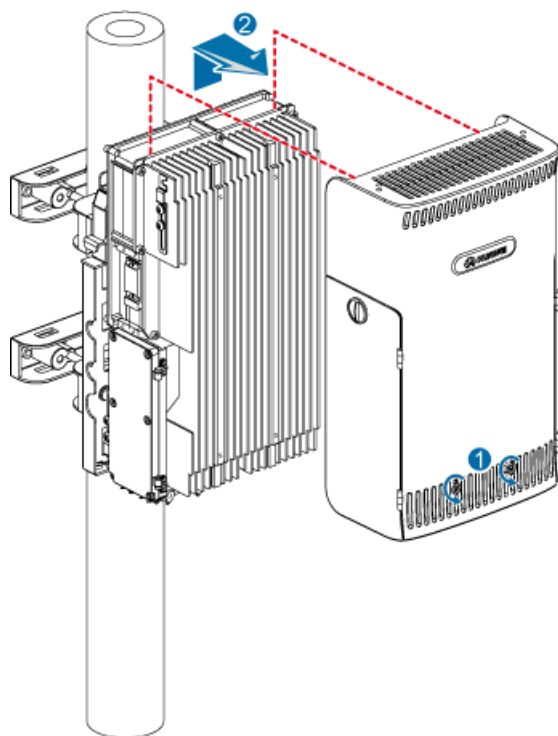
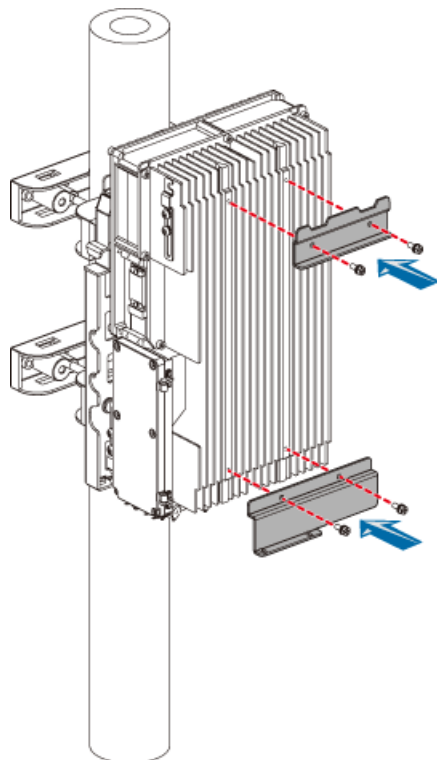


Figure 3-81 Removing the plastic housing

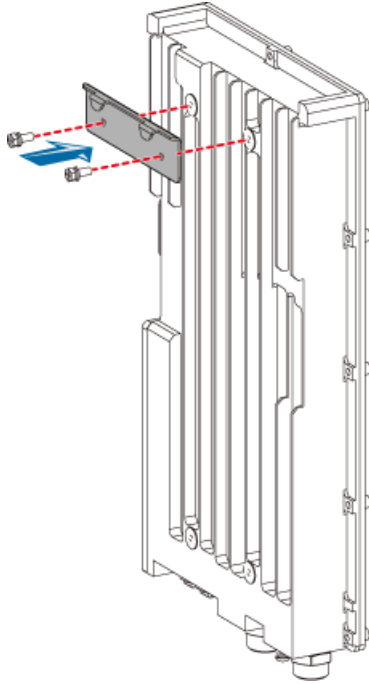


Step 2 Secure the connecting boards on the RRU3804 module, as shown in [Figure 3-82](#).

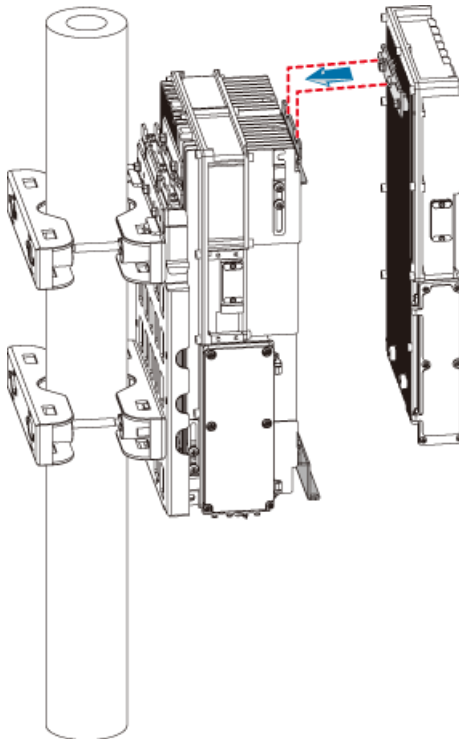
Figure 3-82 Securing the connecting boards



Step 3 Secure the attachment plate on the SRXU, as shown in [Figure 3-83](#).

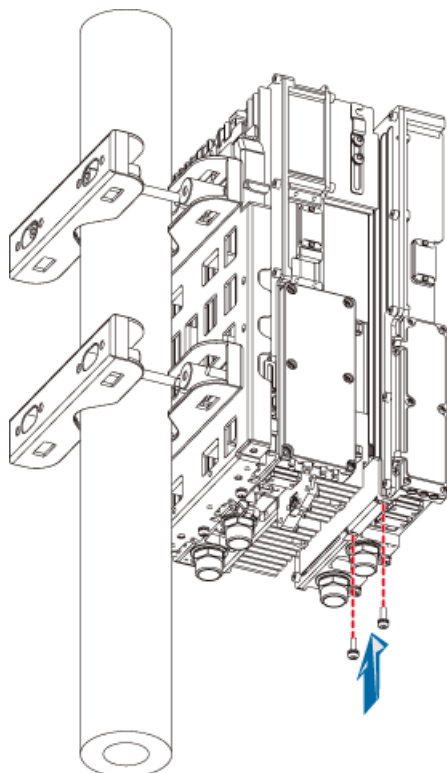
Figure 3-83 Securing the attachment plate on the SRXU

Step 4 Install the SRXU by fitting the tabs on the attachment plate into the anchor slots in the connecting board, as shown in [Figure 3-84](#).

Figure 3-84 Installing the SRXU

Step 5 Lead two screws M6 x 20 through the holes in the bottom of the module. Then, secure the SRXU on the connecting boards, as shown in [Figure 3-85](#).

Figure 3-85 Securing the SRXU



---End

3.6.2 Installing the SRXUs on the Two RRU3804s

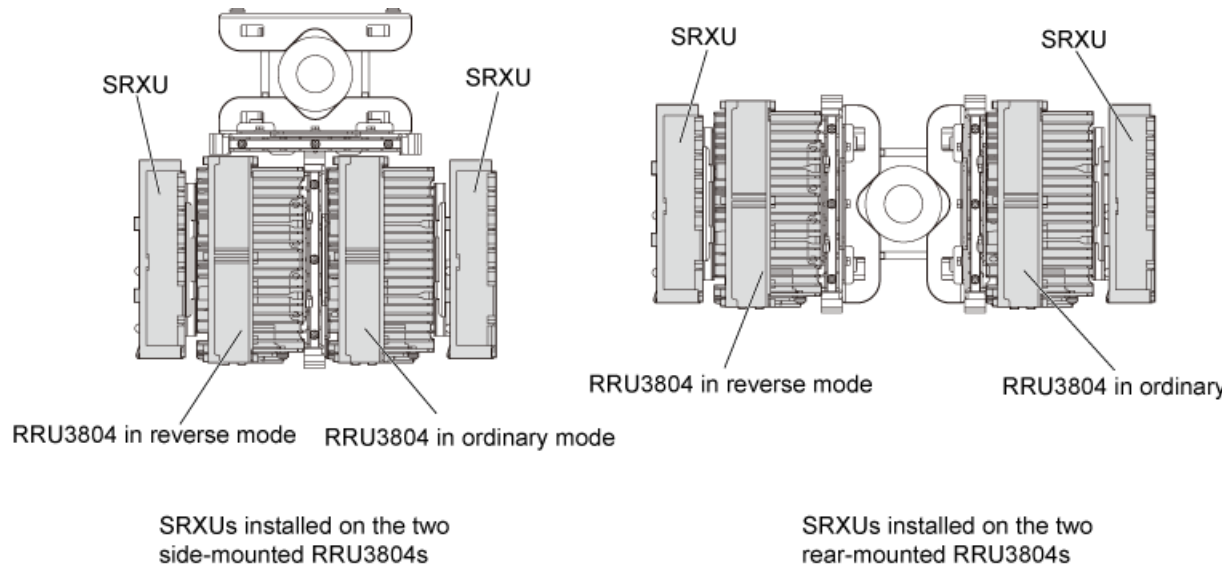
This describes how to install the SRXUs on the two RRU3804 that are mounted on the metal pole. The procedures for installing the SRXUs on the two RRU3804s in pole or wall installation mode are the same.

Prerequisite

The two RRU3804s are installed.

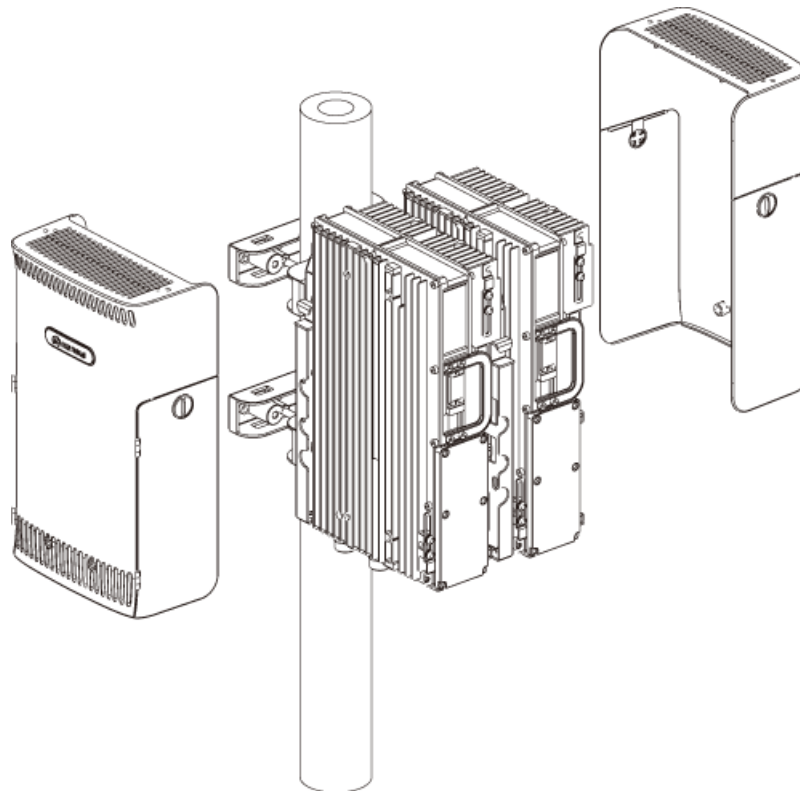
Context

The SRXU can be installed on the RRU3804 that is in either ordinary or reverse mode. The procedures for installing the SRXU on the RRU3804 in ordinary and reverse modes are the same. [Figure 3-86](#) shows the SRXUs installed on the two RRU3804s.

Figure 3-86 SRXUs installed on the two RRU3804s

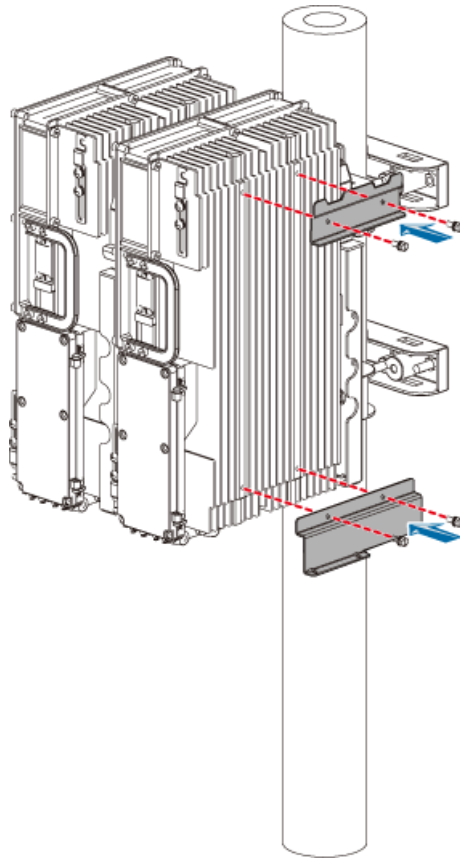
Procedure

- Side-mounted installation
 1. Remove the plastic housing of each RRU3804, as shown in [Figure 3-87](#).

Figure 3-87 Removing the plastic housings

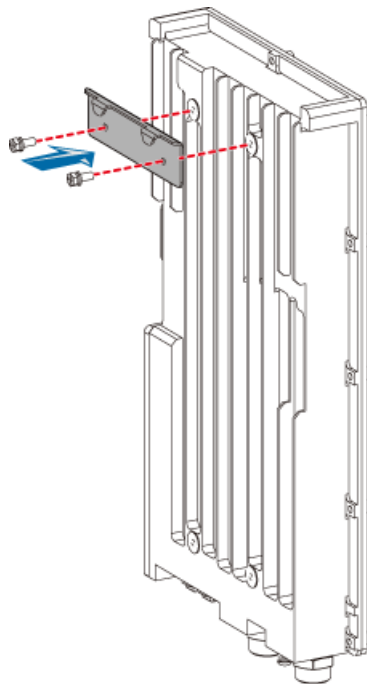
2. Secure the connecting boards on the RRU3804 module in ordinary mode, as shown in [Figure 3-88](#).

