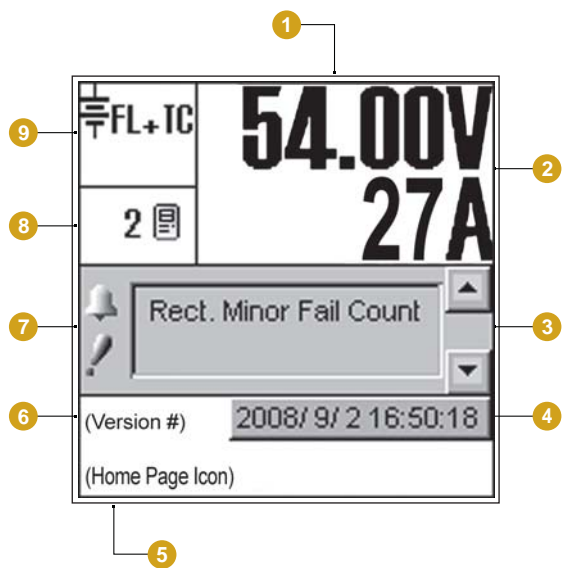


## LCD — NORMAL MODE

## FRONT PANEL DESCRIPTION

## ALARM SYMBOLS



- 1 LCD** Active areas are touch sensitive and respond best to a stylus suited for this purpose. Tap to activate a new window of operation.
- 2 Analog Signals Display** Digits are normally displayed two rows high. Tap this active area to minimize digits and display labels. Tap again for signals display and configuration.
- 3 Alarm Indication** This active area displays text of alarm notification or status. Tap for alarms display and configuration. Alarm cutoff (ALCO) and Power Save may be accessed here.
- 4 Date and Time** Tap this active area to edit.
- 5 Argus (Home Page) Icon** Tap this active area to login, adjust contrast of display, reset, and select language.
- 6 Software Revision** Current version number of the CXC software.
- 7 Alarm Condition and Icons** Indication of alarms and priority are displayed here. See also Alarm Symbols.
- 8 Rectifiers Information** This active area displays the number of rectifiers on-line. For a converter only system, a value of 0 will be displayed. See also Alarm Symbols.
- 9 Mode Status** This active area shows mode of operation and Temp Comp activation along with the duration until the mode changes.

- Active alarm.
- Active alarm has been silenced.
- Major alarm.
- Minor alarm.
- Alarm message **only**.
- Rectifiers Info., # of rectifiers.
- # of rectifiers in Power Save.
- Float mode.
- Equalize mode.
- Battery Test mode.

## QUICK START

### Applying Startup Power

1. Initiate startup routine by applying power to the CXC; e.g., Close battery breaker or close converter/rectifier input and output breakers. *The CXC will perform a short self-test as it boots up. Alarm alerts are normal.*
2. Check and adjust alarms and control levels in the CXC's submenus.
3. Check and adjust group settings in the CONVERTERS or RECTIFIERS submenus; e.g., float, equalize voltage, etc.
4. Verify COMMUNICATIONS settings as needed.
5. Program the CXC's TEMP COMP and AUTO EQUALIZE settings as needed.
6. Test relay OUTPUT ALARM\CONTROLS as needed; e.g., Major Alarm, LVD, etc.

### Remote Communications (see manual Chapter 9)

The CXC can be set up, monitored and tested via Craft port (null modem), ETHERNET 10/100 Base-T or over a phone line using a modem. Some standard scenarios are described below:

- > Network (TCP/IP secured by user) to CXC rear Ethernet port.
- > Computer to CXC using a null modem cable connected to the Craft port.
- > Laptop to CXC via direct Ethernet connection using a standard crossover cable.
- > External modem to CXC via RS-232 serial data connection using a straight through cable connected to the rear RS-232 port.
- > External Argus DC modem (CXCI model).
- > Internal modem (see ordering options).

**CAN bus (located next to the Ethernet port) is provided for connection to the Cordex series of converters, rectifiers and smart peripherals.**

**RS-485 bus provides a secondary connection for products (e.g., Pathfinder rectifiers) that do not support the CAN bus interface.**

### Converter and Rectifier Tips

The Cordex Converter and Rectifier modules are plug and play. When a module is added to the system, the CXC will detect and update the converter/rectifier inventory automatically.

