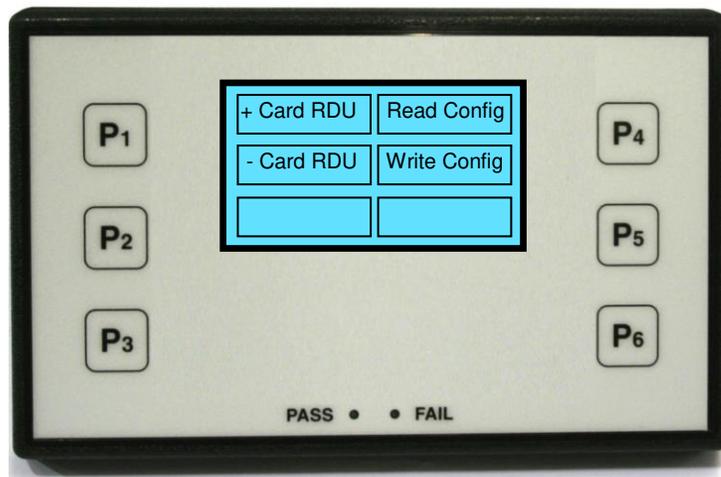


Field Programming Tool: - FPT-601



The FPT-601 Field Programming Tool is designed for commissioning, setup and configuration of the TITAN BACnet enabled controllers with firmware of V3 onwards

The hand held FPT-601 plugs directly into the TITAN controllers RJ11 socket via its flying lead and is used as a commissioning aid allowing the following functions.

Features

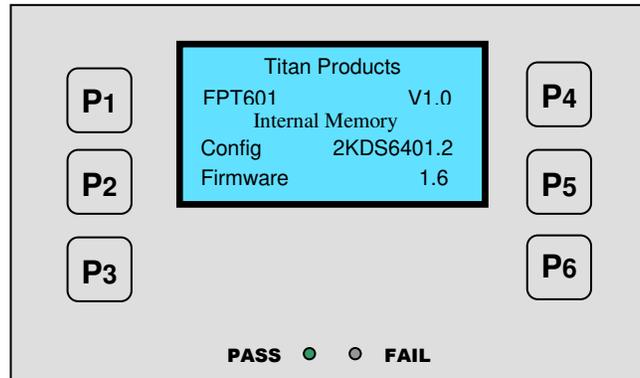
- Entry of MAC address
- Entry of Device ID
- Configuration of Inputs/Outputs
- Adjustment of Control parameters
- Commissioning
- Copy & Upload of Configuration
- Emulation of RDU functions
- Pass code entry for security
- RJ11 connection to controllers
- USB for PC download of new Config

Specification

- Hand held device
- Size 145mm x 90mm x 28mm
- Flame retardant polycarbonate
- Powered from TITAN controller
- RJ11(6/6) connection to controllers
- USB for PC programming
- Backlit display
- Display area 50mm wide x 30mm high
- Touch sensitive keys
- Polyester membrane
- LED indication (Pass/Fail)

DISPLAY MENU (on power up)