Figure 3-88 Securing the connecting boards on the RRU3804 module in ordinary mode



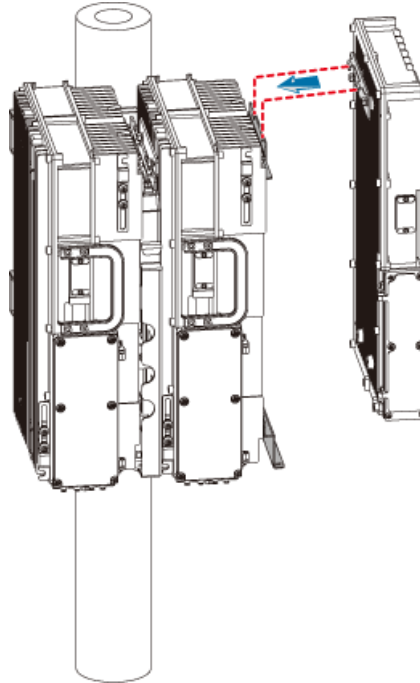
3. Secure the attachment plate on the first SRXU, as shown in [Figure 3-89](#).

Figure 3-89 Securing the attachment plate on the first SRXU



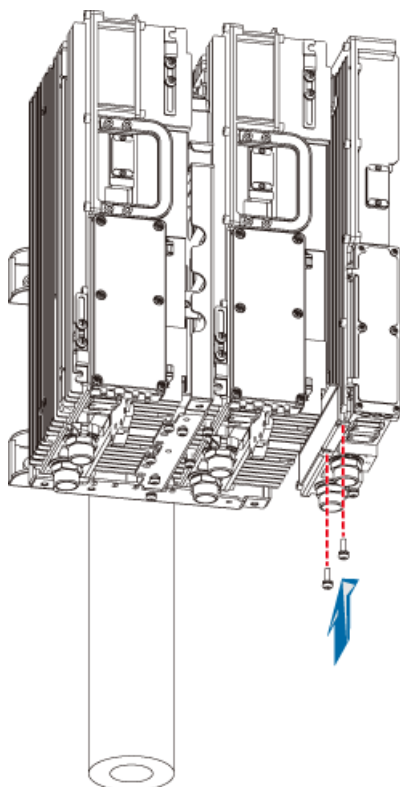
4. Install the first SRXU on the RRU3804 in ordinary mode by fitting the tabs on the attachment plate into the anchor slots in the connecting board, as shown in **Figure 3-90**.

Figure 3-90 Installing the first SRXU



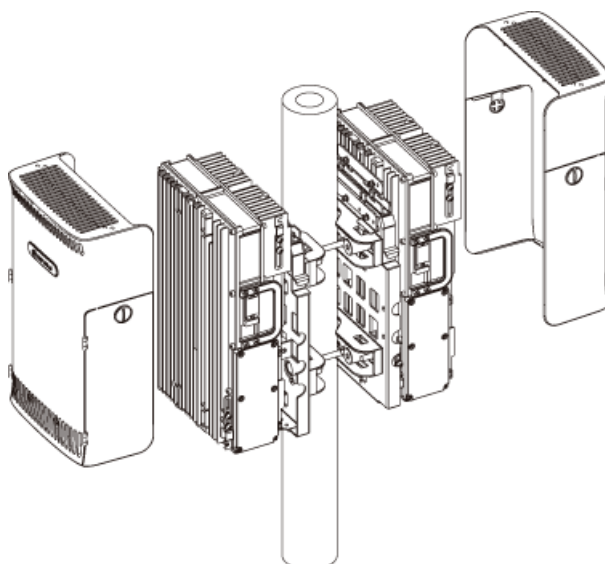
5. Lead two screws M6 x 20 through the holes in the bottom of the module. Then, secure the SRXU on the connecting boards, as shown in **Figure 3-91**.

Figure 3-91 Securing the first SRXU



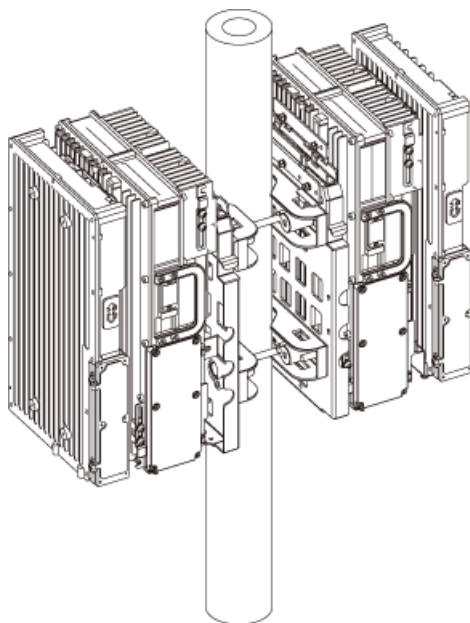
6. Perform the previous steps to install the other SRXU on the RRU3804 in reverse mode.
- Rear-mounted installation
 1. Remove the plastic housing of each RRU3804, as shown in [Figure 3-92](#).

Figure 3-92 Removing the plastic housings



2. Install the two SRXUs by referring to [3.6.1 Installing the SRXU on a Single RRU3804](#). The procedure for installing the SRXUs on the two rear-mounted RRU3804s is the same as that for installing the SRXU on the single RRU3804.

[Figure 3-93](#) shows the SRXUs installed on the two rear-mounted RRU3804s.

Figure 3-93 SRXUs installed on the two rear-mounted RRU3804s

---End

3.6.3 Installing the SRXUs on the Three RRU3804s

This describes how to install the SRXUs on the three RRU3804 that are mounted on the metal pole. The procedures for installing the SRXUs on the three RRU3804s in pole or wall installation mode are the same.

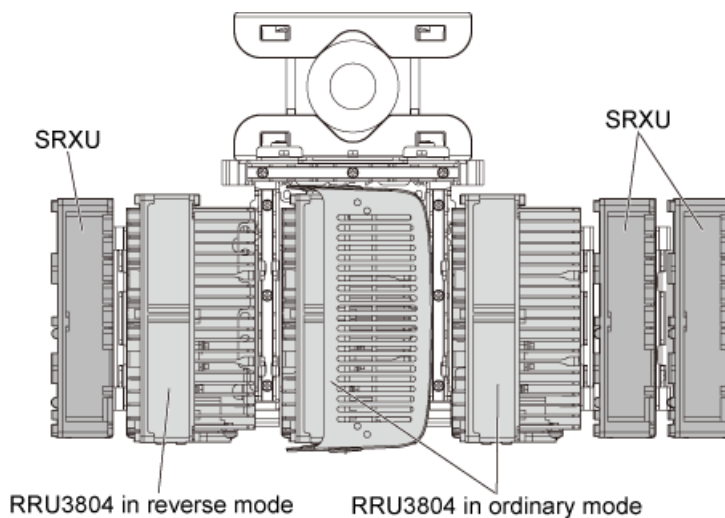
Prerequisite

The three RRU3804s are installed.

Context

The SRXU can be installed on the RRU3804 that is in either ordinary or reverse mode. The procedures for installing the SRXU on the RRU3804 in ordinary and reverse modes are the same. [Figure 3-94](#) shows the SRXUs installed on the three RRU3804s.

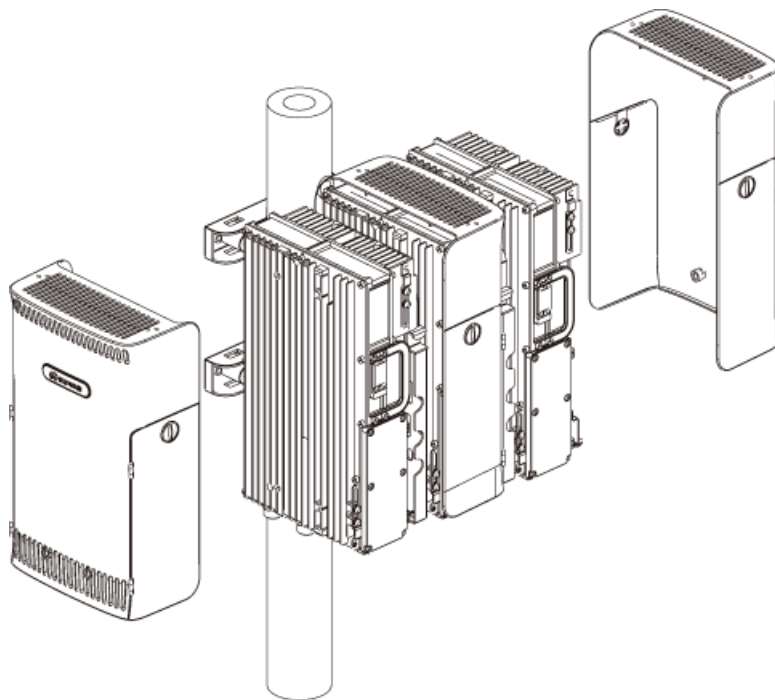
Figure 3-94 SRXUs installed on the three RRU3804s



Procedure

- Step 1** Remove the plastic housings of the RRU3804s on the left and right, as shown in [Figure 3-95](#)

Figure 3-95 Removing the plastic housings



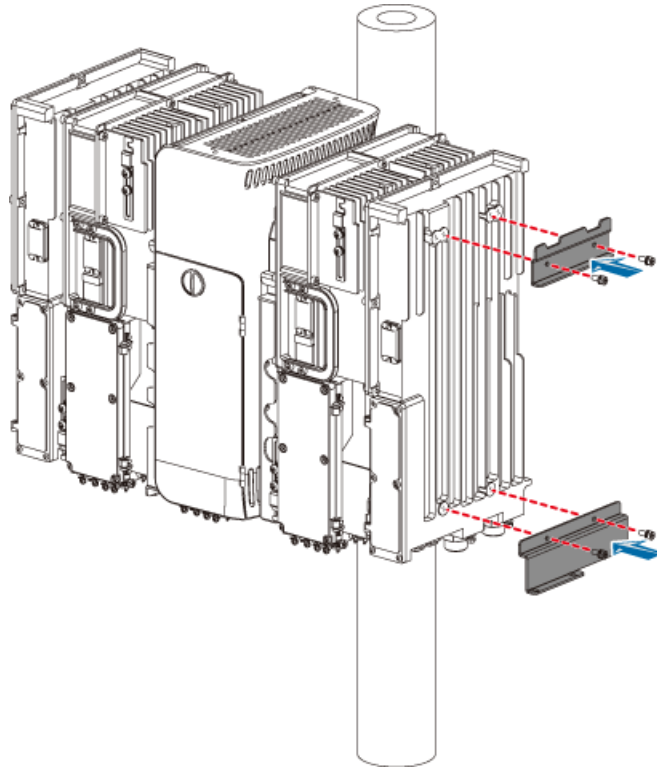
- Step 2** Install two SRXUs on the left and right RRU3804s by referring to [3.6.2 Installing the SRXUs on the Two RRU3804s](#). The procedure for installing the SRXUs on these RRU3804s is the same as that for installing the SRXUs on the two side-mounted RRU3804s.
- Step 3** Determine the position of the third SRXU as required.

 **NOTE**

The third SRXU can be installed on either the left or the right. It is recommended that it be installed on the right. The following description takes installing the third SRXU on the right as an example.

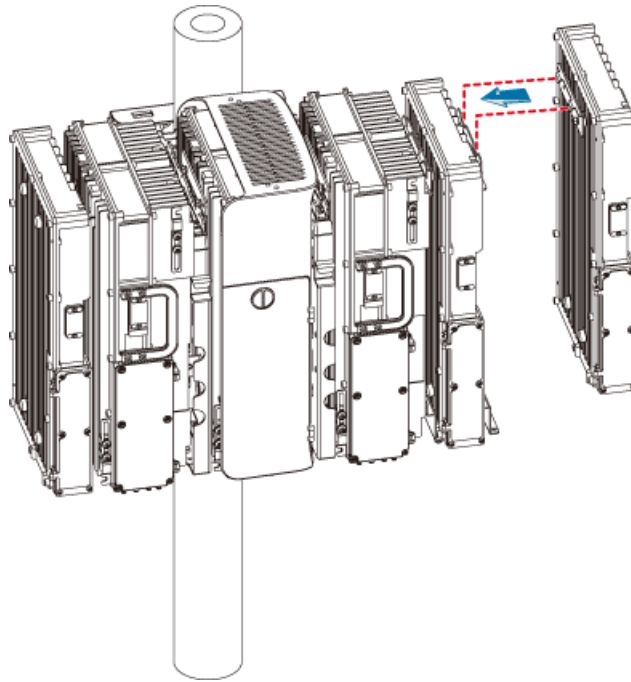
- Step 4** Secure the connecting boards on the right SRXU that is already installed, as shown in [Figure 3-96](#).

