Model label: Replacement cell for chlorine generating devices:

Krystal Clear Saltwater System[™] Model ECO 7110 Replacement cell for the chlorine generating device Krystal Clear Saltwater System[™] Model ECO 7110

REGISTRATION NUMBER 32059, *PEST CONTROL PRODUCTS ACT*. This cell must only be used on this model of chlorine generating device.

READ THE LABEL, THE INSTALLATION MANUAL AND OPERATION MANUAL OF THE CHLORINE GENERATING DEVICE KRYSTAL CLEAR SALTWATER SYSTEM™ MODEL ECO 7110 BEFORE USING.

Registrant: Intex Development Co. Ltd., 9th floor Everbrite Centre, 108 Gloucester Road, Wanchai, Hong Kong, P.R. CHINA Canadian Agent: INTEX RECREATION CORP., 1665 Hughes Way, Long Beach, CA 90810 Phone: 1-800-234-6839 Model label: Chlorine generating devices:

Krystal Clear Saltwater System[™] Model ECO 7110 CHLORINE GENERATOR

CONTROLS BACTERIA AND ALGAE In Swimming Pool Waters

DOMESTIC

A maximum of 26 000 L of water can be treated with one Krystal Clear Saltwater System[™] Model ECO 7110 unit. Maximum output of hypochlorous acid equivalent to 0.125 kg of free available chlorine per day

For swimming pools, a range of 1-3 ppm of free available chlorine must be maintained.

READ THE LABEL AND OPERATING MANUAL BEFORE USING KEEP OUT OF REACH OF CHILDREN REGISTRATION NO. 32059*PEST CONTROL PRODUCT ACT*

WARNING: operating Krystal Clear Saltwater System[™] Model ECO7110 without water flow through the cell can cause a build-up of flammable gases which can result in FIRE OR EXPLOSION.

Registrant: Intex Development Co. Ltd., 9th floor Everbrite Centre, 108 Gloucester Road, Wanchai, Hong Kong, P.R. CHINA Canadian Agent: INTEX RECREATION CORP., 1665 Hughes Way, Long Beach, CA 90810 Phone: 1-800-234-6839 KRYSTAL CLEAR SALTWATER SYSTEM MODEL ECO7110 WITH E.C.O. (ELECTROCATALYTIC OXIDATION)

110 – 120 V~, 60 Hz, 0.6 A, THERMALLY PROTECTED, WEATHERPROOF ENCLOSURE, CSA ENCLOSURE 3, FOR USE WITH SWIMMING POOLS ONLY..

WARNING

RISK OF ELECTRIC SHOCK. CONNECT ONLY TO A GROUNDING TYPE RECEPTACLE PROTECTED BY A CLASS A GROUND FAULT CIRCUIT INTERRUPTER (GFCI).

CAUTION

TO ENSURE CONTINUED PROTECTION AGAINST SHOCK HAZARD, USE ONLY IDENTICAL REPLACEMENT PARTS WHEN SERVICING. THIS PRODUCT IS FOR USE WITH STORABLE ABOVE-GROUND POOLS ONLY. DO NOT USE WITH PERMANENTLY INSTALLED POOLS.

CONFORMS TO UL STD. 1081 CERTIFIED TO CSA STD. C22.2 No. 108-01

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P.R.C.

Made in China

Canadian Agent: INTEX RECREATION CORP., 1665 Hughes Way, Long Beach, CA 90810 Phone: 1-800-234-6839

KRYSTAL CLEAR SALTWATER SYSTEM MODEL ECO 7110

SIZE: 95.8mm x 138mm

KRYSTAL CLEAR SALTWATER SYSTEM MODEL ECO7110 WITH E.C.O. (ELECTROCATALYTIC OXIDATION)

CONTROLS BACTERIA AND ALGAE In Storable Swimming Pool Waters

DOMESTIC

A maximum of 26000L of water can be treated with one KRYSTAL CLEAR SALTWATER SYSTEM MODEL ECO7110 Maximum output of hypochlorous acid equivalent to 0.125 kg of free available chlorine per day.