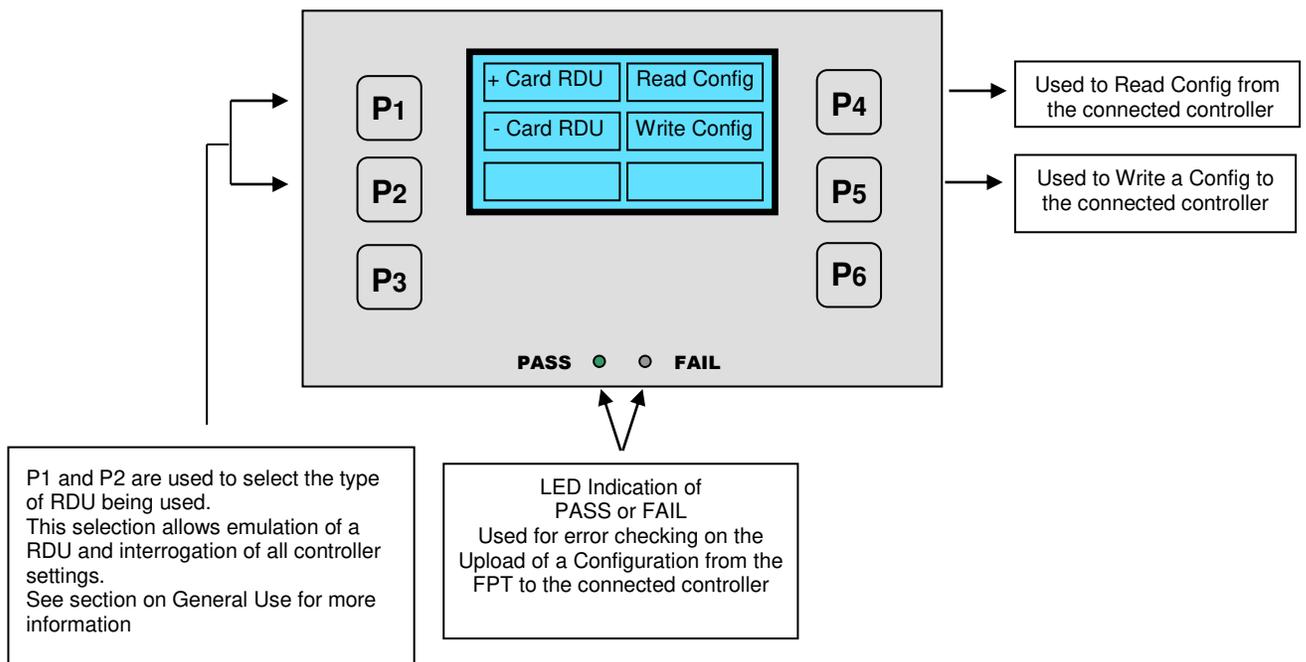
This menu is displayed whenever the FPT-601 is powered up. The Product Information is displayed for approximately 10 seconds or if any button on the key pad is pressed after which the FPT shows the Main Menu. If at any time the RJ11 lead is removed from the back of the programmer then the display will default to the Main Menu on Power Up after the initial Product Information.



The first display is the Product Information and shows for 10 seconds on power up.
Product code :- FPT601 and firmware version of the FPT

The Internal memory refers to:-
Config software that is resident in the FPT and available for upload to a TITAN controller.
Firmware refers to the firmware of the target TITAN controller to run the **Config** version.

MAIN MENU



READING A CONFIGURATION FROM A CONTROLLER

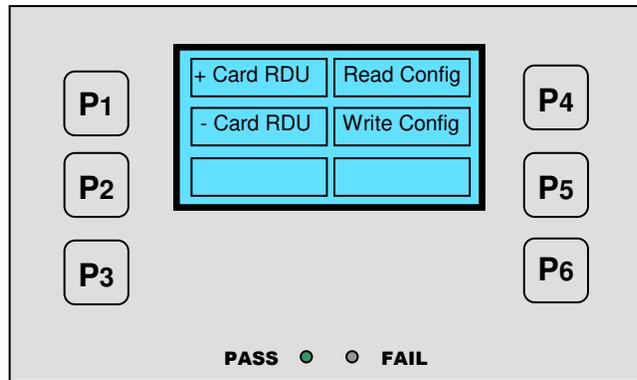
The FPT-601 can be used to read a controller configuration. The configuration includes all IO allocation, controller setup and all the existing controller settings.

To **Read** a configuration the FPT-601 is plugged into the target controller with the RJ11 lead.