Figure 3-96 Securing the connecting boards



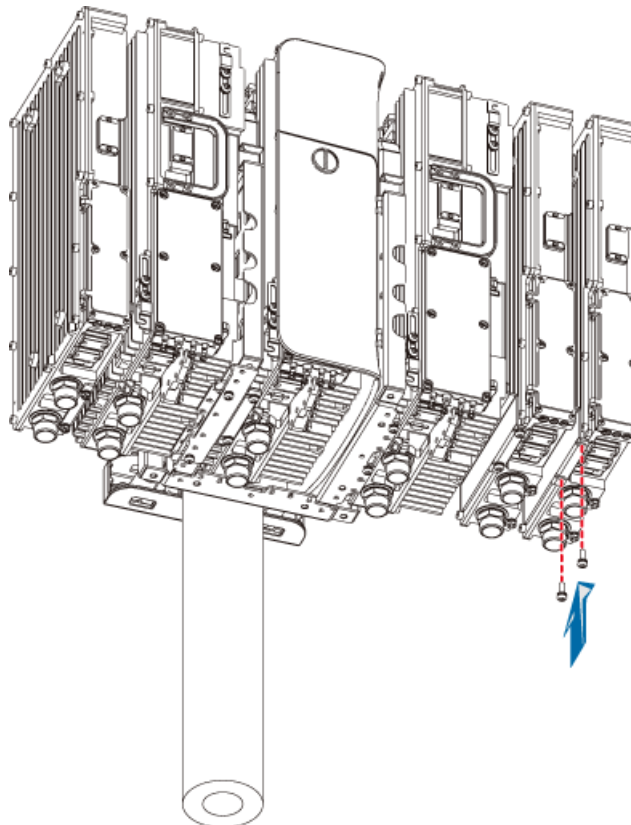
- Step 5** Secure the attachment plate on the third SRXU.
- Step 6** Install the third SRXU on the right SRXU by fitting the tabs on the attachment plate into the anchor slots in the connecting board, as shown in [Figure 3-97](#).

Figure 3-97 Installing the third SRXU



Step 7 Lead two screws M6 x 20 through the holes in the bottom of the module, as shown in **Figure 3-98**. Then, secure the SRXU on the connecting boards.

Figure 3-98 Securing the third SRXU



---End

3.7 Installing RRU3804 and SRXU Cables

This describes how to install the cables of the RRU3804 and SRXU, remove and install the cover plate of the RRU3804 or SRXU cabling cavity.

3.7.1 Cabling Specifications for the NodeB

The power cables and signal cables for the NodeB should be routed in compliance with the cabling specifications to avoid electromagnetic interference to the signals.

3.7.2 Connections of RRU3804 and SRXU Cables

This describes the cable connections between the RRU3804, SRXU, and other devices such as BBU3806, external power supply, and antenna system.

3.7.3 Installing the PGND Cable of the RRU3804/SRXU

The PGND cable ensures the grounding of the RRU3804/SRXU.

3.7.4 Installing the -48 V DC Power Cable of the RRU3804/SRXU

The -48 V DC power cable feeds external -48 V DC power to the RRU3804/SRXU.

3.7.5 Installing the RF Jumper of the RRU3804/SRXU

The RF jumper of the RRU3804/SRXU is of two types: antenna jumper and interconnect jumper. The antenna jumper of the RRU3804/SRXU can be connected to the feeder or directly to the antenna. The interconnect jumper transmits RF signals between two RRU3804s/SRXUs.

3.7.6 Installing the AISG Multi-Wire Cable of the RRU3804/SRXU

The AISG multi-wire cable connects the RRU3804/SRXU to the RCU.

3.7.7 Installing the AISG Extension Cable of the RRU3804/SRXU

If the distance between the RRU3804/SRXU and the RCU is longer than 5 m, an AISG extension cable is required.

3.7.8 Installing the Boolean/RS485 Input Cable of the RRU3804

The Boolean/RS485 input cable monitors the external signals.

3.7.9 Opening and Closing the Cover Plate of the RRU3804 Cabling Cavity

Before installing the -48 V DC power cable, CPRI optical cable, and Boolean input cable, you need to open the cover plate of the RRU3804 cabling cavity. When the cables are connected to the module, close the cover plate.

3.7.10 Opening and Closing the Cover Plate of the SRXU Cabling Cavity

Before installing the CPRI optical cable and PGND cable, you need to open the cover plate of the SRXU cabling cavity. When the cables are connected to the module, close the cover plate.

3.7.1 Cabling Specifications for the NodeB

The power cables and signal cables for the NodeB should be routed in compliance with the cabling specifications to avoid electromagnetic interference to the signals.

General Cabling Specifications

Bending radius of the cables should meet the following specifications:

- The bending radius of the 7/8" feeder should be larger than 250 mm, and that of the 5/4" feeder should be greater than 380 mm.

- The bending radius of the 1/4" jumper should be larger than 25 mm, and that of the 1/2" jumper should be larger than 32 mm.
- The bending radius of the signal cable should be at least 5 times larger than its diameter after the cable is fixed. For the signal cable that is often bent or pulled out/plugged in, the bending radius should be at least 7 times larger than its diameter.
- The bending radius of the optical cable should be at least 20 times larger than its diameter.
- The bending radius of the E1/T1/J1 cable should be at least 7 times larger than its diameter after the cable is fixed. For the E1/T1/J1 cable that is often bent or pulled out/plugged in, the bending radius should be at least 10 times larger than its diameter.
- The bending radius of the signal cable should be at least 5 times larger than its diameter after the cable is fixed. For the signal cable that is often bent or pulled out/plugged in, the bending radius should be at least 7 times larger than its diameter.

The cables should be bundled as follows:

- Cables of different types should be routed separately. The cables cannot be coiled.
- The cables should be tightly and neatly bundled. Ensure that the jackets of the cables are not damaged.
- Two adjacent cable ties should be spaced 200 mm and face the same direction. The cable ties at the same horizontal line should be on the straight line. Extra length of cable ties should be cut off.
- Labels or nameplates should be attached or bundled on the cables after they are installed.

The cables should be routed in category as follows:

- Cables of different types should be routed separately.
- Cables of different types cannot be crossed.
- Space between cables of different types should be larger than 30 mm when the cables are routed parallel inside the cabinet. Space between cables of different types should be larger than 100 mm when the cables are routed parallel outside the cabinet. If such requirements cannot be met, the cables should be separated with specified objects.

Special Cabling Specifications

Cabling specifications for routing the power cables and the PGND cables are as follows:

- Positions of routing the cables should meet requirements of the engineering design and the general cabling specifications.
- If the cable is not long enough, replace the cable. Do not add connectors or solder joints to lengthen the cable.
- Insulating treatment should be done on the cables if they need to be bundled and routed on the metal cable racks.
- Do not install fuses or switches on the cables.
- The -48 V power cable and GND cable should be bundled together.
- Grounding points at both ends of the PGND cables should be in proper electric contact and processed with antirust treatment.
- The low-voltage AC power cable for the NodeB should be covered with a metallic conduit and be buried in the ground for at least 50 m before they are led into the equipment room. Note that if such cables are shorter than 50 m, they should be completely buried in the

ground. If such cables are routed overhead and led into the room, surge protection for the connector of the AC power cable will be affected.

- The PGND cables should be buried in the ground or routed indoors. The PGND cables should not be routed overhead before they are led into the equipment room.

The specifications for routing the E1/T1 cables are as follows:

- Positions of routing the cables should meet requirements of the engineering design and the general cabling specifications.
- The cables should not be routed overhead outdoors.
- If the cables have to be routed outdoors, the cables should be covered with metallic conduits which are reliably grounded at both ends.
- If the cables have to be routed outdoors and it is impossible to install them under the ground, they should be covered and shielded with metallic conduits which are reliably grounded outdoors or connected to the grounding bar in the room. If the cables are covered with metallic jackets, ensure that both ends of each jacket are reliably grounded outdoors or connected to the grounding bar in the room.
- Extra length of E1 cables should be reserved when they are curved.
- Before the E1 cables are led out of the cabinet, they should be properly grounded.
- The wires not in use should be grounded in the equipment room.

The specifications for routing the optical cables are as follows:

- Positions of routing the cables should meet requirements of the engineering design and the general cabling specifications.
- Extra length of the optical cable should be reserved at the point that the cable is curved.
- Do not stretch the optical cables, step on the cables, or place heavy objects on the cables. Keep the cables away from sharp objects to avoid damage. The optical cable that is curved or pressed or the optical connector which is damaged cannot be used.
- Extra optical cables should be coiled on the specified device such as the fiber coiler. Use moderate force to coil the optical cables. Do not bend the cables forcibly lest they be damaged.
- PVC corrugated tubes should be used to cover the optical cables for protection purpose when they are led out of the cabinet.
- Dustproof caps should be used to cover the optical connectors not in use.
- If one end of the optical cable is connected to an optical device, do not look directly at the end face of the optical connector. Otherwise, your eyes may be hurt.
- Use soft materials such as fireproof cotton to fill in the optical connector at the top of the cabinet.
- You need to check whether the optical connector is polluted before installing the cables. If it is polluted, it is recommended that you use a fiber cleaner or dustfree cloth to clean the connector.

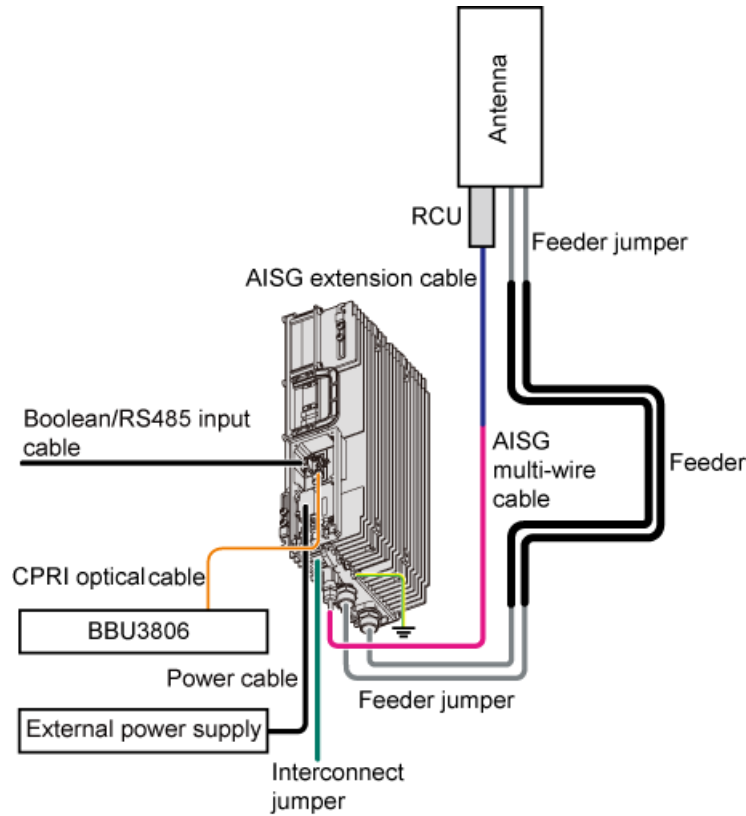
3.7.2 Connections of RRU3804 and SRXU Cables

This describes the cable connections between the RRU3804, SRXU, and other devices such as BBU3806, external power supply, and antenna system.

Cable Connections of One RRU3804 with and Without the SRXU

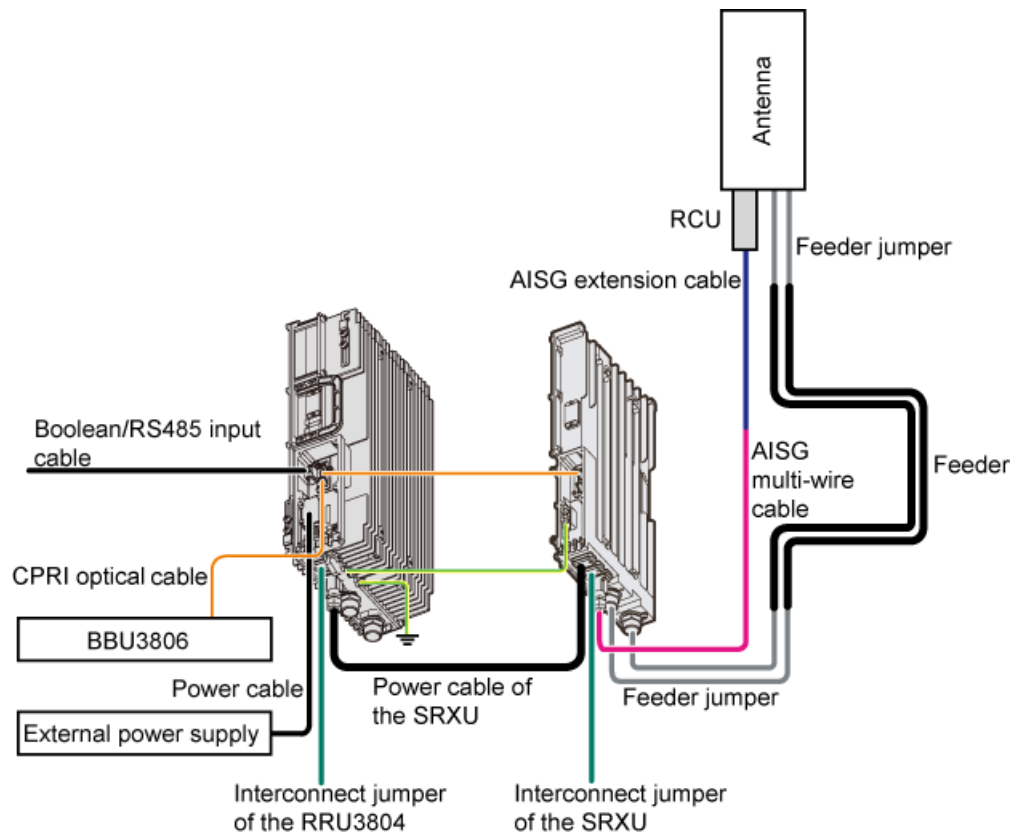
Figure 3-99 and **Figure 3-100** show the cable connections of one RRU3804 with and without the SRXU.

