LynTec XPC

Xtend Power Control Series

Instruction Bulletin

XRS-20
WEB CONTROLLED
AC POWER DISTRIBUTION

Retain for future use.

HAZARD CATEGORIES AND SPECIAL SYMBOLS

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this bulletin or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

The addition of either symbol to a "Danger" or "Warning" safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER

DANGER indicates an immediately hazardous situation which, if not avoided, **will result in** death or serious injury.

⚠ WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, **can result in** death or serious injury.

⚠ CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, **can result in** minor or moderate injury.

CAUTION

CAUTION, used without the safety alert symbol, indicates a potentially hazardous situation which, if not avoided, **can result in** property damage.

NOTE: Provides additional information to clarify or simplify a procedure.

PLEASE NOTE

Electrical equipment should be installed, operated, serviced and maintained only by qualified electrical personnel. This document is not intended as an instruction manual for untrained persons. No responsibility is assumed by LynTec for any consequences arising out of the use of this manual.

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Chapter 1--Introduction

OVERVIEW

The LynTec XRS-20 is a microcontroller based power distribution device that can be accessed via Internet or intranet communications using an Ethernet connection. With this remote access, individual AC circuits can be turned on and off from any LynTec RPC, RPCR, NPAC or XPC controller.

The XRS-20 has four 20 amp capacity circuits.

SAFETY PRECAUTIONS

The XRS-20 is designed to operate at 120 volts, 60 hertz. Operation with any voltage or frequency other than that can damage the equipment and create an unsafe situation.

CAUTION #1: This device must be grounded.

CAUTION #2: This device should be installed only by qualified electrical technicians using appropriate mounting hardware and correct installation techniques. Before installing make sure main power is off.

CAUTION #3: Do not expose this product to moisture or salty air. Doing so could cause significant damage and create an unsafe condition.

DISCLAIMER

LynTec shall under no circumstances be held responsible for any losses, damage, or injury resulting directly or indirectly from the use of the XRS-20 device in a manner contrary to accepted safe operating methods or any instructions contained in this document. The user should determine prior to use whether this product is adequate, suitable and safe for the application intended. Since individual applications can be subject to extreme variation LynTec makes no representation or guarantee as to the suitability of the XRS-20 for any generally described application.

Chapter Two--Quick Start Guide

1. Unbox the unit. The box should contain: XRS-20 device and user manual QR. You will need a CAT5 network cable if attaching to a router, a CAT 5/6 crossover cable if connecting directly to a PC.

2. With your PC/laptop on and booted up, connect the XRS-20 to your router or directly to a PC/laptop using a suitable cable. If the XRS-20 is connected to a network router use a standard CAT 5 cable, if connected directly to a PC/laptop use a CAT 5/6 crossover cable.

3. Plug the XRS-20 power cord into a live AC receptacle, such as a wall outlet, with a twenty amp capacity (i.e. NEMA 5-20R).

4. The XRS-20 will take about 30 seconds to boot up and configure itself at which point the Network light on the front of the unit will illuminate, indi-cating network connectivity. If the Network light blinks or does not light at all check the cable connections.

5. Open up your web browser and type in the following default IP address to access the XRS-20: http://192.168.1.250

6. At this point you will be prompted to log into the XRS-20.

   Initial login:
   Username: admin
   Password: pw

7. Use the "Network Setup" page to set a specific static IP address for your installation.

8. See your system administrator, if you have one, for help with configuration.

Chapter 3--Detailed Installation and Setup

FRONT PANEL FEATURES

Emergency Override Rocker Switch

The primary intent is for the XRS-20 to be controlled via a remote Ethernet link. This switch serves as a fail safe control device in the event an Ethernet connection is not available or functioning. Moving this switch to the UP position will cause the XRS-20 to turn on the three power PODs in a prescribed timed sequence, two seconds between each POD activation. Moving this switch to the DOWN position will cause the unit to turn off the POD outlets in the reverse order.