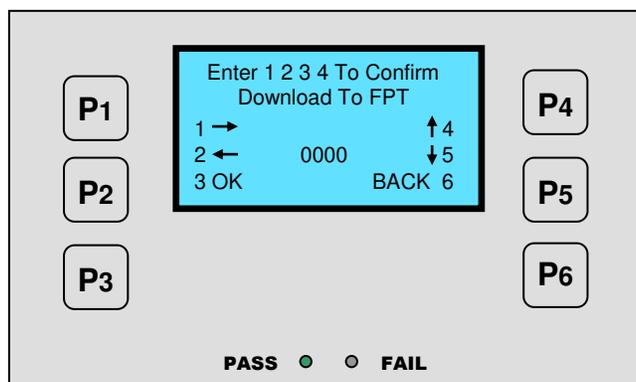
IMPORTANT

When “Read Config” is selected on P4 this action will overwrite any existing program in the FPT-601. Please ensure that the any existing FPT program is not required. If an existing FPT program is required then you can upload this via the USB connection and store on a PC for use later. See USB instructions.

Press **P4** to **Read Config (Down load)** from the connected controller

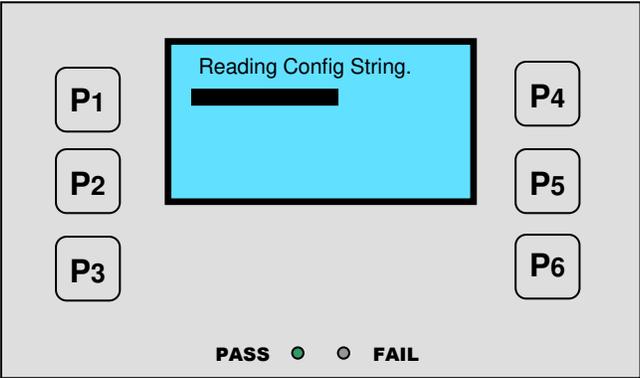


For security purpose the Read Config action from the connected controller into the FPT is protected from misuse. The following is displayed and requires confirmation of selection by an entry code 1,2,3,4 to proceed. Use the display instructions to enter the 1,2,3,4 then press **P3 OK** to proceed.

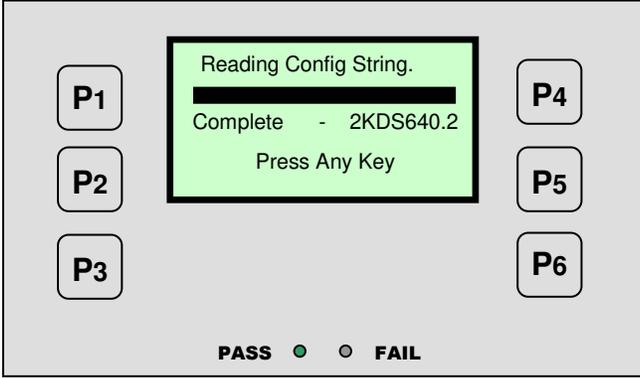


The FPT-601 now starts the read and Overwrite of the existing FPT Config from the connected controller. The Pass light at the bottom is continuously lit during the Download to FPT process.

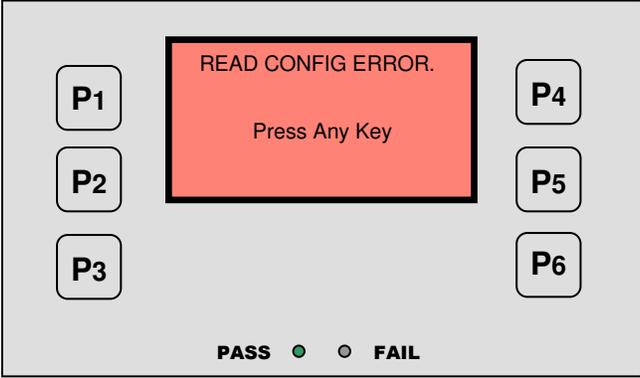
The display shows a dynamic bar during reading of a controller config which is an indication of the down load process. Once this is complete the display reverts back to the Main Menu and the FPT601 is now ready for programming other TITAN controllers.