For swimming pools, a range of 1-3 ppm of free available chlorine must be maintained.

READ THE LABEL AND OPERATING MANUAL BEFORE USING KEEP OUT OF REACH OF CHILDREN

REGISTRATION NUMBER 32059 PEST CONTROL PRODUCTS ACT.

Warning: operating KRYSTAL CLEAR SALTWATER SYSTEM MODEL ECO7110 without water flow through the cell can cause a build-up of flammable gases which can result in FIRE OF EXPLOSION.

Warning: Staining of pool surfaces may occur due to deposits of copper salts. Excessive levels of copper will increase the probability of this occurrence.

Registrant: Intex Development Co. Ltd., 9th floor Everbrite Centre, 108 Gloucester Road, Wanchai, Hong Kong, P.R. CHINA Canadian Agent: INTEX RECREATION CORP., 1665 Hughes Way, Long Beach, CA 90810 Phone: 1-800-234-6839 KRYSTAL CLEAR Saltwater System[™] Model ECO7110 with E.C.O. (Electrocatalytic Oxidation)

IMPORTANT SAFETY RULES

Read, understand, and follow all instructions carefully before installing and using this product. IMPORTANT!

DO NOT RETURN PRODUCT TO STORE

To purchase parts and accessories or to obtain non-technical assistance, Visit www.intexcorp.com For technical assistance and missing parts call us toll-free (for U.S. and Canadian Residents): 1-800-234-6839 Monday through Friday, 8:30am to 5:00pm Pacific Time

Don't forget to try these other fine Intex products: Pools, Pool Accessories, Inflatable Pools and In-Home Toys, Airbeds and Boats available at fine retailers or visit our website listed below.

Due to a policy of continuous product improvement, Intex reserves the right to change specifications and appearance, which may result in updates to the instruction manual without notice. 249-*PO-R0-1507 For illustrative purposes only.

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IMPORTANT SAFETY RULES

Read, Understand and Follow All Instructions Carefully Before Installing and Using this Product.

READ AND FOLLOW ALL INSTRUCTIONS

WARNING

PRECAUTIONS

•To reduce the risk of injury, do not permit children to use this product. Always supervise children and those with disabilities.

•Children must stay away from this product and electrical cord(s).

•Assembly and disassembly by adults only.

• Risk of electric shock. Connect only to a grounding type receptacle, this product is provided with a ground-fault circuit interrupter. If replacement of the plug or cord is needed, use only identical replacement parts.

•Always unplug this product from the electrical outlet before removing, cleaning, servicing or making any adjustment to the product.

• The unit is provided with a ground-fault circuit interrupter (GFCI). To test the GFCI, push the test button. The GFCI should interrupt power. Push the reset button, power should be restored. If the GFCI fails to operate in this manner, the GFCI is defective. If the GFCI interrupts power to the pump without the test button being pushed, a ground current is flowing, indicating the possibility of an electric shock. Do not use this pump. Disconnect the pump and have the problem corrected by a qualified service representative before using.

•Do not bury the electrical cord. Locate the cord where it will not be damaged by lawn mowers, hedge trimmers and other equipment.

•To reduce the risk of electric shock, the supply cord cannot be replaced. If the cord is damaged, the appliance should be replaced immediately..

•To reduce the risk of electric shock, do not use extension cords, timers, plug adaptors or converter plugs to connect unit to electric supply; provide a properly located outlet.

•Do not attempt to plug in or unplug this product while standing in water or when your hands are wet.

•Do not use an appliance leakage current interrupter (ALCI) in place of a GFCI since the ALCI will not protect people.

•Position this product away from the pool, so as to prevent children from climbing on it and accessing the pool.

•Do not operate this product when the pool is occupied.

• To reduce the risk of entrapment hazard, never enter the pool if suction strainer component is loose, broken, cracked, damaged or missing. Replace loose, broken, damaged, cracked or missing suction strainer components immediately.

