



SMART LINKING CONTROL MASTER CONTROLLER

Product Description

The SMART LINKING CONTROL Master Controller is a mains powered, wall-mounting unit that provides automated control over other SMART LINKING CONTROL devices wirelessly. With programmable timers, macro functions and group functions the SMART LINKING CONTROL Master Controller can completely automate many pool, spa and yard functions. Many functions of the SMART LINKING CONTROL Master Controller can also be controlled remotely using the SMART LINKING CONTROL 8 Ch Basic Remote or the LCD Master Remote.

If temperature sensing functions are also required, use the SMART LINKING CONTROLS Solar Controller.

An LCD and 10-button interface make programming and operating the SMART LINKING CONTROL Master Controller quick and easy.

The SMART LINKING CONTROL Master Controller also relays messages from other SMART LINKING CONTROL units and can therefore extend the range of the SMART LINKING CONTROL network.

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Installation

- When installing the SMART LINKING CONTROL Master Controller it may be easier to program the network prior to installation. Please read the section below titled *Programming the SMART LINKING CONTROL Master Controller* for instructions on how to program the SMART LINKING CONTROL Master Controller .
- Mount the SMART LINKING CONTROL Master Controller in a location that is greater than 3.5m from any pool and less than 1.5m from a household supply socket.
- Plug the devices to be controlled into the SMART LINKING CONTROL outlets.
- The total current of the SMART LINKING CONTROL Master Controller must not exceed 10A.
- Plug the mains input lead into the household 240V supply.
- Switch on the household 240V supply and the override switches on the unit.

Programming the SMART LINKING CONTROL Master Controller

To program SMART LINKING CONTROLS Outlets into the SMART LINKING CONTROL Master Controller the SMART LINKING CONTROL Outlet must be transmitting its ID when the SMART LINKING CONTROL Master Controller is in program mode. To transmit a SMART LINKING CONTROL Outlets ID press and hold the button at the top of the Outlet for 5 seconds, the button must be continuously held to transmit the units ID.

To put the SMART LINKING CONTROL Master Controller into program mode enter the Add Equipment menu described above. When in this menu the controller will display the word Searching on the LCD along with a transmitting icon. When the Outlet transmitting its ID has been detected the SMART LINKING CONTROL Master Controller will display a message indicating what type of unit has been detected. The SMART LINKING CONTROL Outlet will automatically be added to the first free space on the favourites menu and will appear under the Outlet type on the Access Equipment menu. The Outlet can now be renamed to represent the device it is controlling.

To program a SMART LINKING CONTROL Master Controller function into a SMART LINKING CONTROL Remote please read the section above describing the Set-up Remote menu.

Please Note: Information provided & specifications are subject to change without notice.

To program a macro select the “Setup Macros” sub-menu from the main menu and then select the macro you wish to program. The screen will now display a list of the 4 macro functions, activation states (on or off) and wait periods. To program a function into one of the macro steps select the **Act:** line and press the right arrow. The “Access Equipment” menu will then be displayed followed by the “Access Equipment Level 2” menu where the function can be selected. The name of this function will be displayed on the **Act:** line. If no function has been programmed into the macro the **Act:** line will display three dashes ---. Whether the function is turned on or off should now be set along with the wait period. The wait period is the time the macro will wait before activating the next step in the sequence.

After the macro has been programmed it can then be activated by a timer, a remote, another macro or by manually selecting the macro from the macro menu and pressing the enter button. Macros can also be added to the favourites list using the “Edit Favourites” menu.

Group Functions

A group function is a programmable group of up to 8 SMART LINKING CONTROL Outlets that can be turned on or off together. For example yard lights could be plugged into SMART LINKING CONTROL Outlets at various locations around the yard and the SMART LINKING CONTROLS Outlets programmed into a group. These lights can then be turned on and off together by pressing a single button on the SMART LINKING CONTROL Master Controller or a SMART LINKING CONTROL Remote. The SMART LINKING CONTROL Master Controller has 8 group functions each of which can contain up to 8 SMART Outlets.

To program a group select the “Setup Groups” sub-menu from the main menu. A list of the 8 groups and their on/off state will then be displayed. Groups can be turned on and off from this menu by selecting the group and pressing the activate button. Selecting a group and pressing the right arrow will enter the program group sub-menu. On the program group sub menu is displayed a list of the 8 SMART Outlets currently programmed into that group. To add a SMART LINKING CONTROL Outlet to this group select a position in the group, 1 to 8, and press the right arrow. The “Access Equipment” sub-menu will now be displayed where an Outlet type can be selected, followed by the “Access Equipment” Level 2 sub-menu when a specific Outlet can be selected. When an Outlet has been selected it will be added to the selected group position.

After a group has been programmed it can then be activated by a timer, a remote, a macro or by manually selecting the group from the “Setup Groups” menu and pressing the enter button. Groups can also be added to the favourites list using the “Edit Favourites” menu.