When the Read Config String is complete the following is displayed with Green backlight. The Alphanumeric reference will be different dependant on the config reference number and the control device being read from.



If the Read Config process does not complete the process correctly then the following is displayed with a RED backlight



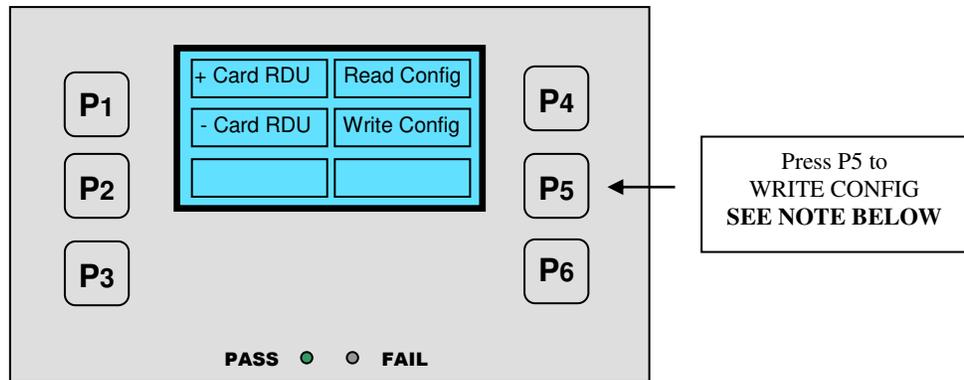
Press Any Key to revert back to the Main Menu Display

WRITING A CONFIGURATION INTO A CONTROLLER

The FPT-601 can be used to **Write (upload)** a new controller configuration. A new configuration includes all IO allocation, controller setup and all the controller settings. It does not overwrite any existing settings for the MAC address, Device ID, Baud Rate and Location Name

To **Write (upload)** a new configuration into a TITAN Controller

- 1) Make sure that the FPT-601 is programmed with the correct file you intend to upload.
- 2) Plug the FPT-601 into the respective controller with the RJ11 lead and the controller must be powered up. The following is displayed on initial power up.

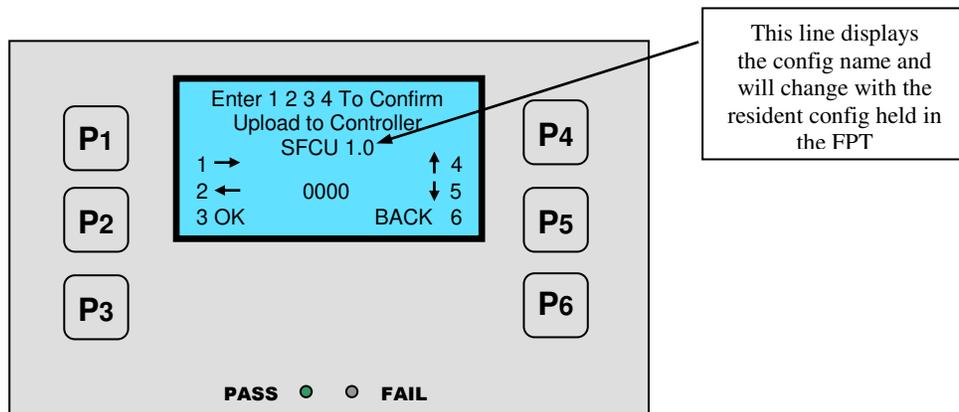


IMPORTANT

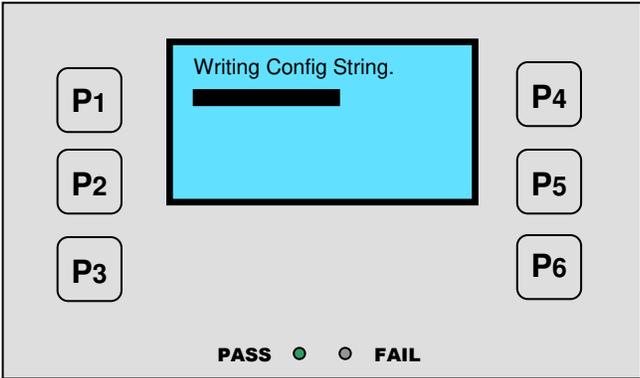
When “Write Config” is selected on P5 this action will overwrite any existing program in the TITAN Controller. Please ensure that any existing program is not required. It is recommended that a record of any previous configuration and settings is made before any changes take place.

