

INSTALLING THE HAND HELD PROGRAMMER'S BATTERY

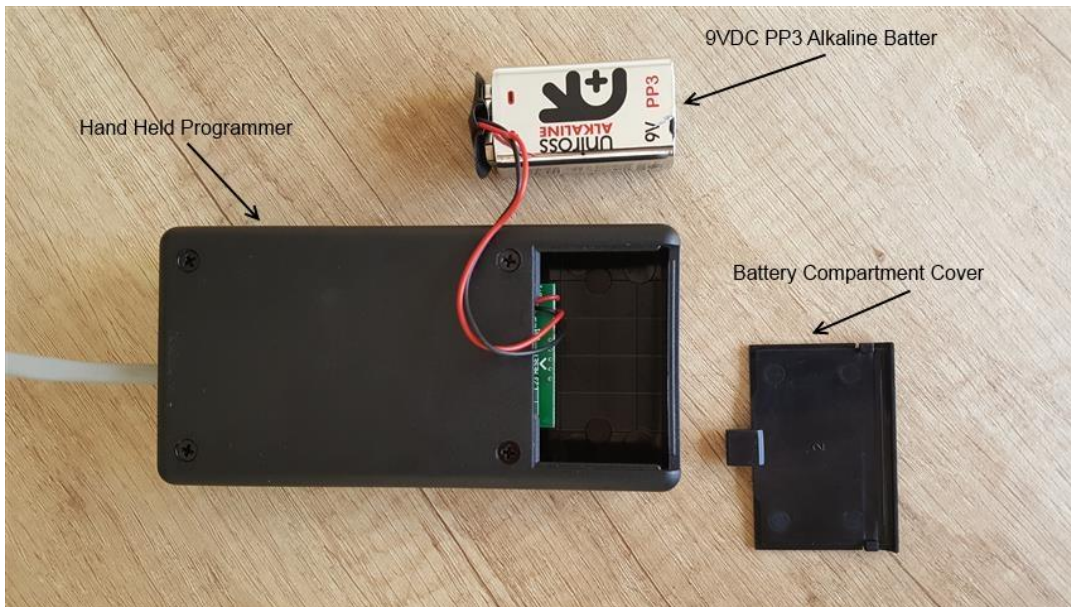


Figure 1

- Referring to Figure 1 above, remove the battery compartment cover and extract the polarized battery connector.
- Connect a new fully charged 9VDC PP3 battery to the polarized battery connector. A clear audible beep will be heard confirming that power has been applied to the unit.
- Carefully insert the power loom and the battery into the battery compartment and replace the battery compartment cover.

CONNECTING THE HAND HELD PROGRAMMER REFERRED TO AS THE HHP TO THE RECEIVER MODULE

- Open the battery housing on the receiver module by removing the rubber plug from the receiver modules battery compartment (Do not use any sharp instruments to achieve this).

