

FOURGROUP

Full-App Remote



Full-App Remote

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1. DESCRIPTION

The Application "Full-App Remote" provides remote control functionality of pumps for domestic and/or industrial pumps connected to the control panel FOURGROUP FULL-APP model. The application "Full-App Remote" can control all the parameter settings, operating commands, modes, status reports, alarms setting and notifications, etc... All from your cellular remote smartphone/tablet/device for one or more control panels FULL-APP installed around the world. In addition, the application "Full-App Remote" allows remote control of multiple control panels enabling the user to manage all the functionalities of multiple systems from the same smartphone/tablet.

This manual describes Full-App Remote connected to a Full-App 2 control panel. If you are connecting to a Full-App 3 control panel will appear the data, commands and settings also for the third pump.

2. DOWNLOAD AND INSTALL

For cellular devices using ANDROID operating systems



- Open GoogleStore by clicking on icon PLAYSTORE  ;
- Inside PLAYSTORE go inside APP tab/section to search for "Full-App Remote" utilizing any of the following keywords: "FOURGROUP", "FULLAPP", "FULLAPP2", "FULLAPP3".



- The icon "Full-App Remote" will be listed;
- Click on icon to install the App;
- Once installed the icon "Full-App Remote" will be copied on your device desktop and the App will be ready to use.



Full-App Remote

Alternatively, to download the App you can also scan the following QR code:

Use any QR reader from your Android smartphone/tablet to scan the code to enter automatically Google Play and download the "Full-App Remote" App.

Or just navigate with your browser here to download:

<https://play.google.com/store/apps/details?id=com.FourGroup.PumpControlleRApp&hl=en>



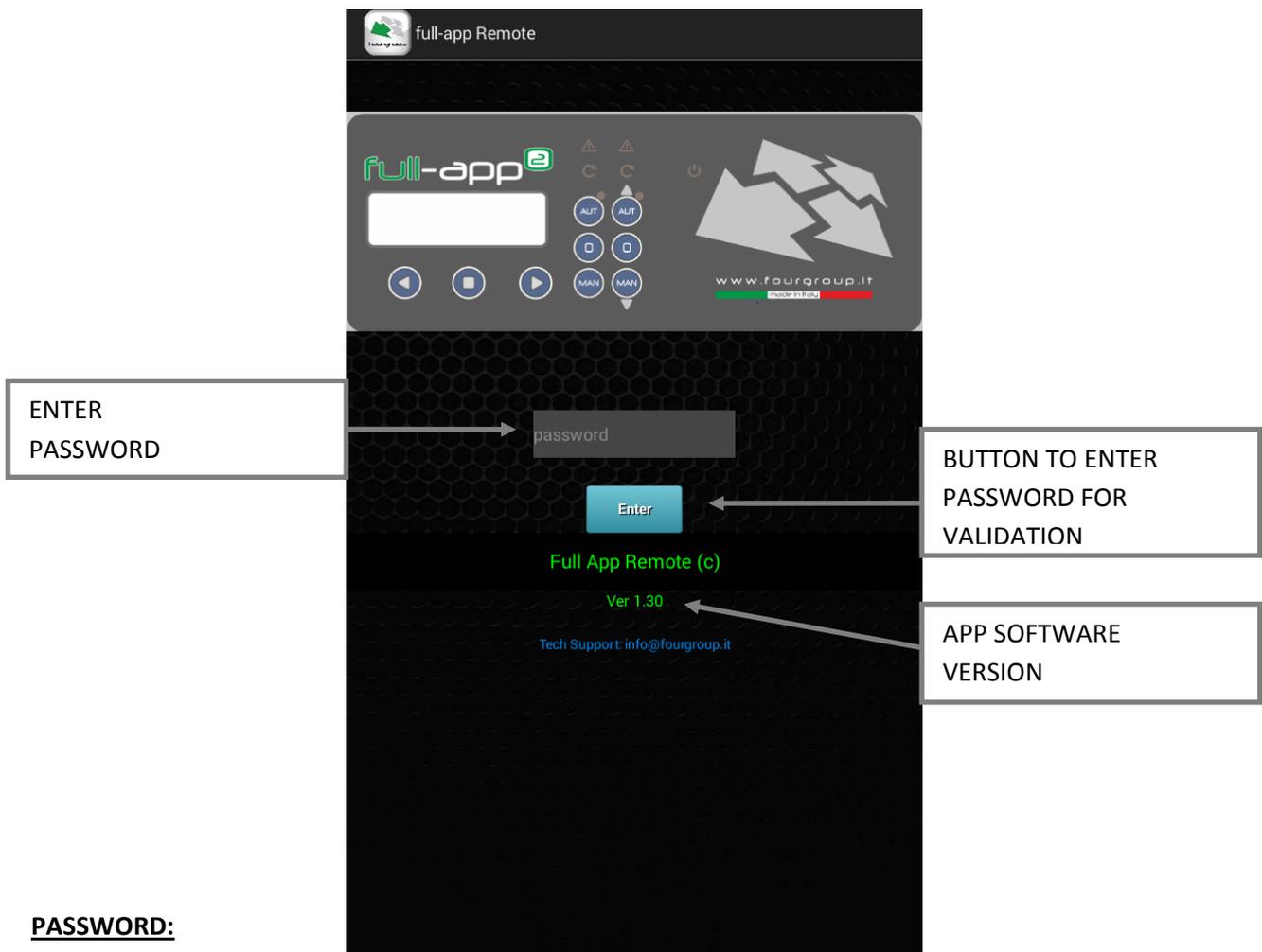
NOTE: - BEFORE YOU BUY THE SIM, CHECK THAT IS COMPATIBLE WITH GSM INSTALLED -

General features of GSM --> Quad-Band GSM module 850/ 900/ 1800/ 1900 MHz - Excluded provider that haven't 2G possibility.
Usable SIM --> All providers that have 2G possibility

3. START-UP ACCESS DISPLAY



Launch the App via its icon and the initial start-up access display will appear on your device:



PASSWORD:

Full-App Remote has 3 password access levels to provide/block functionalities depending on the users. Level 1 has the highest privileges as administrator:

- LEVEL 1 password: provides full access to all App functionalities (Administrator).
- LEVEL 2 password: provides access to App functionality to request and display status information of the control panel main parameters and pumps status; remote control to start/stop pumps. Blocked functionalities: setting the control panel/pumps mode, programs and operating parameters.
- LEVEL 3 password: allows access to functionalities to request and display status information of the control panel main parameters and pumps status. All the other functionalities/control is blocked for this access level.