PASSCODE PROTECTED

For security purpose the Write/Upload of a new Config from the FPT to the connected controller is protected from misuse. The following is displayed and requires confirmation of selection by an entry code 1,2,3,4 to proceed. Use the display instructions to enter the 1,2,3,4 then press **P3 OK** to proceed.



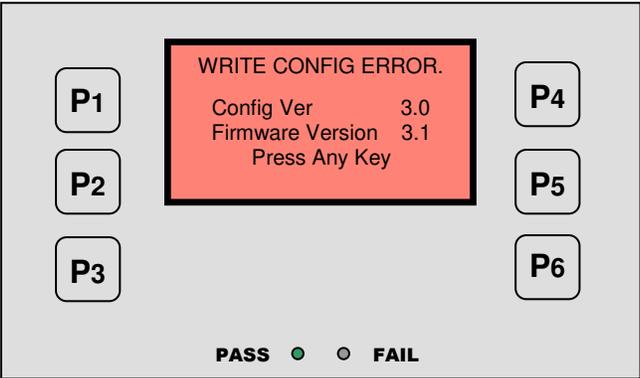
Once confirmation of the Write Config is selected by pressing **P3 (OK)** the display shows a dynamic bar during the process of Uploading the config file.



When the Write Config String is complete the following is displayed with a Green backlight. The Alphanumeric reference will be different dependant on the config reference number and the control device being read from.



If the Write Config process does not complete the process correctly then the following is displayed with a RED backlight. The display provides information on the Config Version resident in the FPT and the Firmware version resident in the target control device



This display shows the config version in the FPT and Firmware version in the target control device. If these are incompatible then a new Write Config String will not be allowed

Press Any Key to revert back to the Main Menu Display

The **PASS and FAIL** led's on the FPT are an indication of an Upload routine. If FAIL then the connected controller will continue to run on the last received control configuration

CHECKING THE CONFIG IN A CONTROLLER

The programmed Config written into the controller can be checked by selecting **RDU** mode. The **RDU** selection depends of the application. See explanation in **General Use** section

USB PC CONNECTION

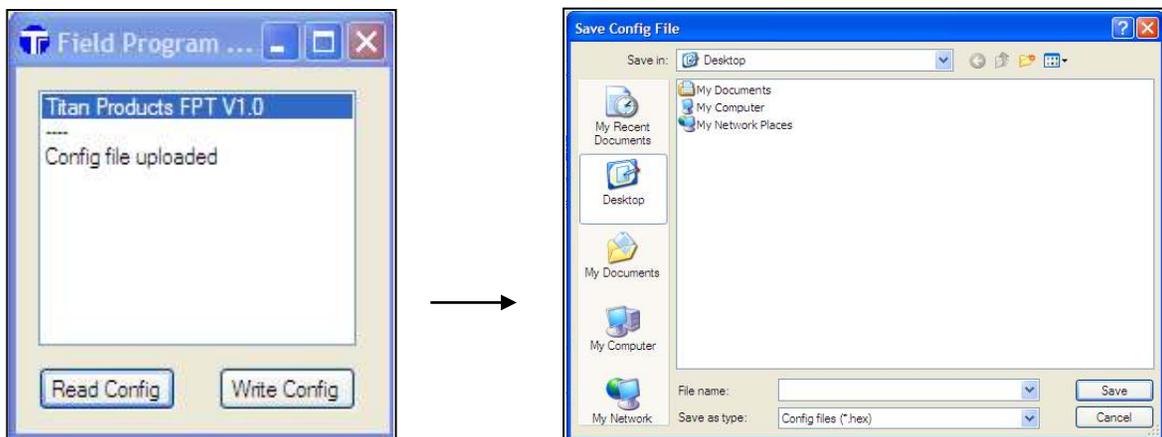
The FPT-601 incorporates a USB connection to allow new controller configs to be programmed from a PC or to save an existing FPT config file into the PC.

