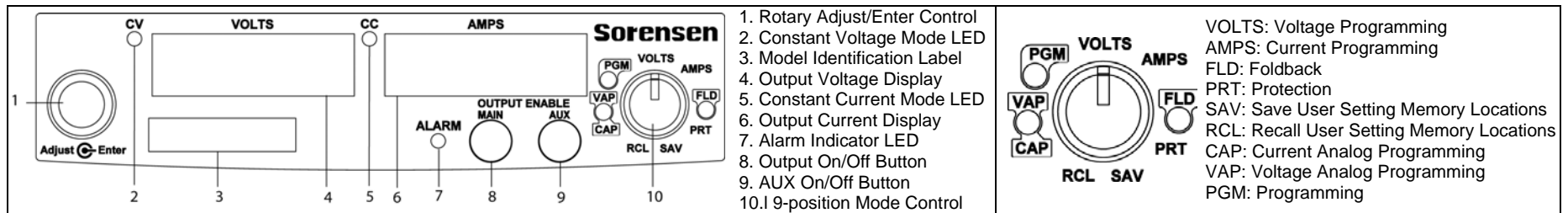![AMETEK® PROGRAMMABLE POWER logo]

QUICK REFERENCE GUIDE: Sorensen XG 850 Watt Series Programmable DC Power Supply (firmware v1.09 and below)

The XG is equipped with a rotary Adjust/Enter control to provide a streamlined front panel for faster setup. Set voltage and current quickly and easily using the rotary Adjust/Enter control and the 9-position Mode control. The information provided in this Quick Reference Guide is for basic usage of the front panel and for understanding the menu system. See the other side of this Quick Reference Guide for a map of the front panel menu system. For complete information on the XG, please refer to the XG 850 Watt Series Programmable DC Power Supply Operating Manual (Part number: M370078-01).

1. Rotary Adjust/Enter Control
2. Constant Voltage Mode LED
3. Model Identification Label
4. Output Voltage Display
5. Constant Current Mode LED
6. Output Current Display
7. Alarm Indicator LED
8. Output On/Off Button
9. AUX On/Off Button
10.I 9-position Mode Control

VOLTS: Voltage Programming
AMPS: Current Programming
FLD: Foldback
PRT: Protection
SAV: Save User Setting Memory Locations
RCL: Recall User Setting Memory Locations
CAP: Current Analog Programming
VAP: Voltage Analog Programming
PGM: Programming

