

WARNING

Keep protective caps in place when connectors are not in use.
Opening the unit invalidates the warranty and IP rating. There are no user serviceable components inside the unit.
Do not apply more than 10 psi water pressure to the unit.



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A04049_03_E00_00 SO-269-1000512_rev04 HBM: public

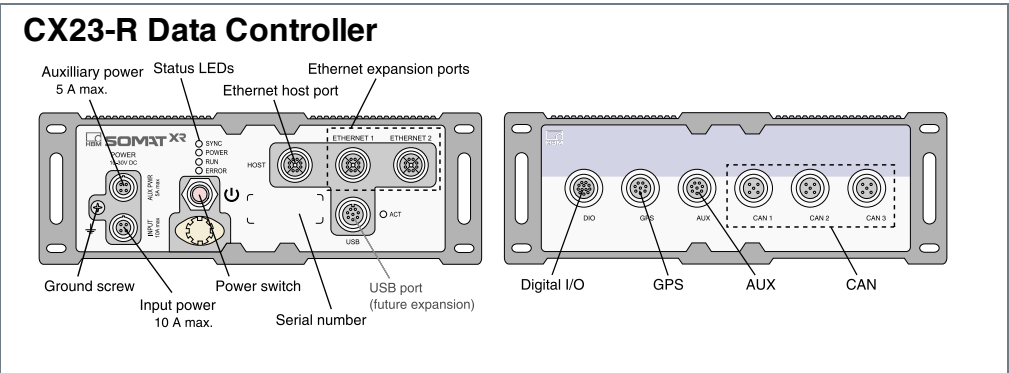


CX23-R Quick Start Guide



In the Box

- CX23-R unit with dust caps
- 1-KAB2115-2 power cable
- 1-KAB2106-2 Ethernet cable
- USB flash drive
- SomatXR Safety Manual
- CX23-R Quick Start Guide



CX23-R Status LEDs

SYNC (blue)

- | | |
|--------|--|
| Off | At least one networked module is not synchronized. |
| 0.5 Hz | All networked modules are synchronized. |

POWER (green)

- | | |
|------|---|
| Off | Unit is off. |
| On | Unit is on and ready. Preceding sequence of LEDs flashing indicates the system is loaded. |
| 4 Hz | Unit is shutting down, rebooting or updating firmware. |
| 2 Hz | Unit is in locate mode. |

RUN (yellow)

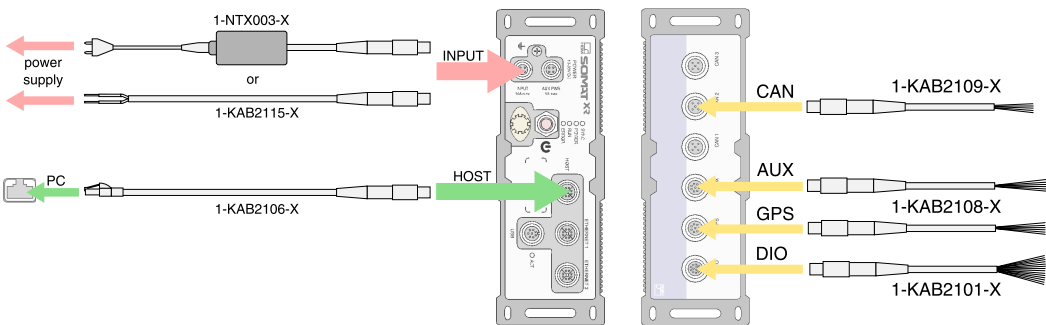
- | | |
|--------|--|
| Off | No test run is in progress. |
| 0.5 Hz | Test Setup task running. |
| 1 Hz | Remote control is enabled, but no Test run is in progress. |
| 8 Hz | Test run is in progress. |

ERROR (red)

- | | |
|------|---|
| Off | No error. |
| On | Unit error. View the System logs for error information and to turn off the LED. |
| 1 Hz | Low storage (less than 2 MB remains). |