• Never play or swim near suction fittings. Your body or hair may be trapped causing permanent injury of drowning.

• To prevent equipment damage and risk of injury, always turn pump off before changing the filter control valve position.

•Never use the pool if indicated chlorine level is more than 3ppm.

•This product is intended to be used only for the purposes described in the manual! •Operating this product without water flowing through the system can cause a buildup of flammable gases which can result in FIRE OR EXPLOSION. WARNING: Staining of pool surfaces may occur due to deposits of copper salts. Excessive levels of copper will increase the probability of this occurrence.

FAILURE TO FOLLOW THESE WARNINGS MAY RESULT IN PROPERTY DAMAGE, ELECTRIC SHOCK, ENTANGLEMENT OR OTHER SERIOUS INJURY OR DEATH.

CAUTION

This product is for use with storable pools only. Do not use with permanently-installed pools. A storable pool is constructed so that it is capable of being readily disassembled for storage and reassembled to its original integrity. A permanently - installed pool is constructed in or on the ground or in a building such that it cannot be readily disassembled for storage.

To reduce the risk of electric shock the pool must be installed no closer than 1.8 m (6 feet) from any electrical outlet. Do not place portable appliances closer than 1.5 m (5 feet) from the pool.

These product warnings, instructions and safety rules provided with the product represent some common risks of water recreation devices and do not cover all instances of risk and danger. Please use common sense and good judgement when enjoying any water activity.

For portable Above-Ground-Pools only

SAVE THESE INSTRUCTIONS

PARTS REFERENCE

Before assembling your product, please take a few minutes to check the contents and become familiar with all the parts.

NOTE: Drawings for illustration purpose only. Actual product may vary. Not to scale Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experiences radio/TV technician for help.

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REF. NO.		DESCRIPTION	QTY	SPARE PART NO.
COMMON PARTS	PARTS FOR CONNECTION TO FILTER PUMPS WITH 32MM (1-1/4") HOSE SIZE			
	1	ADAPTOR A WITH THREADED COLLAR (OPTIONAL)	1	10849
2		SCREW	2	11519
3		ELECTROLYTIC CELL HOUSING	1	11898
4		E.C.O. ELECTRODE	1	11900
5		TITANIUM ELECTRODE	1	11899
6		FLOW SENSOR	1	11460
7		CONNECTOR HOSE WITH THREADED FITTINGS	1	10720
	8	THREADED ADAPTOR B (OPTIONAL)	1	10722
9		CELL COVER	2	11131
10		ELECTROLYTIC CELL NUT	1	11582
11		L-SHAPE O-RING	2	11228
12		TITANIUM ELECTRODE O- RING	1	11585
13		CONTROL STATION	1	11901
14		TEST STRIPS	1	19635

When ordering parts, be sure to quote the model number and part numbers. SAVE THESE INSTRUCTIONS

HOW THE CHLORINE IS GENERATED

This product is specially designed for above ground pools. It will destroy the bacteria, oxidize bather organics and control algae, which provide a safe, clean and comfortable swimming pool.

Common salt (sodium chloride) is made up of two elements, sodium and chlorine. During the installation of your Saltwater System a measured quantity of salt is dissolved in the pool water to make it slightly salty. The pool water flows through the Saltwater System's electrolytic cell to produce chlorine. The chlorine dissolves in the water and instantly starts destroying bacteria and algae. It also oxidizes all other organic materials.

HOW THE ELECTROCATALYTIC OXIDATION WORKS

The Electrocatalytic Oxidation (E.C.O.) is an Advanced Oxidation Processes (AOPs). When direct current is applied to the electrocatalytic oxidation electrodes, water will be discharged to generate "hydroxyl radicals". The hydroxyl radical is a powerful oxidant, which oxidizes organic contaminants, and destroys bacteria and algae.