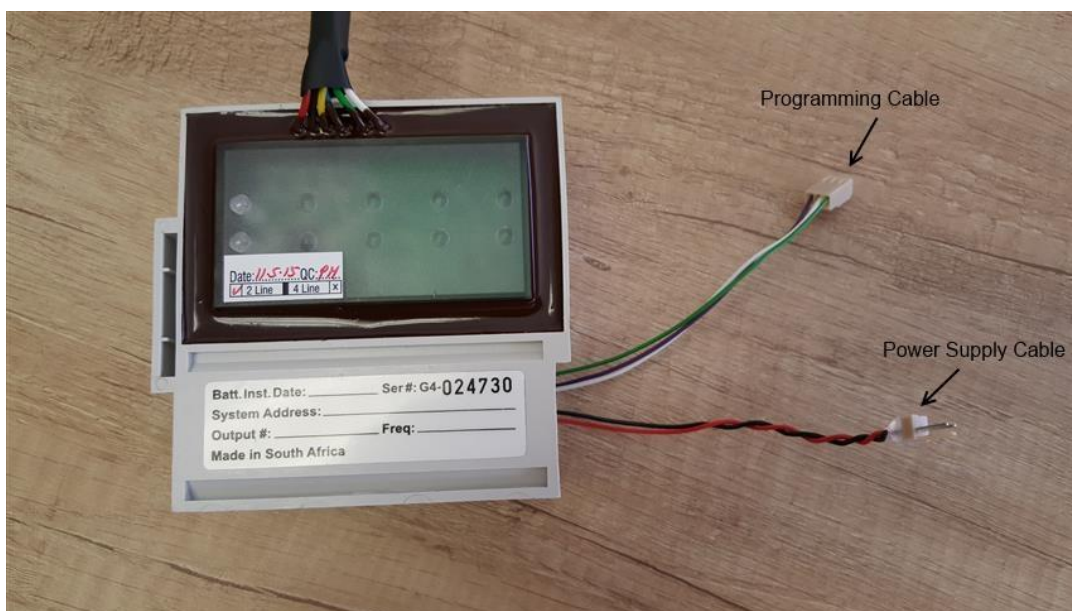


Figure 2

- Referring to Figure 2 above, extract the battery, battery cable and the programming cable out of the receiver modules battery compartment.
- Disconnect the battery from the receiver module by holding the battery's socket connector firmly between your index finger and thumb in one hand and the receiver modules connector plug firmly between your index finger and thumb in the other hand. Extract the plug from the socket to disconnect the battery

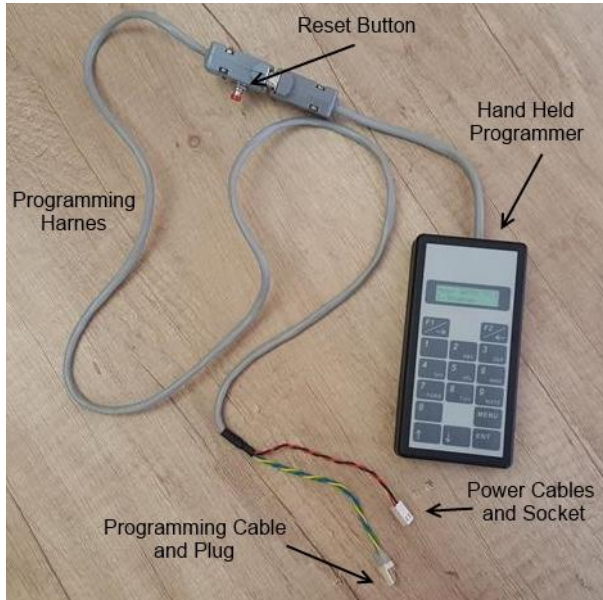


Figure 3

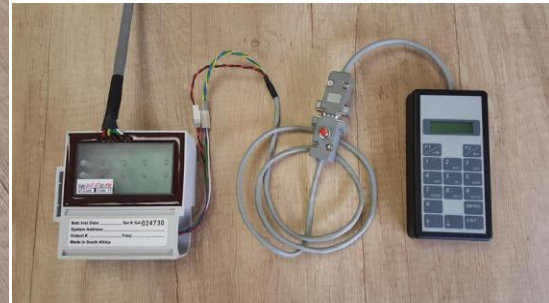


Figure 4

- Referring to Figure 3 and 4 above, the HHP will be equipped with an interfacing harness containing 5 wires namely Red (+), Black (-), White (Programming), Purple (Programming) and Green (Reset). The Red and Black cables are terminated in a socket connector while the Yellow, Blue and Green wires are terminated in a plug. The interfacing harness will also be equipped with a Red reset button mounted on the cover of the DB9 connector of the harness cable.
- Connect the red and black wires from the HHP to the battery connection of the Receiver module.
- Connect yellow, blue and green wires of HHP to the white, purple and green wires of Receiver module. The receiver module will be fitted with a suited connector to prevent the incorrect connection from taking place.

RESETTING THE RECEIVER MODULE *(PERFORM THIS PROCEDURE BEFORE READING OR PROGRAMMING THE RECEIVER MODULE)*

Once the HHP is linked to the Receiver module, press the “Red” button located on the DB9 connector’s cover on the programming harness cable for a period of 2 seconds. This resets the processor in the module allowing immediate programming and or reading of the Receiver module without delay (the need for power to dissipate).

GENERAL OPERATION OF THE HAND HELD PROGRAMMER

- Press the “Menu” key on the keypad. A screen shown in Figure 5 below will appear. The programmer’s software version (E.g. V5.1) is noted in the upper right hand corner of the display.