XG Front Panel Controls, Displays, and Indicators   **XG Rotary Adjust/Enter Control**
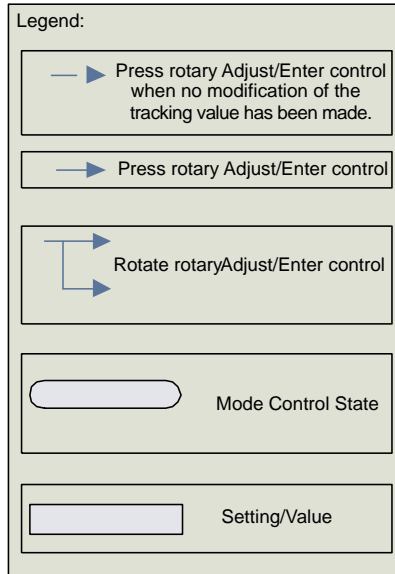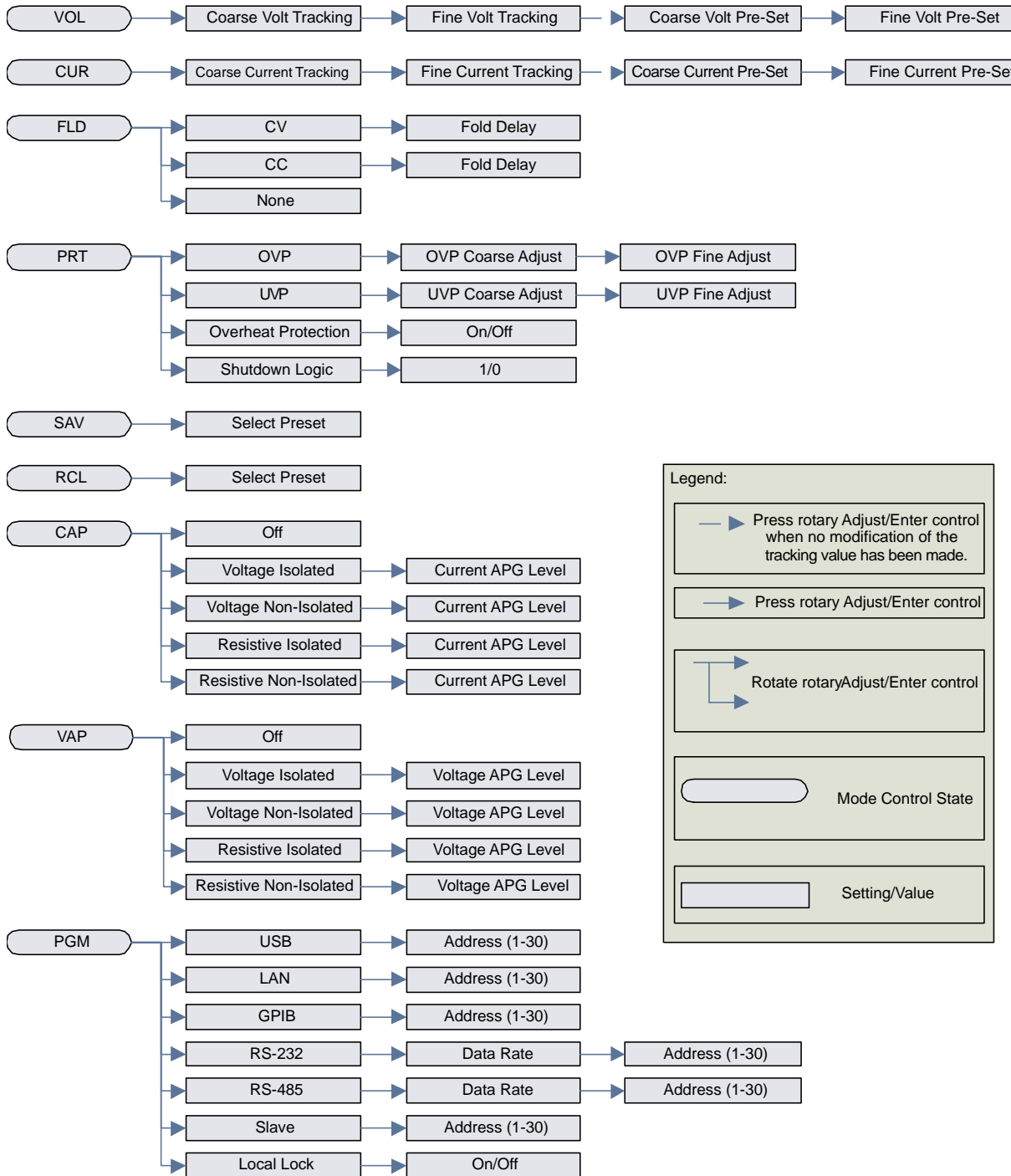
General Procedures for Setting Up Features

- To select a mode, rotate the 9-position Mode control to the desired mode.
- To select the feature or setting, turn the rotary Adjust/Enter control to scroll through the different available settings of that mode.
- The settings appear on the output display.
- Press the rotary Adjust/Enter control to select the feature or setting.
- Set each value using the rotary Adjust/Enter control. When the value has been selected, press the Adjust/Enter control to commit the updated value.

