Practical information

Version 2.0

E-Mail Functions

PoolManager® / Analyt

BAYROL
your pool & spa water expert

Index

1 Definition of terms used

Although the term PoolManager® is used throughout the following text, all of the information contained herein applies equally to the Analyt family of devices.

2 e-mail Functions

Required user qualifications:

IT-SPECIALIST

The set-up of e-mail functions, in particular of the account for sending e-mails (SMTP), must only be performed by IT SPECIALISTS who satisfy the requirements indicated below.

IT-Specialist A person is considered an IT specialist (IT = information technology) if he/she has the ability to perform work on computer systems, networks and network components and to independently identify and avoid potential risks as a result of his/her training, skills and experience, and knowledge of applicable standards and regulations.

Whenever the PoolManager® is connected to the Internet, it has the ability to send e-mails.

NOTE

Internet access

For full remote access to the PoolManager® web server via the Internet using a web browser, the network router on the local network must be properly configured. In particular, port forwarding must be set up.

These steps are not necessary if you only intend to send e-mails using the PoolManager®. In this case, the only requirement is that the local network in which the PoolManager ® is integrated be connected to the Internet. A special network router configuration is not necessary.

Note

Secured e-mail transmission
from software release v140325-M1 (5.3.0)

From 2014, many e-mail providers force secure encrypted e-mail transmission.

PoolManager® supports the common encryption standards SSL/TLS and StartTLS from software release v140325-M1 (5.3.0).

In case an e-mail provider with encrypted transmission should be used for the PoolManager®, the PoolManager® must possibly first be updated to version v140325-M1 (5.3.0) or later.

E-mail functionality enables the following functions to be carried out:

- Alarm e-mails (as of software release 3.0.0 dated 05.09.2012)
- Automatic sending of measurement graphics
  (will be available in a future release)

3 Configuration

3.1 Overview

E-mail functions can be configured at the menu *"Communication & interfaces"* ➔ *"E-mail configuration"*. There, the following options are available:

E-mail configuration menu
Recipients e-mail address configuration
At this sub-menu, up to three recipient e-mail addresses can be configured and individually activated or deactivated.
Account for sending e-mails (SMTP)
At this sub-menu, the account used by the PoolManager® to send e-mails is set up. In order to do this, you will need to have an SMTP account with an appropriate e-mail provider (SMTP = Simple Mail Transfer Protocol) and you must keep the required access data at hand.
Active emails
At this sub-menu, you can configure the events for which the PoolManager or Analyt will send e-mail notifications.
Send test e-mail
This function sends a test e-mail to the active e-mail recipients.

3.2 Keyboard entry

In order to enter e-mail addresses, you will need special characters which are not available on the default PoolManager keyboard, in particular the '@' character.

Press the Shift button [Shift] at the bottom left to switch to the alternative keyboard layout:

The alternative keyboard layout contains all capital letters and several special characters, including the '@' character (top left).

By pressing the Shift button [Shift] once more, you can switch back to the default keyboard layout.

Additional alternative keyboard layouts with international special

characters can be activated by pressing the Alt button [Alt] (bottom right).

3.3 Recipiens e-mail adress configuration

At this menu, you can specify up to three recipient addresses to which the PoolManager® will send e-mails.

You can set each of the e-mail addresses entered to *Active* or *Inactive*. The PoolManager® only sends e-mails to *active* e-mail addresses.

NOTE

Format of e-mail addresses

The usual format for e-mail addresses is: *my_name@my_provider*. In this case, '*my_name*' is the name you chose when you created the e-mail account. '*my_provider*' is the name of the e-mail provider with whom you created your account, e.g. *gmail.com, hotmail.com, gmx.com*, …

The character '@' ("at") must always be inserted between the two parts of the e-mail address.

NOTE

Correct entry of e-mail addresses

Any e-mail addresses you enter must be completely accurate. The slightest mistake will prevent e-mails from being properly transmitted. Please review your entries carefully.

Letters can be entered in either upper or lower case.

3.4 Account for sending e-mails (SMTP)

For the PoolManager® to be able to send e-mails, you will need an e-mail account with the provider of your choice.