Full-App Remote is provided with the password of level 2 active: when you do the first start, just press ENTER without entering the password (with entering the password for level 2 is not possible to program / change the parameters). To access the level 1 you need to enter to the application using the password "4G1" (it has to be entered on the login screen); in this way you can use Full App Remote with all the functionality. You can then change the password in the appropriate parameter in the setup display..

Passwords can be changed and saved.

Initial passwords to enter the App with at various levels are the following. These will ALWAYS work and they can be used as recovery password:

- LEVEL 1 password: "4g1".
- LEVEL 2 password: "4g2".
- LEVEL 3 password: "4g3".

4. MAIN CONTROL DISPLAY

Press the button  the following control display main display after password validation:

BY PRESSING THE BUTTON TO CHOOSE THE SYSTEM, YOU CAN SWITCH TO THE CONTROL OF ANOTHER FULL-APP CONTROL PANEL. THE LIST CONSISTS OF TWO STATION NAMES: THE UPPER NAME RELATES TO THE "CONTROL PANEL # 1" AND THE LOWER NAME IS RELATED TO THE "CONTROL PANEL # 2" (SEE MENU SETUP); THE LOWER NAME IS REPLACED BY THE LAST CONTROL PANEL FULL-APP (IF YOU ARE CONNECTED TO MORE THAN 2 FULL-APP) WHO SENT A SMS TO THE APP. BY CLICKING OVER THE NAME IS POSSIBLE TO SWITCH TO THE OTHER CONTROL PANEL.



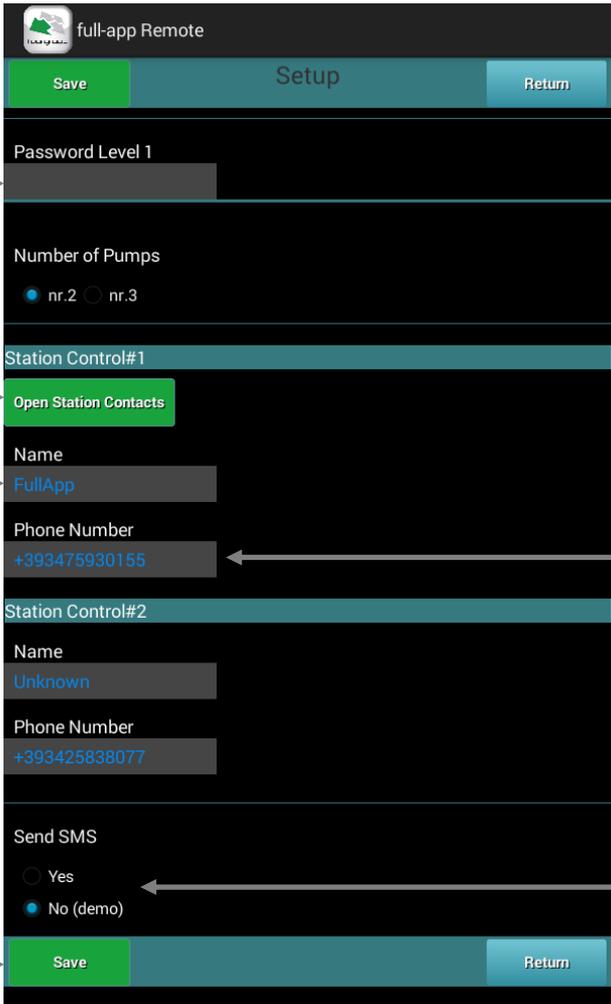
The screenshot shows the 'full-app Remote' interface. At the top, there are three buttons: 'FullApp', 'Clear', and 'Setup'. Below these is a large black area for system status. A callout box on the left points to the 'FullApp' button, stating: 'BUTTON TO CHOOSE THE SYSTEM'. A callout box at the top points to a smaller inset showing a password entry screen with three 'X' characters and a 'Clear' button. A callout box on the right points to the 'Setup' button, stating: '"SETUP" BUTTON'. Another callout box on the right points to the status area, stating: 'DISPLAY SHORT "LOG". THIS WILL SHOW THE LAST 3 SMS EXCHANGES BETWEEN THE APP AND PUMP SYSTEM. TO VIEW THE FULL LOG (30 SMS) PRESS THE BUTTON "LOG".'. A callout box on the left points to the status area, stating: 'REMOTE SYSTEM STATUS PRESS THE BUTTON "STATUS" TO UPDATE THE REMOTE SYSTEM STATUS TO ITS CURRENT STATE. THE CONTROL PANEL WILL SEND THE INFORMATION WHICH WILL BE DISPLAYED ON YOUR SCREEN.'. At the bottom, there are buttons for 'Menu', 'Log', and 'Status'. Below these are two columns of buttons for 'Pump 1' and 'Pump 2', each with 'AUT', 'O', and 'MAN' options. A callout box on the right points to these buttons, stating: 'BUTTONS TO CONTROL THE PUMPS'.

The buttons to control the pumps are available to password access levels 1 and 2. With password access level 3 these buttons are not accessible to block these users from controlling these functionalities remotely via the App.

To maximize the App "Full-App Remote" functionality it is advised to launch the App and to keep it open on the background of your smartphone/tablet (press bottom-centre button of the Android smartphone/device to put on the background without closing it). This is to make sure all the potential SMS sent by various remote systems are monitored and to utilize all other functionality that the App provides.

5. SETUP DISPLAY

Press the button  to enter in the “Setup” display:



The screenshot shows the 'full-app Remote' Setup screen with the following callouts:

- INPUT TO MODIFY THE PASSWORD:** Points to the 'Password Level 1' field.
- ACCESS TO CONTACTS TO CONNECT TO REMOTE CONTROL PANEL (IF SAVED ON CONTACTS):** Points to the 'Open Station Contacts' button.
- INPUT NAME OF REMOTE CONTROL PANEL (IF NOT SAVED ON CONTACTS):** Points to the 'Name' field (containing 'FullApp').
- SECOND CONTROL PANEL FULL-APP, OR TO AUTOMATICALLY STORE NAME/NUMBER IN CASE OF AN INCOMING ALARM FROM A DIFFERENT FULL-APP SYSTEM:** Points to the 'Station Control#2' section.
- BUTTON TO SAVE NEW SETTINGS:** Points to the 'Save' button at the bottom.
- NUMBER OF PUMPS OF THE REMOTE SYSTEM CAN CONTROL:** Points to the 'Number of Pumps' section (radio buttons for 'nr.2' and 'nr.3').
- INSERT TELEPHONE NUMBER OF THE “SIM” CARD INSERTED IN THE CONTROL PANEL:** Points to the 'Phone Number' field (containing '+393475930155').
- POSSIBILITY TO UTILIZE THE APP WITH OR WITHOUT COMMUNICATING WITH REMOTE CONTROL PANEL:** Points to the 'Send SMS' section (radio buttons for 'Yes' and 'No (demo)').

