Unit 1 Grange Business Park,
Fedamore,
Co. Limerick

Tel: 061 390 000
Fax: 061 390 020
Web: www.pet.ie

<div align="center">

User Instructions for

<u>Dimplex Heat Pumps</u>

These instructions should be used in conjunction with the official dimplex operation manuals.

Trouble shooting procedure is indicated on the last page

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Front Buttons

Top left button is the **ESCAPE** Button,
• Press and Hold this to lock the key pad, and do the same to un-lock it.
• Use this button to go backwards within the menu system

Top centre Button is the **MODE** Button
• Use this button to determine which mode of operation you wish to be in

Top right is the **MENU** Button
• Press and hold this button to enter the heat pumps menu

Bottom Left Button is the **DOWN** arrow (with Blue Surround)
• Use this button to decrease the output of the heat pump
• Use this button to scroll through the menu structure, adjust times and temperatures.

Bottom Centre Button is the **UP** arrow (with red Surround)
• Use this button to Increase the output of the heat pump
• Use this button to scroll through the menu structure, adjust times and temperatures

Bottom Right Button is the **ENTER** Button
• Use this to enter a particular menu or setting that you wish to see or adjust
• Use this button to confirm the settings that you have entered.

Display

The Front display shows you from left to right top to bottom

Date, time, operating mode
Outdoors air temperature
Current Heat Pump State (Off, Heating, Hot water, Etc)
Power output (displayed in bars lower and higher from a centre position)

Mode Button

The Heat Pump Has Several Operating Modes But we need only concern ourselves with three of them.

Auto- This is the setting that should be used during the winter and allows the heat pump to heat the house and hot water as determined by its settings.

Summer –This setting Lowers the heating system output to its minimum but allows the hot water to operate as determined by its settings and allows frost protection.

Vacation – This setting Lowers the heating system output to its minimum and disables the Hot water heating by a predetermined time and allows frost protection.

SUMMER		In the SUMMER operating mode, only domestic hot water and swimming pool water is heated by the heat pump. The space heating function is not activated. (Freeze protection is ensured).
AUTOMATIC		The heat pump operates in the automatic operating mode. Programmed temperature reduction and rise times as well as shut-off times for space heating and water heating are automatically activated. The water heating, space heating and pool heating functions are activated according to their respective priority ranking. The heat pump and the supplementary heating source are activated and deactivated, as required.

VACATION (setback mode)		During the holiday operating mode, the heating curves are lowered and a water heating lock-out function is activated. Both functions are independent of the respective time control functions (see 3.1.7 and 3.1.7); however the preset setback values apply. The duration of the holiday mode can be set in the menu "1 Settings – Mode – Holiday mode". After this period has elapsed a switchover to the automatic mode takes place automatically.
PARTY (day mode)		During the Party operating mode, any programmed lowering of the heating curves (see 3.1.7) will be ignored. The duration of the Party operating mode can be set in the menu "1 Settings – Mode – Party mode". After this period has elapsed a switchover to the automatic mode takes place automatically.
Suppl. heat source (HS 2)		In this operating mode the heat pump is shut off, and the entire heating is provided by the supplementary heat source. The supplementary heat source may be an electric heating element, oil- or gas heating. Time programs as well as heat curve settings remain active.

Changing Operating Mode

- First press and hold the **MENU** button.
- Select option 1 or "Settings" by pressing **ENTER**
- Press **DOWN** once to "Operation" and select it by pressing **ENTER**
- "Operating Mode" will be display along with the current setting (Vacation/Summer/Auto).
- Press **ENTER** to change the operating mode.
- Press **UP** or **DOWN** arrow to view the available operating mode
- Press **ENTER** if you would like to select the mode being displayed
- Press **ESC** twice to exit

Setting vacation length

- First press and hold the **MENU** button.
- Then **ENTER** Settings
- Press **DOWN** once to Find "Operation" and Enter
- Press **UP** arrow once and it will say

Vacation mode number of days 00

Adjust this to the amount of days that you are going away for.

Those of you with a solar system may wish to use this to function to disable the hot water heating during the summer months.
Setting it to its maximum by pressing the down button until it says 150 days, this will ensure that it won't come on over the summer.
If you feel that you need to start the hot water due to cloudy weather put the heat pump into either auto or summer modes

Hot Water

- First press and hold the **MENU** button.
- Then **ENTER** Settings
- Press **DOWN** three times to you see "Domestic Hot Water" and Enter
- The First Screen you see will say:

     Domestic Hot Water Temperature 60 Degrees

This is the maximum temperature that the heat pump will heat to using both the heat pump and the immersion.

- Pressing the **DOWN** Arrow once will bring you to a screen that will say

     Hot Water Block

- **ENTER** this to block the hot water for the specified time that you wish to stop the hot water heating.
- The first Screen will say

          Time 1 0000 - 0000
          Time 2 0000 - 0000

Adjust the times to show when you do not want the water to heat.