The PoolManager® first sends all e-mails to your provider, who then forwards them to the actual recipients.

You can set up a new account or select an existing one to use with the PoolManager®.

TIP

Dedicated PoolManager® e-mail account

We recommend setting up a separate e-mail account to be used solely for the PoolManager®. Although the use of an existing account is certainly possible, the shared use of the account by the PoolManager® and other applications may cause some confusion.

The use of a separate e-mail account for the PoolManager® is also the best solution in terms data security.

The e-mail address selected must satisfy the following requirements to be suitable for use with the PoolManager®:

- It must provide an SMTP (outgoing mail) server
  (SMTP = Simple Mail Transfer Protocol,
  the standard protocol for sending e-mails)

- The SMTP server must support one of the following two authentication methods: *PLAIN* or *LOGIN*. These are the two most common authentication methods supported by the majority of

providers. The *LOGIN* method is also often referred to as *SMTP Authentication*.

- The e-mail provider must support either unencrypted e-mail transmission, or one of the common encryption standards SSL/TLS (usually on port 465) or StartTLS (usually on port 587).

- Some e-mail provider allow e-mail transmission only after a previous e-mail transmission („POP before SMTP"). These e-mail providers are not compatible with PoolManager®.

Further information about different e-mail providers can be found in section 0

e-mail provider.

3.4.1 Creating an e-mail account

It is usually possible to create a new e-mail account at a provider's website. To do so, select a provider who meets the requirements listed above and then follow the directions on the provider's website.

You can use any one of the numerous free e-mail providers available or, if you already subscribe to an Internet service package, you can set up a new e-mail address using the services provided by your package.

3.4.2 Entering account information in PoolManager ®

To enable the sending of e-mails to your e-mail provider by the PoolManager®, you must first enter your account information correctly in the PoolManager®. You can do this at the *Account for sending e-mails (SMTP)* menu:

1   Here you will enter the e-mail address of the account that will be used to send e-mails via the associated SMTP server.

2   Here you will enter the sender name of your choice. This name will be displayed to the recipients of PoolManager® e-mails. The sender name is intended to enable recipients to identify the PoolManager® device from which the e-mail was sent, e.g. 'PM5 (Meier/Munich)'

3   Here you will need to enter the address of your e-mail provider's SMTP server (outgoing mail server). If you do not know the address, you can obtain this information from your provider or you can search for it on the Internet by entering the name of your e-mail provider and *smtp server* as search terms.

In case of encrypted e-mail transmission, and sometimes also in case of unencrypted transmission, the so-called „port" used by the e-mail provider must be appended to the address of the SMTP server separated by a colon ':' (no spaces!):
- Usually port 465 for SSL/TLS encryption,
  e.g. smtp.gmail.com:465
- Usually port 587 for StartTLS encryption,
  e.g. smtp.mail.yahoo.com:587
- If no port number is appended, the original SMTP standard port 25 is used. However, port 25 is not very commonly used anymore.

4   Here you select the suitable encryption (security) for your e-mail provider. The following settings are available:
- None (= unencrypted transmission)
- SSL/TLS
- StartTLS

You get the right setting from your e-mail provider. An internet search usually also helps to find the required information.

5   Here you will enter the user name for your e-mail account. User names are defined when an e-mail account is created. In many cases, the e-mail address itself is simply used as the user name. However, this will depend on the provider and may not always be the case. Further information about the user name can be obtained from your e-mail provider.

6   Here you will enter the password for your e-mail account. You set the password when creating an e-mail account with your provider.

7   Here you can send a test e-mail to check the settings once you have correctly entered all of the information in (1) through (6). To do this, at least one recipient e-mail address must be entered and activated (see 3.3 Recipiens e-mail adress).

Additional details about sending test e-mails can be found in section 3.7 Troubleshooting.

> **IMPORTANT!**
> **Correct entry of all data**
> All account information entries must be completely accurate. The slightest mistake will prevent e-mails from being properly transmitted. Please review your entries carefully.
> When entering the SMTP password, be sure to pay close attention to upper and lower case letters.