To **Read and Save** and existing FPT-601 config file into a PC following are required.

- 1) FPT Driver software issued from TITAN installed on the PC.
 - 2) USB lead.
- Power up the PC and plug in the FPT-601 via a USB lead.
 - Open up the TITAN FPT file (Field Program Tool.exe) and in the dialogue box select the operation required
 - The **“Read Config”** activates an instruction to read the existing file in the FPT-601



Once the “Read Config” is complete the FPT-601 config file is Uploaded in to the PC and the following Dialogue boxes appear: - **“Config File uploaded”** followed immediately by **“Save Config File”**



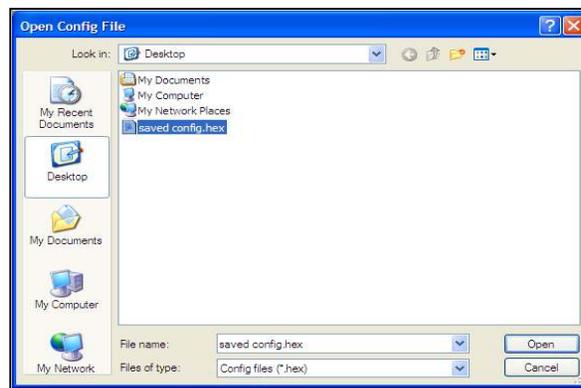
You can now save the file to a location of your choice with the name of you choice.

IMPORTANT Note:- the FPT-601 Config File name is not visible on the PC therefore you might want to cross reference the PC file name with the FPT-601 file name.

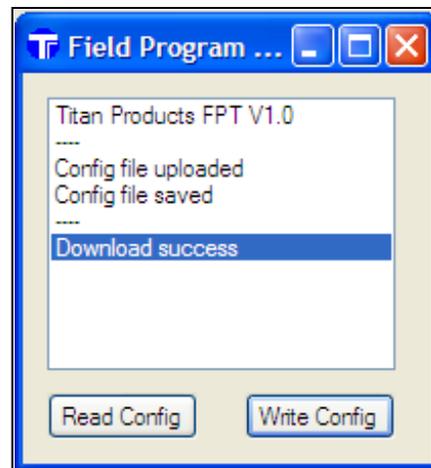
To Write a new Config file down to the FPT-601:- Select “Write Config”



From the saved config select/open the file required once open is selected the PC will Write the new config into the FPT-601



When the “Write Config” is complete the following message is displayed on the PC.



The following errors screens can be displayed:-

“Communications Error” If the PC fails to communicate with the connected FPT-601.
Check connections and USB lead

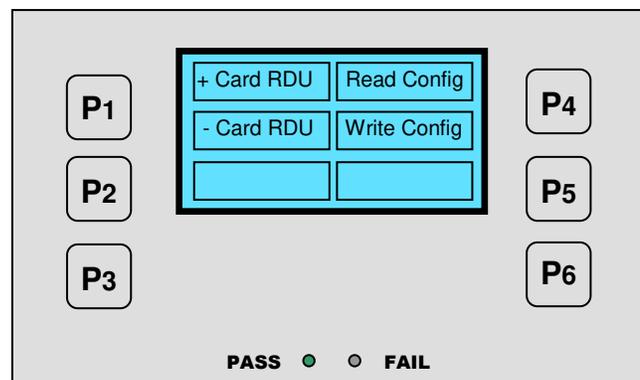
“Invalid config file” When trying to Write to the FPT and if the wrong file was selected or the file is corrupted.
Check the file selected is the correct one.