Setting up the CX23-R

1. Connect the 1-KAB2115 power cable from the INPUT connector to a 10-30 V_{DC} power source. Alternatively, use the 1-NTX003 power supply.
- NOTE**
The green wire of the 1-KAB2115 cable must be insulated or tied to +V_{DC}.
2. Connect the 1-KAB2106 Ethernet cable from the HOST connector to the host PC. The host PC network settings must be compatible with the system default IP address 192.168.100.101.
3. Connect desired transducers to DIO, GPS, AUX and CAN ports using the appropriate sensor cables. Refer to the SomatXR Accessories Data Sheet for a complete list of sensor cables.





Running a Basic Test

- 
 1. Open the web-based interface at the default IP address 192.168.100.101. In the header, click the **Setup** button to navigate to the Test configuration section.
- 
 2. In the Task pane, select Setup, then click the **New** button to define a new test setup. Edit the setup name and description as desired. The default name is "test_name."
- 
 3. In the Task pane, select Input channels, then click the **Add** button. Select the desired inputs and click **OK**. New channels show in the All input channels tab of the grid.
- 
 4. Click the **Save** button in the header or Task pane to save changes.
- 
 5. In the header, click the **Control** button to navigate to the Test and data control section. In the Task pane, Test control shows.
- 
 7. In the Task pane, click **Start** to run the test. The yellow LED flashes in the status bar of the web interface and on the unit. Real time data shows in the channel chart during the test run.
- 
 8. Click **Stop** to end the test run.
 9. To download the SIE data file, click the file name in the Test run statistics panel.



Restoring Default Settings

Administrator profile & password

- To regain administrator access:
1. Power down the CX23-R.
 2. Press and hold the power switch.
 3. When the LEDs begin to flash, quickly release the power switch.

NOTE
No other profiles or users are affected.

Network Settings

- To reset the module IP address to 192.168.100.101:
1. Power down the CX23-R.
 2. Press and hold the power switch.
 3. When the LEDs flash, stay on and start flashing again, release the power switch.

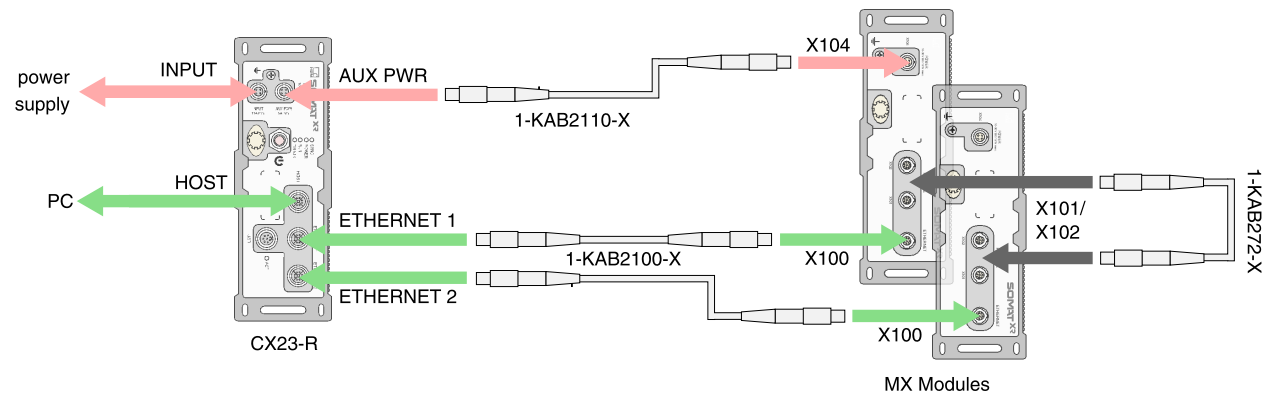
NOTE
This procedure activates the Default Auto Set network and does not delete any user-defined networks.

Connecting MX Modules

A CX23-R module can be used to control and process data from multiple MX modules to include other transducers such as voltage, current, bridge and thermocouple. MX modules can be connected directly to the CX23-R module or through one or more EX23-R Ethernet switches. Refer to the MX Modules User Manual for more information on using MX modules.

