

VYR-6010 PG MASTER

Irrigation Programmer

*Installation Instructions,
Programming and Operation.*





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INTRO

We are proud to introduce you our hybrid programmer **VYR-6010**, with three different models of **5, 8 and 14 stations plus master valve**. Its design and functionality makes this programmer easy to install and to use. This battery programmer (**9 V DC alkaline**) is capable to maintain your system working for **two seasons** with the same battery. The VYR-6010 programmer can be also being connected to an external source of 9-12 V DC by using a current transformer or a solar panel system.

The VYR-6010 has a capacity of **four independent and overlapping programs with six starts per each of these programs**, making it capable to start up to 4 valves plus the master valve at the same time. This programmer gives you also the possibility to connect **two sensors**, one to stop the system and the other one to start a program (freeze control or filter washing).

Its great capacity makes this programmer to be use not only on AG or Turf irrigation but also for **ferti-irrigation** by using pumping injectors, or even for **filter wash** by connecting the filter to the "program start sensor". By using our low consume solenoids you would be able to operate latch-solenoid valves up to **15 bars** of pressure and at a **30 meters** of distance between the programmer and the valves. We can consider then, that our brand VYR has created the best "*all in one*" programmer on the market.

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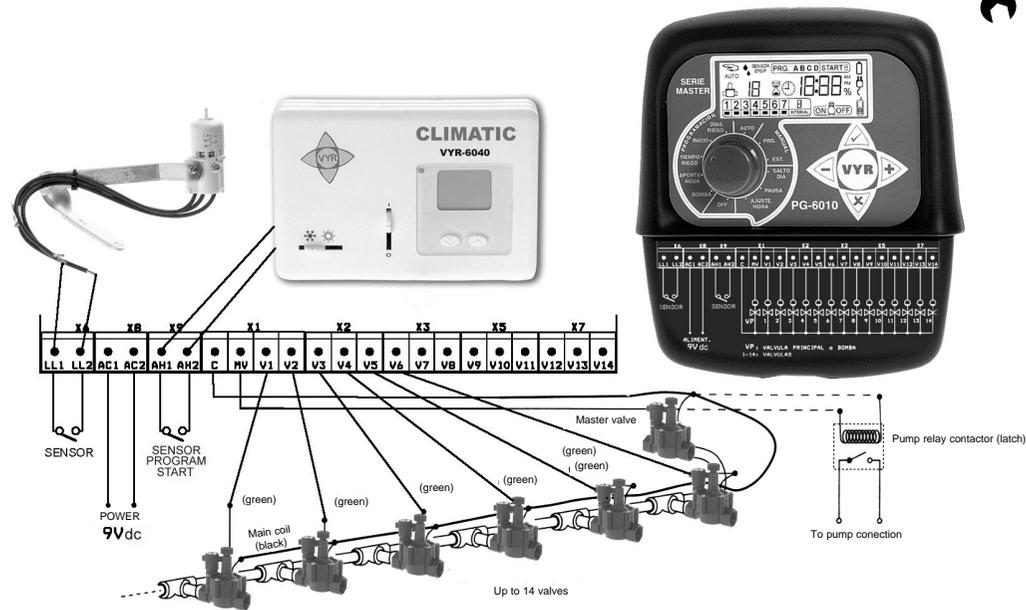
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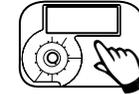
SET UP

1. INSTALATION

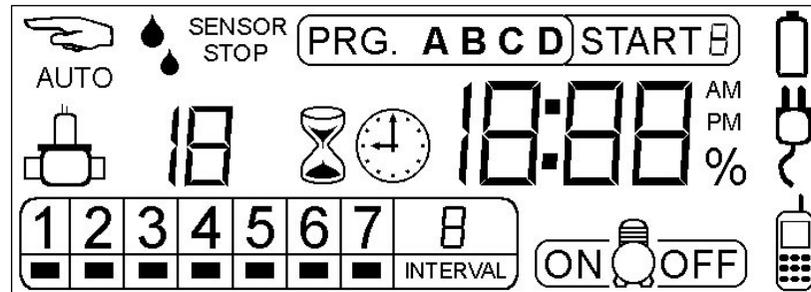


PROGRAMMING AND OPERATION.