To start using Full-App Remote you need to setup the remote control panel information. It's advised to add to your smartphone “Contacts” the control panel phone numbers / names you wish to control remotely. Alternatively, you can enter/modify the name and number manually from within the App “Setup” display.

- Select the control panel from your list of contacts by pressing the button  (if present in your contacts). If the phone number of the control panel SIM card has not been saved in the smartphone's contacts you can always manually insert it (Name/Phone Number in the Setup display).

Important: in the remote control panel will need to have the phone number of your smartphone/tablet in the list of numbers to alert in case of alarms.

Ovviamente nel quadro devono essere stati impostati il numero del telefono che si sta utilizzando con la App ed il nome stazione (che deve corrispondere a quanto inserito sulla casella “Nome”).

Press  to save all the settings. To exit “Setup” without saving the modification and go back to the main control screen press the button . By pressing button  the App “Full-App Remote” will automatically detect the configuration of the remote control panel and if it's a system with 2 or 3 pumps (Full-App 2 or Full-App 3).

6. SENDING SMS MESSAGES

The control panel series Full-App and the application Full-App Remote communicate with each other via SMS messages. The cost of sending SMS will depend on your network operator and contract. Following are the buttons that once pressed will imply sending a single SMS message and therefore a cost depending on your operator.

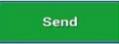
Main Control Screen:

BUTTON TO CONTROL PUMPS: every time the buttons are pressed 1 SMS from your phone to the control panel will be sent.

STATUS BUTTON: every time the button is pressed the smartphone will send 1 SMS to request the status and 1 SMS from the control panel GSM card as response.

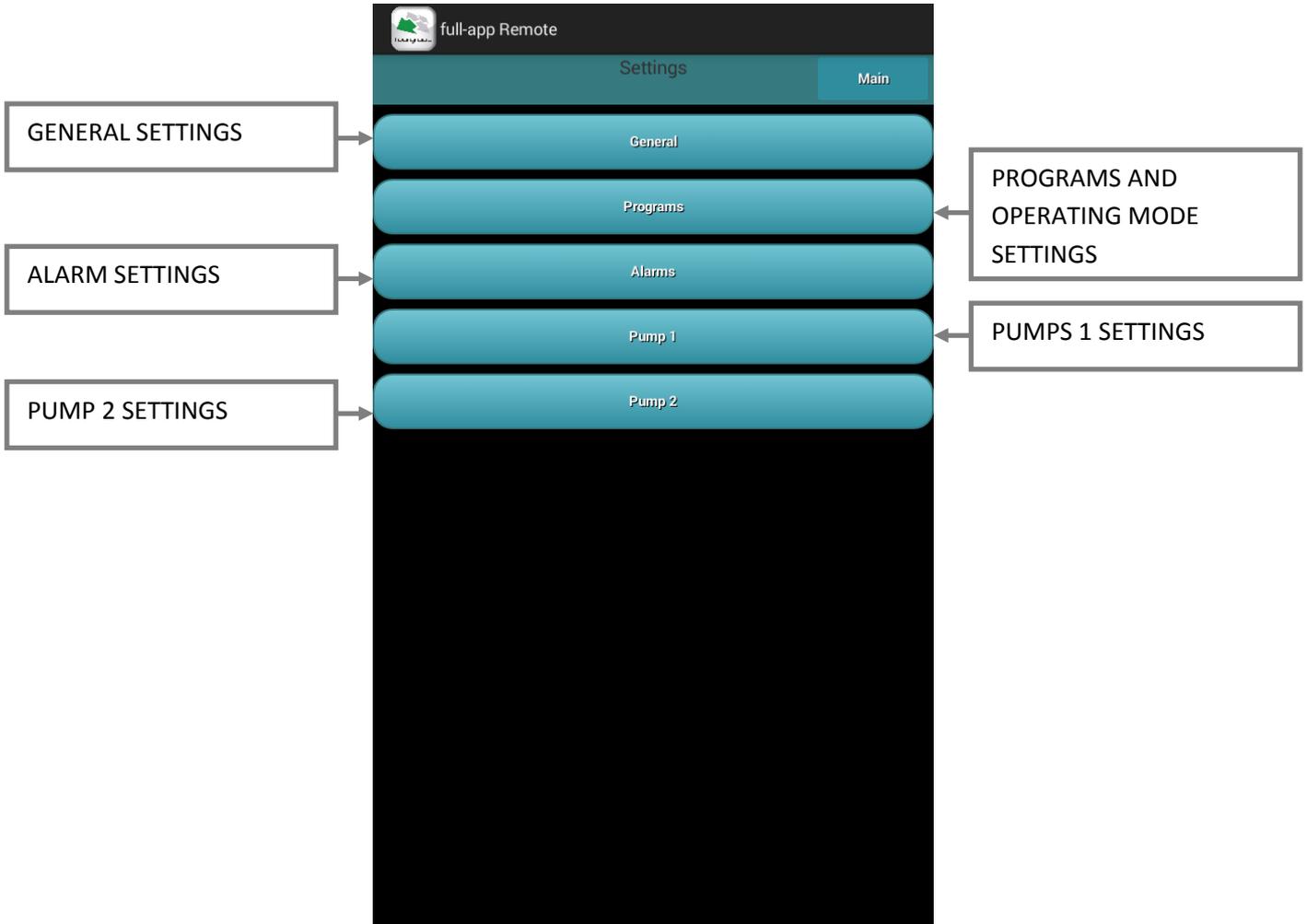
On the various control screens:

SEND BUTTON: every time the buttons are pressed 1 SMS from your phone to the control panel will be sent. The settings will be saved on the panel.

In the various screens to program the control panel general settings, pumps, operating modes, alarms, etc. the buttons , each time the button is pressed, will send 1 SMS from the phone to the control panel.

7. MENU DISPLAY

Press the button  ,in the main control screen, to access the list of various menus to access the various setting of parameters:



Parameters settings:

The App controls the setting of all parameters of control panel, for the full detail descriptions of such parameters please refer to instruction manuals of the control panel Full-App.

