX3660S-24S8XW

This is a Class A product. In a domestic environment, this product might cause radio interference, in which case the User may be required to take appropriate steps.

VCCI-A

■ Harmonic regulations

Products to which the harmonic current emissions standard JIS C 61000-3-2 applies

Applicable products:

AX3660S-24T4X

AX3660S-24T4XW

AX3660S-48T4XW

AX3660S-16S4XW

AX3660S-24S8XW

AX3660S-48XT4QW

AX3660S-24X4QW

AX3660S-48X4QW

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■ Copyright

Preface

Thank you for choosing an AX3660S series switch (ALAXALA compact gigabit Layer 3 switch).

This guide describes the procedures from unpacking to the basic configuration of AX3660S series switches.

In addition, the Guide also explains how to use the Manuals for the AX3660S series switches to ensure stable operation of the Unit.

■ Guide overview

Set up your Unit by referring to the following flow of operations.

Safety Information

This Guide provides important information for safely handling AX3660S series switches. Make sure that you read this Guide before using your Unit.

1 Preparations

This Chapter describes the preparations necessary for using the Unit. It also describes the manual structure for AX3660S series switches, where this Guide fits into the reference materials, and how to reference the manual.

2 Installation of the Components

This chapter describes the appearance of AX3660S series switches, and the steps involved from unpacking a Unit to powering it on.

3 Operations Required for Initial Installation

This Chapter describes the operations required for initial system startup, such as setting the time, as well as choosing a user ID, and the administrator mode password.

4 Other Operations

This Chapter describes the manual you can reference for advanced Unit settings, checking operating status, and troubleshooting problems that can occur.

■ Target Audience

This document is intended for technical personnel responsible for setting up and handling AX3660S series switches. Readers are therefore required to have knowledge of electric circuits, wire connections, and network systems.

Safety Information

Warnings concerning safety are indicated in the headlines. Specifically, this means symbols used for safety precautions, together with the words "Warning," "Caution," or "Notice."

⚠	These are special characters used for Warnings regarding safety. They are chosen to warn of latent dangers that can cause harm to people. Pay attention to any messages following these symbols in order to avoid potential injury or death.
⚠ WARNING	Ignoring instructions preceded by this indication and using the Unit incorrectly could result in death or serious injury to yourself and others.
⚠ CAUTION	Ignoring instructions preceded by this indication and using the Unit incorrectly could result in serious injury to yourself and others.
NOTICE	Ignoring instructions preceded by this indication and using the Unit incorrectly could result in serious damage to the Unit or nearby property.
NOTE	Information preceded by this indication is supplementary information that, if ignored, will not result in physical injury or serious damage to the Unit.

【Example of Notation 1】 Caution: Risk of Electric Shock

△ indicates the need for caution. You will see an illustration inside the triangle, such as "Caution: Electric Shock."

【Example of Notation 2】 Do Not Disassemble

⊘ indicates an action that should be avoided. You will see an illustration inside the circle, such as "Do Not Disassemble."
If there is no illustration inside the circle, it indicates generally prohibited actions.

【Example of Notation 3】 Unplug the plug from the socket.

● indicates recommended actions. You will see an illustration noting a requirement, such as "Unplug the Plug from the Socket." In general, the black circle indicates actions the user should take.

Universal Precautions on safety

Read the following safety information carefully to ensure that you understand it fully.

● Keep this manual handy after reading it, so that it is available for later reference.

● Operate the Unit according to the instructions and procedures provided in this manual.

● Heed all warnings and cautions for the Unit in this guide.
Failure to do so could result in injury or damage to the Unit.

Unauthorized operations
Do not attempt to perform any operations that are not described in this guide.
In the event of a Unit problem, turn off the power, unplug the power cable, and contact maintenance personnel.

Using common sense
The warnings and cautions provided on the Unit and in this guide have been selected after careful consideration. Nevertheless, there is always the possibility of the unexpected occurring. Therefore, while using Unit, stay alert and use common sense in addition to all following instructions.

⚠ WARNING

■ **If anything seems wrong, immediately turn off the power.**

If smoke or an unusual smell is coming from the Unit, or if liquid is spilled into the Unit or a foreign object falls into the Unit, immediately turn off power to the Unit as described below. Continuing operation could result in a fire or electric shock.

● For Units with AC non-detached power cords or embedded with AC power cords, unplug all power cables.

● For Units embedded with DC electric power sources, turn off all circuit board breakers powering the Unit.

■ **Do not allow any foreign objects to get into the Unit.**

Do not insert or drop any foreign objects, such as anything metallic or flammable, through the Unit's ventilation slots. Doing so could result in fire or electric shock.
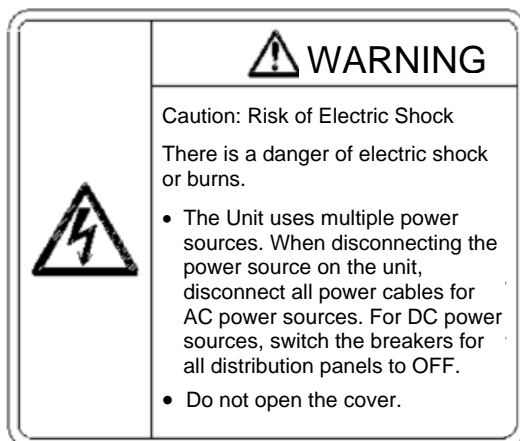
■ **If you wish to turn off the power source of the Unit, cut all power.**

The Unit is supplied by multiple input power sources. Disconnect the power source as follows. The following labels are affixed to the Unit.