PRODUCT SPECIFICATIONS

Power: 110 - 120 Volt AC Amperage: Saltwater System - 0.6 A; Wattage: 65 W Ideal Salt Level: 3000 ppm (parts per million) E.C.O. Cell Output Current: 500 mA Maximum Chlorine Output/hour: 5 grams/hour Filter pump minimum flow rate : 2650 - 11355 litres/hour (700 ~ 3000 gallons/hour) Limited Warranty: see "Limited Warranty"

SAVE THESE INSTRUCTIONS

SETUP INSTRUCTIONS

Please visit <u>www.intexcorp.com</u> for the latest instructional video on the installation and operation of this product.

IMPORTANT

• The Saltwater System requires a separate filter pump [2650-11355 lph (700-3000 gph)] to drive the water and function properly.

• The Saltwater System must be installed as the last piece of pool equipment in the water return line to the pool as displayed in Drawing #1. This location extends the life of the titanium plates.

1. Assemble the above-ground-pool (AGP) and its filter pump according to their installation instructions.

2. Take the Saltwater System and its accessories out of the packaging.

3. Place the Saltwater System in line after the filter pump.

4. Connect the connector hose (7) to the Saltwater System inlet.

Connecting the system to pump and pool with 32mm (1-1/4") connections/ hoses:

The saltwater system features 38mm (1-1/2") connections. It is accordingly supplied with adaptors A (1) and B (8) for connecting to the small 32mm (1-1/4") diameter connections/hoses.

Install as follows: Drawing #1

SETUP INSTRUCTIONS (continued)

1. Go directly to step 2 if your pool is empty. If your above-ground-pool is filled with water, unscrew the strainer grids from the strainer connectors and insert the black hat-like plugs into the connectors, before installing the saltwater pool system.

2. Connect the adaptor A **(1)** to the electrolytic cell **(3)** outlet as shown in Drawing #1. Tighten securely.

3. Disconnect the water return hose from the filter pump connection and connect it to the adaptor A **(1)** on the Saltwater System with a hose clamp. (see Drawing #1)

4. Connect adaptor B **(8)** to the connector hose **(7)**. Tighten securely. (see Drawing #1)

5. Connect adaptor B (8) to filter pump outlet (lower connection). Tighten securely.

6. Remove the black hat-like plugs that prevent water from flowing out of the pool. Now, return the strainer grids to the strainer connectors

Connecting the system to pump and pool with 38mm ($1\frac{1}{2}$ "): connections/hoses: Pump and pool with 38mm ($1\frac{1}{2}$ ") connections do not require the adaptors A (1) or B (8). Install as follows: Drawing #2

1. Go directly to step 2 if your pool is empty. If your above-ground-pool is filled with water, close the plunger valves before installing the Saltwater System.

2. Disconnect the water return hose from the filter pump connection and connect it to the Saltwater System outlet.

3. Connect the connector hose (7) to the filter pump outlet connection.

4. Open the plunger valves to allow the water to flow

Connecting the system to other types of pump (with different type of thread or no thread):

The Saltwater System can also be adapted to other filter pumps with different thread or those without a thread on the connection.

Connection to 32mm (1 ¹/₄"): hose:

Connect one end of adaptor B (8) to the connector hose (7). Tighten securely.
 Now, connect the other end of adaptor B (8) to the filter pump outlet. Tighten securely.

Connection to 38 mm (1 1/2") hose with clamp:

1. Connect the connector hose **(7)** to the filter pump outlet connection with a large hose clamp. Tighten securely.

Connecting the system to other types of pool

After you have connected the Saltwater System to the pump, connect it to the pool. This is depicted in Drawings #1 and #2.

Following are the common connection types:

Connection to 32mm (1 ¼") connectors:

Connect the adaptor A (1) to the electrolytic cell (3) outlet. Tighten securely.
 The adapter A (1) is now fitted to the Saltwater System. The following step is to connect the water return hose to the adaptor A (1) with a hose clamp.

Connection to 38mm (1 ¹/₂") connectors without thread:

Connect the adaptor A (1) to the electrolytic cell (3) outlet. Tighten securely.
 With the adaptor A (1) fixed to the Saltwater System, connect the water return hose to the adaptor, using a large hose clamp.