Recessed Slide Switch

As a second fail safe control point, this switch can be used to manually turn on all POD outlets in the unlikely event of failure of the control circuitry contained in the XRS-20. This switch will turn on all POD outlets simultaneously. When the switch is returned to it's "off" position the XRS-20 will revert to the prior state the unit was in.

Surge Protection/ Network LED

This LED will light up solid Orange when the XRS-20 is connected to an Ethernet network connection. It will blink quickly green and red when an Ethernet cable is attached but no network can be found. When no network cable is connected the light will blink slowly green and red indicating the unit is powered up. If Surge protection is lost the LED will be solid red or blinking red depending on if the unit is connected

POD LEDs

As each of the POD duplex receptacles on the back of the XRS-20 turns on a corresponding LED on the

BACK PANEL FEATURES

Network Port

This RJ45 connector is for connecting to your PC, router or local area network using a TCP/IP link.

PODs 1-3

There are three duplex receptacles on the back of the XRS-20. Each is rated for a maximum twenty amp load and each is controllable to turn on or off independently of the others.

Unswitched Outlet

This single outlet is rated for a maximum load of twenty amps on the XRS-20. It will have power any time the iP device is plugged into a live AC receptacle.

SETUP DETAIL

Unbox the unit. The box should contain: XRS-20 device and user manual QR. Mount the XRS-20 in a 19" wide rack with metal mounting rails, designed with 1.75" spacing. Use appropriate rack mounting hardware. Always power the XRS-20 on a grounded outlet. Do not defeat the grounding feature of the XRS-20 power cord.

Connecting to the XRS-20 with a Router

1. Connect the XRS-20 to your network router using a Cat 5 cable plugged into the RJ45 "Network" port on the front of the unit and the other end to your network router.

2. Plug the XRS-20 power cord into a live AC receptacle, such as a wall outlet. Note: The XRS-2020 requires a 20 amp, NEMA 5-20R receptacle.

3. The XRS-20 will take a few seconds to boot up and configure itself at which point the Network light on the front of the unit should illuminate and remain on without blinking, indicating network connectivity. If the Network light blinks check the cable connections.

4. Open a web browser on your PC or Laptop and type in the following address on the navigation bar to access the XRS-20: http://192.168.1.250 Be sure to type exactly as shown. No domain such as ".com" should be added.

5. You will be presented with the login box. Enter the following initial username and password:

> Initial login:
> Username: admin
> Password: pw

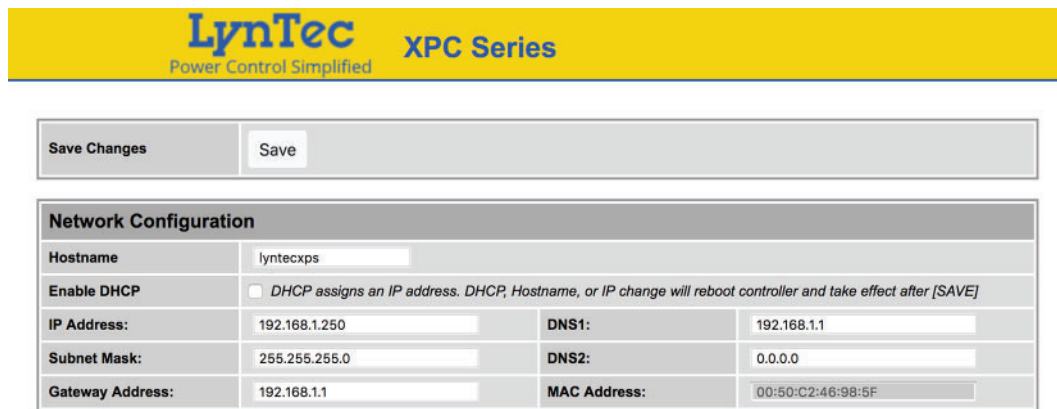**Connecting to the XRS-20 using a Crossover CAT5/6 cable**

To connect the XRS-20 to a PC or laptop directly you will need to change the properties of your internet connection/IP address.