● For Units with AC non-detached power cords or embedded with AC power cords, unplug all power cables.

● For Units embedded with DC electric power sources, turn off all circuit board breakers powering the Unit.

⚠ WARNING

Caution: Risk of Electric Shock

There is a danger of electric shock or burns.

- The Unit uses multiple power sources. When disconnecting the power source on the unit, disconnect all power cables for AC power sources. For DC power sources, switch the breakers for all distribution panels to OFF.
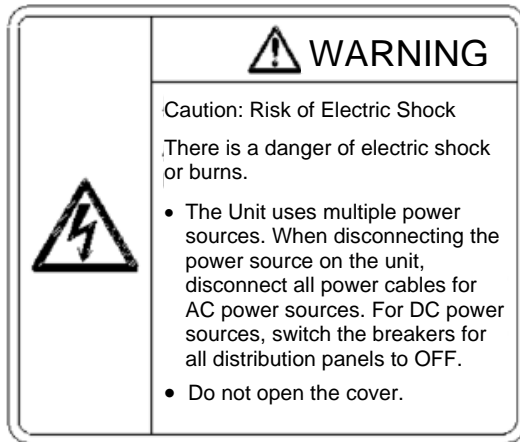
- Do not open the cover.

⚠ WARNING

■ **Remove the cover from the Unit.**

Do not remove the cover from the Unit as this can cause electric shock. The following labels are attached to the device.

⚠ WARNING

Caution: Risk of Electric Shock

There is a danger of electric shock or burns.

- The Unit uses multiple power sources. When disconnecting the power source on the unit, disconnect all power cables for AC power sources. For DC power sources, switch the breakers for all distribution panels to OFF.

- Do not open the cover.

■ **Do not allow any foreign objects to get into the Unit.**

Do not insert or drop any foreign objects, such as anything metallic or flammable, through the Unit's ventilation slots. Doing so could result in fire or electric shock.

■ **Do not attempt to repair, alter, or disassemble the Unit.**

Do not attempt to repair, alter, or disassemble the Unit, as these actions may cause electric shock, fire, or burns. Note that the internal components of the power source have multiple high-voltage parts, which in rare cases may be dangerous if touched.

■ **Avoid impact on the Unit.**

Avoid significant impact on the Unit, such as dropping or hitting it. In the event that the Unit is dropped and internal parts damaged, disconnect Unit power sources and call a maintenance person. Using a damaged unit could result in fire or electric shock.

● For Units with AC non-detached power cords or embedded with AC power cords, unplug all power cables.

● For Units embedded with DC electric power sources, turn off all distribution board breakers powering the Unit.

⚠ WARNING

■ Do not place anything on the Unit.

Do not place any metallic object such as a small pin or a paper clip, or any container with a liquid such as a vase or a flower pot, on the Unit. Liquid or metallic objects falling into the Unit could result in a fire or electric shock.
Do not place optional devices or objects on the Unit. They may slip and cause injury. Also, it may cause the device to malfunction, by the weight of the object placed on it.

■ Use the Unit only with the indicated power supply setting.

Do not use the Unit at any voltage other than the indicated voltage. Doing so could result in a fire or electric shock.
In addition, make sure the power outlet is compatible with your voltage and power cords. Note that using other outlets carries a risk of electric shock.

■ Ensure that the capacity for incoming current to the distribution board is greater than the operating current of the circuit breaker.

Ensure that the capacity for incoming current to the distribution board is greater than the operating current of the circuit breaker. If it is not, the circuit breaker might not operate properly in the event of a failure, which could result in a fire.

■ Ground the Unit.

● When using an AC (PoE) model, redundant power model (with an AC power supply module installed), and an EPU, use only a grounded power outlet. Failure to do so might not only result in electric shock, but it might also introduce unwanted electrical noise that could cause a Unit failure.

● When using a DC model and a redundant power model (with a DC power supply module installed), connect a ground cable to ground the Unit. Failure to do so might not only result in electric shock, but it might also introduce unwanted electrical noise that could cause a Unit failure.

■ For DC electric power equipment, use upstream and downstream-insulated items.

With DC power sources, use upstream and downstream-insulated items that carry no risk of electric shock. Uninsulated electric power equipment may carry the risk of electric shock.

■ Mounting and removing the DC power cable must be done by a trained technician or maintenance personnel.

Mounting and removing the DC power cable must be done by a trained technician or maintenance personnel. Terminal connections are required for connection of the DC power cable to the power facility. For this reason, incorrect handling of the DC power cable could result in fire or electric shock.

⚠ WARNING

■ **Make sure the power supply circuit breaker is set to OFF before connecting or disconnecting a −48 V DC power cable.**

Make sure the power supply circuit breaker is set to OFF before connecting or disconnecting a −48 V DC power cable. Connecting or disconnecting the cable with the circuit breaker set to ON could result in a fire or electric shock.

■ **Observe the specified stripping length of the sheath for the power cable.**

Do not use the Unit indoors. For all interface cables, connect with indoor wiring. To connect with outdoor-wired cables, ensure protection against lightning and install accordingly.

■ **Do not use the Unit indoors.**

Do not use the Unit indoors. For all interface cables, connect with indoor wiring. To connect with outdoor-wired cables, ensure protection against lightning and install accordingly.

■ **Handle power cables carefully.**

● Use the specified electric power cable. Note the following points of caution. Mishandling may cause exposure of copper wires in electric power cords, or overheating caused by shorts or intermittent disconnection, which can result in electric shock or fire.