8. GENERAL SETTING DISPLAY

Press the button  , in the menu screen, to access the following general setting display:

MAXIMUM NUMBER OF PUMPS CONTROLLED BY THE SYSTEM AND WORKING AT THE SAME TIME

The screenshot shows the 'General' settings screen with the following options:

- Number of Pumps:** nr.1 nr.2
- Type of Alternance:**
 - No
 - Every Start LIFO
 - Nr. Starts
 - Work Time
 - Timer
 - Every Start FIFO
- Alternance Timer (1-999 h):** 1 - 999 h
- Delay after Return Power (0-999 sec):** 0 - 999 sec
- Delay Start P1/P2 (4-99 sec):** 4 - 99 sec
- Delay Stop Pumps (0-99 sec):** 0 - 99 sec
- Enable Alarm Voltage:**
 - Setting Vmax (120-500 V):** 120 - 500 V
 - Setting Vmin (100-400 V):** 100 - 400 V
 - Delay Prot. Vmax/Vmin (0-99 sec):** 0 - 99 sec
- Hz Stop Limit (+/- 0-10 Hz):** 0 - 10 Hz
- Delay Protection Hz (0-99 sec):** 0 - 99 sec
- Auto Test every hour (0-999 h):** 0 - 999 h
- Duration Auto Test (1-99 sec):** 1 - 99 sec
- MAN timeout stable:** 0 - 99 sec
- Restart of Intervention CosFi:**
 - Restart Times 1-2-3-4:** 0 - 999 min (time 1)
 - 30
 - 60
 - 90
 - Infinite Restart (time 4):** Yes No

DELAY PROTECTION SETTINGS

PUMPS SELF-TEST SETTING AND ITS DURATION

SETTING OF MANUAL OPERATION MODE

RESTARTS SETTINGS AFTER STOP FOR DRY OPERATION

TYPE OF ALTERNANCE PUMPS (ROTATION PUMPS):

NO: there will be no rotation of starting pumps. The pumps will start and stop depending on their own settings of activation and deactivation. N.B.: the condition for starting pump2 will also start pump 1.

Every Start LIFO: At every activation of the first starting condition the pumps will start in a cyclic order; at every activation of the second condition will result in the start of the second pump. The stopping of the pumps will be by in reverse order, firstly stopping the pump that started last, and then stopping the pump that started first.

Nr. Starts: the rotation will happen based on the number of starts of each pump. to balance the number of starts between the pumps. The stopping of the pumps will order the pump with the least number of starts (in order to have it re-start next and increase the number of restarts to try to balance it).

Work Time the rotation of the pumps will be based on the number of working hours of each pump in order to balance the load and number of working hours between the pumps. The stopping of the pumps will be in order of the most working hours. .

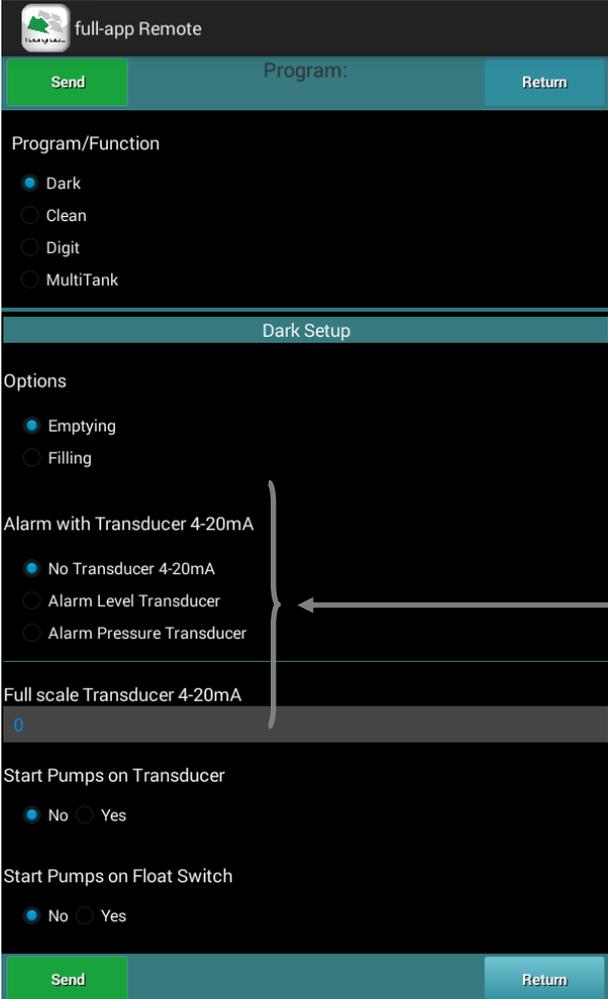
Timer: will activate the timer rotation: the rotation between pumps will be based on the programmable timer described in the next parameter ("Alternance Timer").

Every Start FIFO: At every activation of the first starting condition will result in a cyclic order of the pumps; at every activation of the second condition will result in the start of the second pump. The stopping of the pumps will be in sequence in which the pumps started. Firstly stopping the pump which started first and then stopping the pump that started last.

Once all the settings are entered, press the button  to send **all** the settings to the remote control panel for "General parameters". Pressing the button  will bring you back to the menu display without sending the info to the control panel.

9. PROGRAM DISPLAY - DARK

Press the button  in the menu display to access the following “Programs”. In this part of the of control panel setting it’s possible to choose the program operating mode (for the correct operation of the system it is necessary to install the pumps and the set of the control panel parameters based on the program mode selected). Depending on the operating program mode the appropriate settings and options are available on the display. Following are the settings/options for the operating program **DARK**:



SELECT OPERATING PROGRAM MODE

SELECT OPTION MODE:
EMPTYING /FILLING

SELECT USAGE 4-20mA:
LEVEL OR PRESSURE.

SELECT START PUMPS ON HIGH LEVEL
FLOAT SWITCH OR
TRANSDUCER 4-20mA

The program Dark is particularly suitable for systems managing waste water (this program mode can also be used for clean water system). Especially suitable for a system using float switches, the program Dark can be used also with generic dry contacts. The main characteristic of operation of the program Dark is that the pumps start is controlled via a start float switch and its operation will continue even after the “start switch” deactivation. The stopping of the pump is controlled by the activation of its stop float switch. The operating mode DARK will apply to all the pumps connected.

Once all the settings are entered, press the button  to send **all** the settings to the remote control panel for the program operating mode. Pressing the button  will bring you back to the menu display without sending the info to the control panel.

10. PROGRAM DISPLAY - CLEAN

Following are the settings/options for the operating program **CLEAN**:

The screenshot shows the 'full-app Remote' interface for the 'Clean' program. The 'Program/Function' section has radio buttons for Dark, Clean (selected), Digit, and MultiTank. The 'Clean Setup' section includes 'Options' (Emptying selected, Filling), 'Alarm with Transducer 4-20mA' (No Transducer 4-20mA selected, Alarm Level Transducer, Alarm Pressure Transducer), 'Full scale Transducer 4-20mA' (0), and 'Start Pumps on Transducer' (No selected, Yes) and 'Start Pumps on Float Switch' (No selected, Yes). Callout boxes provide instructions: 'SELECT OPERATING PROGRAM MODE' points to the 'Clean' option; 'SELECT OPTION MODE: EMPTYING / FILLING' points to the 'Emptying' option; 'SELECT USAGE 4-20mA: LEVEL OR PRESSURE.' points to the 'No Transducer 4-20mA' option; and 'SELECT START PUMPS ON HIGH LEVEL FLOAT SWITCH OR TRANSDUCER 4-20mA' points to the 'Start Pumps on Transducer' and 'Start Pumps on Float Switch' options.