1. Plug the CROSSOVER cable into the PC/laptop network socket and the other end into the XRS-20 Network socket .

2. Plug the XRS-20 power cord into a live AC receptacle, such as a wall outlet. Note: The XRS-2020 requires a 20 amp, NEMA 5-20R receptacle.

3. The XRS-20 device will take a few seconds to boot up and configure itself at which point the Network light on the front of the unit should illuminate and remain on without blinking, indicating network connectivity. If the Network light blinks check the cable connections.

4. In Windows go to your start menu and navigate to the control panel. Then choose the Network Connections" icon.

5. Open Network connections by double clicking on it, select the LAN or HIGH-SPEED icon, right click on this and select properties.

6. Click once on the Internet Protocol item that you will see at the bottom of the list and select the properties button which is at the mid right.

7. Check the "Use the following IP address" box and then change the IP address to: 192.168.1.1, then change the Default Gateway address also to: 192.168.1.1.

8. Click OK and then close the network box.

9. Open a web browser on your PC and type in the following address on the navigation bar to access the XRS-20: 192.168.1.250.

10. The XRS-20 login box will appear, enter your login details and configure the XRS-20.

MANAGEMENT

Once you have logged into the XRS-20 you will see"Network Setup". You can configure the IP address and other required network settings (dependent on your personal network)

Network Setup

The Network Setup Page displays the current settings of the unit and the MAC address. This page is useful for retrieving all the information you may need to set up the XRS-20 on your network. Disable DCHP and set a static IP address for the XRS-20.

Chapter Four--Troubleshooting

TROUBLESHOOTING

The LynTec XPS-80 is ruggedly constructed and contains quality components. There are no user serviceable parts inside this device. Unauthorized service will void all existing warranties and may result in equipment damage and personal injury.

Should improper performance be observed consult the following guidelines for diagnosis.

Condition	Possible Causes	Solutions
The XRS-20 will not power up and network light is not lit.	Main utility power outage	Verify that the utility provided power for the building is available.
	Tripped breaker(s)	Check that the circuit breaker is not tripped. Reset the circuit breaker by turning it OFF and then back ON.
The XRS-20 will not power down.	See power up causes above	Follow above solutions
I cannot connect to the XRS-20 via my network	Incorrect network cable	Check you are using the correct cable, standard CAT5 cable for router connection, crossover cable for direct to PC connection.
	Incorrect computer IP address	If you are connecting directly to a PC you will have to configure your computer to have a static IP address of 192.168.1.1. See your operating systems help file on how to do this.
	Incorrect username/password	Are you using the correct username and password? If you are accessing the login page and your login is failing you might need to reset to factory default and try again if you have forgotten the correct username/password combination. Contact LynTec for reset instructions

Detail Specifications

Chassis	16 Gauge Steel
Dimensions	1.72H x 19.0W x 7.0D
Number of circuits	One @20A
Number of controlled Pods	Three
Power input	7 Foot, SJTW with NEMA 5/20P (Note: XRS-2020 requires a NEMA 5/20R receptacle)
Power Output	Six NEMA 5/20R (controlled), one NEMA 5/20R (unswitched)
Input Voltage	120 VAC @60Hz
Relay Current Rating	30A
Power Line Conditioning	Replaceable surge protection module Max Voltage Surge: 10 volts line-neutral, 0.50 volts ground Filtration @ 30MHz: 60 dB line-neutral, 80 dB ground
Operating Temp Range	32-158 deg F
Communications input	Ethernet (RJ-45, 8-wire)
Communications Protocol	HTML
Front Panel Monitor	Power On , Surge Protection and Network Connection LEDs LED indicates network connection, Outlet On, Sequence Delay and Current Flow
Front Panel Control	Override switch to turn on in event of product or network fault
Standards	UL508A
FCC--Part 15, Class A	
ETL Tested to: CU 22.2-14 and UL508A	