

FX Flat Panel Solar Heater - 21' Pool Manual



VER.0418 NS1002

## A.Safety instructions

Read through these instructions carefully before you use the product.

Caution: Failure to comply fully with our instructions for use, or safety instructions, may cause damage or injury to individuals.

- > Please read the instruction manual and the directions shown there.
- > Do not allow children to handle the solar collector.
- Always turn off your filter system when you are working with your solar heater.
- > Do not position the solar heater too close to the pool (adequate safe distance).
- > Do not use any petroleum-based lubricants. Petroleum attacks the product's plastic components.
- This solar heater is not intended for use by anyone (including children) with restricted physical, sensory or mental ability, or with limited experience and / or limited knowledge, unless they are supervised by someone responsible for their safety, or they receive instruction from them regarding the use of the solar heater.
- Children must be supervised to ensure they do not play with the solar heater.

#### **B.** General information

## 1. Conditions for the installation of the solar heater

The solar heater you have purchased is intended for use with in-ground and above-ground pools, and is easy to install and handle. These installation instructions are based on the following conditions:

- 1) You have a pool which is fully built and filled with water.
- 2) Your pool has a filter system.
- 3) You have the required connector & hoses  $\emptyset$  1.25"-1.5"( $\emptyset$  32/38 mm) to supply the pool and filter system with water.
- 4) You are not installing the solar heater under trees.

These are the requirements so that the solar heater can force water through the solar chambers when it is installed and fully connected to the filter pump.

## 2. Use (Figure 1)

Once the solar heater is installed, it is connected between your filter system and your pool using the two hose connectors.

The water is heated by the sun's energy and then fed back through connector hose to the pool.

A = feed from the filter unit to the solar heater

B = feed from the solar heater to the swimming pool inlet nozzles

Water heating depends on the following factors: flow rate and intensity of sunshine.

Solar heating only functions efficiently in sunshine. The solar heater can remain connected to the pump in poor weather or at night as this only causes a slight loss of pressure in the pump.

## 3. Tools and accessories required

Tools required for assembly, but are not included in your set:

- Phillips screwdriver
- > Flat head screwdriver

## 4. The ideal location for your solar heater

Your solar heater needs to be in a location with as much sunshine as possible.

- Never position the solar heater over the surface of your pool.
- The solar heater is designed to allow maximum possible capture of sunshine.

#### 5. Product care

The solar heater should not be left connected in extreme cold weather. The solar heater should be stored in

an area protected from freezing. The solar heater should be removed before the first frost, or at the end of the pool season.

All parts must be rinsed or cleaned with water only. Detergents may damage the protective cover.

## 6. Storage

Drain all the water from the solar heater by closing off the pipes. Store the solar heater for Winter in an area protected from freezing. Remove the pool return pipes.

Make sure there is no water left inside the solar collector as it can freeze. Freezing water can damage the solar chambers.

#### C. Technical data

## NS1002 FX Flat Panel Solar Heater - 21'Pool

- Dimensions: L x W x H 37.8"x 29.53"x18.50" (96x75x47cm)
- ➤ Maximum pressure 14.5psi/1 bar at 68 T (20 C)
- Water flow rate max. 1980GPH (7500LPH)
- Water capacity 3.2gal (12l)

## D. Unpacking Your Solar Heater

Carefully remove the product and all component parts from the box. Make certain all parts are present before beginning assembly.

Refer to section I for a complete PARTS BREAKDOWN.

## E. Installation instructions

1. Assembly instructions

Before you begin installation of the solar heater turn off the filter pump and close off all water connections.

- > Unfold the feet at the bottom and adjust position according to the sun. Make sure to obtain a 30° inclination.
- Fit the 2 hose connectors (4) with the connector caps (5) on either side of the solar heater.

A. Pools with 11/4" or 11/2" Diameter Unthreaded Hoses

- > Connect the hoses (8+9) between the filter unit, the solar heater and the pool.
- Assembly with a 1¼" (32mm) hose connector.
- > This has to be pushed directly over the hose connector (4) and fastened with the hose clamp (7).
- Assembly with a 1½" (38mm) hose connector.
- First push the hose reducer (6)  $1\frac{1}{4}$ " - $1\frac{1}{2}$ " (32mm/38mm) over the hose connector. Then push the  $1\frac{1}{2}$ " (38mm) hose over the hose reducer (6) and fasten it with a hose clamp (7).