Figure 3-99 Cable connections of one RRU3804 without the SRXU



NOTE

- When one RRU3804 is installed, the PGND cable is connected to the grounding bolt on the RRU3804 module.
- Different external power supply devices are used for the RRU3804 depending on field requirements. The external power supply can be an APM, OFB, or SPD40R.
- The AISG multi-wire cable connects the RRU3804 to the RCU. When the distance between the RRU3804 and the RCU is too long, the AISG extension cable is used between the AISG multi-wire cable and the RCU.
- The antenna jumper directly connects the RRU3804 to the antenna. When the distance between the RRU3804 and the antenna is longer than 14 m, the feeder is required.

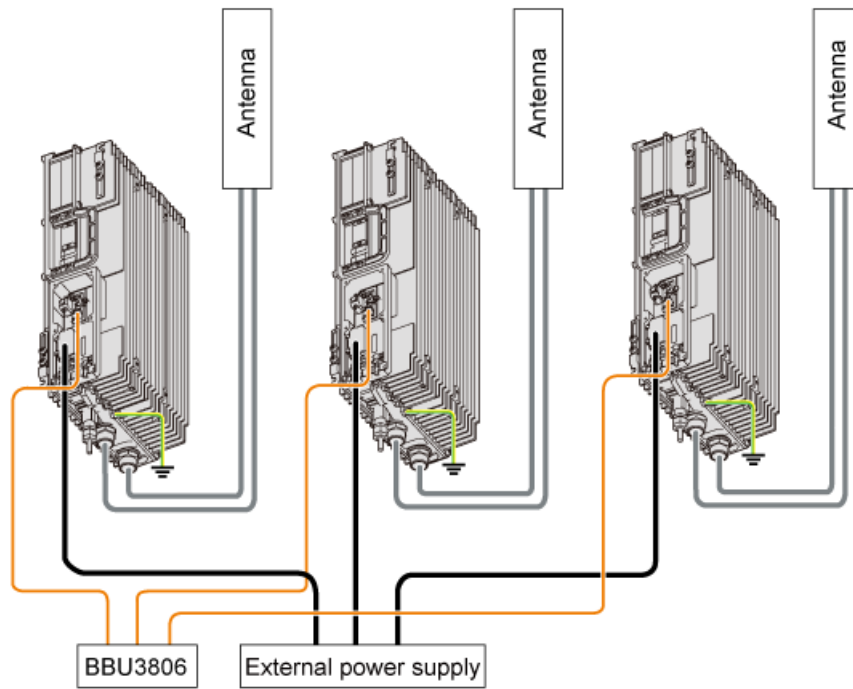
Figure 3-100 Cable connections of one RRU3804 with the SRXU**NOTE**

- When the SRXU is installed, the antenna jumper must be connected to the SRXU.

Cable Connections of Multiple RRU3804s with and Without the SRXUs

Figure 3-101 and **Figure 3-102** show the cable connections of multiple RRU3804s with and without the SRXUs.

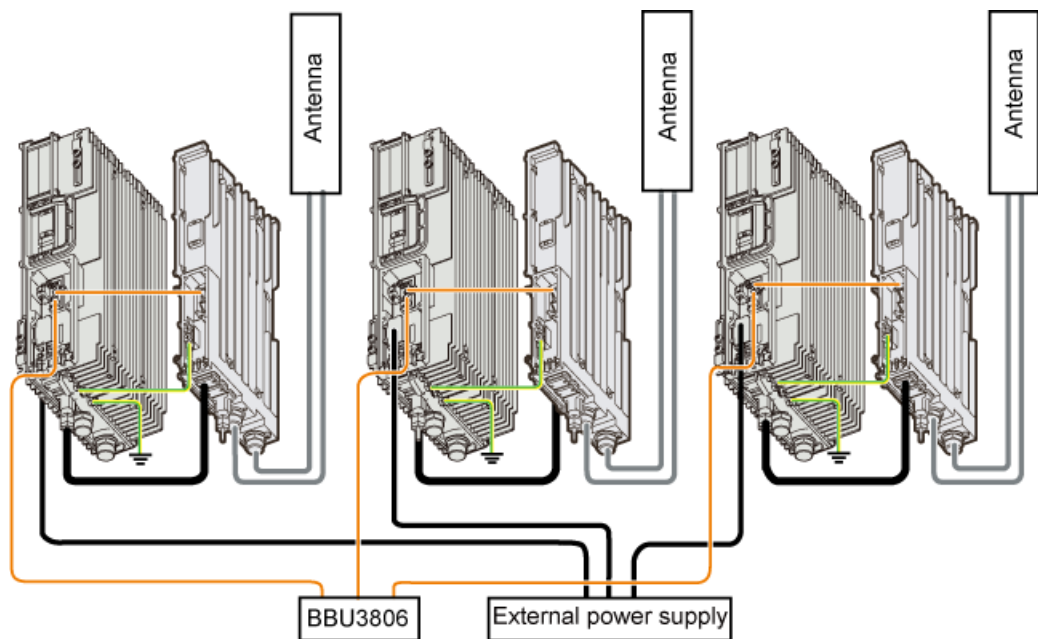
Figure 3-101 Cable connections of multiple RRU3804s without the SRXUs



NOTE

- The interconnect jumper connects two RRU3804s and implements the networking in TX diversity mode.
- Different external power supply devices are used for the RRU3804 depending on field requirements. The external power supply can be an APM, OFB, or SPD40R.

Figure 3-102 Cable connections of multiple RRU3804s with the SRXUs



 **NOTE**

- Interconnect jumper is used to implement the interconnection between combined RRU3804s or between combined SRXUs. The interconnection between the RRU3804 and the SRXU, however, cannot be implemented.

3.7.3 Installing the PGND Cable of the RRU3804/SRXU

The PGND cable ensures the grounding of the RRU3804/SRXU.

Procedure

Step 1 Route the PGND cable by referring to [3.7.1 Cabling Specifications for the NodeB](#).

Step 2 Add an OT terminal to each end of the PGND cable by referring to [Assembling the OT Terminal and the Power Cable](#).

 **NOTE**

The 2-hole OT terminal can also be added to the PGND cable. The method of adding a 2-hole OT terminal is the same that of adding an OT terminal.

Step 3 Connect the PGND cable according to field requirements.

Condition	Action
Only the RRU3804 is installed.	Connect one of the OT terminal to the grounding bolt on the RRU3804 module, as shown in Figure 3-103 .
Both the RRU3804 and the SRXU are installed.	Connect a PGND cable between the RRU3804 and the SRXU. Then, connect one of the OT terminal on the other PGND cable to the grounding bolt on the RRU3804 module, as shown in Figure 3-104 .

Figure 3-103 Connecting the PGND cable (1)

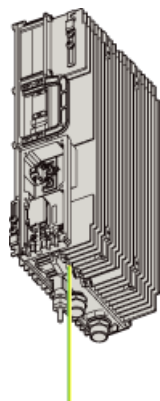
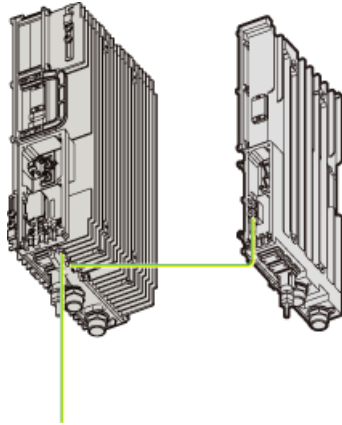


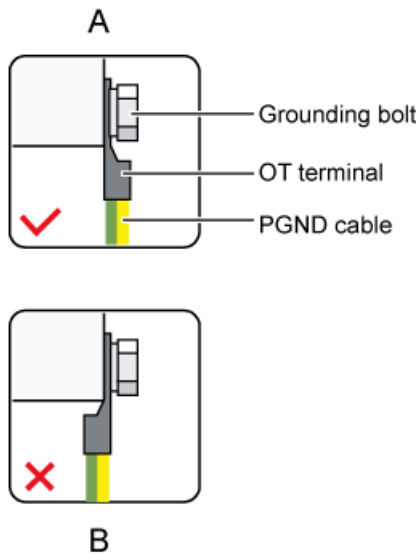
Figure 3-104 Connecting the PGND cable (2)



CAUTION

Keep the crimping tube of the OT terminal in the direction shown in [Figure 3-105](#) when installing the OT terminal.

Figure 3-105 Connecting the OT terminal



Step 4 Connect the other end of the PGND cable to the nearest grounding bolt, depending on the configuration of auxiliary devices at the site.

----End

3.7.4 Installing the -48 V DC Power Cable of the RRU3804/SRXU

The -48 V DC power cable feeds external -48 V DC power to the RRU3804/SRXU.

Context



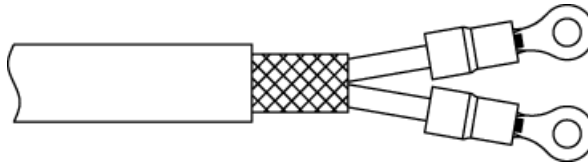
CAUTION

The DC power cable that feeds external power to the RRU3804 must be a shielded cable. Otherwise, the RRU3804 is vulnerable to damage caused by lightning stroke.

Procedure

- Step 1** Route the power cable by referring to [3.7.1 Cabling Specifications for the NodeB](#).
- Step 2** Add two OT terminals to one end of the power cable. [Figure 3-106](#) shows the power cable with two OT terminals.

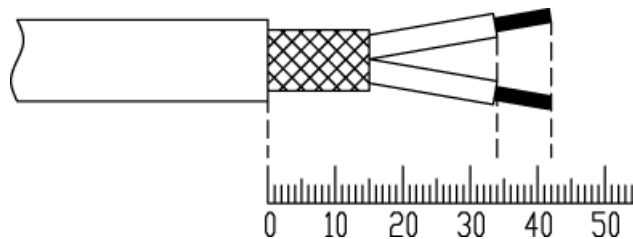
Figure 3-106 Power cable with two OT terminals



To add the OT terminals, perform the following steps:

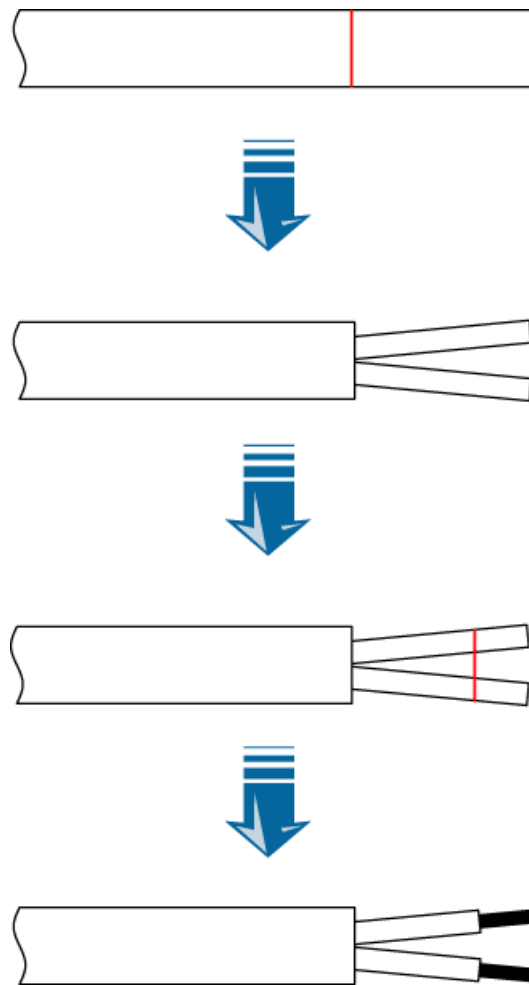
1. Determine lengths of power cable for different operation according to the scales on the cover plate of the cabling cavity, as shown in [Figure 3-107](#).

Figure 3-107 Determining lengths of power cable for different operation



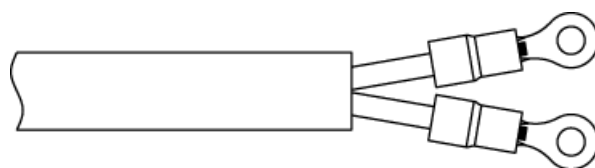
2. Based on the determined lengths, remove the jacket and shielding layer from the power cable. Then, remove the jacket of a specified length from each wire, as shown in [Figure 3-108](#).

