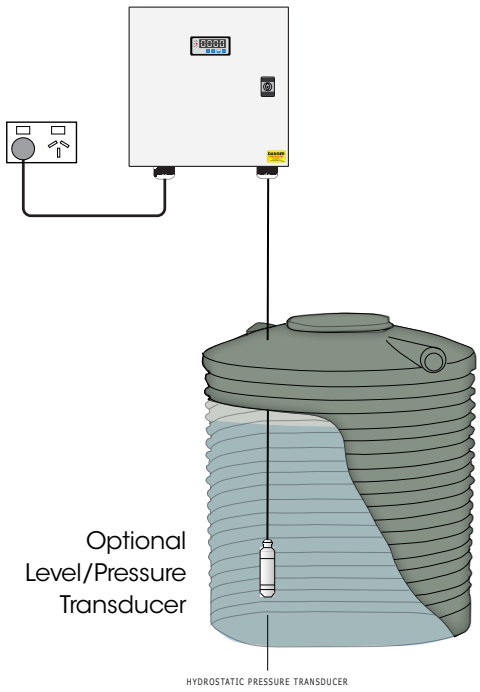


QUICK START GUIDE

Level/Pressure Indicator

FPC-12705

V1.1

This simple, yet highly effective Level/Pressure Indicator provides an extremely accurate and informative indication of water level within a tank. The controller can be coupled with level/pressure transducer, sold separately, to provide a 4-20 mA signal to the process meter. The Process Meter displays the level in very clear LED numerals.

SAFETY

This control panel has been designed and built for applications that are Commercial and/or Industrial in nature, operation, function and location. If the control panel is to be used in Domestic/Residential applications, where specific Wiring Rules in respect of 'electrical supply' protection may apply, it is the responsibility of the installing electrician to ensure compliance with relevant standards.

- Prior to installation, ensure power supply is isolated.
- Power supply must be circuit breaker protected (qualified electrician to determine appropriate amp rating).
- Electrical connection to the panel must be carried out in accordance with the following pages.
- Additions or modifications to the control panel are not permitted and will void warranty.
- The controller is not intended for use by children or infirm persons without supervision.
- Repairs to the controller must only be carried out by a suitably qualified electrician.

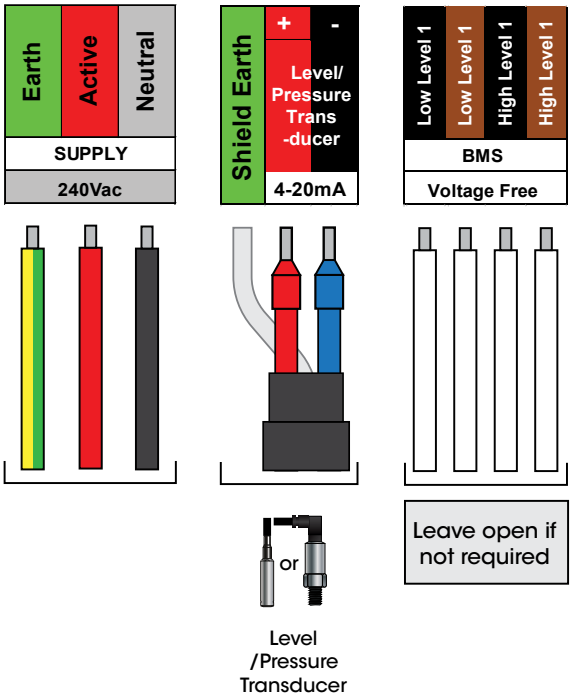
This quick start guide makes use of the following symbols to indicate warnings that must be paid specific attention to:

Damage to equipment or personal harm may occur if this instruction is not followed

Electrical risk (electrocution hazard) may occur if this instruction is not followed

CONNECTIONS

Warning: All electrical connections must be carried out by a suitably qualified and registered electrician



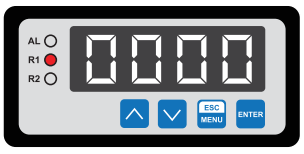
SET UPS

Setting Up Level Display in mm

1. First calculate the maximum range of the transducer in mm.
2. Second calculate transducer height from the bottom of the tank (mm). Recommended approx 100mm.
3. Use the following formula to calculate the 'Hi C' value.

Hi C = Transducer Range (mm) + Transducer height from bottom (mm)

Example: **Hi C = 4000 (mm) + 100 (mm)**
= 4100 mm



4. Press and hold the button [ESC MENU], until the screen is reading **'rEI 1'**
5. Push the button [▽] until the screen is showing **'input',** Press the [ENTER] button
6. Press [▽] button until the screen is reading **'Hi C'**. Press the [ENTER] button
7. Enter in calculated value. Use the [△] and [▽] buttons to change the number that is flashing.

   To go to the next digit, press the [ENTER] button.
8. Once you have successfully entered the new value, press and hold the [ENTER] button until **"Set?"** appears on the screen. Press [ENTER] again.
9. Press [ESC MENU] until it returns to the main reading screen.
10. Further adjustment may be required if exact measurements are not used

SET UPS CONT.

Setting Fill Percentage (%)

1. First calculate the Height of the tank at full (mm) where 100% will be displayed.
2. Second calculate transducer height from the bottom of the tank (mm). Recommended approx 100mm.
3. Use the following formula to calculate the 'Hi C' value.