- Do not place items on top of the Unit
- Do not pull
- Do not push
- Do not bend
- Do not twist
- Do not alter
- Do no use near heated appliances
- Do not heat
- Do not bundle up
- Do not fix in place with staples or otherwise

- Do not use if either the plug or cord is damaged
- Do not expose to UV rays or intense sunlight for long periods
- Do not expose to alkaline substances, acids, oils, or humidity
- Do not use in a high-temperature environment
- Do not use at higher than the specified rating
- Do not use with other devices
- Always grasp the power plug when you plug or unplug the unit
- Do not touch the power plug with wet hands

● Doing so could damage the cable, resulting in a fire or electric shock. If the power cable is covered by a carpet, it is easy to forget that the cable is there and to place something heavy on it.

● To ensure that you can unplug power cords at any time, remove any items from around the plug.

⚠ WARNING

■ **Be cautious with regard to poor connection of power plugs or tracking.**

Take the following steps to avoid overheating due to tracking or poor connection, which can cause fire.

● Push the plug all the way into the outlet.

● Check that no dust or water droplets have accumulated around the power plug, and push it in. If there are any drops or dust, wipe down the surface with a dry cloth, and plug in.

● Make sure that the outlet is not loose when the unit is plugged in.

● Any work on outlets should be done only by a qualified technician.

■ **Do not overload the power outlet.**

Do not overload the power outlet by connecting multiple power plugs to the same outlet. Overloading the outlet could result in fire or the circuit breaker tripping due to excessive power used, which can then affect other equipment.

■ **Do not use the power cable with any other device.**

The power cable that comes with the Unit is a dedicated cable exclusively for use with the Unit. As such it cannot be used with other devices. Use either the cable that comes with the unit or an item sold by our company. Using other equipment may cause fire or electric shock.

Do not use the power cable with devices other than the Unit. Doing so is extremely dangerous and may result in fire or electric shock.

■ **Any additions or replacements must be performed by a trained technician.**

Addition of optional equipment, or replacement of said equipment, must be done by a trained technician or maintenance personnel.
Replacement of electric power sources requires installation and disconnection of power cables. Untrained personnel may make mistakes that could result in fire, electric shock, or Unit malfunction. Mishandling of optional equipment could also result in injury or malfunction of the Unit.

■ **When using the RESET (RST) switch, avoid inserting any small items that can bend easily, as well as pins, clips, etc., which could potentially slip inside and be difficult to remove.**

When using the RESET (RST) switch, avoid inserting any small items that can bend easily, as well as pins, clips, etc., which could potentially slip inside and be difficult to remove. Inserting these items in the switch could cause fire or electric shock.

■ **Remove the power cable when installing or removing a power supply unit.**

When installing or removing a power supply unit, remove the power cable from the power supply unit. If the power cable is connected and the power switch is turned off, power is still supplied to some circuits. Because of this, if you install or remove a power supply unit with the power cable connected, a fire or electric shock could result.

⚠ WARNING

■ Do not use an air duster near a flame.

When cleaning the optical connectors, do not use an air duster that contains flammable gas near a flame. Doing so could result in a fire.

■ **Storing plastic bags for packing purposes**

Keep plastic bags used for storing the Unit out of reach of small children. A child may suffocate if bags are placed over the head.

⚠ WARNING

■ **Do not install the Unit in a dusty or humid location.**

Do not install the Unit in a dusty or humid location. Doing so could result in fire or electric shock.

■ **Do not block the ventilation slots.**

Do not cover the ventilation slots of the Unit. Doing so causes heat to accumulate inside the Unit and could result in a fire. Leave at least 50 mm of space in front of ventilation slots.
In addition, in order to ensure that dust does not enter into inlet/outlet holes, check and clean them regularly.

■ **Do not allow hair or objects near the ventilation slots.**

Because cooling fan units are mounted in the Unit, do not allow anything near the ventilation slot. Doing so causes heat to accumulate inside the Unit and could cause a failure. Do not allow hair or other objects near the ventilation slots because they might be sucked into the Unit, resulting in injury.

■ **Do not place the Unit in a place where it is unstable.**

● If placing the Unit on a desk, lay it on its side on a workbench capable of withstanding the weight of the Unit. If, for example, you place the Unit on a shaky table or a tilted surface, the Unit might fall and possibly injure someone.

● When installing the Unit in a rack, make sure the Unit in the rack is stably positioned. If the Unit is not positioned correctly, injury could result from falling equipment or stumbling over the equipment.

■ **Do not situate the unit vertically or stand it up against a wall.**

Where the Unit is set up on a table, it should be utilized horizontally. If placed vertically or against a wall, it may topple and potentially cause injury or malfunction of the Unit.

■ **Do not stack Units.**

Do not stack the Unit as it may break. In addition, the Unit may topple if unbalanced, potentially causing injury.

■ **Do not step on the Unit, lean against it, or place anything on it.**

Do not step on the Unit, lean against it, or place anything on it. Doing so might damage the Unit. Furthermore, the Unit might fall or lose its balance, resulting in injury.

⚠CAUTION

🚫 ⚠🔥 ⚠⚡ ■ **When moving the Unit, do not hold the handle of the power supply unit, fan unit, or power supply module.**

When moving an EPU, do not hold the handle of the power supply module. The handle might come off, resulting in the Unit falling and possibly causing injury. In addition, the module might become damaged, resulting in a fire or electric shock.

❗ ■ **When moving the Unit, you must all cables.**

Before moving the Unit, you must turn it off and unplug all cables. Failure to do so might cause the Unit or cable to become damaged, resulting in a fire or electric shock.