Figure 3-108 Stripping the cable

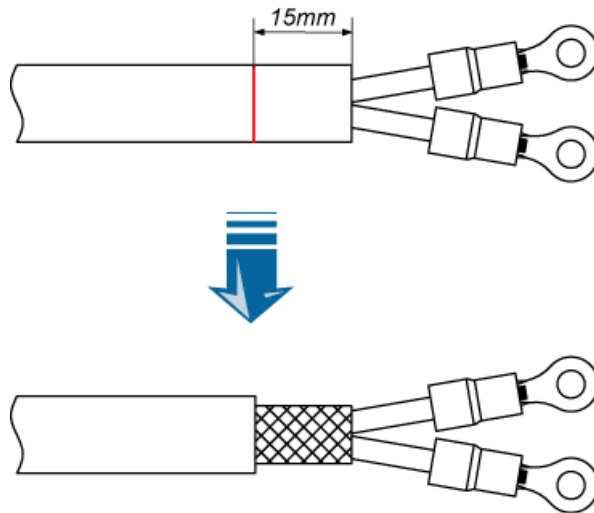


3. Add an OT terminal to each wire by referring to [Assembling the OT Terminal and the Power Cable](#). [Figure 3-109](#) shows the two OT terminals on the power cable.

Figure 3-109 Two OT terminals on the power cable

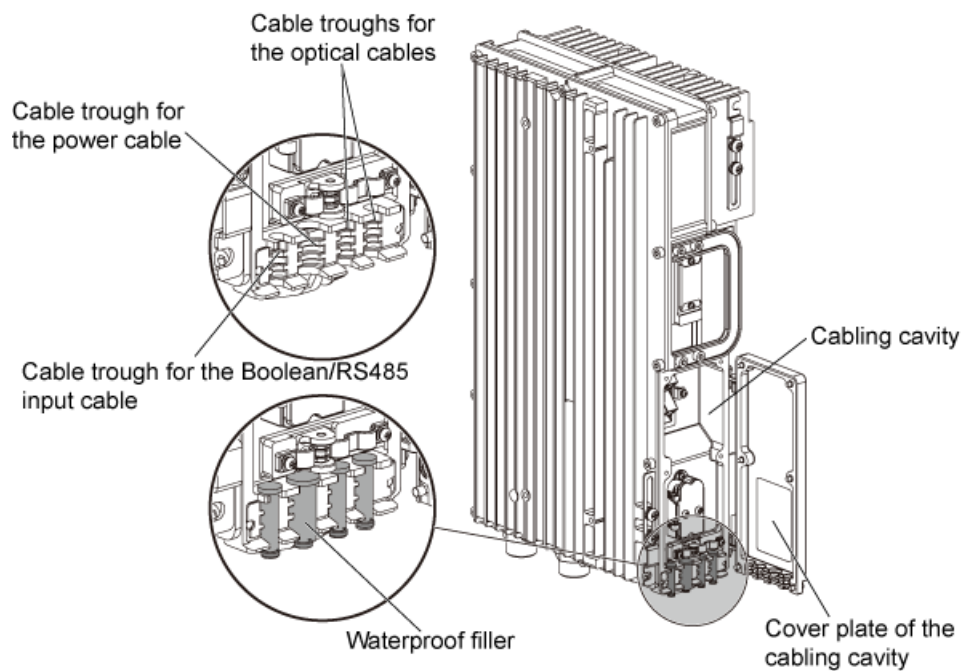


4. Remove about 15 mm jacket from the power cable. The shielding layer is exposed, as shown in [Figure 3-110](#).

Figure 3-110 Removing the jacket from the power cable**CAUTION**

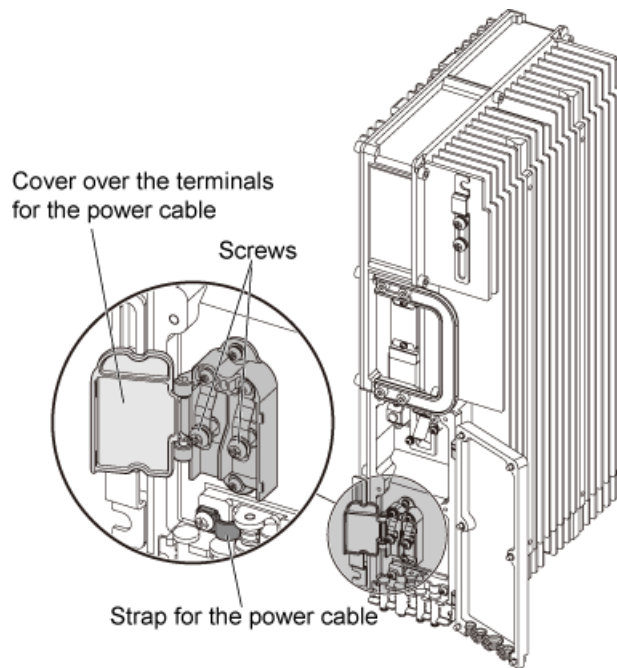
This step must be performed after the previous steps are complete. Otherwise, the exposed shielding layer would be distorted.

- Step 3** Remove the waterproof fillers from the cable troughs of the cabling cavity. Route the power cable along its dedicated cable trough. **Figure 3-111** shows the cable troughs in the cabling cavity.

Figure 3-111 Cable troughs in the cabling cavity

- Step 4** Open the cover over the terminals for the power cable, as shown in **Figure 3-112**.

Figure 3-112 Opening the cover



Step 5 Remove the screw on the strap labeled PGND. **Figure 3-112** shows the strap for the power cable.

Step 6 Press the strap on the exposed shielding layer of the power cable. Then, tighten the screw.

Step 7 Connect the OT terminal on the blue -48 V DC wire to the terminal labeled NEG(-). Connect the OT terminal on the black or brown GND wire to the terminal labeled RTN(+). Then, tighten the screws.

Step 8 Close the cover.

Step 9 Bind the -48 V DC power cable to the binding slot in the lower angle piece.

 **NOTE**

You can bind all the cables to the binding slots by using cable ties after connecting them in the cabling cavity.

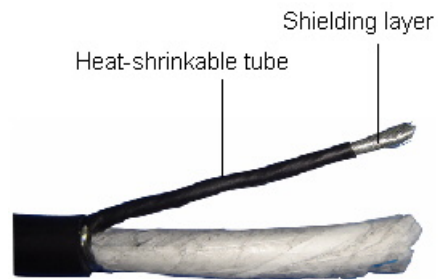
Step 10 Connect the other end of the power cable.

1. Remove about 50 mm jacket from the power cable.
2. Twist the shielding layer of the power cable into one strand, and then wrap the strand with the heat-shrinkable tube of $\Phi 5$, as shown in **Figure 3-113**.



CAUTION

Do not apply too much force lest the shielding layer be broken.

Figure 3-113 Twisting the shielding layer into one strand

3. Use a crimping connector to join the shielding layer and the PGND cable, as shown in [Figure 3-114](#).

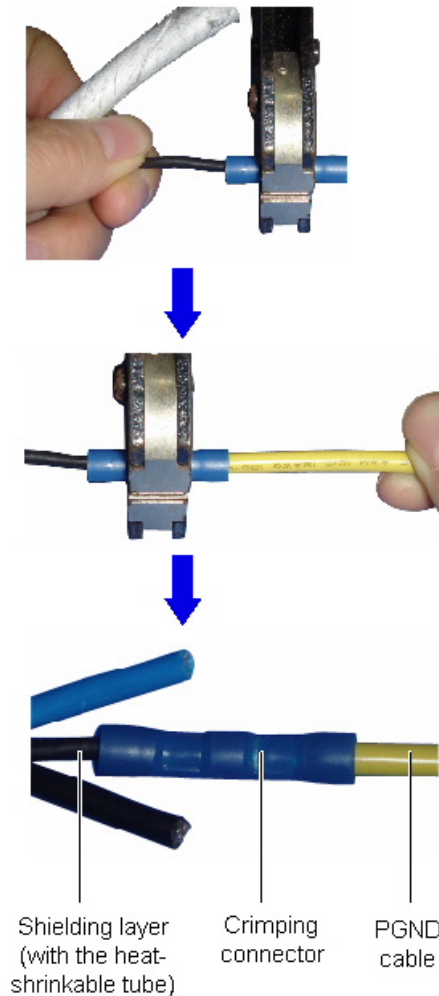
**CAUTION**

- The length of the PGND cable is 2 m at most, depending on the field requirements.
- Special tools are required for crimping the OT terminals.
- Ensure that the shielding layer is completely compressed in the crimping connector.

 NOTE

If the grounding point is less than 100 mm away from the external power supply, directly join the shielding layer and the cord end terminal. In this case, no crimping connector is required.

Figure 3-114 Crimping the shielding layer and the PGND cable



4. Add an OT terminal to the other end of the PGND cable. For details, refer to [Assembling the OT Terminal and the Power Cable](#).
5. Wrap the power cable with the heat-shrinkable tube of $\Phi 14$ at the point where the shielding layer is removed, as shown in [Figure 3-115](#).

Figure 3-115 Power cable with the heat-shrinkable tube



6. Connect the PGND cable to the shielding grounding bar of the APM.
7. Add OT terminals to the blue -48 V wire and the black GND wire, and then connect the OT terminals to the wiring terminals on the power supply.

Step 11 Check whether the power cable of the SRXU needs to be installed.

Condition	Action
The SRXU is installed.	Go to Step 12 to install the power cable of the SRXU.

Condition	Action
No SRXU is installed.	Go to Step 14 .

Step 12 Fix the waterproof DB9 connector at one end of the SRXU power cable to the RET/PWR_SRXU port at the bottom of the RRU3804.

Step 13 Fix the waterproof B9 connector at the other end of the SRXU power cable to the PWR_SRXU port at the bottom of the SRXU.

Step 14 Label the power cable by referring to [Labeling DBS3800 Cables](#).

---End

3.7.5 Installing the RF Jumper of the RRU3804/SRXU

The RF jumper of the RRU3804/SRXU is of two types: antenna jumper and interconnect jumper. The antenna jumper of the RRU3804/SRXU can be connected to the feeder or directly to the antenna. The interconnect jumper transmits RF signals between two RRU3804s/SRXUs.

Context

If the distance between the RRU3804/SRXU and the antenna is shorter than 14 m, use an antenna jumper of fixed length to connect the RRU3804/SRXU and the antenna.

For details of the connections of the RF jumpers in different networking modes, refer to [2.3.7.3 RF Cable Connections of the RRU3804](#).

NOTE

Use a torque wrench to fasten the DIN connector to 27 N·m.

Procedure

- Use the antenna jumper to connect the antenna and the RRU3804/SRXU.

NOTE

Connect the antenna jumper to the appropriate RF port according to the configurations.

Table 3-2 Connecting the antenna jumper to the appropriate RF port

Condition	Action
Only the RRU3804 is configured.	Connect one end of the antenna jumper to the RF port on the RRU3804.
Both the RRU3804 and the SRXU are configured.	Connect one end of the antenna jumper to the RF port on the SRXU.

1. Determine the position to ground the jumper by referring to [Location Requirements for Grounding the Feeder of the Mini Base Station](#).
2. Install the grounding kit at the determined position by referring to [Installing Feeder Grounding Kits](#).

3. Attach labels at the points 100 mm from each end of the antenna jumper by referring to [Labeling the DBS3800 Antenna System](#).
4. Fix the DIN connector of the antenna jumper to the appropriate RF port on the RRU3804/SRXU.
5. Wrap the joint with the PVC insulating tape.

 **NOTE**

Wrap the joint spirally upwards, downwards, and then upwards again. In other words, the joint is wrapped with three layers of insulating tape. For every two adjacent tape layers, the tape on the upper layer overlaps about half the width of the tape on the lower layer.

6. Wrap the joint with the waterproof tape in the same way over the PVC insulating tape. [Figure 3-116](#) shows the waterproofed joints.

Figure 3-116 Waterproofed joints



7. Mount the 50-ohm matched load on the idle RF port. Use the PVC insulating tape and waterproof tape to wrap the joint between the matched load and the RF port in the same way as described in the previous steps.
- Use the antenna jumper to connect the feeder and the RRU3804/SRXU.
 1. Decide a proper length of the antenna jumper according to the real cabling.
 2. Connect one end of the antenna jumper to the feeder according to the configurations.
 3. Attach labels at the points 100 mm from each end of the antenna jumper by referring to [Labeling the DBS3800 Antenna System](#).
 4. Connect the antenna jumper to the appropriate RF port according to the configurations described in [Table 3-2](#).
 5. Connect the antenna jumper to the RRU3804/SRXU by referring to [Step 4](#) through [Step 7](#) in the description about using the antenna jumper to connect the antenna to the RRU3804/SRXU.
 - Use the interconnect jumper to connect two RRU3804s/SRXUs.

**CAUTION**

Interconnection between combined cabinets is implemented exclusively between RRU3804s or between SRXUs.

1. Remove the dustproof cap from the RX_IN/OUT port at the bottom of each RRU3804/SRXU.
2. Fix the 2W2 connectors at both ends of the interconnect jumper to the RX_IN/OUT ports on the two RRU3804s/SRXUs respectively. Then, fasten the screws on the connectors using a screwdriver.

----End

3.7.6 Installing the AISG Multi-Wire Cable of the RRU3804/SRXU

The AISG multi-wire cable connects the RRU3804/SRXU to the RCU.

Procedure

- Step 1** Fix the waterproof DB9 connector at one end of the AISG multi-wire cable to the appropriate port.

Condition	Action
Only the RRU3804 is configured.	Fix the waterproof DB9 connector to the RET/PWR_SRXU port at the bottom of the RRU3804.
Both the RRU3804 and the SRXU are configured.	Fix the waterproof DB9 connector to the RET port at the bottom of the SRXU.