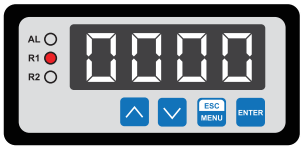
$$\text{Hi C} = \frac{\text{Transducer Range (mm)}}{\text{(Tank full (mm) - Transducer height (mm))}} \times 100$$

Example:

$$\text{Hi C} = \frac{4000 \text{ (mm)}}{\text{(1100 (mm) - 100 (mm))}} \times 100$$

$= 4 \times 100$

$= 400\%$



4. Press and hold ESC MENU the button, until the screen is reading **'rEI 1'**
5. Push the button ▽ until the screen is showing **'input',** Press the ENTER button
6. Press ▽ button until the screen is reading **'Hi C'**. Press the ENTER button
7. Enter in calculated value. Use the △ and ▽ buttons to change the number that is flashing.
   To go to the next digit, press the ENTER button.
8. Once you have successfully entered the new value, press and hold the ENTER button until **"Set?"** appears on the screen. Press ENTER again.
9. Press ESC MENU until it returns to the main reading screen.
10. Further adjustment may be required if exact measurements are not used

Setting Up Pressure Display in kPa

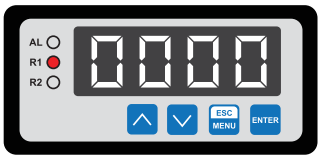
1. First determine the maximum transducer pressure in kPa (Published).
2. Second, calculate the minimum transducer pressure in kPa (Published)
3. Use the following formula to calculate the 'Hi C' value.

$$\text{Hi C} = \text{Transducer Pressure Max} - \text{Transducer Pressure Min}$$

Example: 0-40kPa pressure transducer

Hi C = 40-0

= 40 kPa



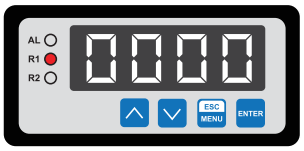
4. Press and hold the button ESC MENU, until the screen is reading **'rEI 1'**.
5. Push the button ▽ until the screen is showing **'input'**, Press the ENTER button.
6. Press ▽ button until the screen is reading **'Hi C'**. Press the ENTER button
7. Enter the pressure range value, Use the △ and ▽ buttons to change the number that is flashing.
   To go to the next digit, press the ENTER button.
8. Once you have successfully entered the new value, press and hold the ENTER button until **"Set?"** appears on the screen. Press ENTER again.
9. Press ESC MENU until it returns to the main reading screen.
10. Further adjustment may be required if exact measurements are not used.

SET UPS CONT.

Setting Up Fill Display in Kilo Litres.

1.First calculate the height of the tank (mm) and volume (kl).
2. Second calculate transducer height from the bottom of the tank (mm). Recommended approx 100mm.
3. Use the following formula to calculate the 'Hi C' value.

$$\text{Hi C} = \frac{\text{Transducer Range (mm)}}{\text{(Tank full (mm) - Transducer height (mm))}} \times \text{Volume (kl)}$$



Example:

$$\text{Hi C} = \frac{\text{4000 (mm)}}{\text{(1100 (mm) - 100 (mm))}} \times \text{40}$$

$= 4 \times 40$

$= 160$ kl

4. Press and hold the button ESC MENU , until the screen is reading **'rEl 1'**
5. Push the button ▽ until the screen is showing **'input',** Press the ENTER button
6. Press ▽ button until the screen is reading **'Hi C'**. Press the ENTER button
7. Enter in calculated value. Use the △ and ▽ buttons to change the number that is flashing. To go to the next digit, press the ENTER button.
8. Once you have successfully entered the new value, press and hold the ENTER button until **"Set?"** appears on the screen. Press ENTER again.
9. Press ESC MENU until it returns to the main reading screen.
10. Further adjustment may be required if exact measurements are not used

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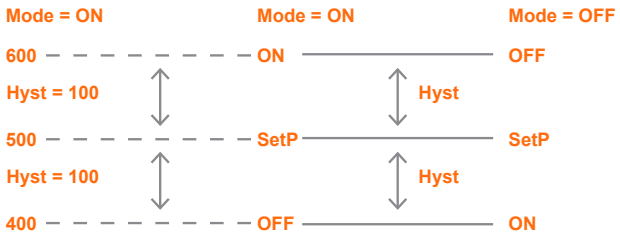
Setting relay outputs

1. Work out switch on and switch off values.
2. Work out whether the relay will switch on when increasing (ON) or decreasing (OFF) level.
3. Use the following example to work out the setpoint, hysteresis and mode.
   Mode: ON (Increasing), OFF (Decreasing)
   SetP: = Middle point between on and off **Hyst: =** Value from middle point to on or off

Example: **ON @ 600, OFF @ 400 SetP**



Note: Increasing is for pump down or high level, decreasing is for tank fill or low level.

4. Press and hold the button ESC MENU , until the screen is reading **'rEl 1'**
5. Press △ or ▽ until the required relay **'rEl 1'** and **'rEl 2'** is displayed then press ENTER.
6. Press △ or ▽ until **'SetP'** is displayed and press ENTER .
7. Enter in calculated value. Use the △ and ▽ buttons to change the number that is flashing. To go to the next digit, press the ENTER button.
8. Once you have successfully entered the new value, press and hold the ENTER button until **"Set?"** appears on the screen. Press ENTER again.
9. Go to step 6 and complete settings for **Mode** and **Hyst**.
10. Press ESC MENU until it returns to the main reading screen.