The program Clean is particularly suitable for systems managing clean water (this program mode can also be used for waste water system). Especially suitable for system using either pressure switches or float switches, the program Clean can be used also with generic dry contacts. With the program Clean the starting and stopping of the pumps are controlled via the start float switch; it is possible to connect to a minimum level float switch as additional protection against dry running operation. The operating mode CLEAN will apply to all the pumps connected.

Once all the settings are entered, press the button **Send** to send **all** the settings to the remote control panel for the program operating mode. Pressing the button **Return** will bring you back to the menu display without sending the info to the control panel.

11. PROGRAM DISPLAY - DIGIT

Following are the settings/options for the operating program **DIGIT**:

The screenshot shows the 'full-app Remote' interface with the following settings and annotations:

- Program/Function:** Dark, Clean, **Digit** (selected), MultiTank. *Annotation: SELECT OPERATING PROGRAM MODE*
- Digit Setup:**
 - Option:** Emptying (selected), Filling. *Annotation: SELECT OPTION MODE: EMPTYING / FILLING*
 - Levels / Pressures:** Levels (selected), Pressures. *Annotation: SELECT FULL SCALE TRANSDUCER 4-20 mA*
 - Full scale Transducer 4-20mA:** 0. *Annotation: SELECT USAGE 4-20mA: LEVEL OR PRESSURE*
 - Start Pumps on Transducer:** No (selected), Yes. *Annotation: SELECT START PUMPS ON HIGH LEVEL FLOAT SWITCH OR TRANSDUCER 4-20mA*
 - Start Pumps on Float Switch:** No (selected), Yes.
 - Alarm Min Level (0-99.99 mt):** 0 - 99.99
 - Alarm Max Level (0-99.99 mt):** 0 - 99.99
 - Level Start P1 (0-99.99 mt):** 0 - 99.99
 - Level Stop P1 (0-99.99 mt):** 0 - 99.99
 - Level Start P2 (0-99.99 mt):** 0 - 99.99
 - Level Stop P2 (0-99.99 mt):** 0 - 99.99

Annotation: SET PUMPS ALARM START AND STOP LEVELS /PRESSURES

The program DIGIT allows the starting and stopping of the pumps based on a signal coming from 4-20 mA device (for example, level piezoresistive sensor, electronic pressure transducer,...). It is possible to control the starting and stopping of the pumps based on some levels/pressures programmable by the operator. The operating mode DIGIT will apply to all the pumps connected.

Once all the settings are entered, press the button **Send** to send **all** the settings to the remote control panel for the program operating mode. Pressing the button **Return** will bring you back to the menu display without sending the info to the control panel.

12. PROGRAM DISPLAY - MULTITANK

Following are the settings/options for the operating program **MULTITANK**:

The screenshot shows the 'full-app Remote' interface for the 'MULTITANK' program. The interface is divided into several sections with callouts explaining the options:

- Program/Function:** Options include Dark, Clean, Digit, and MultiTank. A callout indicates 'SELECT OPERATING PROGRAM MODE'.
- MultiTank Setup:**
 - Transducer 4-20mA:** Options are No and Yes. A callout indicates 'SELECT USAGE TRANSDUCER 4-20mA:'. Below this, 'Levels' and 'Pressures' are selected, with a callout indicating 'SELECT USAGE 4-20mA: LEVEL OR PRESSURE'.
 - Full scale Transducer 4-20mA:** A numerical input field showing '0'. A callout indicates 'SELECT FULL SCALE TRANSDUCER 4-20 mA'.
 - Start Pumps on Transducer:** Options are No and Yes. A callout indicates 'SELECT START PUMPS ON HIGH LEVEL FLOAT SWITCH OR TRANSDUCER 4-20mA'.
 - Start Pumps on Float Switch:** Options are No and Yes.
 - Alarm Min Level (0-99.99 mt):** A numerical input field showing '0-99.99'. A callout indicates 'SELECT ALARM MIN AND MAX LEVELS / PRESSURES'.
 - Alarm Max Level (0-99.99 mt):** A numerical input field showing '0-99.99'.
- Pump nr.1 Program:**
 - Options: Dark, Clean, Digit, Emptying, Filling. A callout indicates 'SELECT OPERATING PROGRAM MODE PUMP-1'.
 - Level Start P1 (0-99.99 mt):** A numerical input field showing '0-99.99'. A callout indicates 'SET START/STOP LEVELS/PRESSURES PUMP 1'.
 - Level Stop P1 (0-99.99 mt):** A numerical input field showing '0-99.99'.
- Pump nr.2 Program:**
 - Options: Dark, Clean, Emptying, Filling. A callout indicates 'SELECT OPERATING PROGRAM MODE PUMP-2'.
 - Options: Emptying, Filling. A callout indicates 'SELECT OPTION MODE: EMPTYING /FILLING PUMP 2'.

The program MULTITANK allows the different type of operating mode among the connected pumps:

PUMP 1: DARK, CLEAN, DIGIT. (The program mode DIGIT is only available for the pump 1).

PUMP 2: DARK, CLEAN.

The program MULTITANK is especially suitable for systems with pumps controlling different tanks and/or controlling different type of pumps with a single control panel.

Once all the settings are entered, press the button **Send** to send **all** the settings to the remote control panel for the program operating mode. Pressing the button **Return** will bring you back to the menu display without sending the info to the control panel.