3.5   Active e-mails

Here you can set up the events for which the PoolManager® will send e-mail notifications.

Currently, e-mail sending can be activated for the following events:

No flow signal	The PoolManager® sends an e-mail notification both when the flow signal is lost and when the flow signal returns.
Alarms	The PoolManager® sends an e-mail notification when a new alarm occurs or when an alarm becomes inactive again. When an alarm is acknowledged, no alarm e-mail is sent unless the alarm simultaneously becomes inactive as a result of acknowledgement (e.g. dosing alarm).

Each e-mail function can be activated or deactivated separately. For example, it possible to activate multiple e-mail functions or deactivate all e-mail functions.

> **IMPORTANT!**
> **No flow signal when**
> *Flow alarm acknowledgement = manual*
> If the *Flow alarm acknowledgement = manual* setting is active in the Flow alarm settings (Test water monitoring), an alarm will be triggered if the flow signal is lost. In this case, if alarm e-mails have been activated, an e-mail will be sent whenever the flow signal is lost. The *No flow signal* setting does not apply in this particular instance.

3.6   Contents and format of alarm e-mails

An alarm e-mail contains the following information:

- Description of the newly occurring alarm with date and time (*'End'* is added to the beginning of the description in the case of a completed alarm)
- Alarm overview
  (List of all current alarms)
- Overview of current readings
  (if there is no flow signal, current readings are not transmitted)
- Device information:
  - device name
  - e-mail sender name
  - device type and maintenance program
  - serial number
  - software version
- The following example shows the contents of an alarm e-mail in detail.

3.6.1   Example

The following is an example of an alarm e-mail notifying of a Redox level warning:

E-mail subject:
PM5 Demo (PM5 (Demo)): Redox warning level (5.0 l)

Explanations	
PM5 Demo	Device name from the *Device settings* menu
PM5 (Demo)	E-mail sender name from the *E-mail configuration* menu
Redox level warning (5.0 l)	Description of the newly occurring alarm (for a level warning, the amount remaining (5.0 l) is also indicated)

E-Mail Text:
07.09.2012, 09:41:
Redox level warning (5.0 l)

Alarm overview:
Upper pH alarm
Redox level warning (5.0 l)

pH 8.00 [pH]
mV 674 [mV]
T1 (test water) 24.6 [°C]

BAYROL PoolManager chlorine (Cl)
PM5 Demo (PM5 (Demo))
Device serial no.: ADDA01234F12
PM5 software version: v140325-M1 (5.3.0)

Explanations	
07.09.2012, 09:41	Date, time (PoolManager® system time)
Redox level warning (5.0 l)	Description of the newly occurring alarm (for a level warning, the amount remaining (5.0 l) is also indicated)
Alarm overview	List of all current alarms
pH 8.00 [pH]…	Overview of all current readings (if there is currently no flow signal, the readings are not transmitted)
BAYROL PoolManager chlorine (Cl)	Device type / maintenance program
PM5 Demo	Device name from the *Device settings* menu
PM5 (Demo)	E-mail sender name from the *E-mail configuration* menu
Device serial no.	PoolManager® serial number
PM5 software version	PoolManager® software version

3.7 Troubleshooting

After a test e-mail has been sent from the *E-mail configuration* menu, a message appears informing the user whether the test e-mail was successfully received.