⚠ ■ **Do not drop optional equipment.**

● Properly handle optional equipment so that it will not be dropped. Dropping the equipment could result in injury.

● When removing optional equipment from the Unit, securely hold the handle of said equipment. If you are not careful when you pull the equipment out, you may drop it, potentially resulting in injury.

❗ 🚫 ■ **When replacing the fan unit with the power on, observe the conditions of the environment and time limits noted below.**

To replace the fan unit with the Unit powered on, do so in an environment of 40°C inlet air temperature or cooler, and stay within a time frame of one minute or less to complete the process. Replacing the fan unit in an environment of 40°C or higher temperature, or if the time frame of one minute is exceeded, causes increased internal temperatures, which can cause the Unit to malfunction.

🚫 ■ **Do not touch the inside of the Unit with your hands.**

Do not carelessly put your hands inside the Unit. The frame and components might cause injury. The internal parts may become excessively hot, also potentially causing injury.

🚫 ■ **If you move to a location where there is a difference in ambient temperature, do not use the Unit immediately.**

If there is a significant discrepancy in temperature between the different places the Unit is used, there is a possibility of condensation on the surface or internal components. If the Unit is used with condensation present, there is a risk of fire or electric school. Wait a few hours before using the Unit. Instead of powering on the device immediately, let it sit for a few hours in the location where it will be used. Once the ambient temperature and the Unit internal temperature have stabilized to about the same temperature, the Unit can be safety used.

⚠ CAUTION

■ **Do not touch the SFP-T，SFPP-ZR, or QSFP28 units when they are in motion, or immediately after they have been powered down.**

The ambient temperature during operation of SFP-T，SFPP-ZR, or QSFP28 models could should be no higher than 65°C Do not touch the Unit while it is operating or immediately after it stops. This could cause burns.

Observe the following to disconnect the SFP-T，SFPP-ZR, or QSFP28 models. Failure to do so could result in burns.

● If you unplug the power on your device with the Unit plugged in, first implement the "Inactivate" command and wait five minutes.
● To cut power to the device and disconnect it, wait five minutes after disconnecting to use it.

The SFP-T，SFPP-ZR, and QSFP28 models are affixed with labels showing the following notations.

■ **Do not use the SFPP-ZR or QSFP28-4WDM-40 in an environment of 40°C or hotter. Doing say could subject the unit to malfunction.**

Using the system temperature-warning-level command, you can generate an operational message when the inlet air temperature rises above a certain level. For command details, see the Configuration Command Reference.

■ **Do not use the PS-D06 model for long periods of time at temperatures of 45°C or higher.**

Using the system temperature-warning-level command, you can generate an operational message when the inlet air temperature rises above a certain level. For command details, see the Configuration Command Reference.

⚠ CAUTION

■ **Avoid Laser Lights**

The Unit is a Class 1M laser product. The SFP, SFP+, QSFP+, and QSFP28 models have laser device internal components that emit laser light. Do not disassemble or alter these products. Also, avoid looking at the internal components or through the optical equipment. Laser light can damage eyesight or cause blindness (in some cases laser light cannot be observed with the naked eye).

■ **Do not use the unit for other than its intended purpose.**

Do not use the Unit or optional equipment for anything else but as a switch, including as a stool or as bookends. The Unit may topple or break, resulting in injury or malfunction.

■ **Individuals with metal allergies should not touch the Unit directly.**

The Unit is coated with zinc, nickel. Gold, etc. Individuals allergic to these metals should not touch the equipment directly. Touching the equipment may lead to eczema, rash, etc.

■ **Cleaning**

The Unit is coated with zinc, nickel. Gold, etc. Individuals allergic to these metals should not touch the equipment directly. Touching the equipment may lead to eczema, rash, etc.

■ **Do not place the Unit in a high-temperature location.**

Do not place the Unit in direct sunlight or near a heater or other heat-generating apparatus. Doing so could adversely affect parts of the Unit.

■ **If the T1 LED light is blinking green (on 0.5 second, off 0.5 seconds), do not disconnect the Unit power source.**

In the following instances, do not disconnect the power if the front panel of the ST1 LED unit is flashing green (flashing for 0.5 seconds, off for 0.5 seconds) until it is solid green. Disconnecting when the light is flashing could cause malfunction.

・Software updating

NOTICE

■ **When the ACC LED is lit, do not remove the memory card or turn off the power.**

When the ACC LED on the front panel of the Unit is lit, the memory card is being accessed. When a memory card is being accessed, do not remove the memory card or turn off the power. Doing so might damage the memory card.

In addition, some commands require a certain amount of time after being entered to finish accessing the card. Make sure that the memory card is no longer being accessed before removing the card or turning off the power.

■ **Handle memory cards and dummy memory cards carefully.**

● When installing a memory card and a dummy memory card, do not force the card. When removing a memory card, do not forcibly pull out the card if it is locked. Doing so might damage the connector of the memory card slot.

● When moving the Unit, remove memory cards and dummy memory cards. If a card is subjected to excessive force when the Unit is moved, the connector of the memory card slot might be damaged.

■ **Do not attach any labels to a transceiver or a direct attach cable connector.**

A label attached to the transceiver or direct attach cable connector indicates that the transceiver or direct attach cable connector is a standard product from ALAXALA or another manufacturer. However, such labels are attached where they do not interfere with heat dissipation from the transceiver or from the direct attach cable connector or interfere with the mechanism that prevents the transceiver or the direct attach cable connector from coming loose from the cage.