13. ALARMS DISPLAY – ALARM BUZZER

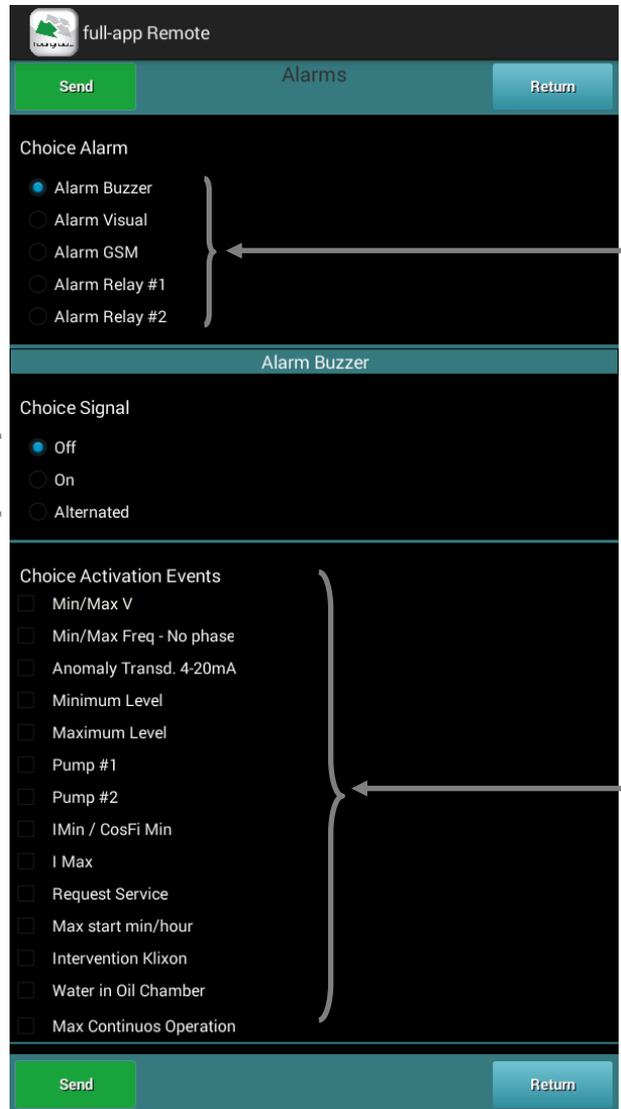
Press the button  in the menu screen to access the following “Alarms” display. In this part of the of control panel setting it’s possible to choose the various alarms output settings. Following are the settings/options for the “**Alarm Sounds**”:

OUTPUT ALARM OPERATING MODE:

OFF: non used.

ON: in the presence of an alarm (among the selected) the output alarm is on and the connected device will activate. In the absence of an alarm the output is off and the connected device is turned off.

ALTERNATED: in the presence of an alarm (among the selected) the output alarm is on with intermittent pulses and the connected device will activate intermittently. In the absence of an alarm the output is off and the connected device is turned off.



SELECT PROGRAMMABLE OUTPUT ALARM

SELECT THE EVENTS THAT WILL ACTIVATE THE OUTPUT ALARM

The alarms “IMin / Cos ϕ Min”, “I Max”, “Request Service”, “Max Start per Min/Hour”, “Intervention Klixon”, “Water in Oil Chamber” e “Max Continuous Operation”, to be triggered, MUST be associated to at least one pump; at least one of the “Alarms pump” must be active.

Once all the settings are entered, press the button  to send **all** the settings to the remote control panel for all programmable output alarms. Pressing the button  will bring you back to the menu display without sending the info to the control panel.

14. ALARMS DISPLAY – ALARM VISUAL

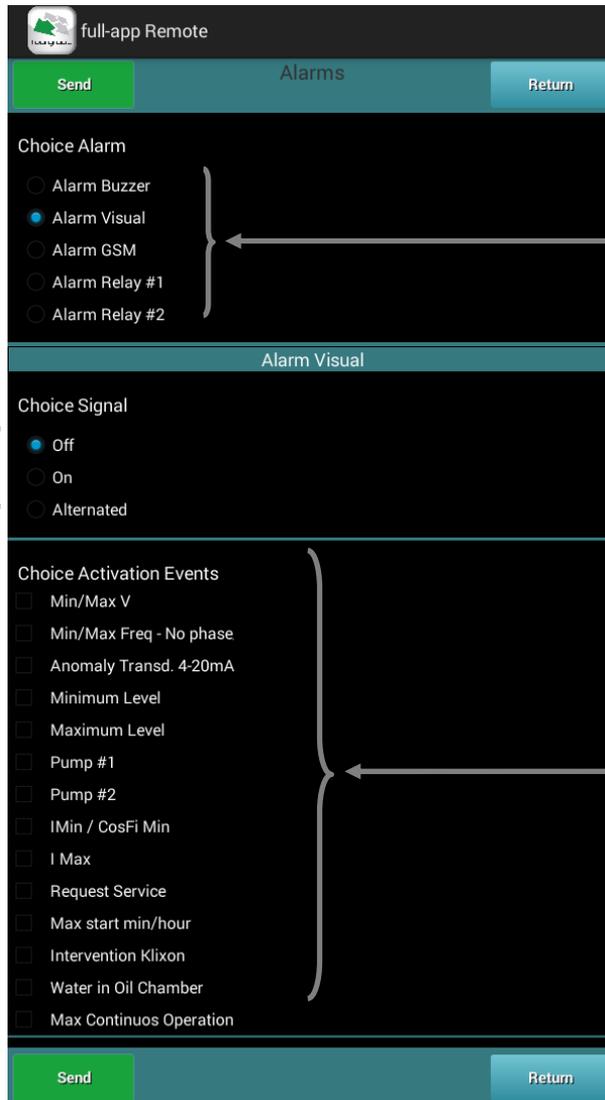
Following are the settings/options for the “**Alarm Visual**”:

OUTPUT ALARM OPERATING MODE:

OFF: not used.

ON: in the presence of an alarm (among the selected) the output alarm is on and the connected device will activate. In the absence of an alarm the output is off and the connected device is turned off.

ALTERNATED: in the presence of an alarm (among the selected) the output alarm is on with intermittent pulses and the connected device will activate intermittently. In the absence of an alarm the output is off and the connected device is turned off.



SELECT PROGRAMMABLE OUTPUT ALARM

SELECT THE EVENTS THAT WILL ACTIVATE THE OUTPUT ALARM

The alarms “I Min / Cos ϕ Min”, “I Max”, “Request Service”, “Max Start per Min/Hour”, “Intervention Klixon”, “Water in Oil Chamber” e “Max Continuous Operation”, to be triggered, MUST be associated to at least one pump; at least one of the “Alarms pump” must be active.

Once all the settings are entered, press the button **Send** to send **all** the settings to the remote control panel for all programmable output alarms. Pressing the button **Return** will bring you back to the menu display without sending the info to the control panel.