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• Which kind of salt to use: Use only Sodium Chloride Salts

Use only sodium chloride (NaCl) salt that is at least 99.8% pure. It is also acceptable to use water conditioning salt pellets (the compressed forms of evaporated salt). However, it will take a longer time for them to dissolve. **Do not use iodized or yellow (yellow prussiate of soda) colored salt.** Salt is added to the pool water and the electrolytic cell uses this salt to create the chlorine. The purer the salt the better the performance of the electrolytic cell.

• Optimum Salt Levels

The ideal salt level in the pool water is between 2500 - 3500 ppm (parts per million). The optimal level is 3000 ppm.

A too low salt level will reduce the efficiency of the Saltwater System and result in low chlorine production. A high salt level may generate a salty taste to the pool water (this may occur at a salt level above 3500 - 4000 ppm). Too high of a salt level may damage the power supply and cause corrosion to pool metal fixtures and accessories. The Salt Table page of this manual, shows the correct dosage of salt needed. The salt in the pool is constantly recycled. Salt loss occurs only when pool water is physically removed from the pool. Salt is not lost due to evaporation.

• Adding Salt

1. Switch the filter pump ON to start the water circulation.

2. Keep the Saltwater System turned OFF.

3. Determine the amount of salt to be added (see "Salt Table").

4. Evenly spread the proper amount of salt around the inside perimeter of the pool.

5. Avoid clogging the filter by not adding salt through the skimmer.

6. Brush the pool bottom to speed up the dissolving process. Do not allow salt to pile up on the bottom of the pool. Run the filter pump 24 consecutive hours to thoroughly dissolve the salt.

7. After 24 hours and if all the salt is dissolved, turn on the Saltwater System, press

button until you hear a "beep", code "00" flashing and set the saltwater system to desired operating time (see "Operating Time Table").

• Removing Salt

If too much salt has been added, the unit will beep and display "code 92" (see "Alarm Codes"). You will need to lower the salt concentration. The only way to do so, is to partially drain the pool and refill it with fresh water. Drain and refill approximately 20% of the pool's water until the "Code 92" disappears.

Types of Pool	Gallons	Cubic Meters (pool size in metres)
	(pool size in feet)	1 cubic metre = 1000L
Rectangular	Length x Width x Average Depth x 7.5	Length x Width x Average Depth
Circular	Length x Width x Average Depth x 5.9	Length x Width x Average Depth x 0.79
Oval	Length x Width x Average Depth x 6.0	Length x Width x Average Depth x 0.80

Pool Volume Calculation

INTEX POOLS SALT TABLE

This table shows the amount of salt needed to achieve and maintain the optimal 3000 ppm salt level.

Pool Size		Water Capacity (calculated at 90% for Frame Pool and 80% for Easy Set & Oval Pool)		Salt Needed for Startup 3.0 g/L (3000 ppm)		Salt Needed when Low Salt Detected (CODE "91")	
		Gals	Litres	Lbs	Kgs	Lbs	Kgs
INTEX ABOVE	GROUND POOLS (AGP's)		0700	05			40
	457cm x 84cm (15'x33") 457cm x 91cm (15'x36")	2587 2822	9792 10681	65 65	30 30	20 20	10 10
	457cm x 107cm	3284	12430	80	35	20	10
	(15'x42")	3204	12430	00	35	20	10
EASY SET POOL	457cm x 122cm (15'x48")	3736	14141	95	45	25	10
	488cm x 107cm (16'x42")	3754	14209	95	45	25	10
	488cm x 122cm (16'x48")	4273	16173	110	50	30	15
	488cm x 132cm (16'x52")	4614	17464	115	50	30	15
	549cm x 107cm (18'x42")	4786	18115	120	55	30	15
	549cm x 122cm (18'x48")	5455	20647	135	60	35	15
	457cm x 91cm (15'x36")	3282	12422	80	35	20	10
CIRCULAR METAL	457cm x 107cm (15'x42")	3861	14614	100	45	25	10
FRAME POOL	457cm x 122cm (15'x48")	4440	16805	110	50	30	15
	488cm x 122cm (16'x48")	5061	19156	125	55	35	15
	549cm x 122cm (18'x48")	6423	24311	160	75	40	20
	640cm x 132cm (21' x 52")	9533	36082	240	110	60	30
	732cm x 132cm (24' x 52")	12481	47241	310	140	80	35
ULTRA FRAME POOL	488cm x 122cm (16'x48")	5061	19156	125	55	35	15
	549cm x 122cm (18'x48")	6423	24311	160	75	40	20
	549cm x 132cm (18' x 52")	6981	26423	175	80	45	20
	610cm x 122cm (20' x 48")	7947	30079	210	90	50	25
	671cm x 132cm (22' x 52")	10472	39637	260	120	65	30
	732cm x 132cm (24' x 52")	12481	47241	310	140	80	35
	792cm x 132cm (26' x 52")	14667	55515	365	165	90	40
SEQUOIA SPIRIT POOL	478cm x 124cm (15'8"x49")	4440	16805	110	50	30	15
SET	508cm x 124cm	5061	19156	125	55	35	15