Attaching a label to a location that interferes with these functions could cause a malfunction in the transceiver or a direct attach cable connector, or cause damage to the Unit.

■ **Do not touch the connecting terminal.**

Do not touch the connecting port, such as connector cords, with your hand or with any metal. Do not induce a short by inserting foreign objects such as needles into the Unit. This may result in smoke or poor electrical contact.

■ **Ensure that voltage drop does not occur in the power facility due to an inrush current.**

Turning on the Unit causes an inrush current. Ensure that voltage drop does not occur in the power facility due to the inrush current.

Voltage drops affect not only the Unit, but also the devices connected to the same electrical power equipment.

■ **When carrying or packing a Unit and an optional module, wear a wrist strap to protect against static electricity.**

Be sure to wear an antistatic wrist strap. If you handle the Unit without wearing an antistatic wrist strap, the Unit might be damaged by static electricity.

NOTICE

■ **Install a blank panel when disconnecting the electric power source**

Install a blank panel where there is no embedded power source slot. Using the unit without a blank panel may block air flow inside the Unit. Blocked air flow can cause the internal temperature of the Unit to rise. Also, interference generated by the Unit may impact other devices, while at the same time interference generated by other devices may impact the Unit, which can cause misoperation.

■ **When carrying and packing optional modules, handle them carefully.**

Do not touch a connector when carrying or packing a transceiver, direct attach cable, memory card, power supply unit, fan unit, or power module. Also, when storing a module, use an antistatic bag.

■ **When carrying and packing optional modules, handle them carefully.**

● Lay the wiring so that people do not trip over wires or pull on them. Tripping over wires or pulling on them can cause injury or malfunction of the connectivity device.

● Do not place heavy objects on top of the cable. In addition, do not place wiring nearby hot equipment. This could case cables to break, as well as malfunction of connected equipment.

■ **Do not pull hard on pull tabs of directly-attached cables.**

To remove a directly-attached cable, press the directly-attached cable back shell toward the Unit horizontally with your fingers. Pull on the pull tab as you slowly add pressure. Do not pull excessively hard. If you do, you may pull off the tab and damage the directly-attached cable.

■ **Do not pull hard on the SFP or SFP+ levers.**

If you are having trouble disconnecting the SPF or SFP+, lower the lever, press on the Unit in the direction of the transceiver, and check that the transceiver cannot be uninstalled. Pulling on the lever with excessive force can cause transceiver malfunction.

■ **Do not pull hard on the QSFP+ or QSFP28 lever or pull tab.**

If you are having trouble disconnecting the QSFP+ and QSF28, press on the transceiver un the direction of the Unit, slowly adding pressure as you do so, and pull the lever or pull tab. Pulling too hard on the lever or pull tag could result in damage to the transceiver such as malfunction of the lever or pull tag.

■ **Do not install or disconnect the transceiver more often than necessary.**

Do not install or disconnect the transceiver more often than necessary, as this nay shorten the life of the product.

NOTICE

■ **Do not bring the Unit close to strong magnetism.**

Do not place the Unit near items emitting strong magnetism such as magnets, speakers, etc. This may cause malfunction.

■ **Do not use a TV or a radio near the Unit.**

Placing the Unit near a TV or a radio could affect both devices. If you hear noise on the TV or radio, do the following:
- ・ Place the Unit as far away as possible from the TV or radio.
- ・ Adjust the orientation of the TV or radio antenna.
- ・ Use separate outlets.

■ **Do not place the Unit where it may be exposed to hydrogen sulfide or salts.**

The life of the Unit may by compromised if it is utilized in a location where hydrogen sulfide is emitted, such as a hot spring area, or where there are significant salts, such as by the ocean.

■ **To use the Unit with smoky liquid, be sure to protect it.**

When using the Unit near hazy pesticide, first wrap it well in a vinyl sheet or similar. Such substances can cause Unit malfunction if they get inside. Disconnect the Unit at this time.

■ **Use care when handling an air duster.**

● Use an air duster specially designed for cleaning optical connectors. Using another type of air duster could cause the ferrule tip to become dirty.

● Keep the nozzle or container of the air duster from coming into contact with the ferrule tip. Contact could result in a malfunction.

■ **Use care when handling an optical connector cleaner.**

● Always use a dedicated optical connector cleaner. If you use another type of cleaner, the ferrule tip might become dirty.

● Before cleaning, make sure that the tip of the optical connector cleaner is clean and free of defects, such as lint, dirt, or other foreign substances. Using a cleaner with a defective tip might damage the ferrule tip.

■ **Transporting the Unit**

When transporting the Unit, always be sure to package it first. In addition, when packaging the unit pay attention to which way the top and bottom are facing. If you fail to package the unit or transport it upside down, it may cause malfunction.

NOTICE

■ **Maintenance**

Clean any dirty areas on the exterior of the Unit with a clean, dry cloth, or a cloth damp with (but not soaked with) water or a neutral detergent. Do not use volatile organic solutions (such as benzene or paint thinner), chemicals, chemically treated cloths, or pesticides because these substances might deform, discolor, or damage the Unit.

■ **If the Unit will not be used for a long time**

For safety reasons, unplug the power cable from the outlet if the Unit will not be used for a long time.

● For devices embedded with AC electric power sources, unplug all power cables from plugs.

● If you are using a DC power supply, turn off the circuit breaker at the supply of power.

■ **Disposing of the Unit**

When disposing of the Unit, you should either follow local ordinances or regulations or contact your local waste disposal and treatment facility.

CONTENTS

1 Getting Ready

This Chapter indicates the steps required to use the unit. It also explains the manual style, the importance of this Guide, and how to refer to the Manuals for the AX3660S Series.