3.7.1 Test e-mail sent successfully

If the PoolManager® is able to contact your e-mail provider and all login data is correct, then the following message will appear:
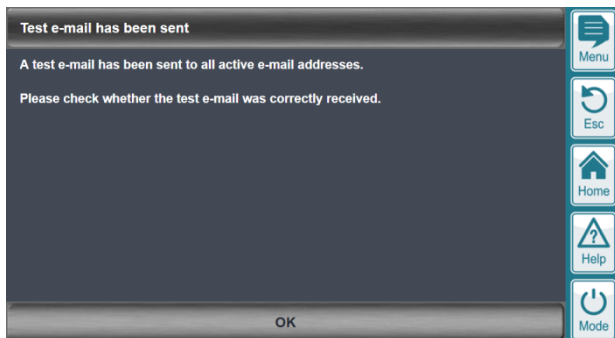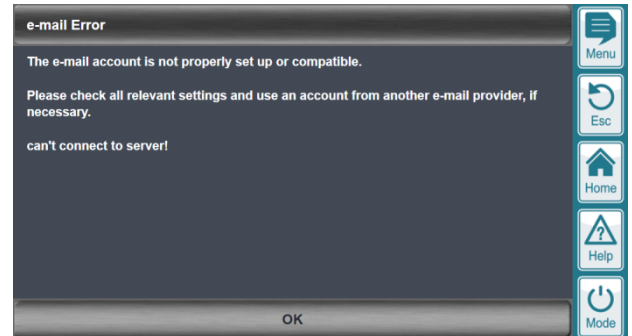

This message confirms that the test e-mail was sent successfully.

However, this does not guarantee that the test e-mail was also successfully received by the active e-mail recipients.

Possible error	Even though the *Test e-mail has been sent* message appears, not all active e-mail recipients receive the test e-mail
Possible causes	• You have entered one or more recipient e-mail addresses incorrectly (typo?) • One of the e-mail providers is experiencing a problem (sender or receiver) • The e-mail transmission may be taking a bit longer than usual. Wait a few minutes before checking for receipt again.

3.7.2 Error when sending a test e-mail

If the PoolManager® is unable to contact the specified e-mail provider when sending a test e-mail, or if the e-mail provider returns an error message, then the following message will appear:

The last line contains a specific error message which can help to identify the problem:

Error message	**can't connect to server!**
Possible causes	• The SMTP server address entered is incorrect (typo?) • There is a problem with the Internet connection • The selected e-mail provider is (temporarily?) experiencing a problem

Error message	**SMTP_from fail** **SMTP _rcpt fail**

Possible causes	• One or more of the following entries is incorrect:
	   • SMTP Username
	   • SMTP Password (be sure upper and lower case letters are entered correctly!)
	 • E-mail sender address

Error message	**SMTP_helo fail** **SMTP _meet fail**
Possible causes	• The selected e-mail provider is not compatible, e.g. due to the use of a special authentication method. Please select a different provider that is compatible with the PoolManager®.

3.8   e-mail providers

Successful tests of the PoolManager e-mail functions have been performed (in Germany) using, for example, the free services of the following providers:

Provider	gmail (googlemail)
Website	mail.google.com
SMTP server:port	smtp.gmail.com:465
Security / encryption	SSL/TLS
SMTP user name	e-mail address (my_name@gmail.com)

Provider	Yahoo
Website	yahoo.com
SMTP server:port	smtp.mail.yahoo.com:465
Security / encryption	SSL/TLS
SMTP user name	e-mail address (my_name@yahoo.com)

Provider	AOL
Website	aol.com
SMTP server:port	smtp.aol.com:465
Security / encryption	SSL/TLS
SMTP user name	e-mail address (my_name@aol.com)

Provider	web.de FreeMail
Website	web.de
SMTP server:port	smtp.web.de:587
Security / encryption	StartTLS
SMTP user name	e-mail address (my_name@web.de)

Provider	mail.de
Website	mail.de
SMTP server:port	smtp.mail.de:587
Security / encryption	StartTLS
SMTP user name	e-mail address (my_name@mail.de)

Some e-mail providers still support unencrypted transmission and can be used with earlier software versions of the PoolManager® (from software release 3.0.0 as of 05.09.2012):

Provider	AOL
Website	aol.com
SMTP server:port	smtp.aol.com
Security / encryption	None
SMTP user name	e-mail address (my_name@aol.com)

Provider	mail.de
Website	mail.de
SMTP server:port	smtp.mail.de
Security / encryption	None
SMTP user name	e-mail address (my_name@mail.de)

3.8.1   Incompatible e-mail providers

The following e-mail providers use special authentication methods and are therefore not currently compatible with the PoolManager® e-mail functions:

- Lycos
- GMX
  (allows for e-mail transmission only after previous reception, „POP before SMTP")

Please choose a different provider that is compatible with the PoolManager®.