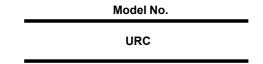
REMOTE CONTROL



Universal Remote Control PowerSine-series



OWNER'S MANUAL

1. Introduction

Thank you for purchasing the Samlex Electronics Universal Remote Control (URC) for controlling the following Samlex devices:

- Powersine Combi inverter/charger series

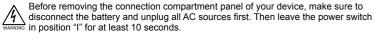
The URC features an advanced graphical display and a smart user interface for easy operation. Using the URC you can readout all available parameters of the connected Samlex device and remotely turn this product on and off. The communication between the URC and the Samlex device is made using the rugged industrial SamlexLink protocol which supports wirelengths of up to 50 meters. A Samlex Link connection accepts simple CAT5 Ethernet patch cables (straight wired).

To get optimal performance and safe operation from your URC and Samlex device, it must be installed and used properly. Please read this manual very carefully, especially the warning and caution statements, before installing and using the URC.

2. Installation

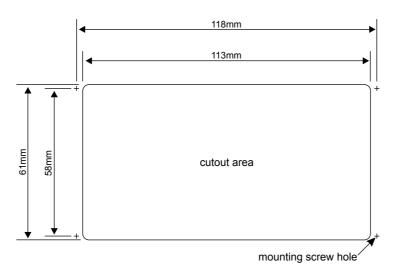


Never connect a SamlexLink connector to other network types like ethernet, or to the e-xpert series quick connection kit!



The URC must be mounted in a dry location where it is not exposed to direct sunlight. The ambient air temperature of this location should be between -10°C and +50°C (humidity < 95% non condensing).

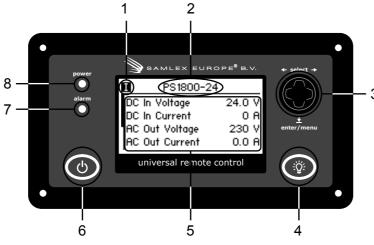
Never put excessive pressing force on the display window area, since this could permanently damage the display. For panel mounting the URC, the following measurements must be taken into account



Please follow the installation instructions of your Samlex device to connect the URC correctly. The URC must be connected inside the connection compartment of a Samlex inverter or combi, while it can be connected externally (bottom panel) to a Samlex battery

3. URC Display and control overview

Now that the URC is connected to the Samlex device, you can turn it on which will automatically activate the remote panel as well. Before going into specific details, the image below shows the display and control overview of the URC



- 1. Samlex device mode indicator. With an inverter connected, symbol I indicates inverter on in normal mode. Symbol II indicates inverter on in ASB mode. With a charger connected, symbol I indicates charger on in normal mode. Symbol II indicates charger on in forced float mode. With a combi connected, symbol I indicates combi on in normal mode. Symbol II indicates combi on in charger only mode.
- 2. Samlex device type indicator. Automatically shows which inverter, charger or combi model is connected to the URC.
- 3. Intelligent rotary controller knob. Three way control knob which can be used to select values, browse through lists and change numeric values.
- 4. Backlight button. Activates or deactivates the backlight of the LCD
- 5. LCD parameter field. In normal operating conditions, this field indicates all available parameters and it's corresponding values. When this list has more than four rows, you can use the rotary controller to browse through this list.
- 6. Power button. This button activates the power options menu, or directly turns off the Samlex device when pressed for 3 seconds.
- 7. Alarm indicator LED. Flashes red when a Samlex device error has occurred. The corresponding error type will be showed on the display.

 8. Power indicator LED. Lits green when the Samlex device and remote panel are on.

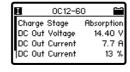
4. General URC functionality

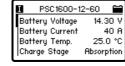
As explained above, when the Samlex device is switched on using it's main power switch, the URC will start up as well showing a green power LED and the following startup screen for a few seconds



This screen will be followed by the normal operating display mode where all available parameters of the inverter, charger or combi will be showed

■ PS1800-24	
DC In Voltage	24.0 V
DC In Current	0 A
AC Out Voltage	230 V
AC Out Current	0.0 A



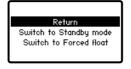


You can browse through the list of available parameters by turning the rotary controller knob (3) clockwise or counter clockwise. When the ambient light conditions are poor, the backlight button (4) can be pressed to activate the display backlight. Use the same button to deactivate the backlight again

When the Samlex device shuts down automatically caused by tripping an error mode, the alarm LED (7) starts flashing and the display will show the corresponding error type. This error message will automatically disappear again when the error has been solved.