2. SIMBOLIC DISPLAY



This programmer comes with the following symbolic display:

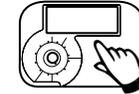


The mean of the different elements of the display are:

-  **HAND:** Tells you that a manual operation is happening, and also tells you about the activation of a valve station or program.
-  **AUTO:** It comes on when the control rotator is on the position AUTO.
-  **VALVE:** It comes on when any valve station is operating.
-  **WATER DROPS:** It comes on and blinks while irrigating.

PROGRAMMING AND OPERATION.

2. SIMBOLIC DISPLAY



 **SENSOR STOP:** It comes on when a rain, temperature, humidity or similar sensors are connected to the programmer and sends an emergency stop signal.

 **PRG A B C D:** Tells you the existing programs.

 **START:** Tells you the number of start been used.

 **BATTERY:** It comes on and blinks when the battery is low.

 **PLUG:** It comes on when the programmer is connected to a current transformer.

 **TELEPHONE:** It comes on when a remote system is connected.

 **SAND CLOCK:** If is on, the numbers at its right tells you the remaining time.

 **CLOCK:** If is on, the numbers at its right tells you the actual time.

 **CENTRAL LEFT DIGITS:** Tells you the station number.

 **CENTRAL RIGHT DIGITS:** Tells you time, remaining time, water budget, etc

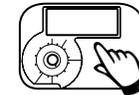
 **1 2 3 4 5 6 7:** Tells you the day of the week selected with an underneath bar.

 **INTERVAL:** Tells you the interval of days on a irrigation cycle.

 **PUMP ON/OFF:** Tells you if the pump/master valve is on while system works.

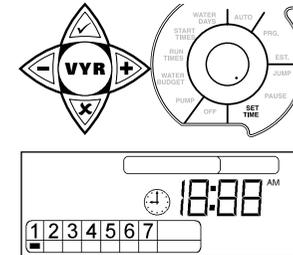
PROGRAMMING AND OPERATION.

3. DAY AND TIME SET UP



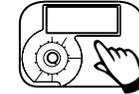
For clock adjustment proceed this way:

- Move the rotor to the position **TIME SET UP**. The clock, actual time and week days on the display will come on.
- Press the ✓ bottom. The bar under the week days (**1 to 7**) will start blinking. Using the bottoms + and – move the bar until is under the day of the week that we like to select and then press **YES**; the bar will stop blinking and the digits for hour will start blinking.
- Using the bottoms + and – adjust the time. If you maintained press the bottom +, the increments will run automatically and opposite way for the bottom -.
- Once the hour is adjusted press ✓; Hour digits will stop blinking and now the **AM/PM** will start blinking. Using + or – make your selection and press ✓. Now, the minutes digits will start blinking. Using the bottoms + and – adjust the minutes on the same way that you adjusted the hour. The minutes will run from 00 up to 59. Then press ✓ and all the display will remain fix with the new time.
- If while the operation process you need to go back one step you can press the **X** bottom. For example, if while you are adjusting the minutes and you realize the hour is wrong, then press **X**. The minutes will remain fix and the hour digits will start blinking and you could modify the numbers there.



PROGRAMMING AND OPERATION.

4. PROGRAMMING DAYS, STARTS AND IRRIGATION TIMES

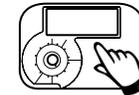


Use the table that is on the inside tap of the programmer. Here you can write down for better visualization the different programs, starts and irrigation time for each start. This programmer has 4 different programs, and each program has 6 different starts (24 starts a day). Up to four valves can be overlapped at the same time plus the master valve.

