

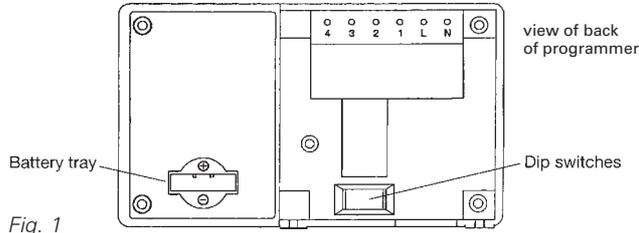
RWB7 Timeswitch

Programming for daily operation (i.e. same times each day)

NB: These units are not suitable for control of immersion heaters.

Installation and configuration

1. First remove the backplate from the RWB7 by undoing the two small screws at the base of the unit and lift out from the bottom so that the two lugs at the top disengage from their positions. Turn unit over and dip switches and battery tray are on reverse. Select operating style with dip switches, refer to section 7.



Technical Data RWB7

Supply	200/240V 50 Hz
Power consumption	50 mA
Contact rating	6A (resistive) 2A (inductive). Total switching 10 amps
Ambient temperature range	0 to 40°C
Environmental humidity	80% RH
Housing	Fire-retardant ABS material

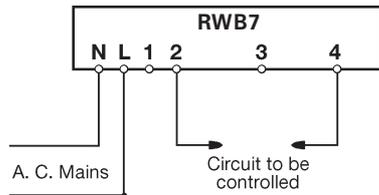
2. Mounting location

To ensure convenience of use, the RWB7 should be fitted in a position which allows easy access. It is recommended that the unit is placed at a height of 1.4 metres from the floor, and should not be installed where either extremes of heat or cold exist. Care should also be taken to ensure that steam, water or oil cannot splash onto or enter either the RWB7 or its backplate.

3. Backplate

The RWB7 is supplied with the industry standard backplate to which the system must be wired. The backplate can be fitted directly to the wall or onto a conduit box. Only conduit boxes which comply with BS1363 or BS4662 (single gang) should be used.

4. Programmer internal wiring diagrams



The mains supply must be isolated before replacing an existing programmer, failure to do so could cause damage to the RWB7 and will invalidate all warranty claims.

The voltage applied to terminal 2 is switched to terminal 4 when the timeswitch is in the ON position, and to terminal 3 when the Timeswitch is in the OFF position. If 240V direct mains switching is required link L to 2. (For more information see separate wiring and interchange sheet).

Note: All external wiring must comply with current IEE regulations. Wiring of this unit should be carried out by a qualified electrician. Whilst every effort is made to ensure the accuracy of the instructions given, discrepancies may occur due to a variety of reasons outside our control. If, after wiring your system, you should find that it does not work properly you should:

- Check you have used the correct wiring system and wired it correspondingly. Ensure no wiring links have been missed and all screws are tight.
- Check with the Technical Help line - there may be a simple explanation.

(Technical Help Line: 01952 602048 Mon. - Fri. 9am - 5pm)

5. Prior to installing onto the backplate, insert the battery into the battery tray (see Fig. 1) and ensure that positive + and negative - are correctly installed. The battery is a non-rechargeable lithium cell and in the event of power failure will protect your programme instructions for up to 365 continuous days of power loss. (However, please note in the event of premature battery failure you can **write** to the address below for a replacement.)

6. The RWB7 is factory set to provide 2 on/off switching times per day and each day will be the same, i.e. daily operation. To select the other styles of switching you will have to alter the dip switches which are to be found at the bottom rear of the unit into the relevant position for the style of operation you require.

NB: Press RESET after any dip switch change.

RESET button will be found on the front of the unit under the flap.

7. Your operation styles are:

RWB7	Dip switch configurations				
Please note black bar shows position of dip switch, eg daily with two ON/OFF, dip switch 1 up, 2 to 4 down.	1	2	3	4	5
Daily with 2 on/off switching per 24 hr period (factory setting).					
Daily with 3 on/off switching per 24 hr period.					

Black area shows position of switches

8. Once you have completed the above you are ready to connect the RWB7 to the backplate. When replacing a Landis & Gyr or Landis & Staefa product as listed below, no wiring changes are required, *with the exception of the RWB3* which will require a link to be inserted from L to 2 on the existing backplate.

RWB3, RWB30, RWB50, RWB100, RWB152, RWB152cw, RWB170, RWBXT.