If module communication has failed, or a module has been removed from the system, an INVENTORY UPDATE must be initiated manually.

### Controller Tips

Use the CXC GUI or web interface to ensure that the operating levels (e.g., input/output voltage, converter voltage, etc.) are within operating parameters of alarm and control thresholds.

## TROUBLESHOOTING GUIDE

Symptom	Solution
Rectifier Communications Lost (RECT COMMS LOST)	<ul style="list-style-type: none"> <li>♦Check cable connections for breaks or loose contacts.</li> <li>♦Ensure all rectifiers are secured and tightly screwed in to the shelf.</li> <li>♦Perform <b>INVENTORY UPDATE</b> by tapping the Rectifiers Information area and then tapping on Inventory Update.</li> </ul>
Rectifier Lockout (RECT LOCKOUT)	<p>Pathfinder rectifier modules with LCD option:</p> <ul style="list-style-type: none"> <li>♦Check if any rectifiers menu has been accessed. Rectifiers must be in normal operation mode. Perform <b>INVENTORY UPDATE</b>.</li> <li>♦Set all rectifiers for Remote Access enabled and Remote Adjust Access enabled.</li> </ul>
No Communications at RS-232 Port	<ul style="list-style-type: none"> <li>♦Set web routing to Front Craft Port in the web settings option of the <b>COMMUNICATIONS</b> menu.</li> <li>♦Ensure the baud rate is set to match.</li> <li>♦Ensure you are using a NULL modem cable.</li> </ul>
Relays Not Triggering During Alarm Condition	<ul style="list-style-type: none"> <li>♦Ensure alarm condition is mapped to a relay (<b>ALARMS</b> menu).</li> <li>♦Ensure polarity of relay is set correctly (<b>HARDWARE</b> menu).</li> <li>♦Ensure <b>CUTOFF ALL ALARMS</b> has not been selected.</li> </ul>
Rectifier Minor/Major Alarm	<ul style="list-style-type: none"> <li>♦Ensure system load is at least 5% of the current rating of the power modules used in the system or a battery is connected.</li> <li>♦Check the rectifier sending the alarm for specific alarm condition.</li> <li>♦Perform <b>RECTIFIER REPORT</b> by tapping the Rects (rectifiers information) area and then tapping on Rectifier Report.</li> </ul>
New Rectifier Has Not Been Acquired	<ul style="list-style-type: none"> <li>♦Ensure all rectifiers are secured and tightly screwed in to the shelf.</li> <li>♦Perform <b>INVENTORY UPDATE</b> (via <b>Rects area</b>).</li> <li>♦Perform <b>RECTIFIER REPORT</b> (via <b>Rects area</b>) to confirm acquisition.</li> </ul>
Unable to communicate with CXC via the Ethernet port (for CXCI, see below)	<ul style="list-style-type: none"> <li>♦Ensure IP settings are correct (<b>COMMUNICATIONS</b> menu).</li> <li>♦Reboot CXC after changing IP settings: select Reset from the Option button and save settings if prompted.</li> <li>♦Use a straight through cable for network connection.</li> <li>♦Use a crossover cable only when connecting directly to a PC.</li> <li>♦Try pinging the CXC IP address to verify connectivity.</li> <li>♦Contact your IT department to ensure both the CXC and PC can actually communicate across the network.</li> </ul>
Unable to communicate with CXCI: IP reset procedure	<ul style="list-style-type: none"> <li>♦Press and hold the front panel reset button for three seconds.</li> <li>♦The CXCI will beep three times, IP will be reset (to 10.10.10.201) and DHCP will be disabled.</li> <li>♦The settings will be saved and the CXCI will then reset.</li> <li>♦Access will be permissible with a laptop and a standard network crossover cable.</li> </ul>
Web interface loads but shows no live data	<ul style="list-style-type: none"> <li>♦Ensure you are using the latest version of Microsoft® Internet Explorer. Performance with any other browser is limited and varies from browser to browser.</li> </ul>
Screen is too bright/dim	<ul style="list-style-type: none"> <li>♦Tap the Argus icon (shown above) and select Contrast from the pop-up window.</li> <li>♦Use the slider on the GUI to adjust contrast as desired.</li> <li>♦Tap the check mark to complete adjustment.</li> <li>♦Enter the Supervisor password to confirm.</li> </ul>