PROGRAM	ACTIVE DAYS <input checked="" type="checkbox"/>	START TIMES	STATION RUN TIME
A	1 2 3 4 5 6 7	1. 7:00 AM	1. 00:30 6. 11
	2	2. 9:00 PM	2. 00:45 7. 12
	3	3.	3. 00:30 8. 13
	4	4.	4. 00:30 9. 14
	5	5.	5. 10.
	6	6.	6. 11.
	<input checked="" type="checkbox"/> C or <input type="checkbox"/> INTERVAL 1 2 3 4 5 6 7		
B	1 2 3 4 5 6 7	1. 1:00 PM	1. 6. 11
	2	2.	2. 7. 12
	3	3.	3. 1:00 8. 13
	4	4.	4. 9. 14
	5	5.	5. 10.
	6	6.	6. 11.
	<input checked="" type="checkbox"/> C or <input type="checkbox"/> INTERVAL 1 2 3 4 5 6 7		
C	1 2 3 4 5 6 7	1. 10:00 AM	1. 6. 00:30 11
	2	2. 10:00 PM	2. 7. 12
	3	3.	3. 00:30 8. 13
	4	4.	4. 9. 14
	5	5.	5. 10.
	6	6.	6. 11.
	<input type="checkbox"/> C or <input checked="" type="checkbox"/> INTERVAL 1 2 3 4 5 6 7		
D	1 2 3 4 5 6 7	1.	1. 6. 11
	2	2.	2. 7. 12
	3	3.	3. 8. 13
	4	4.	4. 9. 14
	5	5.	5. 10.
	6	6.	6. 11.
	<input type="checkbox"/> C or <input type="checkbox"/> INTERVAL 1 2 3 4 5 6 7		

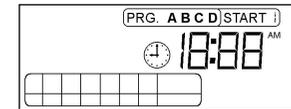
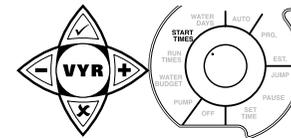
PROGRAMMING AND OPERATION.

4. PROGRAMMING DAYS, STARTS AND IRRIGATION TIMES



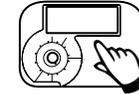
For irrigation programming proceed this way:

- Place the rotor on the **STARTS** position.
- Press ✓ and the program A will start blinking. Pressing + or – select the program letter (A, B, C or D) where you like to edit your program. Press ✓ and only this program will be selected. Then the start number will start blinking.
- Using the bottoms + and – increase or decrease the number of the start and then press ✓ to select. Hour will start blinking.
- Using the bottoms + and – increase or decrease the number of the hour and then press ✓ to select. Minutes will start blinking.
- Using the bottoms + and – increase or decrease the number of the minutes and then press ✓ to select. Start will start blinking.

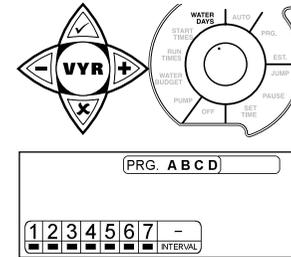


PROGRAMMING AND OPERATION.

4. PROGRAMMING DAYS, STARTS AND IRRIGATION TIMES

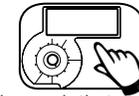


- Continue on the same way if you like to have different starts under the same program.
- If while operating you wish to go back to the previous operation, press **X**.
- Once all the starts of a program have been adjusted, and **START** is blinking, press **X** and the programs **A, B, C** or **D** will start blinking. Using **+** or **-** choose another program in case that you like to continuous programming on a different start.
- If you like to **CANCEL** the starts of a program, while the program letter blinks, press and maintain **X** for three seconds.
- After all the starts have been adjusted, move the rotor to the position **IRRIGATION DAYS**. Notice that the times adjustment for the **STARTS** must be done first because if you chose an irrigation day for a determined program and this program doesn't have any start adjusted, then the programmer will not accept the change.
- Press **✓** and the program **A** will start blinking. Using **+** or **-** choose the program that you wish to select and then press **✓**. The program letter will remain fix and the line on **INTERVAL** will start blinking. Press **✓** and the line will stop blinking while a actual day of the week will start blinking.
- Using the bottoms **+** and **-** go to the day of the week that you wish to irrigate using this program. Press **✓** for select and a bar will appear underneath the day number. In case that the day is already select with the bar and what you like is to erase it, then press **X** and the bar will disappeared. Proceed to assign all the irrigation days for the program.
- After all the irrigation days have been assigned go to day 1 and press **✓** or to day 7 and press **+**, so the program letter will start blinking now. Repeat the same steps for the other three programs in case you are using those.

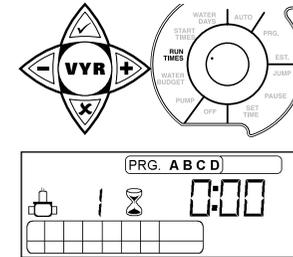


PROGRAMMING AND OPERATION.