9. However, if the RWB7 is replacing a Landis & Gyr or Landis & Staefa product as listed below, these products are not suitable for replacement by the RWB7. **You are trying to replace a programmer with a time clock.** Return the RWB7 to your stockist/installer and request the RWB9 which will fully interface with your old unit's backplate - RWB1, RWB2, RWB20, RWB40, RWB200, RWB200cw, RWB252, RWB252cw, RWB270, RWBXP. Gloworm Mastermind, Potterton Miniminder, Sankey Sunline.

10. Fitting the unit to the backplate

With the backplate installed and the dip switches positioned for your mode of operation you can now locate the programmer onto its backplate. Tilt the bottom of the case away from the wall, locate the two slots in the top of the case over the two tabs at the top of the backplate. Push the bottom of the case towards the wall, slotting the two backplate screws into the bottom of the case and tighten the screws. This enables the contact pins of the RWB7 to engage with those in the backplate. Turn the power on, the display will then be lit and indicator light will flash momentarily, you are now ready to commence programming.

Pre-set factory settings:

2 on/off 6.30 am to 8.30 am and 4.30 pm to 10.30 pm

3 on/off 6.30 am to 8.30 am, 12.00 pm to 2 pm and 4.30 pm to 10.30 pm

The above times are the same for all operating styles.

Programming for daily operation (i.e. same times each day)

Drop the bottom door flap and with a ball-point pen or similar object, press the small Reset button to the right of the time adjustment button. The display will show the current states of the dip switch setting:

2P 10: 2 programs per day
3P 10: 3 programs per day
Mo Tu We Th Fr Sa Su: static: All days the same program

If while entering a switching time the word LIMIT should appear in the display you have tried to enter a switching programme that is not possible.

ie 1 ON 8.40AM
 1 OFF 8.30AM

When first time programming or after pressing the Reset button, you must first set the clock time before you can enter any programme times.

1.0 Altering the clock

Move the vertical slider switch on the left, up to SETTIME, the time will *flash*. Now press either TIME+ or TIME- buttons to set the correct time. (Holding down the respective button will make the clock change at a fast speed.)

Once the correct time has been reached YES/NO appears. To store this time press YES and YES/NO will now disappear from the display.

Move the vertical slider switch back to RUN, thus completing the clock setting.

For Winter/Summer time changes **DO NOT PRESS RESET** follow normal operation above.

1.1 Changing the switching times

To alter the switching times move the vertical slider switch to SET PRG. The display will show "1 ON" indicating first on period.

1.2 Using TIME+, TIME- buttons, adjust to required time setting (10 minute increments). Press YES to store and move onto next switching time.

1.3 Repeat as in **1.2** to set remaining switching times.

1.4 Having completed the above, move the vertical slider switch to RUN. The correct time of day will now display along with one small bar on the left of your screen which points to your programme selection (switching patterns).

Initially this bar will show against OFF and you must now make your selection of switching patterns - see **Selecting Switching Patterns**.

Selecting switching patterns

These are the various styles of switching available to you by use of the following buttons:

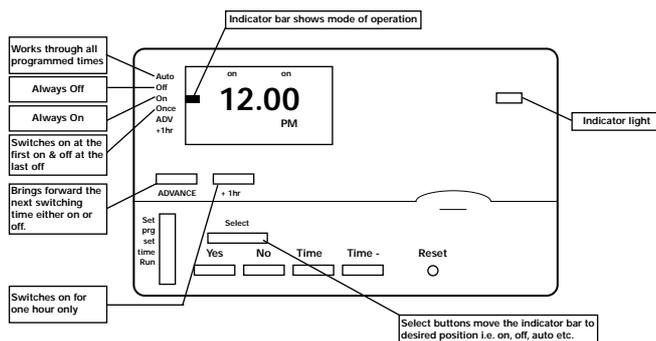
- AUTO** - Programmer will operate across ALL programmed switching times.
- OFF** - Always off - only + 1hr. operative.
- ON** - Constant On. Never Off.
- ONCE** - From first On to last Off.

ADV (Advance) - Only operates in AUTO or ONCE. Pressing **ADV** brings forward the next automatic switching time, e.g. from an ON time to the next OFF time and will automatically cancel at next switching time. **If you wish to cancel Advance push ADV again.** When Advance is in operation a black bar shows against **ADV** in the display.

+ 1hr. (also known as 'boost') - This button will either bring the unit on one hour in OFF, or extend by one hour while in ON. To cancel just press **+ 1hr.** again. When **+ 1hr.** is in operation a black bar shows against **+ 1hr.** in the display. Please note **+ 1hr.** will also work when the unit is in any OFF position.