- Step 2** Fix the AISG female connector at the other end of the cable to the AISG male connector of the AISG extension cable or that on the RCU.

----End

3.7.7 Installing the AISG Extension Cable of the RRU3804/SRXU

If the distance between the RRU3804/SRXU and the RCU is longer than 5 m, an AISG extension cable is required.

Procedure

- Step 1** Fix the AISG male connector at one end of the AISG extension cable to the AISG female connector of the AISG multi-wire cable.
- Step 2** Fix the AISG female connector at the other end to the AISG male connector on the RCU.

----End

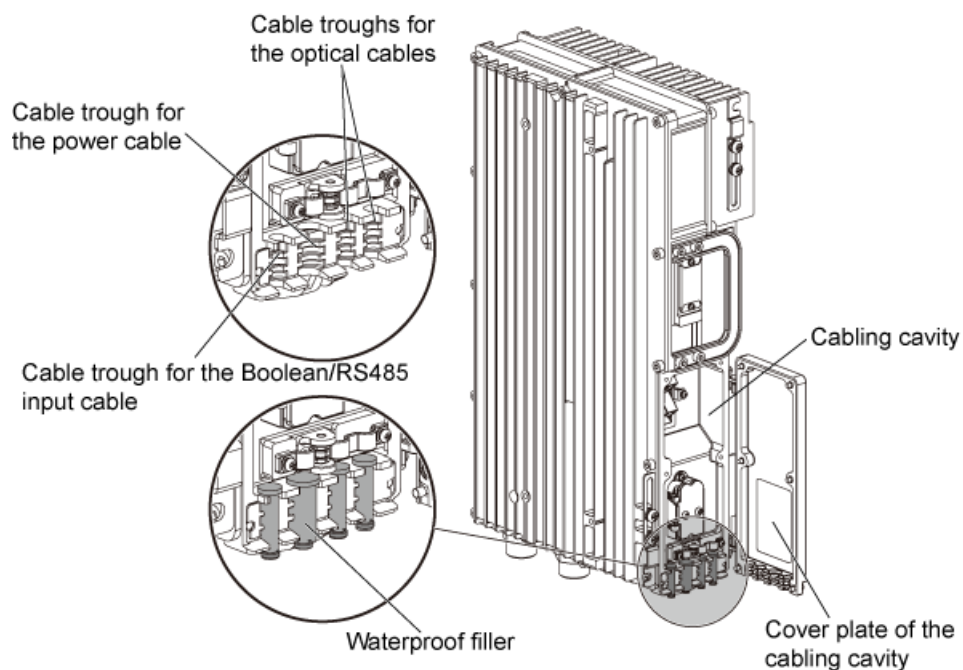
3.7.8 Installing the Boolean/RS485 Input Cable of the RRU3804

The Boolean/RS485 input cable monitors the external signals.

Procedure

- Step 1** Fit a protection tube onto the Boolean/RS485 input cable. Ensure that the cable reaches out of the protection tube in a proper length.
- Step 2** Fix the DB15 connector to the RS485/EXT_ALM on the cabling cavity of the RRU3804.
- Step 3** Remove the waterproof fillers from the cable troughs of the cabling cavity. Route the Boolean/RS485 input cable along its dedicated cable trough. **Figure 3-117** shows the cable troughs in the cabling cavity.

Figure 3-117 Cable troughs in the cabling cavity



- Step 4** Bind the Boolean/RS485 input cable to the binding slot in the lower angle piece.

NOTE

You can bind all the cables to the binding slots by using cable ties after connecting them in the cabling cavity.

- Step 5** Connect the other end of the Boolean/RS485 input cable depending on the configuration of auxiliary devices at the site.

Condition	Action
No SPD40R is used.	Connect this end to the port for Boolean alarm signals or RS485 signals on the external equipment.
An SPD40R is used.	Connect this end to the SPD40R. For details about how to connect the Boolean/RS485 input cable to the SPD40R, refer to the <i>SPD40R User Guide</i> .

- Step 6** Waterproof both ends of the protection tube.

Step 7 Label the Boolean/RS485 input cable by referring to [Labeling DBS3800 Cables](#).

---End

3.7.9 Opening and Closing the Cover Plate of the RRU3804 Cabling Cavity

Before installing the -48 V DC power cable, CPRI optical cable, and Boolean input cable, you need to open the cover plate of the RRU3804 cabling cavity. When the cables are connected to the module, close the cover plate.

[3.7.9.1 Opening the Cover Plate of the RRU3804 Cabling Cavity](#)

This describes how to open the cover plate of the RRU3804 cabling cavity before installing the -48 V DC power cable, CPRI optical cable, and Boolean input cable.

[3.7.9.2 Closing the Cover Plate of the RRU3804 Cabling Cavity](#)

This describes how to close the cover plate of the RRU3804 cabling cavity after checking the hardware installation.

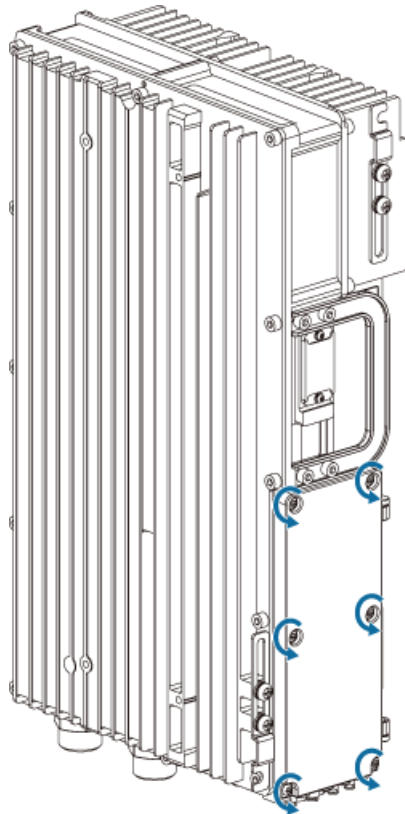
Opening the Cover Plate of the RRU3804 Cabling Cavity

This describes how to open the cover plate of the RRU3804 cabling cavity before installing the -48 V DC power cable, CPRI optical cable, and Boolean input cable.

Procedure

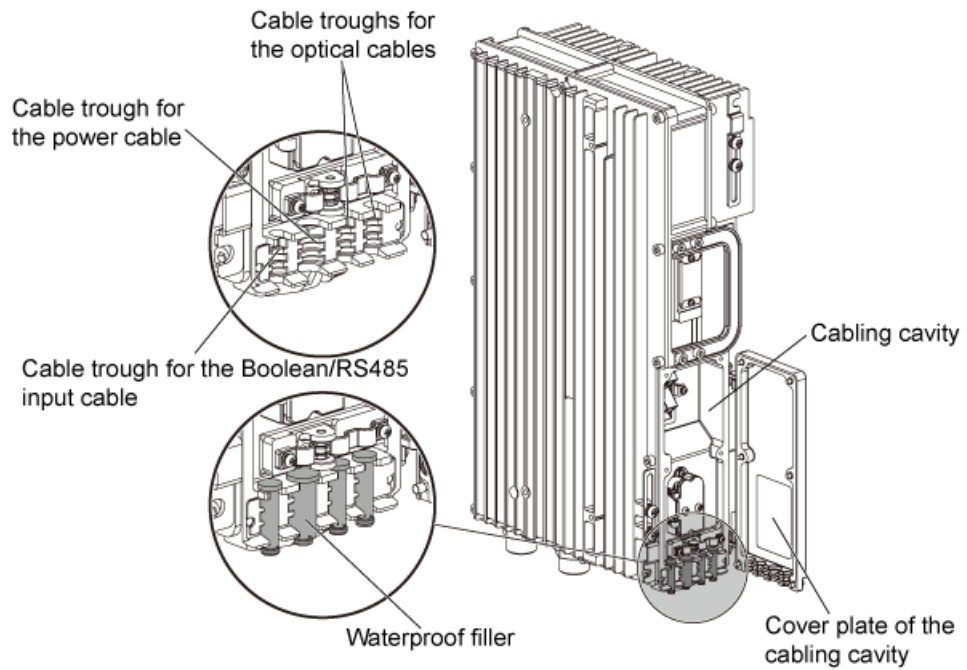
Step 1 Loosen the six captive screws on the cabling cavity, as shown in [Figure 3-118](#).

Figure 3-118 Loosening the six captive screws



Step 2 Open the cover plate, as shown in [Figure 3-119](#).

Figure 3-119 Opening the cover plate



**CAUTION**

Waterproof fillers are pre-installed in the cable troughs. Keep the idle fillers for later use.

----End

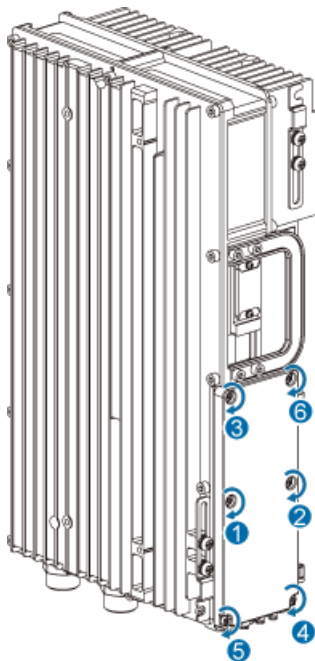
Closing the Cover Plate of the RRU3804 Cabling Cavity

This describes how to close the cover plate of the RRU3804 cabling cavity after checking the hardware installation.

Procedure

- Step 1** Close the cover plate.
- Step 2** Tighten the screws in the order as shown in [Figure 3-120](#).

Figure 3-120 Tightening the screws

**CAUTION**

Use a torque wrench to fasten the screws to 14 N·m.

----End

3.7.10 Opening and Closing the Cover Plate of the SRXU Cabling Cavity

Before installing the CPRI optical cable and PGND cable, you need to open the cover plate of the SRXU cabling cavity. When the cables are connected to the module, close the cover plate.

3.7.10.1 Opening the Cover Plate of the SRXU Cabling Cavity

This describes how to open the cover plate of the SRXU cabling cavity before installing the CPRI optical cable and PGND cable.

3.7.10.2 Closing the Cover Plate of the SRXU Cabling Cavity

This describes how to close the cover plate of the SRXU cabling cavity after checking the hardware installation.

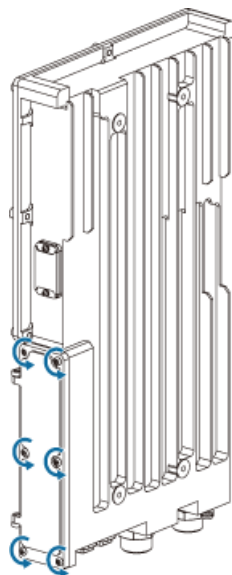
Opening the Cover Plate of the SRXU Cabling Cavity

This describes how to open the cover plate of the SRXU cabling cavity before installing the CPRI optical cable and PGND cable.

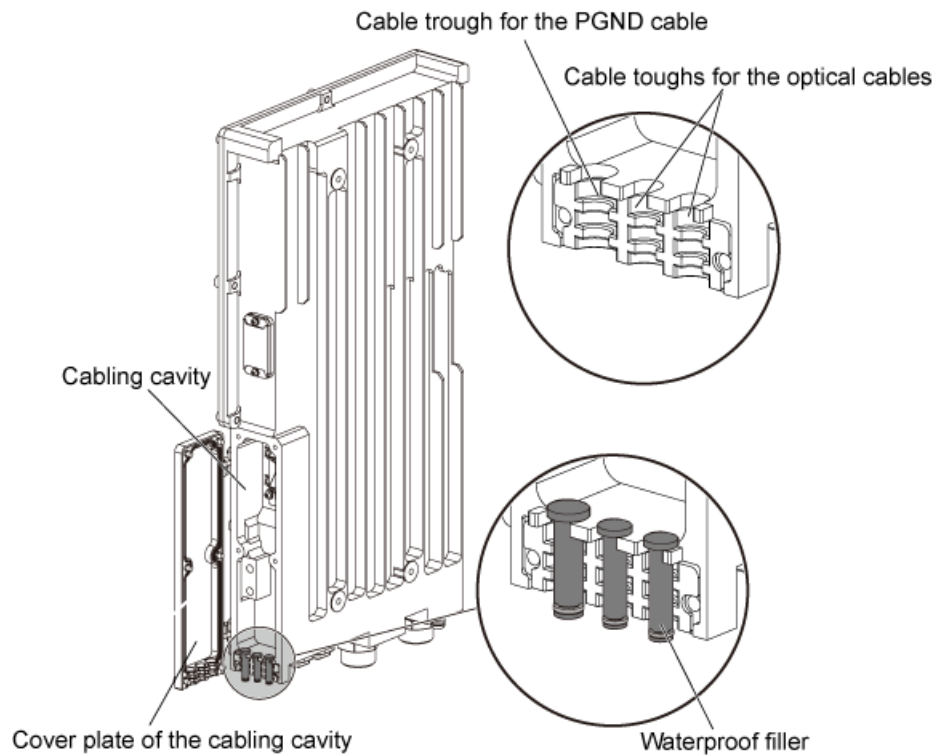
Procedure

- Step 1** Loosen the six captive screws on the cabling cavity, as shown in [Figure 3-121](#).