## B.Pools with 40mm Diameter Intex® Threaded Hoses

- Attach the adapter for either Intex® (#10,11&12, Included in the product you purchased) or Bestway (Not included) to the hose connectors (4). Make sure the o-ring is in the collared tube adapter prior to attachment.
- > Screw existing threaded 40mm Intex® pool hoses onto the adapters. Be sure to place the thick connector gasket between the hose and the adapter for a tight seal.

## F. Initial use

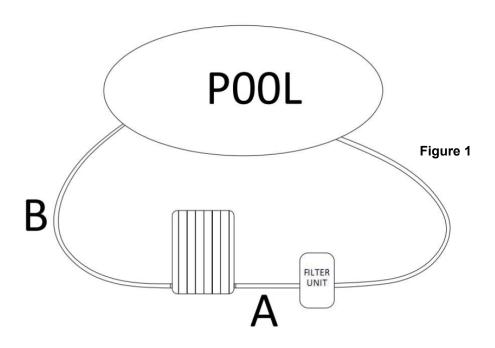
Once the solar heater is assembled and the hoses are connected to the filter pump and the pool, open the water supply and ensure that water is flowing through the hose. Then turn on the filter system. Air bubbles will rise from the inlet nozzle in the pool. This happens as the air is expelled from the solar heater. If this continues for more than 2-3 minutes, check the tightness of the connections in your system.

Please note: We recommend that you cover your pool overnight to avoid loss of heat.

# **G.Trouble shooting**

Problem	Cause / Solution
The pool does not warm up.	<ul> <li>➤ Make sure that water is flowing through the hoses.</li> <li>➤ Has it been sunny enough?</li> <li>➤ Insure the maximum amount of sunshine and increase the running time of the filter pump.</li> <li>➤ Cover your pool overnight to avoid loss of heat.</li> <li>➤ It is possible that you may need several solar heaters.</li> </ul>
No bubbles appear after the equipment has been attached to the pump.	Check the filter system and ensure that water from the pool is flowing through the filter pump, then through the solar heater and through the connector hose back to the pool.
Air bubbles come out of the pool return after the pump has been turned on.	<ul> <li>Check the connector hoses for any damage.</li> <li>Check that the hose clamps have been properly tightened.</li> </ul>
Water draining out of the system	<ul> <li>Check the seals in the system of hoses.</li> <li>Check the hose clamps to insure they are tight enough.</li> <li>Check the connector hoses for any cracks.</li> </ul>

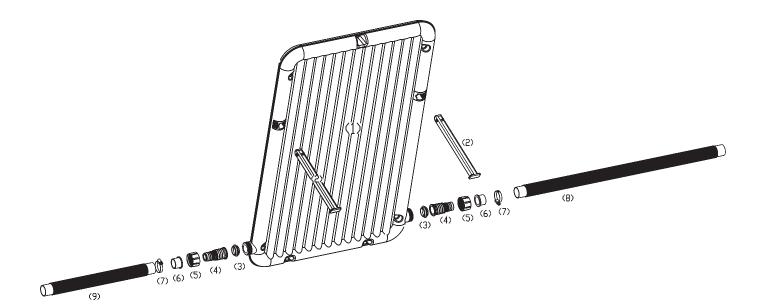
# H.Installation Figure



## I . NS1002 FX Flat Panel Solar Heater Parts Breakdown

Key	Part Name	Qty	BW SKU	For Model #
1	Kappa Solar Panel	1	NUP4061	NS1002
2	Leg Brace	2	NUP4062	NS1002
3	Flat Gasket	2	NUP4063	NS1002
4	32mm Hose Connector	2	NUP4064	NS1002
5	Connector Cap	2	NUP4065	NS1002
6	Hose Reducer	2	NEP4079	NS1002
7	Hose Clamp	2	NEP4260	NS1002
8	Long Hose	1	NUP4082	NS1002
9	Short Hose	1	NUP4083	NS1002
10	O-Ring for Intex® Special Adapter	2	NEP4236	NS1002
11	Intex Special Adapter	2	NEP4233	NS1002
12	Flat Gasket	2	NEP4234	NS1002

## a. Connection for 11/4" or 11/2" Diameter Unthreaded Hoses



## b. Connection for 40mm Diameter Intex® Threaded Hoses