AUTO, OFF, ON, ONCE

To select the four positions listed above, push the button marked Select located under the flap until the black bar is adjacent to your switching demand.



Programming for 5/2 day operation (i.e. weekdays different to week-ends)

NB: If you have selected this style of operation for the first time you **must** press the Reset button first before making any entries.

Drop the bottom door flap and with a ball-point pen or similar object, press the small Reset button to the right of the time adjustment button. The display will show the current states of the dip switch setting:

2P 10: 2 programs per day
3P 10: 3 programs per day
Mo Tu We Th Fr/Sa Su: alternating: weekday/weekend programming

If while entering a switching time the word LIMIT should appear in the display you have tried to enter a switching programme that is not possible.
 ie 1 ON 8.40AM
 1 OFF 8.30AM

When first time programming or after pressing the Reset button, you must first set the clock time before you can enter any programme times.

2.0 Altering the clock

Move the vertical slider switch on the left up to SETTIME and Mo will flash. If today is Monday press YES, if not then press NO repeatedly until the correct day is displayed. Then press YES.

Now the time will flash. Press either TIME+ or TIME- buttons to set the correct time. (Holding down the respective button will make the clock change at a fast speed.)

Once the correct time has been reached YES/NO appears. To store this time press YES and YES/NO will now disappear from the display.

Move the vertical slider switch back to RUN, thus completing the clock setting.

For Winter/Summer time changes **DO NOT PRESS RESET** follow normal operation above.

2.1 Changing the switching times

To alter the switching times move the vertical slider switch to SET PRG. The display will now show - Mo, Tu, We, Th, Fr YES/NO flashing.

Press YES the display will show "1 ON" indicating first on period.

Using TIME+, TIME- buttons, adjust to required time setting (10 minute increments). Press YES to store and move onto next switching time and repeat for each switching.

On completion of the above, display shows Mo-Fr, COPY? static and Sa-Su flashing. Press NO to enter different times for Saturday/Sunday. Display now reads YES/NO Sa-Su flashing. Press YES and repeat as previous instructions for weekend switching times.

Having completed the above the display will show either Mo-Fr YES/NO alone flashing or with COPY? Sa-Su static, you have completed your programming. Now move the vertical switch to RUN. The correct time and day will now display along with one small bar on the left of your screen which points to your programme selection (switching patterns).

Initially this bar will show against OFF and you must now make your selection of switching patterns - see **Selecting Switching Patterns**.

Selecting switching patterns

These are the various styles of switching available to you by use of the following buttons:

- AUTO** - Programmer will operate across ALL programmed switching times.
- OFF** - Always off - only + 1hr. operative.
- ON** - Constant On. Never Off.
- ONCE** - From first On to last Off.

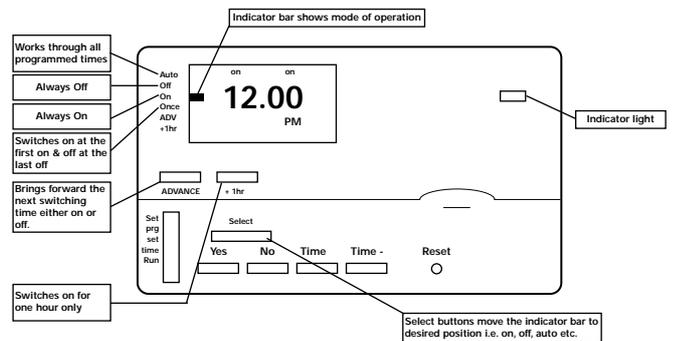
ADV (Advance) - Only operates in AUTO or ONCE. Pressing **ADV** brings forward the next automatic switching time, e.g. from an ON time to the next OFF time and will automatically cancel at next switching time. **If you wish to cancel Advance push ADV again.** When Advance is in operation a black bar shows against **ADV** in the display.

+ 1hr. (also known as 'boost') - This button will either bring the unit on one hour in OFF, or extend by one hour if pressed while in ON. To cancel just press **+ 1hr.** again. When **+ 1hr.** is in operation a black bar shows against **+ 1hr.** in the display. Please note **+ 1hr.** will also work when the unit is in any OFF position.

AUTO, OFF, ON, ONCE

To select the four positions listed above, push the button marked Select located under the flap until the black bar is adjacent to your switching demand.