Figure 3-121 Loosening the six captive screws



- Step 2** Open the cover plate, as shown in [Figure 3-122](#).

Figure 3-122 Opening the cover plate**CAUTION**

Waterproof fillers are pre-installed in the cable troughs. Keep the idle fillers for later use.

----End

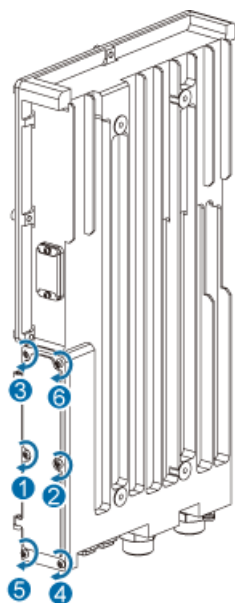
Closing the Cover Plate of the SRXU Cabling Cavity

This describes how to close the cover plate of the SRXU cabling cavity after checking the hardware installation.

Procedure

- Step 1** Close the cover plate.
- Step 2** Tighten the screws in the order as shown in [Figure 3-123](#).

Figure 3-123 Tightening the screws



CAUTION

Use a torque wrench to fasten the screws to 14 N·m.

----End

3.8 Checking RRU3804 and SRXU Hardware Installation

This describes how to check the power-on status, hardware installation, and field cleanliness for the RRU3804 and SRXU.

Prerequisite

- The RRU3804 and SRXU hardware is installed.
- The power switch of the primary power supply to the RRU3804 and SRXU is set to OFF.

Procedure

- Step 1** Check RRU3804 and SRXU hardware installation by referring to [3.8.2 Checklist for RRU3804 and SRXU Hardware Installation](#). Modify the items that fail to comply with the checklist until they meet the requirements.
- Step 2** Check the power-on status of the RRU3804 and SRXU by referring to [3.8.1 Checking the Power-On Status of the RRU3804 and SRXU](#).
- Step 3** Check field cleanliness by referring to [3.8.3 Checklist for Field Cleanliness of RRU3804 and SRXU Installation](#). Modify the items that fail to comply with the checklist until they meet the requirements.

----End

3.8.1 Checking the Power-On Status of the RRU3804 and SRXU

This describes how to check the power-on status of the RRU3804 and SRXU through the input voltage and LED status.

Prerequisite

- The power switch of the primary power supply to the RRU3804 and SRXU is set to OFF.

Context



DANGER

Before powering on the equipment, set the power switches to OFF. This ensures both personal and equipment safety.

Procedure

Step 1 Measure the power supply voltage of the RRU3804 and SRXU. If DC power is used, the input voltage should range from -40 V DC to -60 V DC .

Step 2 Turn on the power switch of the RRU3804 and SRXU.



DANGER

When powering on the RRU3804 and SRXU, do not look straight at the port on the ESFP optical module if the transmission device is not installed.

Step 3 Check the status of the RUN LED on the cabling cavity in three to five minutes.

Status	Description	Action
ON	The module has power input, yet the module is faulty.	Power off the RRU3804 and SRXU. Clear the fault, and then power on the RRU3804 and SRXU again.
OFF	The module has no power input, or the module is faulty.	Power off the RRU3804 and SRXU and check the input power. If the input power is normal, you need to clear the fault in the equipment and power on the RRU3804 and SRXU again.
1s ON, 1s OFF	The module is running as configured.	End the check.

Status	Description	Action
0.5s ON, 0.5s OFF	Software is being loaded to the module, or the module is not configured.	Wait until the software is loaded. If the loading does not end in five minutes, power off the RRU3804 and SRXU and check whether the data configuration file is correct. After the fault is cleared, power on the module again.

---End

3.8.2 Checklist for RRU3804 and SRXU Hardware Installation

This describes the checklists for equipment installation and cable connections.

Checklist for Equipment Installation

Table 3-3 Checklist for equipment installation

SN	Item
1	The position of each equipment accords with the engineering design and meets the space requirement.
2	For the RRU3804 in pole installation mode, the fixture assemblies are tight and steady, and the mounting plate is securely installed without any twist.
3	For the RRU3804 in wall installation mode, the holes on the mounting plate are well aligned with those for expansion bolts, and the mounting plate is placed against the wall securely and evenly.
4	In wall installation modes, the RRU3804 is secure and steady.
5	The cover plate is fastened to the cabling cavity of the RRU3804/SRXU.
6	The empty cable troughs in the cabling cavity of the RRU3804/SRXU are waterproofed.
7	On the RRU3804/SRXU, the RF ports that are not connected with RF cables are capped and waterproofed.
8	The waterproof caps at the bottom of the module are bound with the cables nearby.
9	The housing is properly secured.
10	When the RRU3804/SRXU is operational, the LEDs on the door of the AC SPD40R are ON and the door of the AC SPD40R is locked.
11	The RRU3804/SRXU surface is clean and neat. The external paint is satisfactory.
12	Labels, tags, and nameplates are correct, legible, and complete.

Checklist for Power Cable and PGND Cable Connections

Table 3-4 Checklist for the power cable and PGND cable connections

SN	Item
1	The PGND cables are yellow or green and yellow, the GND cables are black or brown, and the -48 V power cables are blue.
2	No power cable or PGND cable is short-circuited or reversely connected.
3	The power cable and the PGND cable are separated from other cables.
4	Labels are attached to both ends of the power cable and PGND cable.
5	The power cable or the PGND cable is not scratched or broken.
6	No joint lies in the middle of the power cable or the PGND cable.
7	No breaking device such as switch and fuse lies in the electric connection of the grounding system.
8	The redundant part of the power cable or PGND cable is stripped off rather than coiled.
9	The lugs at both ends of the power cable or the PGND cable are securely soldered or crimped.
10	The bare wires and lug at the wiring terminals are tightly wrapped up by using insulating tapes or heat-shrink tubes.
11	The flat washers and spring washers are well mounted to all wiring terminals.
12	The working ground, protecting ground of the NodeB, and the lightning protection ground of the building share one group of the grounding bodies.

Checklist for Signal Cable Connections

Table 3-5 Checklist for signal cable connections

SN	Item
1	The connectors of signal cables are tight and secure.
2	The connectors of signal cables are intact.
3	Signal cables are not scratched or broken.
4	Signal cables are neatly bound with ties installed at even intervals and to a proper tightness.
5	Extra cable ties are cut off. All cuts are smooth without sharp projections.
6	The cables layout facilitates maintenance and expansion.
7	Both ends of each cable are correctly and clearly labeled.

3.8.3 Checklist for Field Cleanliness of RRU3804 and SRXU Installation

After the RRU3804 and SRXU is installed, you must check the field cleanliness for better engineering quality.

Table 3-6 Checklist for field cleanliness

SN	Item
1	There are no unnecessary tapes, ties, wastepaper, or packing bags at the site.
2	No fingerprints or other smears are left on the surfaces of the RRU3804, SRXU, and other related devices.

3.9 Installing the Housing of the RRU3804 and SRXU

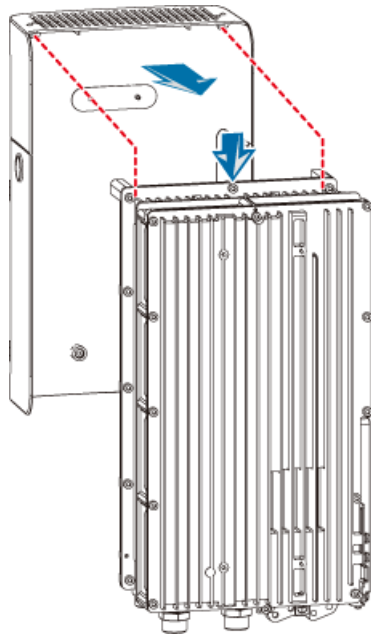
After the SRXU is fixed to the RRU3804, install the housing after checking the hardware installation.

Context

When loading the software and commissioning the module, you may need to check the operating status of the module through the cover plate of the cabling cavity. Therefore, you can install the housing after system commissioning.

Procedure

- Step 1** Install the housing by fitting the tabs into the anchor slots in the module, as shown in [Figure 3-124](#).

Figure 3-124 Installing the housing

Step 2 Use two bolts M6 x 14 to secure the housing, as shown in [Figure 3-125](#).

Figure 3-125 Securing the housing

---End

4 Maintaining RRU3804 and SRXU Hardware

About This Chapter

After the RRU3804 and SRXU are deployed, accepted, and put into use, routine maintenance is performed to ensure the functionality of the modules.

[4.1 Equipment Maintenance Items for the DBS3800](#)

The equipment maintenance items for the DBS3800 involve the fans, surface, cleanliness, and LEDs on the equipment.

[4.2 Powering On/Off the RRU3804/SRXU](#)

This describes how to power on/off the module. During power-on, the status of the LEDs on the module should be checked. If the SRXU is fixed to the RRU3804, the modules must be powered on/off at the same time.

[4.3 Replacing an RRU3804](#)

This describes how to replace an RRU3804. The RRU3804, a remote radio unit, forms a DBS3800 system together with the BBU. Replacing an RRU3804 interrupts all the services carried by the RRU3804.

[4.4 Replacing an SRXU](#)

This describes how to replace an SRXU. The SRXU is a remote radio unit that is used for capacity expansion of the carriers. It forms a DBS3800 system together with other modules such as RRU3804 and BBU. Replacing an SRXU interrupts all the services carried by the SRXU and the corresponding RRU3804.

[4.5 Replacing RRU3804 and SRXU Cables](#)

This describes how to replace the cables of the RRU3804 and SRXU. The faulty cables must be replaced in time. The cables that can be replaced are the transmission cables, signal cables, and RF cables.

4.1 Equipment Maintenance Items for the DBS3800

The equipment maintenance items for the DBS3800 involve the fans, surface, cleanliness, and LEDs on the equipment.

Equipment Maintenance Items

Table 4-1 describes the equipment maintenance items for the DBS3800.

Table 4-1 Equipment maintenance items for the DBS3800

Item	Frequency	Guidelines	Reference Standard
Fan check (for the BBU3806 only)	Weekly, monthly, or quarterly	Check the fans.	No alarm related to the fan is reported.
Surface check	Monthly or quarterly	Check whether the surface of each equipment is impaired and whether the label of each equipment is legible.	-
Cleanliness check	Monthly or quarterly	Check whether every equipment is clean.	The surface and inside of the equipment are clean.
LED check	Monthly or quarterly	Check whether the LEDs on each equipment are functional.	For information of the LEDs, refer to <i>DBS3800 Hardware Description</i> .

4.2 Powering On/Off the RRU3804/SRXU

This describes how to power on/off the module. During power-on, the status of the LEDs on the module should be checked. If the SRXU is fixed to the RRU3804, the modules must be powered on/off at the same time.

4.2.1 Powering on the RRU3804/SRXU

This describes how to power on the RRU3804/SRXU. The RRU3804, supplied with -48 V DC power, feeds power to the SRXU through a power cable.

4.2.2 Powering off the RRU3804/SRXU

This describes how to power off the RRU3804/SRXU. The RRU3804/SRXU should be powered off if you need to move the equipment or anticipate a territorial blackout or if there is an emergency such as fire hazard, smoke, or water immersion.

4.2.1 Powering on the RRU3804/SRXU

This describes how to power on the RRU3804/SRXU. The RRU3804, supplied with -48 V DC power, feeds power to the SRXU through a power cable.

Prerequisite

Ensure that the input voltage to the RRU3804 stays within the range of -37 V DC to -60 V DC.

Procedure

- Step 1** Turn on the power switch of the external power supply to the RRU3804/SRXU.
- Step 2** Check the status of the LEDs on the cabling cavity of the RRU3804. [Table 4-2](#) describes the LEDs and their status.

Table 4-2 LEDs on the RRU3804

LED	Color	Status	Description
RUN	Green	ON	The module has power input, yet the module is faulty.
		OFF	The module has no power input, or the module is faulty.
		1s ON, 1s OFF	The module is running as configured.
		0.5s ON, 0.5s OFF	Software is being loaded to the module, or the module is not configured.
ALM	Red	ON	The module is reporting alarms (excluding VSWR-related alarms).
		OFF	The module is operational.

- Step 3** Check the status of the LEDs on the cabling cavity of the SRXU. [Table 4-3](#) describes the LEDs and their status.

Table 4-3 LEDs on the SRXU

LED	Color	Status	Description
RUN	Green	ON	The module has power input, yet the module is faulty.
		OFF	The module has no power input, or the module is faulty.
		1s ON, 1s OFF	The module is running as configured.
		0.5s ON, 0.5s OFF	Software is being loaded to the module, or the module is not configured.
ALM	Red	ON	The module is reporting alarms (excluding VSWR-related alarms).
		OFF	The module is operational.

Step 4 Perform the next step based on the status of the LEDs.

Condition	Action
The RRU3804/SRXU is operational.	End the power-on task.
The RRU3804/SRXU is faulty.	Clear the fault, and then go to Step 1 .

----End

4.2.2 Powering off the RRU3804/SRXU

This describes how to power off the RRU3804/SRXU. The RRU3804/SRXU should be powered off if you need to move the equipment or anticipate a territorial blackout or if there is an emergency such as fire hazard, smoke, or water immersion.

Procedure

Turn off the power switch of the external power supply to the RRU3804/SRXU.