1.1. Viewing the AX3660S Series Manual

The following figure provides an overview of how to view the AX3660S Series Manual.

This Guide indicates how to perform the basic settings after unpacking the box. Note that it explains only the most necessary basic information. Refer to the Manuals noted below on how to use the numerous features of the AX3660S Series products.

● Reading the AX3660S Series Manual

Fig.1-1　Viewing the AX3660S Series Manual

From opening the box to basic settings at initial setup ▶	Quick Start Guide（AX36S-Q002）
Hardware operating conditions ▶	Overview of hardware（AX36S-H002）
Search hardware operations ▶	
Transceivers for support purposes/ interface cable specifications ▶	Overview of transceiver hardware（AX-COM-H001）
Checking software features, configuration settings, and operations command ▶	Software manual Configuration guide Vol.1（AX38S-S010）
	Software manual Configuration guide Vol.2（AX38S-S011）
	Software manual Configuration guide Vol.3（AX38S-S012）
Configuration command entry syntax parameters ▶	Software manual Configuration command reference Vol.1（AX38S-S013）
	Software manual Configuration command reference Vol.2（AX38S-S014）
Operations command entry syntax parameters ▶	Software manual Operations command reference Vol.1（AX38S-S015）
	Software manual Operations command reference Vol.2（AX38S-S016）
System message and log details ▶	Software manual Message and log reference（AX38S-S017）
Details of support MIB ▶	Software manual MIB referene（AX38S-S018）
Troubleshooting ▶	Troubleshooting guide（AX36S-T002）

1.2. Check Items Included in Box

Refer to the list of accessory items included in the box, and check that all are included.

1.3. Get Required Items Ready

To set up, get the following equipment ready in addition to the unit and options.

● Terminal

Set up a personal computer or work station supporting the following features.

Table 1-1 Terminal (where connected to the CONSOLE port)

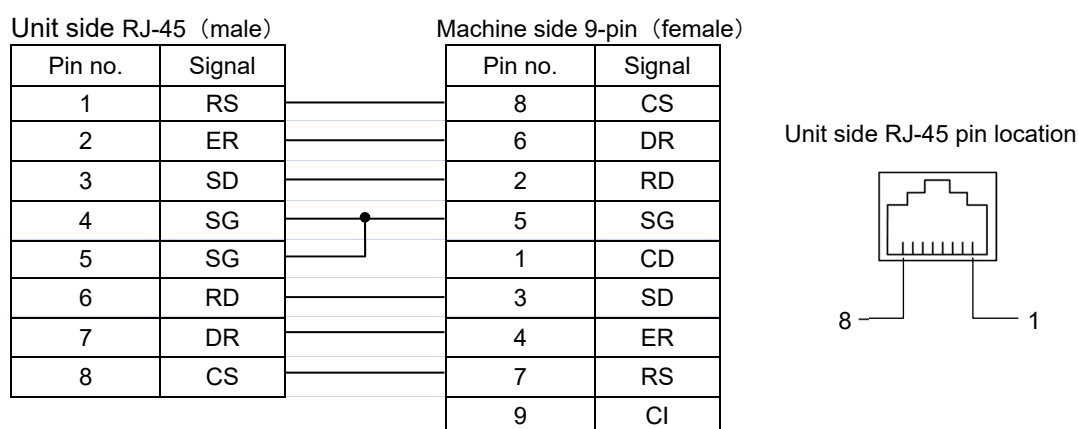| Category		Specifications
Transmission port		RS-232C port
Transmission software		Transmission software meeting the Transmission Settings requirements below
Transmission settings	Transmission parameters	8 bit, 1 stop bit, no parity
	Transmission speed[1]	19200bit/s, 9600bit/s, 4800bit/s, 2400bit/s, 1200bit/s

*1 Transmission speed of the main unit when it is shipped from the factory is 9600 bit/second.

● RS-232C Cross Cable

To connect the unit console port with the operating terminal, use the RS-232C cross cable (RJ-45 (male) D-Sub9 pin (female).

The following indicates the pin position of the RS-232C cross cable.

Fig.1-2 Operating terminal connection cable

Unit side RJ-45 （male）

Pin no.	Signal
1	RS
2	ER
3	SD
4	SG
5	SG
6	RD
7	DR
8	CS

Machine side 9-pin （female）

Pin no.	Signal
8	CS
6	DR
2	RD
5	SG
1	CD
3	SD
4	ER
7	RS
9	CI

Unit side RJ-45 pin location

8 ─ 1

NOTE   You may use the RS-232C cable compatible with CISCO Systems, but be sure to check the operating terminal signal specifications and RS-233C cable specifications ahead of time.

● Interface Cable

An interface cable is required to connect other machinery. For details on interface cables, refer to the AX3660S Hardware Overview covering the main unit.

● AC200V Power Cable

If you are using the main unit with AC200V, obtain an AC200V power cable that meets our company's specifications. For details on the AC200V power cable, refer to the AX3660S Hardware Overview.

2 Equipment Setup

This Chapter covers the process from connecting equipment such as power cables and interface cables to the unit through powering on the device.

2.1. Equipment Setup

The following is an overview of equipment setup.

Step 1 Attaching the Wrist Strap

Attach the wrist strap to prevent static electricity and protect the equipment from static electricity.

Step 2 Attaching the Operational Terminal

1. Connect with the operational terminal to the console port. To connect the operation terminal, use the RS-232C closed cable.
2. Power on the operational terminal.
3. Launch the transmission software (terminal software).