The RWB7 is fitted with a red LED which will light only when the relay is on.



RWB7 Timeswitch

Programming for 7 day operation (i.e. every day different)

NB: These units are not suitable for control of immersion heaters.

Installation and configuration

1. First remove the backplate from the RWB7 by undoing the two small screws at the base of the unit and lift out from the bottom so that the two lugs at the top disengage from their positions. Turn unit over and dip switches and battery tray are on reverse. Select operating style with dip switches, refer to section 7.

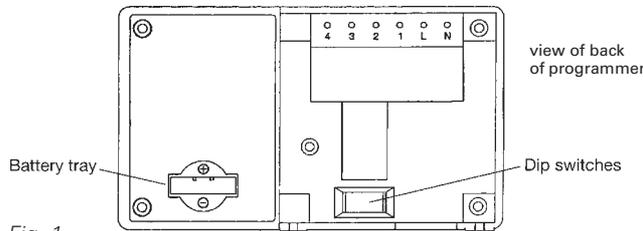


Fig. 1

Technical Data RWB7

Supply	200/240V 50Hz
Power consumption	50 mA
Contact rating	6A (resistive) 2A (inductive). Total switching 10 amps
Switching voltage	12 to 240V
Ambient temperature range	0 to 40°C
Environmental humidity	80% RH
Housing	Fire retardant ABS material

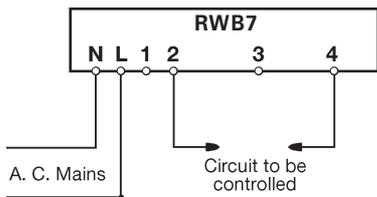
2. Mounting location

To ensure convenience of use, the RWB7 should be fitted in a position which allows easy access. It is recommended that the unit is placed at a height of 1.4 metres from the floor, and should not be installed where either extremes of heat or cold exist. Care should also be taken to ensure that steam, water or oil cannot splash onto or enter either the RWB7 or its backplate.

3. Backplate

The RWB7 is supplied with the industry standard backplate to which the system must be wired. The backplate can be fitted directly to the wall or onto a conduit box. Only conduit boxes which comply with BS1363 or BS4662 (single gang) should be used.

4. Programmer internal wiring diagrams



The mains supply must be isolated before replacing an existing programmer, failure to do so could cause damage to the RWB7 and will invalidate all warranty claims.

The voltage applied to terminal 2 is switched to terminal 4 when the timeswitch is in the ON position, and to terminal 3 when the Timeswitch is in the OFF position. If 240V direct mains switching is required link L to 2. (For more information see separate wiring and interchange sheet).

Note: All external wiring must comply with current IEE regulations. Wiring of this unit should be carried out by a qualified electrician. Whilst every effort is made to ensure the accuracy of the instructions given, discrepancies may occur due to a variety of reasons outside our control. If, after wiring your system, you should find that it does not work properly you should:

- Check you have used the correct wiring system and wired it correspondingly. Ensure no wiring links have been missed and all screws are tight.
- Check with the Technical Help line - there may be a simple explanation.

(Technical Help Line: 01952 602048 Mon. - Fri. 9am - 5pm)

5. Prior to installing onto the backplate, insert the battery into the battery tray (see Fig. 1) and ensure that positive + and negative - are correctly installed. The battery is a non-rechargeable lithium cell and in the event of power failure will protect your programme instructions for up to 365 continuous days of power loss. (However, please note in the event of premature battery failure you can **write** to the address below for a replacement.)

6. The RWB7 is factory set to provide 2 on/off switching times per day and each day will be the same, i.e. daily operation. To select the other styles of switching you will have to alter the dip switches which are to be found at the bottom rear of the unit into the relevant position for the style of operation you require.

NB: Press RESET after any dip switch change.

RESET button will be found on the front of the unit under the flap.

7. Your operation styles are:

RWB7	Dip switch configurations				
Please note black bar shows position of dip switch, eg daily with two ON/OFF, dip switch 1 up, 2 to 4 down.	1	2	3	4	
7 Day with 2 on/off switching per day.					
7 Day with 3 on/off switching per day.					

Black area shows position of switches.

8. Once you have completed the above you are ready to connect the RWB7 to the backplate. When replacing a Landis & Gyr or Landis & Staefa product as listed below, no wiring changes are required, *with the exception of the RWB3* which will require a link to be inserted from L to 2 on the existing backplate.

RWB3, RWB30, RWB50, RWB100, RWB152, RWB152cw, RWB170, RWBXT.