GENERAL USE

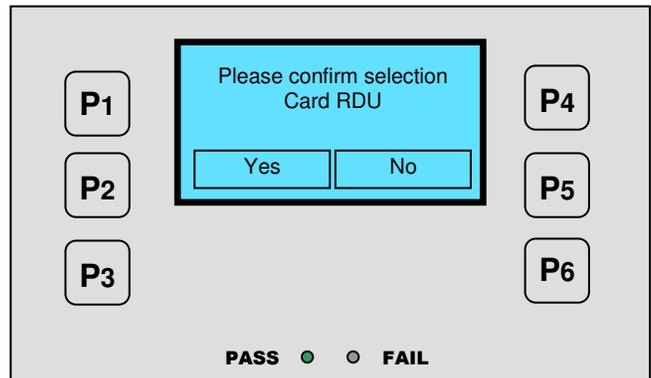
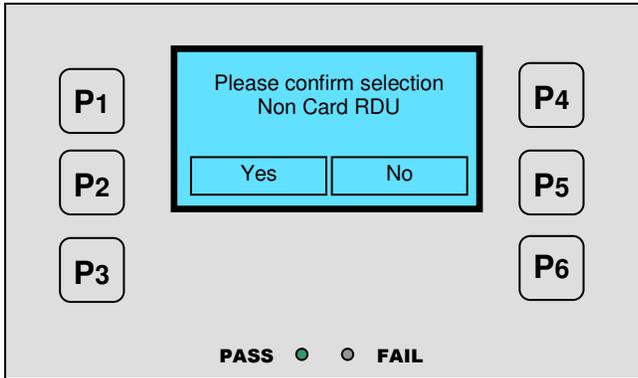
To use the FPT-601 for emulation of an RDU user interface the hand held device must be plugged into the appropriate TITAN controller and the type of RDU must be selected in the **Main Menu**.

- + Card RDU this product incorporates a Key Card slot or Hotel Applications
- Card RDU this product is a standard room display unit with no Key Card



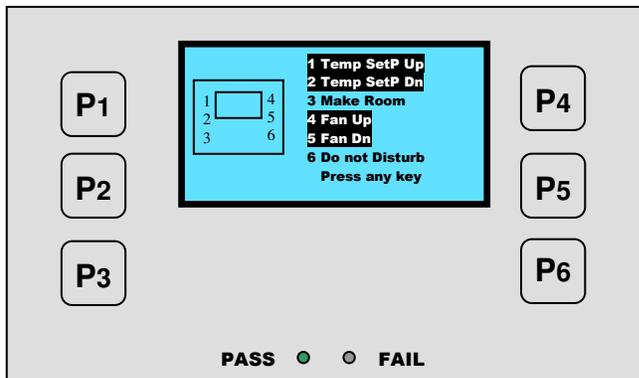
Select the type of RDU by pressing **P1** (Card RDU) or **P2** (Non Card RDU) once the selection is made then the one of the following is displayed with a request to confirm the selection by pressing **P3 Yes** or **P6 No**

Confirm selection Yes or Cancel Selection No

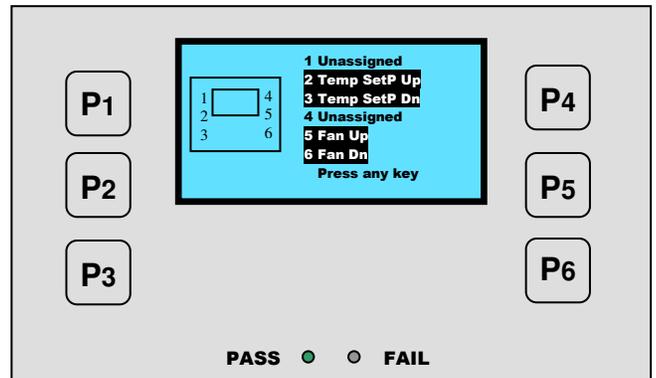


When **Yes (P3)** is selected and dependant on the RDU type one of the following will be displayed providing information on the function keys to be used.