Figure 5



➤ The following nine functions are available under the “Menu”. These functions will be fully described in this document.

1. Program
2. Read
3. Valve num
4. Valve Amount
5. System ID
6. Extra Sys ID
7. Unit Type
8. MAX Amount
9. Upgrade to 4

➤ Use the ▲ and ▼ keys on the programmer’s keypad to navigate between the different functions.

UNDERSTANDING THE SETTINGS FIELDS SCREEN ON THE HHP

Whenever a Receiver module is “read” or “programmed” (as explained in more detail below) the following screen will appear on the Hand Held Programmer. Figure 6 below provides an explanation of each of the setting fields that are displayed.

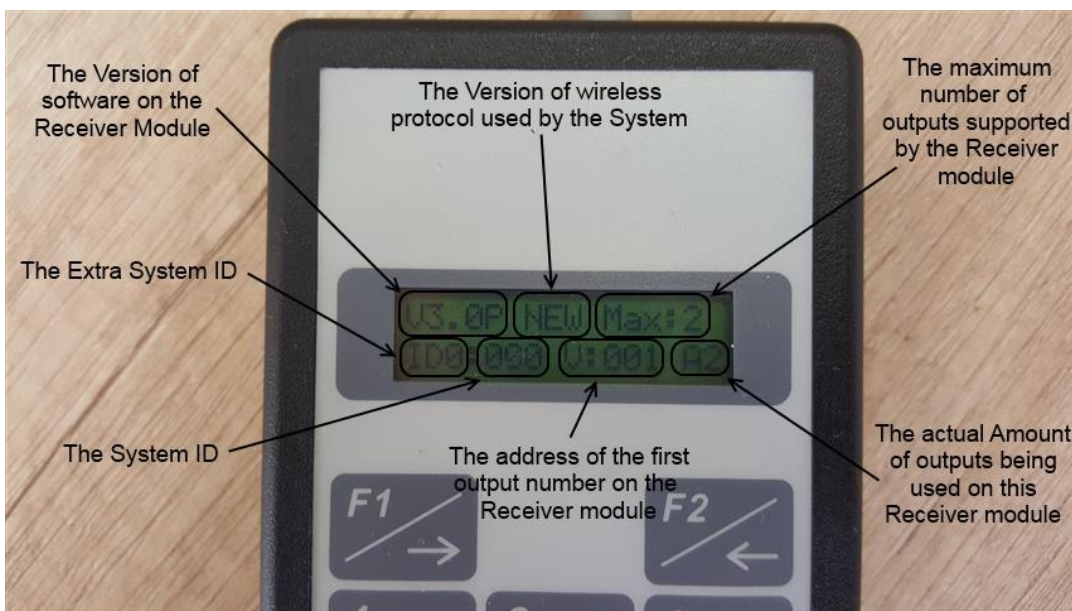


Figure 6

PROGRAMMING THE RECEIVER MODULE

STEP 1

Setting the output addresses on the receiver module.

In the programmer’s main menu, use ▲ ▼ arrows to move to 3. Valve num (ber).

Press ENT

Use ▲ ▼ arrows to select the appropriate address for the first output number on the Receiver module.

Press ENT again.



Programming guide for the G4 Radio Receiver Module using the Hand Held Programmer

E.g. If the module is set to 5, the first output will be 5 and the other outputs will follow in sequence. A Receiver module with 3 outputs will be addressed as follows: Output 1 will be address 5, output 2 will be addresses 6 and output 3 will be addressed 7.

NOTE!!! Avoid setting the Receiver modules first output address in a region that will cause the second, third or fourth output to overlap the output values 32 and 33, 64 and 65, or 96 and 97.

E.g. If a 4 line receiver is set as 31, the other outputs will be 32, 33 and 34. Outputs 33 and 34 will not be functional.

The modules output addresses are now set on the HHP and require downloading to the Receiver module once all other programming is completed (See step 6).

STEP 2

Setting the number of outputs required on the Receiver module.

In the programmer's main menu, use ▲ ▼ arrows to move to 4. Valve Amount.

Press ENT

Use ▲ ▼ arrows to select number of outputs that will be used on the Receiver module.