- After Adjusting the times press the **DOWN** arrow will bring to a screen that says

MO TU WE TH FR SA SU
 N   N   N   N   N   N   N

- Adjust the N for No Blocking or either T1 for Time 1, T2 for Time 2 or Y for Both Times 1 and Times 2

After Adjusting all of these press the **ESCAPE** button once to return to the Main Hot water Menu, press the **DOWN** arrow once and the display will read

Thermal Disinfection

- This is used to carry out a disinfection of the hot water cylinder on selective days of the week.

ENTER this to set a start time.

- Press the **DOWN** arrow once to set the temperature than you wish to achieve
- Press the **DOWN** arrow once more to you will find a screen that will say

MO TU WE TH FR SA SU
 N   N   N   N   N   N   N

- Adjust the N for No Thermal Disinfection or either T1 for Time 1, T2 for Time 2 or Y for Both Times 1 and Times 2

Heating Circuit 1

Use these settings to set your heat pump to output more heat during the night rate time period, loading your house, floors and buffer tank with heat during the half price electricity time period.

- First press and hold the **MENU** button.
- Then **ENTER** Settings
- Press **DOWN** arrow twice to Find "Heating circuit 1" and Enter
- Press **UP** arrow once
- The Screen you see will say:

Time 1 0000 - 0000
Time 2 0000 – 0000

Adjust the times to show when you want to raise the heat output.

- After Adjusting the times press the up arrow will bring to a screen that says

MO TU WE TH FR SA SU
 N   N   N   N   N   N   N

- Adjust the N for No Blocking or either T1 for Time 1, T2 for Time 2 or Y for Both Times 1 and Times 2

- Pressing the **UP** arrow once more will bring you to a screen that says

Raise Value
00 k

Adjust this value to the amount extra heat that you want the heat pump to out put

Recommended settings

Hot Water:

- Set the Hot water temperature to 60 degrees

Set the Hot water block as
       Time 1 0800 - 2399
       Time 2 0000 - 0000

- And the days all to T1
- Set the thermal disinfection to come on once a week and heat to 60 degrees.

Heating circuit 1:

- Set the time for
       Time 1 1159 - 0800
       Time 2 0000 - 0000

- And the Raised Value at 10K

Cleaning the filters

There are 2 filters on a geothermal heating system. The first one is located at low level between the Heat Pump and Buffer Tank (Photo X), the second one is located on the collector board to the right of the heat pump just bellow the circulation pump (Photo Y).
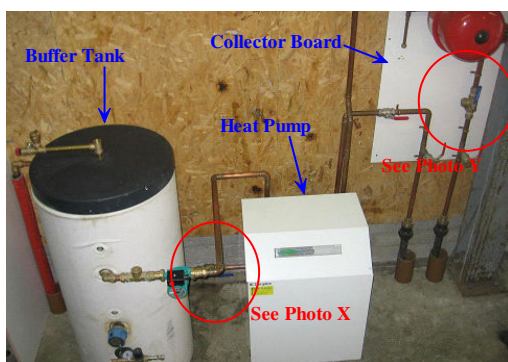
Photo X   Photo Y

(Note: On air to water heat pumps there is only one filter to be cleaned at low level)

1. Turn the heat pump off at either the Isolation switch, usually located above the heat pump or at the circuit breaker located at the main switch board (**Photo 1 & Photo 2**). The large isolation switch first, than the smaller one.
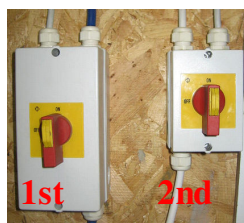
Photo 1   Photo 2
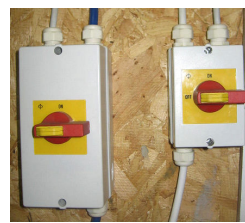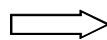
2. Turn the blue lever (**Photo 3**) so that it is perpendicular to the direction of the pipe or OFF position (**Photo 4**).

Photo 3   **Photo 4**
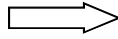
3. Using a large spanner (adjustable spanner will be fine) to open (**Photo 5**) the nut (**Photo 6**) that is on the pipe in line with the blue handled lever. Note that size of nut is either 40mm or 50mm.
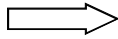
Photo 5   **Photo 6**

Remove the circlip that retains the filter (**Photo 7**). Remove the filter (**Photo 8**) and clean the filter thoroughly under a tap to remove any sediment.

Photo 7   **Photo 8**
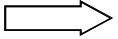
4. Replace the filter (**Photo 9**) and circlip (**Photo 10**).

Photo 9   **Photo 10**
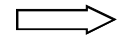
5. Replace nut (**Photo 11**) and tighten it firmly (**Photo 12**).

Photo 11   **Photo 12**
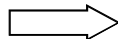
6. Turn the Blue lever (**Photo 13**) to the direction of the Pipe work or ON position (**Photo 14**).

Photo 13   **Photo 14**
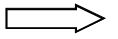
7. Switch the power on to the Heat pump (**Photo 15** & **Photo 16**, reverse of Step 1).