RDU with Card Insert



RDU Standard (no Card Insert)

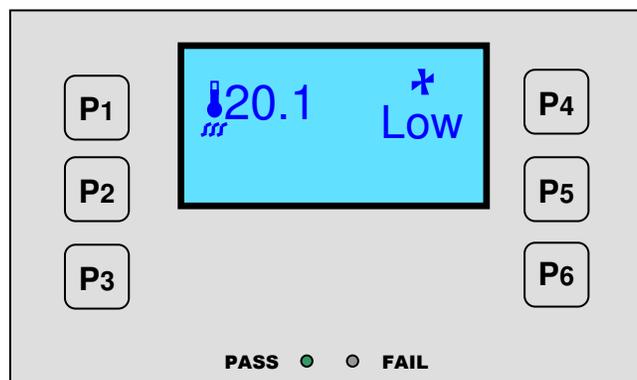


When a key is pressed to proceed then the following display appears to allow setting of fan speed and temperature.

For + Card RDU use P1 & P2 for Temperature. P4 & P5 for Fan Speed settings

For - Card RDU (standard) use P2 & P3 for Temperature. P5 & P6 for Fan Speed settings.

NOTE: - The displayed information will vary and depends on the controller setup



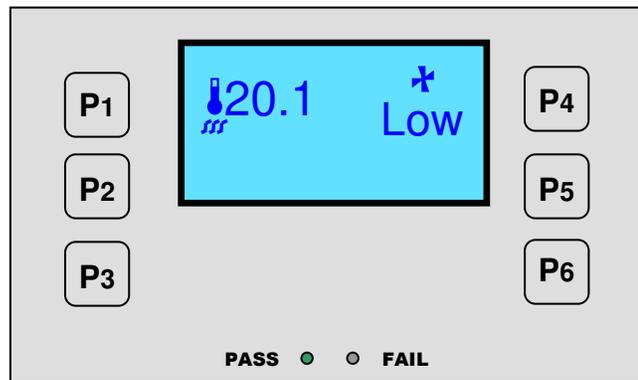
ACCESS TO SETTING AND CONFIGURATION

Entry to controller settings and configuration is accessed through this RDU emulation by pressing and holding four keys.

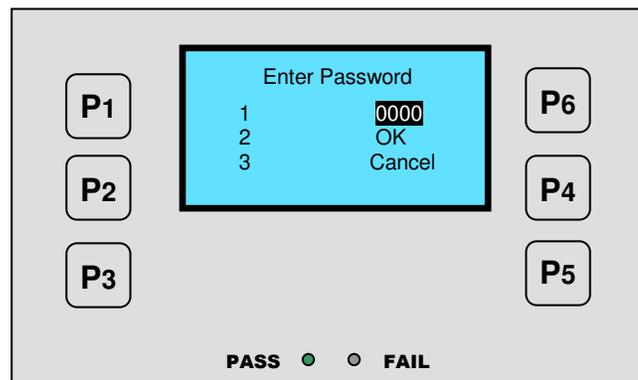
SEE DETAILS ON RDU SCREENS FOR MORE INFORMATION

NOTE: - When in the RDU emulation mode unplugging the RJ11 lead from the back of the unit will reset the FPT back to the Main Menu.

To Enter the Controller setup and Commissioning Menus press all four buttons simultaneously.
P1, P2 P4 & P5 for Card type RDU
P2, P3, P5 & P6 for standard (non Card RDU)



Enter the Password. This will vary dependant on the Controller setting and Customer requirements:-



Actual Setup menus and settings will vary dependant on the type of controller and the configuration. The display menus are shown separately or each project.