Setting the Output Voltage and Current Limit Using Tracking Mode

To access the tracking mode where new values take effect as the rotary Adjust/Enter control is turned:
1. Select VOLTS or AMPS on the 9-position Mode control. The set point will blink and the unit will be in coarse tracking mode.
   - When VOLTS mode is selected, the voltage set point will blink in the output voltage display.
   - When AMPS mode is selected, the current set point will blink in the output current display.
2. Use the rotary Adjust/Enter control to adjust the set point.
3. Press the Adjust/Enter control to use fine adjust tracking mode. The set point blinks faster when the unit is in fine tracking mode.
4. Use the rotary Adjust/Enter control to fine tune the set point.
5. Once the set point has been selected, press the Adjust/Enter control to exit tracking.

Front Panel Menu System (firmware v1.09 and below)

VOL → Coarse Volt Tracking → Fine Volt Tracking → Coarse Volt Pre-Set → Fine Volt Pre-Set

CUR → Coarse Current Tracking → Fine Current Tracking → Coarse Current Pre-Set → Fine Current Pre-Set

FLD
- CV → Fold Delay
- CC → Fold Delay
- None

PRT
- OVP → OVP Coarse Adjust → OVP Fine Adjust
- UVP → UVP Coarse Adjust → UVP Fine Adjust
- Overheat Protection → On/Off
- Shutdown Logic → 1/0

SAV → Select Preset

RCL → Select Preset

CAP
- Off
- Voltage Isolated → Current APG Level
- Voltage Non-Isolated → Current APG Level
- Resistive Isolated → Current APG Level
- Resistive Non-Isolated → Current APG Level

VAP
- Off
- Voltage Isolated → Voltage APG Level
- Voltage Non-Isolated → Voltage APG Level
- Resistive Isolated → Voltage APG Level
- Resistive Non-Isolated → Voltage APG Level

PGM
- USB → Address (1-30)
- LAN → Address (1-30)
- GPIB → Address (1-30)
- RS-232 → Data Rate → Address (1-30)
- RS-485 → Data Rate → Address (1-30)
- Slave → Address (1-30)
- Local Lock → On/Off

Legend:

— ▶ Press rotary Adjust/Enter control when no modification of the tracking value has been made.

→ Press rotary Adjust/Enter control

↳ Rotate rotaryAdjust/Enter control

( ) Mode Control State

[ ] Setting/Value

Front Panel Display Messages

0	Negative Polarity
1	Positive Polarity
AnPr	Analog Programming
AS	Power On Autostart
AuAS	Auxiliary Autostart
CAPr	Current Analog Programming
CLr	Clear
CC	Constant Current
COn7	Controller
CU	Constant Voltage
CrPC	Coarse Current Pre-set Mode
CrPU	Coarse Voltage Pre-set Mode
CShr	Current Share (same as CUrrShAr)
CUrr	Current
CUrrShAr	Current Share (same as CShr)
dELA	Fold Delay
FOLd	Foldback protection triggered
FLA	Flash
FnPC	Fine Current Pre-set Mode
FnPU	Fine Voltage Pre-set Mode
FLd	Setting up Foldback trigger
9P ib	GPIB Interface
HbPS	Data rate (Kbps)
In	Interlock
H rS	Hard Reset
LE C	Current APG Level
LE U	Voltage APG Level
Loc	Lock
LOCL	Local
OCP	Over Current Protection
O7P	Over Temperature Protection
OUP	Over Voltage Protection
OuPF	Over Voltage Protection fine adjustment
OUPC	OVP Calibration
OU7P	Output Protection
POL	Polarity
PrO	Protection mode
PSU	Power Supply Unit
r IS	Isolated Resistive Analog Programming
rCL	Recall User Setting Memory Locations
rE	Remote Programming/Interface
rni S	Non-Isolated Resistive Analog
SAFE	Safe
Sd	Shutdown
SLA	Slave Remote Interface
S rS	Soft Reset
U IS	Isolated Analog Voltage Programming
Un IS	Non-Isolated Analog Voltage
UUP	Under Voltage Protection Coarse
UUPF	Under Voltage Protection Fine Adjustment
URPr	Voltage Analog Programming
UOL	Voltage

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