

COMMANDS

COMMAND	DESCRIPTION / USE
.TRESET	Resets the history, daily and statistic files.
?	Displays trigger-type alarms and severity levels.
<CTRL-A>	To repeat the last command.
<CTRL-C>	To terminate the current command.
<ESC>	To terminate the current command.
ANALOG[X]	Sets parameters for an analog channel.
ARC[X]	To deactivate memorized (latched) alarms for a specific card.
ASTATE[-R][X]	Polls analog channel values in real time.
C[X]	Sets card type (ANALOG, EVENT, OUTPUT).
CALARM	Sets parameters for audible and front panel alarms.
CALLOUT[X]	Sets parameters for callouts.
COM	To configure serial communication ports, ethernet ports and modem parameters.
CONFIG	To access the configuration mode.
APP	To apply modifications to configuration (when autosave is disabled).
CSTAT	Sets a statistic file's parameters.
CVIEW[X]	Sets view parameters.
DCPLANT[X]	Sets parameters for a DC power plant.
DISC	Ends a session (Disconnect).
ERRFILE	To view errors in the last configuration file sent to the unit.
DOWNLOAD	To transfer a unit's configuration, a history or a statistic file in CSV format using XMODEM.
EQUALIZE[X]	Sets operating parameters for battery equalize.
ESTATE[-R][X]	Polls event channel status in real time.
EVENT[X]	Sets parameters for an event channel.
G[X]	Sets operating parameters for a group.
H[ELP]	Displays commands list and description.
HIST[X]	Displays the contents of the history file.
HUB	For hubbing between ports.
LED[X]	To set parameters for a front panel LED.
LOG	Begins a new session at another access level.
OSTATE[-R][X]	Polls output channel status in real time.
OUTPUT[X]	To set parameters for an output channel.
DELAY[X]	To set operating parameters for a delay.
RECT[X]	To set operating parameters for a rectifier.
RESETOCC	To reset all occurrence counters.
RESETENER[X]	To reset energy (V and amp/hour) values manually.
DAILY	Polls a daily data log.
SYS	To set general system operating parameters.
TH[X]	To set parameters for a threshold using an analog channel or an occurrence counter.
TSP[X]	To set operating parameters for a timer.
BM[X]	To set parameters for a binary manual channel.
BMSTATE[X]	To change the state of a binary manual channel.
UPLOAD	To reconfigure a unit by transferring a CSV file using XMODEM.
CPU	Display CPU utilization.
MEM	Display remaining memory capacity.
VERSION	Displays card/software versions and numbers.

COMMUNICATIONS PORTS SPECIFICATIONS

	MODEM PORT	ETHER NET PORT	FRONT RS-232 PORT	BACK RS-232 PORT	BACK RS-485/422 PORT
Connector	RJ-11C	RJ-45	DB-25	DB-9	RJ12C
Emulation	ANSI or VT-100	ANSI or VT-100	ANSI or VT-100	ANSI or VT-100	ANSI or VT-100
Baud Rate	300, 1200, 2400, 4800, 9600, 19 200, 38 400, 57 600, 115 200	10 Mbps / 100Mbps (auto-detect)	300, 1200, 2400, 4800, 9600, 19 200, 38 400, 57 600, 115 200	300, 1200, 2400, 4800, 9600, 19 200, 38 400, 57 600, 115 200	300, 1200, 2400, 4800, 9600, 19 200, 38 400, 57 600, 115 200

BASIC SPECIFICATIONS

Height 10.1 cm (4 in.)  
Depth 30.5 cm (12 in.)  
Width 43.2 cm (17 in.)

INPUT VOLTAGE AND CURRENT

18 – 24 Vdc (24 nominal), 1.6 A or  
40 – 48 Vdc (48 nominal), 800 mA

POWER/FAIL LED INDICATORS

FRONT PANNEL	
COLOUR	POSSIBLE CAUSE
Solid Yellow	Ongoing software loading.
Solid Green	Hardware and software functional.
Flashes red once	Communication problem with the CPU III card.
Flashes red twice	Memory problem with the Front Panel.
Flashes red 3 times	Software version problem.
CPU III CARD FAIL LED	
Solid Green	Hardware and software functional.
Solid Red	Hardware problem.
Flashes red once	Defective peripheral card(s).
Flashes red twice	Problem with the front panel.
Flashes red 3 times	Low battery.
Flashes red 4 times	CPU III card memory problem.
Flashes red 5 times	EEPROM problem.
Flashes red 6 times	RTC problem.
Flashes red 7 times	A or B power feed problem
Flashes red 8 times	Modem problem.
Flashes red 9 times	Problem with Ethernet
Flashes red 10 times	Fatal error with configuration
I/O CARD FAIL LED (ANALOG, EVENT OR OUTPUT)	
Solid Yellow	Ongoing loading of software.
Solid Green	Hardware and software functional.
Flashes red once	No data received on the RS-485 link.
Flashes red twice	Converter problem.
Flashes red 3 times	Memory problem.
Flashes red 4 times	Program not available.
Flashes red 5 times	Problem with RS-485.
Flashes red 6 times	Wrong configuration.
SPECIFIC PROBLEMS: ANALOG CARD FAIL LED	
Flashes red 7 times	Timer error.
Flashes red 8 times	Low battery.