16. ALARM DISPLAY – ALARM RELAY 1

Following are the settings/options for the “**Alarm Relay #1**”:

OUTPUT ALARM OPERATING MODE:

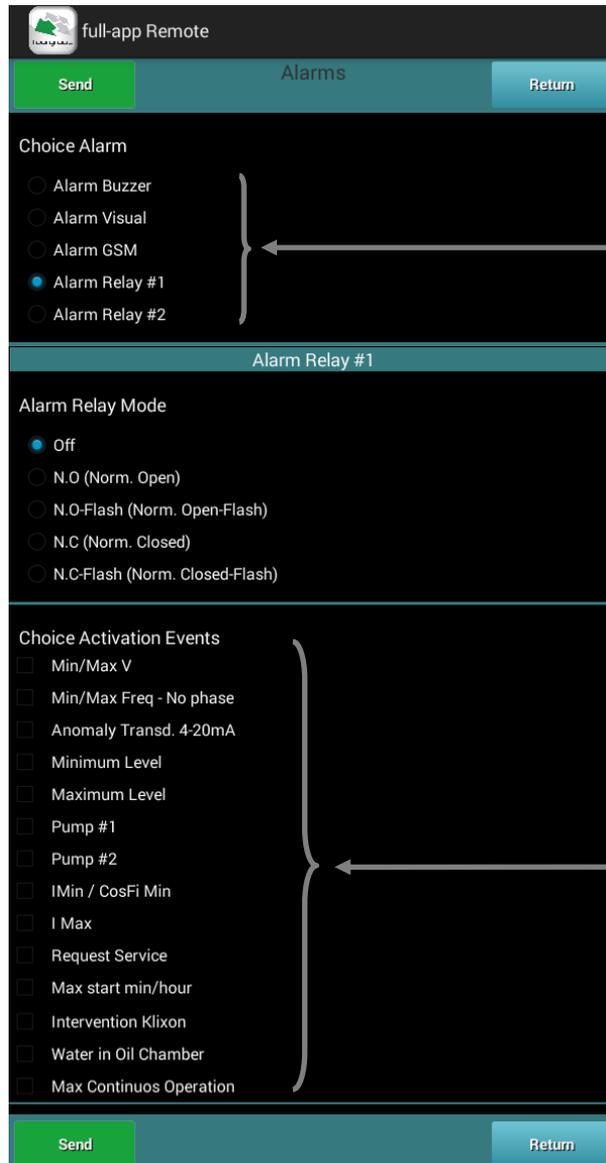
OFF: not used.

N.O. (Norm. Open): in the presence of an alarm (among the selected) the output relay alarm is activated and it changes status; that is, the contact N.O will close relative to COM and the contact N.C will open.

N.O-Flash. (Norm. Open-Flash): in the presence of an alarm (among the selected) the output alarm will be on at intermittent pulses and therefore there will be and intermittent change of contacts.

N.C. (Norm. Closed): the output relay alarm is always active in absence of an alarm (among the selected). Without the alarm the contact N.O is closed and the contact N.C. is open.

N.C-Flash (Norm. Closed-Flash): the output is always on (the device connected is on) in absence of an alarm. In the presence of an alarm (among the selected) the output alarm is on with intermittent pulses and the connected device will activate intermittently.



For The alarms “IMin / Cos ϕ Min”, “I Max”, “Request Service”, “Max Start per Min/Hour”, “Intervention Klixon”, “Water in Oil Chamber” and “Max Continuous Operation”, to be triggered, MUST be associated to at least one pump; at least one of the “Alarms pump” must be active.

Once all the settings are entered, press the button **Send** to send all the settings to the remote control panel for all programmable output alarms. Pressing the button **Return** will bring you back to the menu display without sending the info to the control panel.

17. ALARM DISPLAY – ALARM RELAY 2

Following are the settings/options for the “**Alarm Relay #2**”:

OUTPUT ALARM OPERATING MODE:

OFF: not used.

N.O. (Norm. Open): in the presence of an alarm (among the selected) the output relay alarm is activated and it changes status; that is, the contact N.O will close relative to COM and the contact N.C will open.

N.O-Flash. (Norm. Open-Flash): in the presence of an alarm (among the selected) the output alarm will be on at intermittent pulses and therefore there will be and intermittent change of contacts.

N.C. (Norm. Closed): the output relay output alarm is always active in absence of an alarm (among the selected). Without the alarm the contact N.O is closed and the contact N.C. is open.

N.C-Flash (Norm. Closed-Flash): the output is always on (the device connected is on) in absence of an alarm. In the presence of an alarm (among the selected) the output alarm is on with intermittent pulses and the connected device will activate intermittently.

SELECT PROGRAMMABLE OUTPUT ALARM

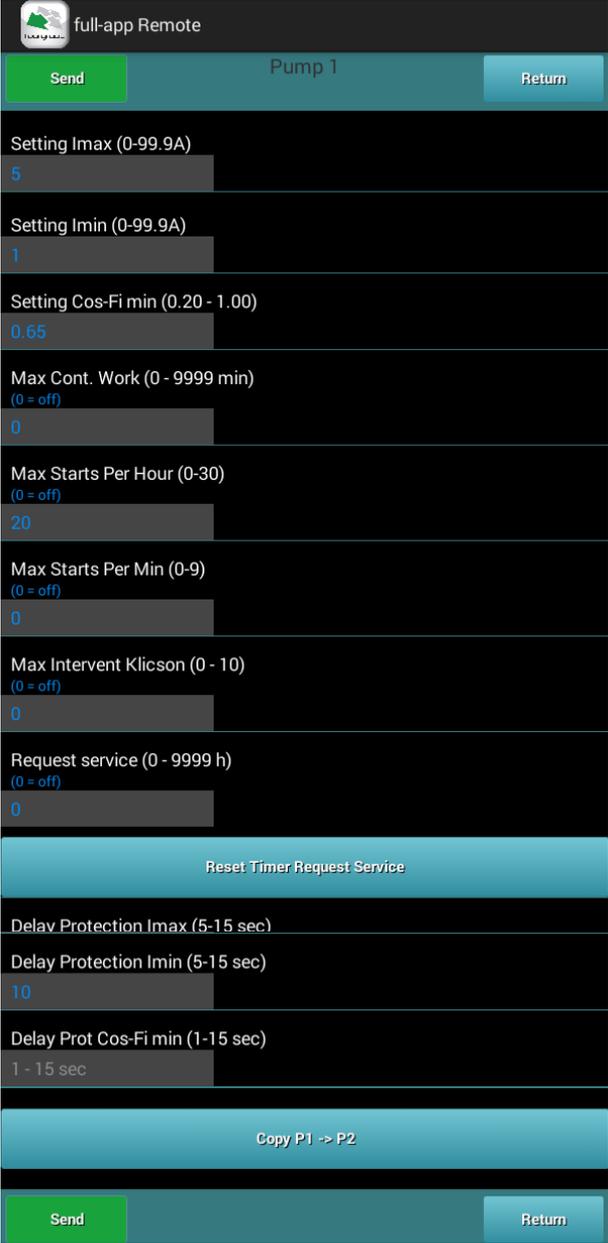
SELECT THE EVENTS THAT WILL ACTIVATE THE OUTPUT ALARM

For the alarms “IMin / Cos ϕ Min”, “I Max”, “Request Service”, “Max Start per Min/Hour”, “Intervention Klixon”, “Water in Oil Chamber” and “Max Continuous Operation”, to be triggered, they MUST be associated to at least one pump; at least one of the “Alarms pump” must be active.