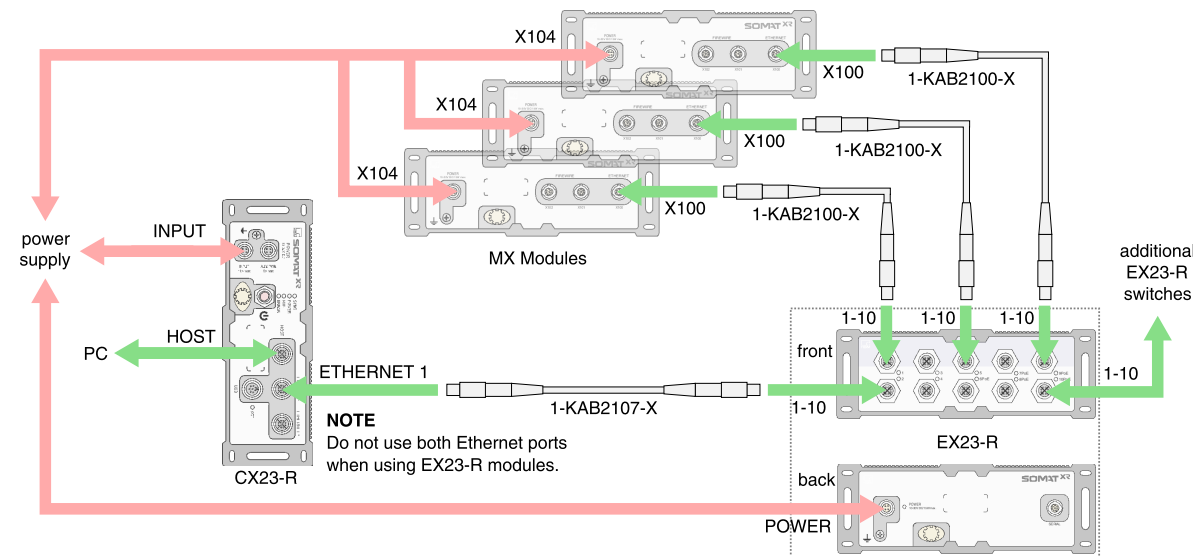
NOTE
The CX23-R automatically configures the MX module network address and checks for firmware updates. If necessary, install new MX firmware before continuing. **Do not reboot the CX23-R when MX firmware updates are in progress.**

Centralized network using direct Ethernet connections



- NOTE**
The CX23-R AUX PWR connector can power a maximum of two MX modules.
1. To power the first MX module, connect the CX23-R AUX PWR connector to the X104 connector on the first MX module using a 1-KAB2110 cable.
- CAUTION**
Do not exceed 5 A current draw from the CX23-R AUX PWR connector.
2. To power the second MX module, use a 1-KAB272 cable from the X101 or X102 connector on first MX module to the X101 or X102 connector on the second MX module.
 3. Connect the CX23-R ETHERNET1 and ETHERNET2 connectors to the MX module X100 connectors using KAB2100 cables. This establishes communication and synchronization between the CX23-R and MX modules.

Distributed network using EX23-R Ethernet switches



1. Connect the CX23-R, EX23-R and MX modules to a power supply.
NOTE
When designing the power system, note that increased cable lengths can produce significant voltage drops at the module connectors, especially when using PoE or powering multiple modules from one source.
NOTE
MX modules may also be powered in serial using FireWire connections. Refer to the MX Modules User Manual for details.
2. Use a 1-KAB2107 cable to connect the CX23-R ETHERNET1 connector to the EX23-R switch.
NOTE
For optimal data throughput performance, do not use both CX23-R Ethernet ports when using EX23-R modules. To use multiple EX23-R modules, connect any Ethernet port on the new EX23-R module to any open EX23-R Ethernet port.
3. Use 1-KAB2100 cables to connect the MX module X100 connectors to the EX23-R switch.