9. However, if the RWB7 is replacing a Landis & Gyr or Landis & Staefa product as listed below, these products are not suitable for replacement by the RWB7. **You are trying to replace a programmer with a time clock.** Return the RWB7 to your stockist/installer and request the RWB9 which will fully interface with your old unit's backplate - RWB1, RWB2, RWB20, RWB40, RWB200, RWB200cw, RWB252, RWB252cw, RWB270, RWBXP. Gloworm Mastermind, Potterton Miniminder, Sankey Sunline.

10. Fitting the unit to the backplate

With the backplate installed and the dip switches positioned for your mode of operation you can now locate the programmer onto its backplate. Tilt the bottom of the case away from the wall, locate the two slots in the top of the case over the two tabs at the top of the backplate. Push the bottom of the case towards the wall, slotting the two backplate screws into the bottom of the case and tighten the screws. This enables the contact pins of the RWB7 to engage with those in the backplate. Turn the power on, the display will then be lit and indicator light will flash momentarily, you are now ready to commence programming.

Pre-set factory settings:

2 on/off 6.30 am to 8.30 am and 4.30 pm to 10.30 pm

3 on/off 6.30 am to 8.30 am, 12.00 pm to 2 pm and 4.30 pm to 10.30 pm

The above times are the same for all operating styles.

Programming for 7 day operation (i.e. every day different)

NB: If you have selected this style of operation for the first time **you must** press the Reset button first before making any entries.

Drop the bottom door flap and with a ball-point pen or similar object, press the small Reset button to the right of the time adjustment button. The display will show the current states of the dip switch setting:

2P 10: 2 programs per day
3P 10: 3 programs per day
Mo Tu We Th Fr Sa Su: successively: individual day programming

If while entering a switching time the word LIMIT should appear in the display you have tried to enter a switching programme that is not possible.

ie 1 ON 8.40AM
 1 OFF 8.30AM

When first time programming or after pressing the Reset button, you must first set the clock time before you can enter any programme times.

3.0 Altering the clock

Move the vertical slider switch on the left up to SETTIME and Mo will flash. If today is Monday press YES, if not then press NO repeatedly until the correct day is displayed. Then press YES. Move the vertical slider switch back to RUN, thus completing the clock setting.

For Winter/Summer time changes **DO NOT PRESS RESET** follow normal operation above.

3.1 Changing the switching times

To alter the switching times move the vertical slider switch to SET PRG. The display now shows Mo and YES/NO flashing.

Press YES the display will show "1 ON" indicating first on period.

Using TIME+, TIME- buttons, adjust to required time setting (10 minute increments). Press YES to store and move onto next switching time. Repeat through each switching operation.

Display shows Mo COPY? static and Tu YES/NO flashing. To copy Monday's switching times to Tuesday press YES and repeat for each day that you require these same times, or press NO, then YES and enter new times. Please note that the copy facility will work through all days except Sunday to Monday. Continue until all the week's programmes are entered.

Having completed the above the display will show either Mo, YES/NO alone flashing or with COPY? Su static, you have completed your programming. Now move the vertical switch to RUN. The correct time and day will now display along with one small bar on the left of your screen which points to your programme selection (switching patterns).

Initially this bar will show against OFF and you must now make your selection of switching patterns - see **Selecting Switching Patterns**.

Selecting switching patterns

These are the various styles of switching available to you by use of the following buttons:

- AUTO** - Programmer will operate across ALL programmed switching times.
- OFF** - Always off - only + 1hr. operative.
- ON** - Constant On. Never Off.
- ONCE** - From first On to last Off.

ADV (Advance) - Only operates in AUTO or ONCE. Pressing **ADV** brings forward the next automatic switching time, e.g. from an ON time to the next OFF time and will automatically cancel at next switching time. **If you wish to cancel Advance push ADV again.** When Advance is in operation a black bar shows against **ADV** in the display.

+ 1hr. (also known as 'boost') - This button will either bring the unit on one hour in OFF, or extend by one hour in ON. To cancel just press **+ 1hr.** again. When **+ 1hr.** is in operation a black bar shows against **+ 1hr.** in the display. Please note **+ 1hr.** will also work when the unit is in any OFF position.

AUTO, OFF, ON, ONCE

To select the four positions listed above, push the button marked Select located under the flap until the black bar is adjacent to your switching demand.

The RWB7 is fitted with a red LED which will light only when the relay is on.