Photo 15

2nd   **1st**
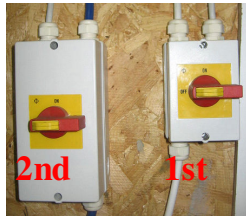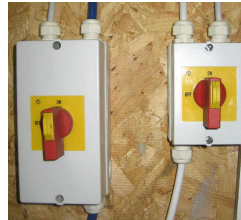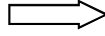
Photo 16

8. Repeat exercise with the other filter.

Repressuring System

1. Open buffer tank air vent (fig 1.4, typically located at top of tank) by turning the plastic screw anticlockwise
2. Check buffer tank pressure (fig 1.2, label c) is greater than 1.5 bar. If not, perform the following steps:
    a. Turn the screw (fig 1.3) in line with pipe work with a flat head screw driver
    b. Turn filler valve (fig 1.2, label b) anticlockwise
    c. Wait until the pressure rises above 1.5 bar and re-close all valves inc buffer air vent.
3. Check collector pressure gauge (geothermal only) and follow above steps should the pressure be down. Note there is no air vent to open for this

Fig 1.0
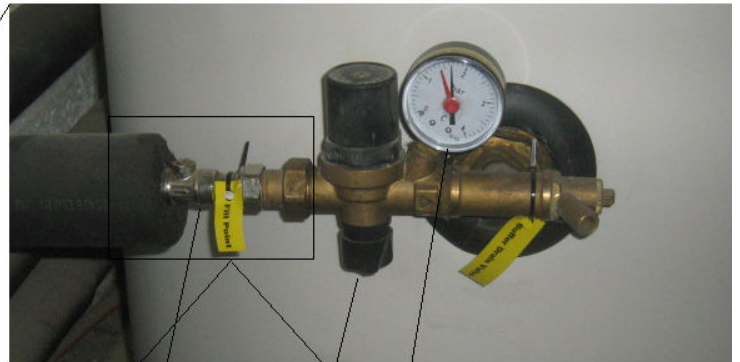
Fig1.2

Fig1.3

Fig1.4

Heatpump Fault-finding Chart

```
                          I have no
                        heat/hot water
                              |
                      Is the display of
                      the controller on?
                         /         \
                       No           Yes
                        |            |
                 Check controller   Does the screen
                 switch/MCB in       indicate an error
                 house board          /            \
                          /          No             Yes
                         /            |               \
                      No         Is it in Auto      High Pressure        Low Pressure
                      |          Mode? (see          Fault/Hot Water      Fault
                      |          manual)             Fault
                      |          /      \                |                   |
                      |        No        Yes       Is the Pressure      Is the Pressure gauge
                      |        |          |        gauge on the buffer   on the collector board
                      |   Put Controller  Is the Return heating  tank above 1.5 bar   above 1.5 bar
                      |   in Auto Mode    set point set high      /       \            /       \
                      |   (follow note 1) enough (see manual)    No        Yes        No        Yes
                      |                    /        \             |          |          |          |
                      |                  No          Yes    Repressurise  Is the filter  Repressurise  Is the filter
                      |                  |            |      buffer following  Clean     buffer following  Clean
                      |             Raise Set point  Does the heat pump  instructions  /    \   instructions  /    \
                      |                              indicate that HP is on          No    Yes              No    Yes
```

- I have no heat/hot water
  - Is the display of the controller on?
    - No → Check controller switch/MCB in house board
    - Yes → Does the screen indicate an error
      - No → Is it in Auto Mode? (see manual)
        - No → Put Controller in Auto Mode (follow note 1)
        - Yes → Is the Return heating set point set high enough (see manual)
          - No → Raise Set point
          - Yes → Does the heat pump indicate that HP is on even though no noise is heard
            - Yes → Is Supply for compressor switched on
              - No → Switch on Compressor Supply Switch
              - Yes → Possible faulty soft start, service call required
            - No → Are the stats inside calling for heat (see stat manual)
              - No → Adjust stat settings as per instructions
   - Yes → Are logic strips above manifolds live (note 4)
                - No → Possible wiring/relay fault, try restart of system, if not service call
                - Yes → With thermostat calling is relevant pump running?
                  - No → Possible wiring/pump fault
                  - Yes → Service call required
      - Yes
        - High Pressure Fault/Hot Water Fault → Is the Pressure gauge on the buffer tank above 1.5 bar
          - No → Repressurise buffer following instructions
          - Yes → Is the filter Clean
            - No → Clean Filter following instructions
            - Yes → Does the auxiliary pump run normally while compressor runs
              - Doesn't run → Possible faulty relay/wiring/pump
              - Runs noisily → Bleed pump
              - Runs ok → Is the return set point set to max
                - Yes → Turn down set point
                - No → Service call
        - Low Pressure Fault → Is the Pressure gauge on the collector board above 1.5 bar
          - No → Repressurise buffer following instructions
          - Yes → Is the filter Clean
            - No → Clean Filter following instructions
            - Yes → Does the primary pump run normally while compressor runs
              - Doesn't run → Possible faulty relay/wiring/pump
              - Runs noisily → Bleed pump
              - Runs ok → Service call