4. PROGRAMMING DAYS, STARTS AND IRRIGATION TIMES

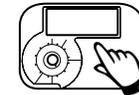


- Another possibility is to make any program to be on a cycle, this means that instead of assign the days of the week that we want our programs to run, we could tell the programmer to irrigate every “number” of day. For this, when the line of **INTERVAL** is blinking, instead of pressing ✓, pressing the botton + or – select the cycle from 1 to 7 days. Then press ✓ and the number will remain fix. The number of the actual day of the week we are will start blinking then. Using the bottoms + or – go to the day of the week that you wish to initiate your cycle and press ✓. A bar will appear underneath this number and a program letter will start blinking.
- Once the irrigation days and start times are programmed, we need to program the duration times for each program. Place the rotator at the **TIMES** position.
- Press ✓ and the program A will start blinking. Using the bottoms + or – go to the program that you want to edit the irrigation times. Press ✓ and the program letter will remain fix while the station number will start blinking.
- Using the bottoms + or – choose the station number that you want to adjust the irrigation duration time. Press ✓ and the station number will remain fix while the hour number will start blinking. Using the bottoms + or – adjust the number of hours that you like this station to be on and then press ✓. Now the minutes number will start blinking and using the bottoms + or – adjust the number of minutes and press ✓. The station number will start blinking at this point, so using the bottoms + or – you can go ahead and adjust the irrigation duration times for the rest of the stations on the same way that we have just done above.
- Once all the irrigation duration times are fixed and while the station number is blinking, press X and the program letter will start blinking then. Proceed on the same way to adjust the other times for the rest of the programs.



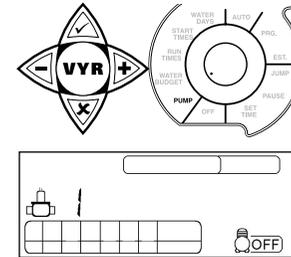
PROGRAMMING AND OPERATION.

5. PUMP/MASTER VALVE PROGRAMMING



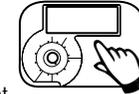
The programmer initial factory configuration comes with pump/master valve operation for all the stations. Some stations needs of a pump or master valve (MV) start to make the system run. It is necessary to indicate to our programmer which stations we want or not the PUMP/MV to start and for which ones not. For this adjustment please do the following steps:

- Place the control rotor at the **PUMP/MV** position.
- Press ✓ and the station number will start blinking. For this station the pump will say **ON** if is a need for it or **OFF** if there is no need.
- Using the bottoms + or - go through the different stations making sure that each of then are at the position you want.
- If on any station you like to change the pump from **ON to OFF** or the opposite, press ✓, to make the pump blinks. Then using the bottoms + or - you could change to either position. Once finish, press ✓, so the station number will start blinking again.



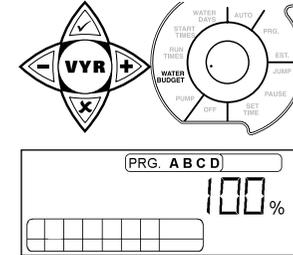
PROGRAMMING AND OPERATION.

6. WATER BUDGET %



The real irrigation times for each station can be modified on the chapter 3, or can be multiplied by a coefficient for each program. If you wish to make this kind of change for any program follow the next steps:

- Place the control rotor at **WATER BUDGET** position.
- Press **✓** and the program A will start blinking while it shows you the actual water budget percentage. Using the bottoms **+ or -**, navigate through the four programs visualizing their percentages.
- If you wish to make changes on any of those programs, then when you are over one of then while is blinking, press **✓**. The program will remain fix and the water budget percentage will start blinking.
- Using the bottoms **+ or -**, increase or decrease the water budget. This modification goes on increments of 10% up to a maximum value of 400% and a minimum of 10%. Once the water budget value is adjusted press **✓**. Water budget value will remain fix and a program letter will start blinking.



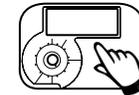
The meaning of the water budget value is to multiply by a coefficient the irrigation times that were selected for each station. If the water budget value is 100% the real irrigation times will be the same that were adjusted, but if instead of that is 50% then the real irrigation times would be half of the times that were adjusted, and if is 250% then the new real irrigation times would be the value that were adjusted multiply by 2.5.