----End

4.3 Replacing an RRU3804

This describes how to replace an RRU3804. The RRU3804, a remote radio unit, forms a DBS3800 system together with the BBU. Replacing an RRU3804 interrupts all the services carried by the RRU3804.

Prerequisite

- The quantity and models of the faulty RRU3804s are checked, and new RRU3804s are ready.
- The installation position of each RRU3804 is recorded.
- The position of each screw on the RRU3804s is recorded.
- The connections of each RRU3804 cable are recorded.
- The tool kit is ready.

Context

It takes about 30 minutes to replace an RRU3804. The time covers the activities of disconnecting the cables from the faulty RRU3804, connecting the cables to the new RRU3804, and resuming the services.



CAUTION

Wear an ESD wrist strap or ESD gloves when performing the operation.

Procedure

Step 1 Remove the housing of the RRU3804.

 **NOTE**

If the SRXU is fixed to the RRU3804, you also need to remove the SRXU. For details, refer to [4.4 Replacing an SRXU](#).

Step 2 Power off the RRU3804. For details, refer to [4.2.2 Powering off the RRU3804/SRXU](#).

Step 3 Disconnect all the cables from the faulty RRU3804 and take appropriate insulation measures for the cables.

Step 4 Remove the two screws M6 x 20 at the bottom of the mounting plate.

 **NOTE**

If the RRU3804 to be replaced is the right one in two-module centralized mode or the middle one in three-module centralized mode, you also need to remove the multi-purpose attachment plate at the bottom of the mounting plate. The right RRU3804 in two-module centralized mode is installed in ordinary mode.

Step 5 Unhitch the tabs on the attachment plate from the anchor slots in the mounting plate. Then, remove the RRU3804.

Step 6 Remove the three screws M6 x 20 that fasten the attachment plate.

Step 7 Take out a new RRU3804.

Step 8 Use the three screws M6 x 20 to secure the attachment plate on the new RRU3804.

Step 9 Install the RRU3804 module by fitting the tabs on the attachment plate into the anchor slots in the mounting plate.

Step 10 Use the two screws M6 x 20 to secure the RRU3804 on the mounting plate.

Step 11 Connect all the cables to the new RRU3804.

 **NOTE**

If the SRXU is fixed to the RRU3804, you also need to install the SRXU. For details, refer to [3.6 Installing the SRXU](#). Then, connect all the cables to the new RRU3804.

Step 12 Power on the RRU3804. For details, refer to [4.2.1 Powering on the RRU3804/SRXU](#).

Step 13 Install the housing.

----End

Postrequisite

After replacing the faulty RRU3804, check the following items:

- The new RRU3804 is properly installed.
- All the cables on the new RRU3804 are properly connected.
- Each screw on the new RRU3804 is installed in the correct position and all screws are fastened.
- The new RRU3804 is functional after being powered on.

Contact the Huawei local office to handle the faulty RRU3804.

4.4 Replacing an SRXU

This describes how to replace an SRXU. The SRXU is a remote radio unit that is used for capacity expansion of the carriers. It forms a DBS3800 system together with other modules such as RRU3804 and BBU. Replacing an SRXU interrupts all the services carried by the SRXU and the corresponding RRU3804.

Prerequisite

- The quantity and models of the faulty SRXUs are checked, and new SRXUs are ready.
- The installation position of each SRXU is recorded.
- The position of each screw on the SRXUs is recorded.
- The connections of each SRXU cable are recorded.
- The tool kit is ready.

Context

It takes about 30 minutes to replace an SRXU. The time covers the activities of disconnecting the cables from the faulty SRXU, connecting the cables to the new SRXU, and resuming the services.



CAUTION

Wear an ESD wrist strap or ESD gloves when performing the operation.

Procedure

- Step 1** Remove the housing.
- Step 2** Power off the SRXU. For details, refer to [4.2.2 Powering off the RRU3804/SRXU](#).
- Step 3** Disconnect all the cables from the faulty SRXU and take appropriate insulation measures for the cables.
- Step 4** Remove the two screws M6 x 20.
- Step 5** Separate the SRXU from the RRU3804.
- Step 6** Take out a new SRXU.
- Step 7** Install the new SRXU in its original position.
- Step 8** Use the two screws M6 x 20 to secure the SRXU on the RRU3804.
- Step 9** Connect all the cables to the new SRXU.
- Step 10** Power on the SRXU. For details, refer to [4.2.1 Powering on the RRU3804/SRXU](#).
- Step 11** Install the housing.

----End

Postrequisite

Check the following items after replacing the faulty SRXU:

- The new SRXU is properly installed.
- All the cables on the new SRXU are properly connected.
- Each screw on the new SRXU is installed in the correct position and all screws are fastened.
- The new SRXU is functional after being powered on.

Contact the Huawei local office to handle the faulty SRXU.

4.5 Replacing RRU3804 and SRXU Cables

This describes how to replace the cables of the RRU3804 and SRXU. The faulty cables must be replaced in time. The cables that can be replaced are the transmission cables, signal cables, and RF cables.

Context

NOTE

Contact Huawei engineers for confirmation if:

- You choose to prepare the devices, cables, and connectors by yourself.
- You need to cut the cable in specified length.

[4.5.1 Replacing the CPRI Optical Cable](#)

Replacing the optical cable interrupts the services carried over the cable.

[4.5.2 Replacing the RF Jumper of the RRU/SRXU](#)

The RF jumper of the RRU/SRXU is of two types: feeder jumper and interconnect jumper. You should power off the RRU/SRXU before replacing the RF jumper.

[4.5.3 Replacing the AISG Multi-Wire Cable of the RRU/SRXU](#)

The AISG multi-wire cable connects the RRU/SRXU to the Remote Control Unit (RCU). You should power off the RRU/SRXU before replacing the AISG multi-wire cable.

[4.5.4 Replacing the AISG Extension Cable of the RRU/SRXU](#)

If the distance between the RRU/SRXU and the RCU is too long for the AISG multi-wire cable to connect the two devices, an AISG extension cable should be used. You should power off the RRU/SRXU before replacing the AISG extension cable.

4.5.1 Replacing the CPRI Optical Cable

Replacing the optical cable interrupts the services carried over the cable.

Prerequisite

- The quantity and types of the faulty optical cables are confirmed, and new optical cables are ready.
- The new cables are in good condition. Damaged cables cannot be used.
- The connections of each optical cable are recorded.

- The tools and materials are ready. The tools and materials are the ESD wrist strap or gloves, cross screwdriver, straight screwdriver, ESD box or bag, dustfree cotton cloth, fiber cleaner, and key to the cabinet.

Context

It takes about five minutes to replace a CPRI optical cable. The time covers the activities of removing the faulty optical cable, installing the new optical cable, and recovering the CPRI links.



CAUTION

Wear an ESD wrist strap or a pair of ESD gloves when performing the operation.



CAUTION

Do not point the optical cable at your eyes after removing the connector of the optical cable from the optical module.

Procedure

- Step 1** Lead the new CPRI optical cable to the peer device along the route of the faulty cable.
- Step 2** Press the latch on the connector of the faulty optical cable. Then pull the connector out of the optical module.
- Step 3** Put the faulty optical cable into an ESD box.
- Step 4** Plug the connector of the new optical cable into the same optical module according to the label on the optical cable.
- Step 5** Bind the new optical cable.

----End

Postrequisite

Check the following items after replacing the faulty CPRI optical cable:

- The new optical cable is well installed and its type is correct.
- On the M2000 or LMT, the related alarms are cleared.

Contact the Huawei local office to handle the faulty optical cable.

4.5.2 Replacing the RF Jumper of the RRU/SRXU

The RF jumper of the RRU/SRXU is of two types: feeder jumper and interconnect jumper. You should power off the RRU/SRXU before replacing the RF jumper.

Prerequisite

- The quantity and models of the faulty RF jumpers are confirmed and new RF jumpers are ready.
- The tools and materials are ready. The tools and materials are the key to the RRU/SRXU housing, ESD gloves, and screwdriver.

Context

The RF jumper of the RRU/SRXU is of two types: feeder jumper and interconnect jumper.

- The feeder jumper inputs and outputs RF signals.
- The interconnect jumper transmits RF signals between two RRU/SRXUs.



CAUTION

Wear an ESD wrist strap or ESD gloves when performing the operation.

Procedure

Step 1 Remove the housing.

Step 2 Turn off the power switch of the RRU/SRXU.



NOTE
This step is omitted in replacing the RF Jumper of the RRU3804/SRXU.

Step 3 Remove the faulty RF jumper from the RF port on the RRU/SRXU.

Step 4 Remove the faulty RF jumper from the RF port on the antenna system.

Step 5 Fix the waterproof connector of the new RF jumper to the RF port on the RRU/SRXU.

Step 6 Wrap the joint with the PVC insulating tape.



NOTE
Wrap the joint spirally upwards, downwards, and then upwards again. In other words, the joint is wrapped with three layers of insulating tape. For every two adjacent tape layers, the tape on the upper layer overlaps about half the width of the tape on the lower layer.

Step 7 Wrap up the waterproof tape with the PVC insulating tape in the same way.

Step 8 Mount the 50-ohm matched load on the idle RF port. Use the PVC insulating tape and waterproof tape to wrap the joint between the matched load and the RF port in the same way as described in the previous steps.

Step 9 Connect the RF jumper to the antenna system.

Step 10 Turn on the power switch of the RRU/SRXU.



NOTE
This step is omitted in replacing the RF Jumper of the RRU3804/SRXU.

Step 11 Install the housing after ensuring that the RRU/SRXU is operational.

---End

Postrequisite

Check the following items after replacing the faulty RF jumper:

- The RF jumper is tightly connected to the antenna system.
- The RF jumper is tightly connected to the RRU/SRXU.
- The RRU/SRXU is operational after being powered on.

Contact the Huawei local office to handle the faulty RF jumper.

4.5.3 Replacing the AISG Multi-Wire Cable of the RRU/SRXU

The AISG multi-wire cable connects the RRU/SRXU to the Remote Control Unit (RCU). You should power off the RRU/SRXU before replacing the AISG multi-wire cable.

Prerequisite

- The quantity of faulty AISG multi-wire cables is confirmed, and new AISG multi-wire cables are ready.
- The tools and materials are ready. The tools and materials are the key to the RRU/SRXU housing, ESD gloves, and screwdriver.

Context

One end of the AISG multi-wire cable is a waterproof DB9 connector, and the other end is a standard 8-pin AISG female connector.



CAUTION

Wear an ESD wrist strap or ESD gloves when performing the operation.

Procedure

Step 1 Remove the housing.

Step 2 Turn off the power switch of the RRU/SRXU.

NOTE

This step is omitted in replacing the AISG multi-wire cable of the RRU3804 or SRXU.

Step 3 Remove the waterproof DB9 connector of the faulty AISG multi-wire cable from the RET port on the RRU/SRXU.

Step 4 Install the new AISG multi-wire cable. Reference about the installation of a new AISG multi-wire cable is based on the actual configuration of the RRUs.

Condition	Action
The RRU3801C is configured.	Refer to Installing the AISG Multi-Wire Cable of the RRU3801C .

Condition	Action
The RRU3804/SRXU is configured.	Refer to 3.7.6 Installing the AISG Multi-Wire Cable of the RRU3804/SRXU .

Step 5 Turn on the power switch of the RRU/SRXU.

Step 6 Install the housing after ensuring that the RRU/SRXU is operational.

----End

Postrequisite

Check the following items after replacing the faulty AISG multi-wire cable:

- The AISG multi-wire cable is tightly connected to the RCU.
- The RRU/SRXU is operational after being powered on.

Contact the Huawei local office to handle the faulty AISG multi-wire cable.

4.5.4 Replacing the AISG Extension Cable of the RRU/SRXU

If the distance between the RRU/SRXU and the RCU is too long for the AISG multi-wire cable to connect the two devices, an AISG extension cable should be used. You should power off the RRU/SRXU before replacing the AISG extension cable.

Prerequisite

- The quantity of the faulty AISG extension cables is confirmed, and new AISG extension cables are ready.
- The tools and materials are ready. The tools and materials are the key to the RRU/SRXU housing, ESD gloves, and screwdriver.

Context



CAUTION

Wear an ESD wrist strap or ESD gloves when performing the operation.

Procedure

Step 1 Remove the housing.

Step 2 Turn off the power switch of the RRU/SRXU.

NOTE

This step is omitted in replacing the AISG extension cable of the RRU3804 or SRXU.

Step 3 Remove the AISG female connector of the faulty AISG extension cable from the AISG male connector on the RCU.

- Step 4** Remove the AISG female connector of the AISG multi-wire cable from the AISG male connector of the faulty AISG extension cable.
- Step 5** Fix the AISG male connector of the new AISG extension cable to the AISG female connector of the AISG multi-wire cable.
- Step 6** Fix the AISG female connector of the new AISG extension cable to the AISG male connector on the RCU.
- Step 7** Turn on the power switch of the RRU/SRXU.
- Step 8** Install the housing after ensuring that the RRU/SRXU is operational.

---End

Postrequisite

Check the following items after replacing the faulty AISG extension cable:

- The AISG multi-wire cable to the RRU/SRXU is tightly connected to the AISG extension cable.
- The AISG extension cable is tightly connected to the RCU.
- The RRU/SRXU is operational after being powered on.

Contact the Huawei local office to handle the faulty AISG extension cable.

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