To turn off the Samlex device or to put it into a different operating mode, you can press the power button (6) once. This will show the inverter, charger or combi power options menu:





Switch to Standbu mode Switch to Charger only

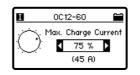
By turning the rotary controller knob you can choose your preferred option. This option can be executed by pushing the rotary controller knob, or pressing the power button. Option "Return" will escape from this screen and jumps to the normal operating screen again. Changing to a different Samlex device operating mode, will also change the mode indicator (1) from I to II or vice versa. If an inverter was already running in ASB mode before entering the power options menu, the "Switch to ASB mode" option is replaced by "Switch to normal mode". If a charger was already running in Forced float mode before entering the power options menu, the "Switch to Forced float mode" option is replaced by "Switch to normal mode". If a combi was already running in Charger only mode before entering the power options menu, the "Switch to Charger only" option is replaced by "Switch to normal

The choice of operating mode on the URC will always override the position of the main power switch on the inverter. You can also switch directly to Samlex device standby mode in the normal operating screen by pressing the power button (6) for three seconds. The Samlex device and URC can be activated again by pressing the power button (6) once.

Note: In standby or sleep mode, the device still draws a very small current from the battery in order to be able to detect a power button press on the remote panel. When you are leaving the device off for an extended amount of time, it is advised to turn off the device using the local main power switch. This way the device will draw zero current from the batteries

5. Charger only URC functionality

When the URC is connected to a battery charger, it is possible to dynamically reduce the Maximum Charging Current (MCC). This feature is ideal in situations where the user wishes to temporarily reduce the chargers AC power consumption, for example when limited AC source power is available. To activate the MCC menu, press the rotary controller knob (3) once which will show the following screen

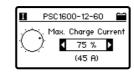


Now it's possible to turn the rotary controller knob (3) clockwise or counter clockwise to adjust to the preferred charge current level. The charge current level is represented as percentage of maximum rated charge current, and in actual Amps (between brackets). The minimum MCC level is 10%. When the desired MCC level is selected, press the rotary controller knob (3) once to jump back to the normal operating display mode. The MCC level will be stored in internal memory and remains the setpoint until it is changed

In the top-right area of the display, you can see a small battery icon which represents the charging state of the battery. This state is directly linked to the charge status bar on the battery charger itself.

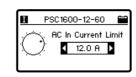
6. Combi only URC functionality

When the URC is connected to a combi device, it is possible to dynamically reduce the Maximum Charging Current (MCC) and set the AC input current limit level. Reducing the MCC is ideal in situations where the user wishes to temporarily reduce the chargers AC power consumption, for example when limited AC source power is available. To activate the MCC menu, press the rotary controller knob (3) once which will show the following



By turning the rotary controller knob (3), the preferred charge current can be set in percentage of maximum rated charge current, or just in Amps

When the rotary controller knob (3) is pressed once again, the AC In Current Limit level screen appears



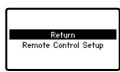
By turning the rotary controller knob (3), the preferred AC input current limit level can be set in Amps. When this input current level is exceeded, the combi immediately reduces the charge current automatically in order to keep the AC input current below this predefined level. When this input current level remains being exceeded, even when the charge current has been reduced to zero, the Power Boost feature will be activated (see Powersine Combi combi manual for further information).

When the desired AC In Current Limit level is selected, press the rotary controller knob (3) once to jump back to the normal operating display mode. The MCC and AC In Current Limit levels will be stored in internal memory and remains the setpoint until it is changed again using this menu

In the top-right area of the display, you can see a small battery icon which represents the charging state of the battery. This state is directly linked to the charge status bar on the battery charger itself.

7. URC setup

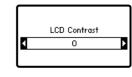
When the rotary controller knob (3) is pressed for three seconds, the following screen will



By turning the rotary controller you can select the "Remote Control Setup" option and press the rotary controller once. The following screen with URC properties will appear



Now you can select the property that you wish to change, by turning and pressing the rotary controller accordingly. A screen will appear that allows you to change the property value by turning rotary controller again. The image below shows the display contrast property as an example



The desired value can be stored by pressing the rotary controller for three seconds. This way of saving a property value change, would result in jumping back to the normal operating display mode again. When you wish to change more than one property, press the rotary controller once and you will jump back to the URC properties list again were you can select the next property to change. When all desired URC properties are changed, select and press "Return" in the URC property list screen which will save all changed values and jump back to the normal operating display mode. If no buttons are touched for 90 seconds when operating in a setup screen, the URC will automatically jump back to the normal operating display again without saving any changed property values.

8. Technical specifications

Universal Remote Control (SamlexLink)
SamlexLink point to point
UTP straight wired patch cable RJ45(8)-RJ45(8)
12VDC or 24VDC
12mA [47mA]
-10C to +50 C
-20C to +65 C
130 x 70 x 36 mm
113 x 61mm
30 mm
IP30
140 grams
ABS

Note: the given specifications are subject to change without notice