Technical assistance call toll-free (in Canada and the USA)  
1-888-462-7487



International technical assistance (outside Canada & USA)  
1-604-436-5547

MAIN MENU

**System Info**

**System Configuration**

- CAN Device FW Upgrade
- Set ADIO Module Number [1-16]
- Site Information
- Temperature Units [C / F]
- Factory Information

- System Voltage [12V, 24V, 48V, 125V, 220V]
- Use Firmware [perform upgrade]
- Load From Device [get firmware]
- System Number, Serial, **Contact Information**
- Unit Serial, Hardware Rev., Ethernet/MAC Address
- Factory Notes

**Converters**

- Converter Report
- Configure Settings**

- Serial Num.    Amps    Alarms    Out of Tolerance
- View Details** [converter alarms, out of tolerance]
- Output Voltage, OVP, Input Voltage Shutdown,
- Input Voltage Restart, Start Delay,
- Current Limit (CL) Alarm, Ramp Test

**Rectifiers**

- Rectifier Report
- Configure Settings**
- Power Save [enable...]
- Phase Mapping [locate...]

- Serial Num.    Amps    Alarms    Out of Tolerance
- View Details** [rectifier alarms, out of tolerance]
- Float Voltage, Equalize Voltage, BT Voltage, Safe
- Voltage, OVP, LVA, HVA, Current Limit, Power Limit
- EQ Timeout, BT Timeout, Slope, Backlight Timeout
- Security Code, Module & System Start Delay
- Softstart Ramp Rate [normal / fast]
- Temp Display Scale [C / F]
- Current Limit (CL) and Power Limit (PL) Alarm
- Remote Shutdown, Local Access Alarm
- Ramp Test

**Batteries**

- Temp Comp** [enable, breakpoints...]
- Auto EQ [duration, interval, threshold...]
- Charge Current Control [enable...]
- Battery Monitor [enable...]
- Battery Test [voltage, timeout, interval...]
- BCT EQ [enable, duration, threshold]
- Boost Mode [enable, voltage, timeout...]
- Battery Properties, Battery Information

- Rectifier, Digital, Current, Voltage, Battery,
- Temperature, Miscellaneous, ADIO, Custom,
- Converter, **Configure** (Customize)

**Alarms**

- Configure Alarms**
- Configure ALCO, ADIO Alarms Detail
- Alarm Hysteresis [voltage, time]
- Alarm Tone [enable...]

- Controller Signals
- Analog Inputs [V1-2, I1-4, GP1-4]
- Digital Inputs [1-8 *view status*]
- Rectifier Signals [*view status*]
- Custom Signals [1-10, **Configure** (Customize)]
- Converter [*view status*], Counter, Timers, ADIO

**Signals**

- Calibrate Analog Inputs
- Configure Signals**

**Controls**

- LVD Control** [1-10, voltage, mapping...]
- LVD Inhibit [status, mapping...]
- HVSD [activation value, mapping...]
- CEMF [voltages, mapping...]

- Configure... (Name of Alarm or Control)**
- [activation, value, source *as required*]
- Relay Mapping [1-16]
- Priority [major / minor / message]
- Allow Alarm To Be Cutoff, Enable Alarm
- Email, SNMP [severity], **Customize...**

**Communications**

- IP Info [IP addr, subnet mask, gateway, MAC]
- IP Address** [obtain automatically, settings]
- Modem [baud rate, rear port, init string]
- Craft Port [baud rate]
- Web Settings [routing]
- Master SNMP Destination

The branches of this tree show the structure or possible paths from the Main Menu through the submenus; which contain items that can be invoked to configure properties, perform control functions, view parameters, etc.

- MANUAL PROVIDES DETAILS -

Some items are highlighted here to provide a visual cue for functions and tasks most commonly used.

**Hardware**

- Configure Relays [1-16, toggle polarity]
- Test Relays [1-16, toggle state]

**Supervisor**

- Change Password [Supervisor, User]

The “Option” button is used to Logout or Save changes

Option