Buttons

Button	Name	Function
1, 2, 3 and 4	Hotkeys	These buttons activate favourites 1, 2, 3 and 4. These favourites can be changed in the <i>Edit Favourites</i> menu.
↑ and ↓	Up and Down arrows.	- On the main menu these buttons will switch to the favourites menu. - On other menus these buttons will scroll the menu up and down. - When an option is selected these buttons will increase or decrease the selected value.
← and →	Left and Right arrows.	- Enter (↵) or exit (⇐) the highlighted sub-menu. - If there is no sub-menu, → will activate the highlighted item. - Move the selection left or right.
X	Cancel / ESC	Exits the current menu or de-selects the current selection.
✓	Accept / Activate	- Activate the highlighted item. - If the highlighted item is a sub-menu that cannot be activated this button will enter the sub menu. - Accept the current selection.

Menu Options

At any time pressing Hotkeys 1 to 4 will activate favourites 1 to 4. All other buttons are used to navigate the menus. Below is a list of the SMART LINKING CONTROL Master Controller menus.

Default Display

When the master controller is first turned on, or no buttons are pressed for 30 seconds, the default screen will be displayed. Displayed on this screen are the day and time and a alternating display of the favourite functions.

- Pressing the up or down arrows will enter the favourites menu.
- The right arrow and activate buttons will enter the main menu.

Monday	09:35
Outlet 1	ON

Main Menu

The main menu provides a choice of 7 sub-menus.

- Pressing the up and down arrows will scroll the selection and the screen up and down.
- The right arrow and activate button will enter the selected sub-menu.
- The left arrow and the ESC button will exit to the default menu.

<p>>Equipment Set Timers Setup Macros Setup Groups Edit Favourites</p>

Main Menu

Equipment Menu

The equipment menu provides a choice of 4 sub-menus.

- Pressing the up and down arrows will scroll the selection and the screen up and down.
- The right arrow and activate button will enter the selected sub-menu.
- The left arrow and the ESC button will exit to the default menu.

<p>>Access Units Add Equipment Rename Outlet</p>

Main Menu

Equipment Menu

Access Equipment

The Access Equipment menu provides a choice of equipment types that can be accessed or modified. When accessing this sub-menu the functions that are displayed will depend upon the menu that has provided access to this sub-menu. The display at right shows the SMART LINKING CONTROLS Outlets. Some Access Equipment menus will also display Macro and Group functions.

<p>>2x10A Outlets 15A Outlets</p>
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Timers

The SMART LINKING CONTROL Master Controller features 16 programmable timers, each with its own function selection, on time and off time. The timers can be programmed to turn on and off SMART LINKING CONTROLS Outlets, macro functions and group functions.

To set a timer select the “Set Timers” sub-menu from the main menu and then select the timer you wish to program. The timers can be turned off when they are not needed, such as in the off-season. Turning a timer on or off does not affect the programming of the timer.

Once a timer has been selected the function it will activate can then be selected. This is done by selecting the line **Act:** and pressing the right arrow. The “Access Equipment” menu will then be displayed followed by the “Access Equipment Level 2” menu where the function the timer will activate is selected. The name of this function will be displayed on the **Act:** line. If no function has been programmed into the timer the **Act:** line will display three dashes ---. The on and off times and the on and off day or days should now be set.

The timer is now running and will activate the programmed function at the programmed time.

Macro Functions

Macro functions allow a sequence of 4 programmable functions to be turned on or off with a programmable delay in between each step. These functions can be SMART LINKING CONTROLS Outlets, group functions or macro functions. A macro can even trigger itself to create an endless cycle. The wait period can be anywhere between 1 minute and 24 hours. The SMART LINKING CONTROL Master Controller supports 8 macro functions.

For example, a person wants to run a pump for 10 minutes an hour, every hour, between the 9:00am and 5:00pm. This could be achieved with a timer and a macro. A timer could be programmed to activate macro 1 at 9:00am and to turn off macro 1 at 5:00pm. Macro 1 can then be programmed to start the pump, wait 10 minutes, stop the pump, wait 50 minutes and then activate macro 1. So at 9:00am the timer will start macro 1, which will continuously activate itself in a loop until the timer stops macro 1 at 5:00pm.

Macros can also be used in sequence to create more than 4 programmable steps. For example macro 1 can trigger macro 2 and so on.

Main Menu

Edit Favourites

This menu allows the Favourites menu to be changed. Outlets, Macros and Groups can be added to this list and the order re-arranged. The “Favourites” buttons activate the first four functions on this list.

```
>Favourite 1 ON
Favourite 2 OFF
Favourite 3 OFF
.
```

To add a function to the Favourites list select a position on the list and press the right arrow. This will display the Access Equipment menu followed by the Access Equipment Level 2 menu when a function can then be selected.