Once all the settings are entered, press the button Send to send **all** the settings to the remote control panel for all programmable output alarms. Pressing the button Return will bring you back to the menu display without sending the info to the control panel.

18. SETTING PUMP 1

Press the button  in the menu screen to access the following "Pump 1" setting display:



The screenshot shows the "Pump 1" settings screen. It features a top bar with "Send" and "Return" buttons. The settings are grouped into two main sections:

- PUMP 1 PROTECTION SETTINGS:** This section includes:
 - Setting I_{max} (0-99.9A): 5
 - Setting I_{min} (0-99.9A): 1
 - Setting Cos-Fi min (0.20 - 1.00): 0.65
 - Max Cont. Work (0 - 9999 min) (0 = off): 0
 - Max Starts Per Hour (0-30) (0 = off): 20
 - Max Starts Per Min (0-9) (0 = off): 0
 - Max Intervent Klicson (0 - 10) (0 = off): 0
 - Request service (0 - 9999 h) (0 = off): 0
- PUMP 1 DELAYS PROTECTION SETTINGS:** This section includes:
 - Delay Protection I_{max} (5-15 sec)
 - Delay Protection I_{min} (5-15 sec): 10
 - Delay Prot Cos-Fi min (1-15 sec): 1 - 15 sec

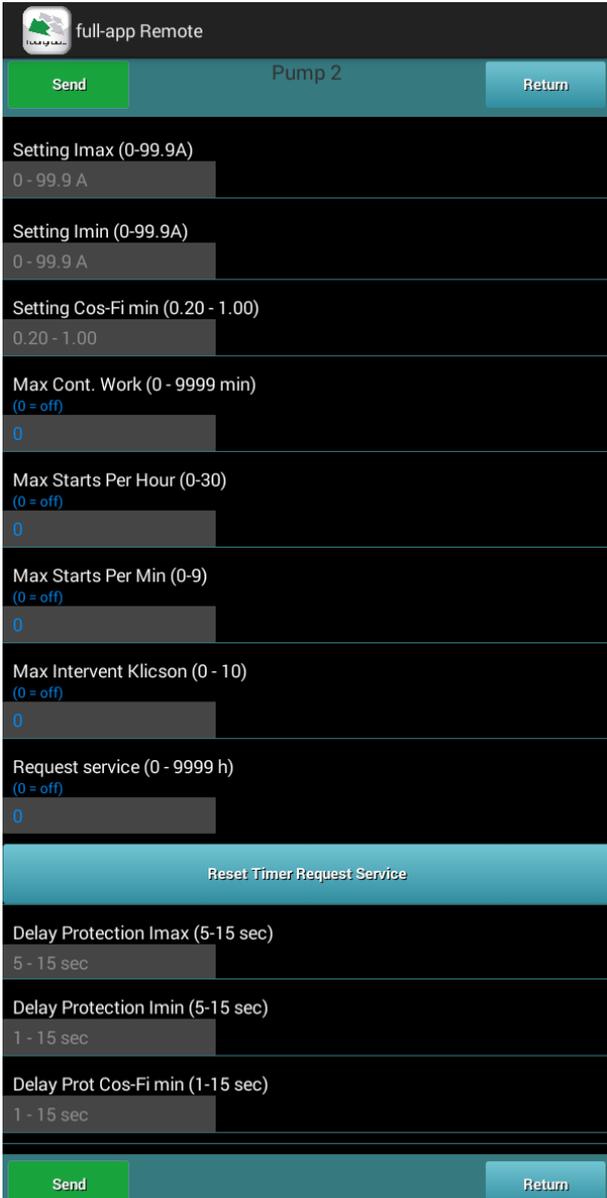
Additional callouts on the right side of the screen point to specific buttons:

- "SETTING WORK TIME FOR PUMP 1 TO REQUEST SERVICE" points to the "Request service" field.
- "RESET TIMER FOR PUMP 1 SERVICE REQUEST" points to the "Reset Timer Request Service" button.
- "BUTTON TO COPY ALL THE APP INTERNAL SETTINGS FOR PUMP 1 TO PUMP 2" points to the "Copy P1 -> P2" button.

Once all the settings are entered, press the button  to send **all** the settings to the remote control panel for Pump 1. Pressing the button  will bring you back to the menu display without sending the info to the control panel.

19. SETTING PUMP 2

Press the button  in the menu screen to access the following “Pump 2” setting display:



The screenshot shows the 'Pump 2' settings screen in the 'full-app Remote' interface. The screen is divided into two main sections: 'PUMP 2 PROTECTION SETTINGS' and 'PUMP 2 DELAYS PROTECTION SETTINGS'. The 'PUMP 2 PROTECTION SETTINGS' section includes: Setting I_{max} (0-99.9A), Setting I_{min} (0-99.9A), Setting Cos-Fi min (0.20 - 1.00), Max Cont. Work (0 - 9999 min) (0 = off), Max Starts Per Hour (0-30) (0 = off), Max Starts Per Min (0-9) (0 = off), Max Intervent Klicson (0 - 10) (0 = off), and Request service (0 - 9999 h) (0 = off). The 'PUMP 2 DELAYS PROTECTION SETTINGS' section includes: Delay Protection I_{max} (5-15 sec), Delay Protection I_{min} (5-15 sec), and Delay Prot Cos-Fi min (1-15 sec). A 'Reset Timer Request Service' button is located between the two sections. The screen has a 'Send' button at the top left and a 'Return' button at the top right. Callouts on the left side group the settings into 'PUMP 2 PROTECTION SETTINGS' and 'PUMP 2 DELAYS PROTECTION SETTINGS'. Callouts on the right side point to the 'Request service' field and the 'Reset Timer Request Service' button, with labels 'SETTING WORK TIME FOR PUMP 2 TO REQUEST SERVICE' and 'RESET TIMER FOR PUMP 2 SERVICE REQUEST' respectively.

Once all the settings are entered, press the button  to send all the settings to the remote control panel for Pump 1. Pressing the button  will bring you back to the menu display without sending the info to the control panel.

20. LOG EVENT DISPLAY

Press the button  on the main menu control display to view the historic log of events. Around thirty events of communication between the App and the remote control panel will be saved in the log. The log will maintain the most recent events with timestamp and eventually remove old events from the list::



Press button  to clear all the events from the historic log. Press the button  to go back to the menu display.