DARIN
RUSSIAN EQUIPMENT FOR POOLS

DARIN
11, Simferopol highway,
Shcherbinka, Moscow, 108851

+7 495-983-10-83
info@darin7.ru
www.darin7.ru

Dear partners!

The text will contain references to the paragraphs of the Installation and Operation Manual of the CRYSTAL station. This document is available for download on our website at https://darin7.ru/index.php#big-form2 . Hereinafter in this letter, this Manual will be referred for brevity as "IOM".

So, you proceed to the installation of the CRYSTAL station or the installation of the station is almost complete:

1. Terminals 1 and 2 " TOPPING-UP " on the CRYSTAL controller board (see para.4.3.1 OM) – between them there is a jumper supplied by the manufacturer during the pre-sale preparation of the CRYSTAL station – to enable the station to be put into operation (if there is no need to use these terminals).

2. Purpose of terminals 1 and 2 "TOPPING-UP": for communication of the station with the control device for water topping-up to the balancing tank of the pool – then the station "recognizes" when the topping-up of fresh water has started and will block the activation of the dosing pumps. The connection between the station controller and the water topping-up control device is carried out through the contactor located in the electrical panel of the pool (see Fig. 4.3-6 and 4.3-7 of the IOM). In addition, the user sets the **delay time for switching on the dosing pumps after the end of water topping-up** (by default, it is 60 minutes, the available range of values is from 0 to 90 minutes) (see para. 4.6.6. of the IOM).

3. When is this feature required?

For deck level pools with a small balancing tank or where water intake for filtration and water topping-up are not spaced apart in opposite corners (equipment design and installation flaws).

4. What happens when a water topping-up control device is not connected to these terminals via a contactor?

Water topping-up has started, for example, after the filter backwashing, the fresh water to be added in the balancing tank does not have enough time to mix with the pool water and the measuring cell of the station receives water in which there is little chlorine content and, as a rule, the pH level is increased. Of course, the dosing pumps turn on and ... we get an overdose (after all, before that, the pool had a normal pH level and chlorine concentration). To prevent this, the station must “find out”: when the topping-up was turned on and allow time, after its completion, necessary for guaranteed multiple pumping of water from the balancing tank into the pool.

5. If the measuring water is supplied from the pool by a special pump to the measuring cell, then this function is irrelevant and you can leave these terminals with the factory jumper. The same applies to balancing tanks of sufficient size.

6. If periodic filtration is used, let's say the filtration pump operates for 16 hours and is turned off for 8 hours at night, and if water is topped up at night (for example, automatic flushing is programmed for the night), then in this case, the balancing tank will contain mostly fresh water and the above protection against overdose will not help. Here, another necessary delay in turning on the metering pumps will help: **the delay after measurements interruption** (resuming) (see para. 4.6.6. of the IOM). Therefore, before starting the dosing of reagents, the station allows time for the filtration pump to fully mix the water in the pool (by default, the duration of this delay is 20 minutes, the available range of values is from 0 to 90 minutes).

Best regards, DARIN