NOTE	For details on the transmission software, refer to the Transmission Software Manual.

Step 3 Connecting the Interface Cable

Connect the interface cable to the interface port.

Step 4 Attach the Power Cable

● To use the unit with AC100V

Attach the AC100V power cables (included) to all AC power ports.

⚠WARNING	To power the unit with AC100V, use only grounded cords. Failure to ground could cause electric shock, or could cause issues such as problems due to electrical noise.

⚠WARNING	To power the unit with AC100V, use the power cable that comes with the unit or equipment separately sold by our company. Note that using other equipment could cause fire or electric shock. Do not use our company's power cables with equipment other than the unit. Using the cables with equipment other than the unit could cause fire or electric shock.

● Unit is powered at AC200V

All AC power ports on the unit are connected with AC200V power cables.

⚠WARNING	To power the unit with AC200V, use only grounded cords. Failure to ground could cause electric shock, or could cause issues such as problems due to electrical noise.

| ⚠WARNING	To power the unit with AC200V, use the power cable that comes with the unit or equipment separately sold by our company. Note that using other equipment could cause fire or electric shock. Do not use our company's power cables with equipment other than the unit. Using the cables with equipment other than the unit could cause fire or electric shock.

● Using DC-48V with the unit

Attach DC-48V power cables to all of the unit's DC power sources. Refer to the AXAX3660S
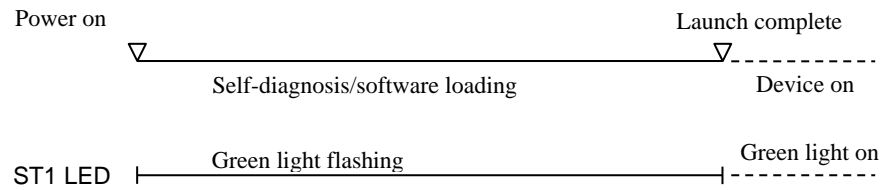
Hardware Overview for information in attaching the DC-48V power cables.

Step 5 Checking the LEDs

When the ST1 LED on the unit flashes green, this indicates that it has launched.
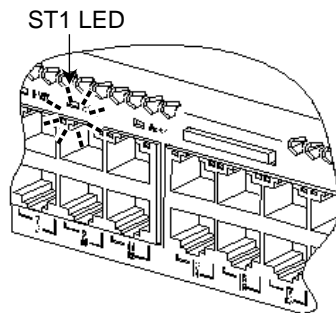
ST1 LED

The following illustrates the process though powering on of the device.

Power on   Launch complete
    ▽————————————————————————————————▽ - - - - - - - - - -
            Self-diagnosis/software loading   Device on

                    Green light flashing   Green light on
ST1 LED ├————————————————————————————————┤ - - - - - - - - - -

1. After powering the unit on, the ST1LED flashes green for self-diagnosis and to launch
   software loading.
2. Once the equipment is launched, the ST1LED flashes green.

NOTE   Where the ST1 LED flashes red, there is a problem with the equipment.
            Refer the "Troubleshooting" section for information on equipment issues and how
            to resolve them.

2.2. Other Operations

● Installing and uninstalling optional equipment

Regarding installing and uninstalling of optional equipment such as fan units, power ports, memory cards, transceivers, etc., refer to the AX3660S Hardware Overview.

● Details on the unit and options

Regarding the names and details on the unit and the various options, refer to the AX3660S Hardware Overview.

3 Operations Required at Initial Installation

This Chapter covers password setup for Administrator Mode required at initial installation, adding and deleting user accounts, and setting the time.

3.1. Overview of Command Input Mode

Unit command line interface (CLI) Command Input Modes consist of General User Mode, Administrator Mode, and Configuration Mode.

In order to configure or change a configuration for the Unit or refer to Unit status, you must switch to the appropriate command input mode and input configuration or operational commands.

The following is an overview of the Command Input Modes. Refer to table 3-1: "Command Input Mode" for information on accessing Command Input Modes as well as Exit Processing.

Table 3-1 Overview of Command Input Mode

Command input mode	Mode switch command	Prompt	Finishing the operation	Notes
General user mode	login: (User Name)	>	> logout	All operational commands, excluding some such as configuration commands, are enabled.
Administrator mode	> enable	#	# disable	All operational commands enabled.
Configuration mode	# configure	(config)#	(config)# exit	All configuration commands enabled.

- General User Mode

  Status when logging into the Unit is General User Mode. In General User Mode, operational commands can be executed with a few exceptions. Configure commands utilized in registering and deleting new accounts, as well as switching to Configuration Mode, cannot be executed in General User Mode. These must be executed in Administrator Mode instead.

- Administrator Mode

  Using the General User Mode, input the Enable command to switch to Administrator Mode. All operational commands are available for use in Administrator Mode. The Enable command does not have an associated password at initial installation. To prevent any security breaches, we recommend that you set up the Enable command and password to limit the number of users accessing by Administrator Mode.

● Configuration Mode

In Administrator Mode, enter the Configure command to get into Configuration Mode. By using configuration commands in Configuration Mode, you can configure the Unit as well as make changes to your configuration.

NOTE	Refer to the Software Manual Operations Command reference for information on which operational commands are implemented by command input mode. See the Software Manual Configuration Command Reference.

3.2. Overview of Required Operations at Initial Installation

The following is an overview of required operations at initial installation providing details on individual operations.

(1) Login

Log in to the Unit. Use the User Name ("Operator") set up at initial installation. Because there is no password associated with "Operator," you may log in without verification.