Main Menu

Setup Remote

This menu allows the SMART LINKING CONTROL Master Controller’s Outlets, Groups and Macros to be programmed into SMART LINKING CONTROLS Remotes. Selecting a function on this menu and pressing either the right arrow or the activate button will transmit the SMART LINKING CONTROL Master Controllers ID along with the ID of the selected function. When a SMART LINKING CONTROLS Remote is programmed with this ID the remote will then be able to turn the function on and off.

```
>Outlet 1
:
```

Main Menu

Settings

The Settings menu provides access to the Set Clock sub-menu, the Factory Reset sub-menu and displays the firmware version.

```
>Set Clock
Factory Reset
Version 1
```

When Factory Reset is selected by pressing the right button or the activate button a confirmation screen is displayed. If the activate button is then pressed the unit will delete all programmed data and return to the original state.

Main Menu

Settings

Set Clock

Use the left and right arrow buttons to select a part of the date and time display, then the up and down buttons to change the selection. Accept sets the selection.

```
Sunday
09.12.12
```

Main Menu

Equipment Menu

Access Equipment

Access Equipment Level 2

After an equipment type has been selected a list of functions in the unit type category is shown on this menu.

- Use the up and down arrows to scroll the menu up and down and highlight a function.
- Pressing the activate button will activate the highlighted function.
- Pressing the right arrow will activate the function if no sub-menus are present. If there is a sub-menu the right arrow will enter the sub-menu.
- The left arrow will exit this sub-menu and return to the access equipment menu.

```
>Function 1  ON
      :
Function 2  OFF
```

Main Menu

Equipment Menu

Add Equipment

When this menu is selected the controller will search for units that are transmitting their ID.

- Pressing the activate or right button will cancel the search for units.
- The left arrow will exit the menu and return to the main menu.

```
Searching
/ / \ \
```

Main Menu

Equipment Menu

Rename Outlet

This menu allows any outlet programmed into the SMART LINKING CONTROL Master Controller to be renamed to better suit the device that is controlled by that outlet.

```
>Outlet name
New name
```

When this menu is first selected the Access equipment menu, where an equipment type is selected, will be displayed, followed by the Access Equipment Level 2 menu where an outlet is selected. Following this is the rename menu where the selected outlet can be renamed.

- When the entire outlet name is flashing, the up and down arrows will cycle through the library of available words.
- When a single letter is flashing, the up and down arrows will cycle through the available letters, numbers and symbols.
- The left and right arrows will move the flashing selection indicator left and right.
- When the selection indicator is moved to the far left the entire word will flash and if the left arrow is pressed again it will exit the menu.
- The activate button will store the new name into memory and exit the menu.
- The ESC button will exit the menu without storing any changes that have been made.

Main Menu

Equipment Menu

Remove Units

The Remove Units menu allows any SMART LINKING CONTROLS unit that is programmed into the SMART LINKING CONTROL Master Controller to be removed from the SMART LINKING CONTROL Master Controller's memory.

```
>Function 1  ON
      :
Function 2  OFF
```

When this menu is first selected the Access equipment menu, where an equipment type is selected, will be displayed, followed by the Access Equipment Level 2 menu where an outlet is selected. Selecting an outlet on the Access Equipment Level 2 menu will remove the unit containing that outlet from the SMART LINKING CONTROL Master Controller's memory.

- The up and down arrows can be used to select the equipment type and the outlet.
- The left and right arrows will enter and exit the sub-menus. When an outlet is selected the right arrow will delete the unit containing that outlet from the Controller's memory.
- The ESC button will exit the menus.
- The activate button will activate the selected outlet.

Main Menu

Set Timers

When the “Set Timers” menu is first selected a list of the 16 timers will be displayed. Here the timers can be turned on and off and selected for programming.

```
>Timer 1: ON
Act: Outlet 6
On Time: 9:00
Day: Weekdays
Off Time: 10:00
```

When programming a timer pressing the right arrow on the **Act:** line allows an Outlet, Macro function or Group function to be selected.

Main Menu

Setup Macros

When the “Setup Macros” menu is first selected a list of the 8 Macros functions is displayed. Here the macro functions can be started and stopped manually and selected for programming.

```
>Macro 1: Off
Act: Outlet 1
Turn: On
Wait: 00:10
Act: Outlet 1
Turn: Off
Wait: 00:50
Act: Macro 1
Turn: On
```

When programming a Macro pressing the right arrow on an **Act:** line allows an Outlet, Macro function or Group function to be selected and programmed into that step in the sequence.

An example of how a Macro function might be used is shown at the right. The example shows macro 1 which, when started either manually, by a timer or another macro function, will turn on Outlet 1, wait 10 minutes, turn off outlet 1, wait 50 minutes and then re-start macro 1. This macro will therefore run in an endless loop until stopped by a timer, another macro function or manually. The 4th step in the sequence of this macro will not run because the macro will re-start itself at the third step.

Main Menu

Setup Groups

When the “Setup Groups” menu is first selected a list of the 8 groups is displayed. On this list the groups can be manually turned on and off and selected for programming.

```
>Group 1 ON
:
GROUP 2 OFF
```

When a group has been selected from the Setup Groups menu a list of the 8 SMART LINKING CONTROLS Outlets currently programmed into that group is displayed. Selecting any of the 8 positions on this list and pressing the right arrow will display the Access Equipment menu followed by the Access equipment Level 2 menu where an outlet can be selected.