INTERNAL FEATURES

- **General system capacity:** 1 CPU III card, 1 front panel card, up to 30 I/O cards total.
- **Analog channel capacity:** Up to 18 real (differential) and 18 virtual (derived) input channels per card; up to 30 cards per system.
- **Event channel capacity:** Up to 48 binary input channels per card; up to 30 cards per system.
- **Output channel capacity:** Up to 32 relay output channels per card; up to 30 cards per system.
- Twenty automatic callouts.
- Two programmable statistic files capturing data on selected analog channels.
- One history file for recording of selected events with date and time of occurrence.
- One daily file for recording daily statistics of all analog channels.
- Remote access through Ethernet™ of dial-up modem for polling, configuration, download or upload.
- Multiple sessions
- 64 programmable time set points for events, tasks or routine scheduling.
- Three access levels and up to ten users for increased security.
- Virtual pass-through for peripheral NE remote access.

EXTERNAL FEATURES

- Optional eighteen character LCD screen for local display and seven-key touch pad for local access.
- POWER/FAIL LED on each system component for status.
- Sixteen LEDs on front panel for alarm indication.
- Eight-pin Weidmuller connectors for connection to channels.
- Line, serial, and Ethernet connectors on back panel.
- Serial connector on front panel for local access.

**INSTALLATION**

- Prepare tools and test equipment.
- Verify material.
- Mount unit on relay rack.

**WIRING AND CONNECTIONS TO BACK PANEL**

- Run and connect DC power cabling.
- Run and connect frame ground cable.
- Install and connect in proper sequence probes, sensors, detectors, and Transducers to analog channel connectors.
- Connect appropriate event channels.
- Run and connect leads to female connectors for remote control and/or alarm point to output channels.
- Connect line to LINE jack.
- Connect RS-232 cable front panel connector.
- Verify all wiring and cabling.

**START UP**

- Install fuses and/or circuit breakers to unit and monitoring point.
- Verify unit through local access procedure, RS-232/modem access and front panel.

**LOCAL ACCESS PROCEDURE**

- Connect a terminal or computer to front panel RS-232 port.
- Adjust baud rate accordingly,
- Hit three carriage returns to reach logon message.
- Enter appropriate commands.

**REMOTE ACCESS PROCEDURE (MODEM)**

- Dial the MIRADOR's telephone number.
- Enter appropriate commands.

**ANALOG CHANNEL CONNECTIONS**

PIN	CHANNE L	CON.	PIN	CHANNE L	CON.
1	CxA1-	1	1	CxA10-	4
2	CxA1+	1	2	CxA10+	4
3	CxA2-	1	3	CxA11-	4
4	CxA2+	1	4	CxA11+	4
5	CxA3-	1	5	CxA12-	4
6	CxA3+	1	6	CxA12+	4
7	EXCT1-	1	7	EXCT4-	4
8	EXCT1+	1	8	EXCT4+	4
1	CxA4-	2	1	CxA13-	5
2	CxA4+	2	2	CxA13+	5
3	CxA5-	2	3	CxA14-	5
4	CxA5+	2	4	CxA14+	5
5	CxA6-	2	5	CxA15-	5
6	CxA6+	2	6	CxA15+	5
7	EXCT2-	2	7	EXCT5-	5
8	EXCT2+	2	8	EXCT5+	5
1	CxA7-	3	1	CxA16-	6
2	CxA7+	3	2	CxA16+	6
3	CxA8-	3	3	CxA17-	6
4	CxA8+	3	4	CxA17+	6
5	CxA9-	3	5	CxA18-	6
6	CxA9+	3	6	CxA18+	6
7	EXCT3-	3	7	EXCT6-	6
8	EXCT3+	3	8	EXCT6+	6

**OUTPUT CHANNEL CONNECTIONS**

PIN	CHANNE L	CON.	PIN	CHANNE L	CON.
1	CxO1	1	2	CxO18	3
2	CxO2	1	3	CxO19	3
3	CxO3	1	4	CxO20	3
4	CxO4	1	5	CxO21	3
5	CxO5	1	6	CxO22	3
6	CxO6	1	7	CxO23	3
7	CxO7	1	8	CxO24	3
8	CxO8	1	1	CxO25	4
1	CxO9	2	2	CxO26	4
2	CxO10	2	3	CxO27	4
3	CxO11	2	4	CxO28	4
4	CxO12	2	5	CxO29	4
5	CxO13	2	6	CxO30	4
6	CxO14	2	7	CxO31	4
7	CxO15	2	8	CxO32	4
8	CxO16	2	1	Common 1-16	5
1	CxO17	3	2	Common 17-32	5

**EVENT CHANNEL CONNECTIONS**

PIN	CHANNE L	CON.	PIN	CHANNE L	CON.
1	CxE1	1	1	CxE25	4
2	CxE2	1	2	CxE26	4
3	CxE3	1	3	CxE27	4
4	CxE4	1	4	CxE28	4
5	CxE5	1	5	CxE29	4
6	CxE6	1	6	CxE30	4
7	CxE7	1	7	CxE31	4
8	CxE8	1	8	CxE32	4
1	CxE9	2	1	CxE33	5
2	CxE10	2	2	CxE34	5
3	CxE11	2	3	CxE35	5
4	CxE12	2	4	CxE36	5
5	CxE13	2	5	CxE37	5
6	CxE14	2	6	CxE38	5
7	CxE15	2	7	CxE39	5
8	CxE16	2	8	CxE40	5
1	CxE17	3	1	CxE41	6
2	CxE18	3	2	CxE42	6
3	CxE19	3	3	CxE43	6
4	CxE20	3	4	CxE44	6
5	CxE21	3	5	CxE45	6
6	CxE22	3	6	CxE46	6
7	CxE23	3	7	CxE47	6
8	CxE24	3	8	CxE48	6

Cx: x is the card position number.  
Pin numbering is from left to right for connectors #2, 4, and 6.  
Pin numbering is from right to left for pins #1, 3, and 5.