(2) Set Up Administrator Mode Password

Set up a password for use when using the Enable command to switch to Administrator Mode. The password is not set up at initial installation. To prevent any security breaches, set up a password for use in Administrator Mode.

(3) Add User Account/Delete "Operator"

Create New User Account

Where you choose not to use "Operator" (which is already set up at initial installation) as the User login during Unit operations, we recommend deleting it (with the "rm user" command) when you create a new log in user to avoid any security breaches.

(4) Setting the Time

Set up the time zone and time settings. The time settings are incorrect at initial installation. Because the time is important in information-gathering used to investigate disruptions, be sure to set the time accurately.

3.3. Login

You will see the Login prompt when you turn on the Unit. Enter the User Name to login to the Unit.

NOTE	For Versions 12.1.K or later of the software, users who have not created a password (including beginner users) will see the Password prompt. In addition, if you log in but have not created a password, you will see a banner asking you to create a password.

---

login: **operator**   …Enter the user name (operator).

Password: …Press the Enter key. (Ver 12.1.K onward)

No password is set up. Please set password!   …A banner appears. (Ver 12.1.K onward)

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NOTE	Note that the content shown below may differ slightly depending on the software version. However there are no discrepancies between basic operations between the different versions.

3.4. Set Up Passwords for Administrator Mode

Set up your password for Administrator Mode.

```
> enable                            …Switch to Administrator Mode.
# password enable-mode              …Enable setting of Administrator Mode password.
Changing local password for admin.
New password: ********              …Set up Administrator Mode password.
                                      (Characters entered are not shown).


Retype new password: ********       …Re-enter password to confirm.
                                      (Characters entered are not shown).

#
```

NOTE

Passwords must be a least six characters long. You will get an error message if your password is fewer than six characters. Revise your password accordingly. Also note that passwords must be fewer than 128 characters. If your password is 129 characters or greater, it will be cut down to the first 128 characters. Passwords must include capital letters, numbers, and special characters. You will get an error message if your password is all small letters. Revise your password accordingly.

3.5. Adding and Deleting User Accounts/Deleting "Operator"

Step 1: Creating User Accounts/Setting up Login Passwords

Create a new User Account and set up your Login Password. The following is an example of how to set up a new User and login password.

```
# adduser newuser                       …Set up a new User Name (newuser).
User(empty password) added. Set up new password.
Changing local password for newuser.
New password: ********                  …Set up the User Name (new user) login password.
                                           (Characters entered are not shown).
Retype new password: ********           …Re-enter the password to confirm.
                                           (Characters entered are not shown).
# disable                               …Switch back to User Mode.
> logout                                …Louout
```

NOTE

Passwords must be a least six characters long. You will get an error message if your password is fewer than six characters. Revise your password accordingly. Also note that passwords must be fewer than 128 characters. If your password is 129 characters or greater, it will be cut down to the first 128 characters. Passwords must include capital letters, numbers, and special characters. You will get an error message if your password is all small letters. Revise your password accordingly.

Step 2: Delete "Operator" User Account

Delete the "Operator" User Account set up at initial installation.

```
login: newuser                          …Login with a new User Name.
Password: ********                      …Enter the Login password (password set up in Step 1).
Copyright (c) 20XX ALAXALA Networks Corporation. All rights reserved..
> enable                                …Switch to Administrator Mode.
Password: ********                      …Input the Administrator Mode password.
# rmuser operator                       …Delete the User Name "Operator," which is set up at initial
                                           installation.
Delete user 'operator'? (y/n): y
#
```

3.6. Setting the Time

Choose the time zone.

The following example shows how to set the date/time of March 22, 2016 (15:30), Japan time.

```
# configure                        …Switch to Configuration Mode.
(config)# clock timezone JST +9    …Select JST for the time zone, with a +9 offset for UTC.
!(config)# save                    …Save the time zone settings.
(config)# exit                     …Revert to Administrator Mode.
# set clock 1603221530             …Input date and time (year-month-day-time) using two digits each.
Tue Mar 22 15:30:00 JST 2016       …The time you set is displayed.
# disable                          …Revert to general user mode.
> logout                           …Logout
```

NOTE
Where changes are made to the configuration, you will see an exclamation (!) point in front of the prompt. The exclamation point disappears when the configuration is saved.

This concludes the settings necessary for initial installation: time settings, password setup for Administrator Mode, as well as adding and deleting user accounts

4 Follow-up Operations

This Chapter covers the Manuals used for reference in unit setup, checking operational status, and troubleshooting.

4.1   Operational Management and Configuration Setup

4.2   Troubleshooting

4.1. Operations Management and Configuration Settings

Refer to the following manuals regarding operational management and configuration setup (manual numbers shown in parentheses).

● Manuals Used for Operational Management and Configuration Setup
- **Software Manual Configuration Guide** Vol.1 (AX38S-S010)
- **Software Manual Configuration Guide** Vol.2 (AX38S-S011)
- **Software Manual Configuration Guide** Vol.3 (AX38S-S012)

● Manuals Used for Configuration Command Details
- **Software Manual Configuration Command Reference** Vol.1 (AX38S-S013)
- **Software Manual Configuration Command Reference** Vol.2 (AX38S-S014)

● Manuals Used for Operational Command Details
- **Software Manual Operational Command Reference** Vol.1 (AX38S-S015)
- **Software Manual Operational Command Reference** Vol.2 (AX38S-S016)

4.2. Troubleshooting

Refer to the following Manual for troubleshooting (manual numbers shown in parentheses).

• **Troubleshooting Guide** (AX36S-T002)