NOTE!!! On a module that has been factory set for 2 lines only; a maximum of 2 outputs can be selected. On a module that has been factory set for 4 lines only; a maximum of 4 outputs can be selected. It is possible to select less than the factory set amounts but a minimum of 1 output must be selected.

Make your selection and then press ENT

The Receiver modules number of outputs has now been set on the HHP and require downloading to the Receiver module once all other programming is completed (See step 6).

STEP 3

Setting the Receiver modules System I.D.

The System I.D. pairs the Receiver module with a transmitter device set with the same System ID

In the programmer's main menu, use ▲ ▼ arrows to move to 5. System ID

Press ENT

Use ▲ ▼ arrows to select the system I.D. The selection range is from 000 to 255.

Once a number corresponding with the number used by this system transmitter device is selected, press ENT again.

NOTE!!! It is important to make sure that this system cannot interfere with another system which utilizes the same ID

The Receiver modules systems ID has now been set on the HHP and requires downloading to the Receiver module once all other programming is completed (See step 6).

STEP 4

Setting the Receiver modules Extra Sys I.D.

The Extra Sys(tem) ID pairs the Receiver module with a transmitter device set with the same Extra Sys ID. It works in the same manner as the System ID as explained under Step 3 above. The objective of the Extra Sys ID is to provide additional ID's to be used over and above the 256 normal System ID's.

In the programmer's main menu, use ▲ ▼ arrows to move to 6. Extra Sys ID



Press ENT

Use ▲ ▼ arrows to select the Extra Sys ID. The selection range is from 0 to 7.

Once a number corresponding with the number used by this system transmitter device is selected, press ENT again.

NOTE!!! It is important to make sure that this system cannot interfere with another system which utilizes the same ID

The Receiver modules Extra Systems ID has now been set on the HHP and requires downloading to the Receiver module once all other programming is completed (See step 6).

STEP 5

Setting the Receiver modules Unit Type

Unit Type refers to the version of wireless protocol being used in the system. This normally defined by the type of transmitter device but in general NEW is for the G3 or newer versions of Receiver modules and OLD is for the G2 or older versions of Receiver module

In the programmer's main menu, use ▲ ▼ arrows to move to 7. Unit Type

Press ENT

Use ▲ ▼ arrows to select between OLD and NEW receiver type.

NOTE!!! If the software version POPTX XX is available on the systems radio transmitter interface card, the module should be set to the NEW type. If the software version REMTX XX is available on the systems radio transmitter interface card, the module should be set to the OLD type. All other transmitter devices will pertain to the generation of Receiver module being used.

Press ENT

The modules software version has now been set on the HHP and requires downloading to the receiver module once all other programming is completed (See step 6).

STEP 6

Programming the Receiver module with the various settings

In the programmer's main menu, use ▲ ▼ arrows to move to 1. Program

Observe both the green and the red LED's on the Receiver module that is about to be programmed.

Press ENT

The Red and Green LED's should flash twice during the process of downloading the setting from the HHP to the Receiver module. Both LED will extinguish once the download process has completed.

The downloaded setting will now appear on the screen of the HHP as per the image below.



If the settings appear in accordance with what was selected, the Receiver module is now ready for field operation.

HOW TO READ THE RECEIVER MODULE

Press MENU.

In the programmer's main menu, use ▲ ▼ arrows to move to 2. Read

Press ENT

Observe the LED's on the Receiver module which is about to be read.

The Red and Green LED's should flash twice and then turn off.

The setting relevant to this Receiver module should then appear on the screen of the HHP. This may take a few seconds to update.

If any of these settings are incorrect or need updating, repeat steps 1 to 5 under "*Programming the receiver module*" above.

DISCONNECTING THE RECEIVER MODULE FROM HHP.

Disconnect the Receiver module from the HHP and reconnect the Receiver module's battery.

The Receiver module will re-activate immediately once the battery is reconnected.

The Red and green LED's should light up.

The Green LED will turn off and the Red LED will remain on for 5 minutes after the battery was reconnected.

Should a radio signal applicable to this receiver module (ID being the same as the transmitted signal), be received by the unit, the green LED will flash briefly.

If data that pertains to one or more of the outputs has been received by the module, the output/s will be activated or deactivated dependant on the status requested. At this time the green LED will also flash briefly.