For example, if the irrigation time selected for a station is 10 minutes we will get the next real times depending of the new water budget value:

WATER BUDGET	TIME	WATER BUDGET	TIME
20%	2 min	150%	15 min
50%	5 min	200%	20 min
100%	10 min	400%	40 min

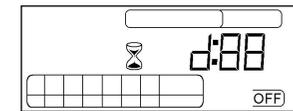
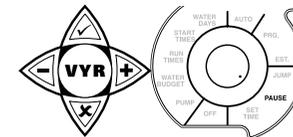
PROGRAMMING AND OPERATION.

7. PAUSE



This programmer gives you the opportunity to choose a certain number of days that for any reason you don't want your system to irrigate. To fix the pause mode follow the next steps:

- Move the control rotor to the **PAUSE** position.
- Press **✓** and then the number of days of pause mode will start blinking.
- Using the **+ or -** bottoms choose the days you want to pause. Then move the control rotor to a different position.
- If you already have days on pause mode and you want to cancel those then press **X**.

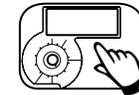


When the control rotor is on the **AUTO** position and paused days are selected, the display will be alternating showing you the real time and the remaining paused days.

Notice that paused days are cancel after 12:00 AM, so if for example you have choose to pause a day at 11:00 PM, then the system would be paused that day for one hour.

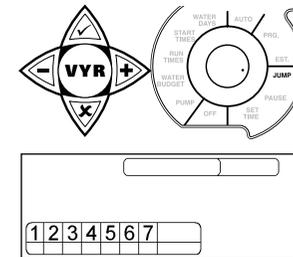
PROGRAMMING AND OPERATION.

8. RAIN DELAY



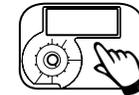
The rain delay mode gives you the opportunity of cancel the irrigation a determined day of the week. To activate this mode follow the next steps:

- Place the control rotor at the **RAIN DELAY** position. The days of the week will show up, and a bar underneath of those that were selected to be cancel. To modify the activation or deactivation of this rain delay press ✓ and the actual day will start blinking.
- Using the + or – bottoms goes to the day that you wish to modify. Once the day is selected and blinking press ✓ select or cancel the rain delay mode. Once you finish move the control rotor to a different position.



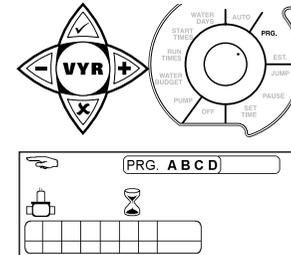
PROGRAMMING AND OPERATION.

9. STARTING A PROGRAM MANUALLY

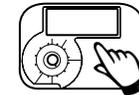


You can run any program that you **HAD MADE AT ANY TIME** you want. To do so, follow the next steps:

- Press ✓ and the program letter **A WILL START BLINKING**.
- Using the + or – bottoms goes to the program that you want to run.
- Press ✓ and the selected program will start running.
- In case that you want to stop a program that is running, first select the program letter and then maintain press **X** for 3 seconds.

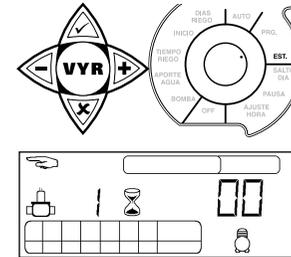


10. STARTING AN STATION MANUALLY



You can also start a station **VALVE MANUALLY**. To do so, follow the next steps:

- Place the control rotor to **EST. MANUAL** position.
- Press ✓ and the number of station will start blinking.
- Using the + or – bottoms, select the number of the station valve that you want to open.
- Press ✓ and the number of the station will remain fix while the minutes numbers will start blinking.
- Using the + or – bottoms select the number of minutes that you like this station to be running.
- Press ✓ and the selected station will start running for the number of minutes that were selected.

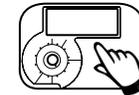


If an station is running manually and you want to stop it, place the control rotor at the **EST. MANUAL** position and follow these steps:

- Press ✓ and the number of station will start blinking.
- Using the + or – bottoms goes to the number of the station that you want to stop.
- Press X and the station will stop running.

PROGRAMMING AND OPERATION.

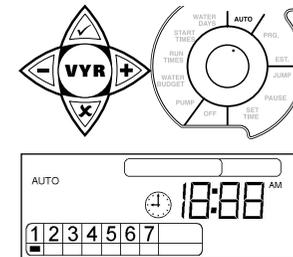
11. AUTO POSITION



When the control rotor is at this position (common position) it will start the different programs at the selected times.

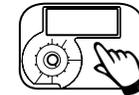
To save battery energy, the display will shut down automatically after one minute that there is no operation on the programmer. To turn on the display you just need to press any of the four bottoms.

When the control rotor is at **AUTO** position the display will show you the time if there is not any program running. If a valve station is running the display shows you the number of the station that is been run and the remaining running time for this valve station. If is a program what is been run, then the display shows you the program and station been run.



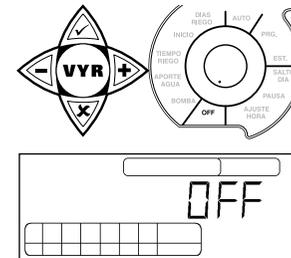
PROGRAMMING AND OPERATION.

12. SHUT OFF THE PROGRAMMER

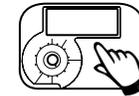


To shut down the programmer you just need to move the control rotor to the **OFF** position.

The display will show you for three seconds the word **OFF** and then it will shut down.



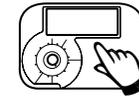
13. EXTERNAL SENSORS



This programmer has two external sensors analogical connections (free of power):

- The first sensor connection is for any type of sensor: rain, wind, humidity, temperature, etc. While the sensor contact is close, the programmer will cancel all the programs temporarily. If the contact closed while a program is active, the station running at this time will keep running and the next station will be cancel.
- The second sensor connection is for temperature control. When a sensor closed, the program A will start running.

14. POWER SOURCE

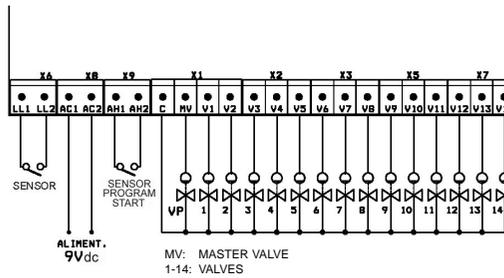
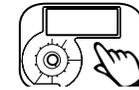


The power source for this programmer is given by a 9 V. battery (alkaline is recommended). A blinking icon of a battery will show up when the battery is low.

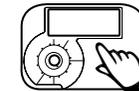
This programmer could also be connected to a 9 V. DC transformer (not included) through the corresponding connectors.

PROGRAMMING AND OPERATION.

15. CONNECTIONS



16. PROGRAMMER WORKING CAPACITY



This programmer can be use either for Turf or AG irrigation. Its great working capacity and program overlapping system makes this programmer to have the possibility of been used for Ferti-Irrigation or Filter Wash.



17. TECHNICAL SUPPORT

In case that you need any type of technical assistance, please contact with your nearest VYRSA Authorized Distributor or Installer, contact us at vyrsa@vyrsa.com or by calling at (SPAIN) +34 947 26 22 26 during our office

18. WARRANTY

VYRSA warrants all our control system products to be free of defects in materials or workmanship under normal use for a period of three (3) years from the original date of manufacture. All our sprinkler and accessories products are warranted to be free of defects in materials or workmanship under normal use for five (5) years from the original date of manufacture. In case that VYRSA detects any defect during the warranty period on any of our products, VYRSA will repair or replace, at its option, the product or the defective part.

VYRSA warranties does not extend to repairs, adjustments, or replacement of any of our products or part that results from misuse, negligence, alteration, tampering, modification or improper installation and/or maintenance of the product. This warranty extends only to the original installer of the VYRSA product.

In case that a defect appears in a VYRSA product or part during the warranty period, you should contact your local VYRSA Authorized Distributor.

VYRSA'S OBLIGATION TO REPAIR OR REPLACE ITS PRODUCTS AS SET FORTH ABOVE IS THE SOLE AND EXCLUSIVE WARRANTY SET FORTH BY VYRSA. THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. VYRSA WILL NOT BE LIABLE TO ANY PARTY IN STRICT LIABILITY, TORT, CONTRACT OR ANY OTHER MANNER FOR DAMAGES CAUSED OR CLAIMED TO BE CAUSED AS A RESULT OF ANY DESIGN OR DEFECT IN VYRSA PRODUCTS, OR FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE.

If you have any questions concerning the warranty or its application, please write to:

VYRSA • Polig. Ind. N-1 • 09001 Burgos, SPAIN