		1	1	-			
	(16'8"x49")						
	569cm x 135cm (18'8" x	6981	26423	175	80	45	20
	53")						
OVAL FRAME	549cm x 305cm x	2885	10920	70	30	20	10
POOL	107cm (18'x10'42")						
	610cm x 366cm x	4393	16628	110	50	30	15
	122cm (12'x20'48")						
RECT. ULTRA	457cm x 274cm x	3484	13187	90	40	25	10
FRAME POOL	122cm (15'x9'x48")						
	549cm x 274cm x	4545	17203	115	50	30	15
	132cm (9'x18'x52")						
	610cm x 305cm x	5835	22085	145	65	40	20
	132cm (20'x10'x52")						
	732cm x 366cm x	8403	31805	210	95	55	25
	132cm (24' x 12' x 52")						
	975cm x 488cm x	14364	54368	360	165	90	40
	132cm (32' x 16' x 52")						

Page 15 INTEX POOLS CYANURIC ACID TABLE

Cyanuric acid is a chemical that reduces the loss of chlorine in water due to ultraviolet rays. To maintain the pool water clear and clean, and to maximize the performance of the device, add cyanuric acid to the pool. We recommend that the cyanuric acid level be maintained at approximately 1% of the salt, i.e. 45 Kgs (100 Lbs) salt x1% = 0.45 Kgs (1 Lb) cyanuric acid.. If the pool water is dirty, filthy or grimy, DO NOT add chlorine stabilizer (cyanuric acid) as this will slow down the sanitation time of the device. Under this condition you must BOOST your pool water, refer to BOOST cycle steps. Once the pool water has been restored to clear and clean conditions you may add cyanuric acid.

	Pool Size	Water Capacity (Calculated at 90% for Frame Pool and 80% for Easy Set & Oval Pool)		Cyanuric Acid Needed for Startup 0.03 g/L (30 ppm)	
	OVE GROUND POOLS (AGP's)	Gals	Litres	Lbs	Kgs
EASY	457cm x 84cm (15'x33")	2587	9792	0.6	0.3
SET	457cm x 91cm (15'x36")	2822	10681	0.7	0.3
POOL	457cm x 107cm (15'x42")	3284	12430	0.8	0.4
	457cm x 122cm (15'x48")	3736	14141	0.9	0.4
	488cm x 107cm (16'x42")	3754	14209	0.9	0.4
	488cm x 122cm (16'x48")	4273	16173	1.1	0.5
	488cm x 132cm (16'x52")	4614	17464	1.2	0.5
	549cm x 107cm (18'x42")	4786	18115	1.2	0.5
	549cm x 122cm (18'x48")	5455	20647	1.4	0.6
	457cm x 91cm (15'x36")	3282	12422	0.8	0.4
CIRCUL	457cm x 107cm (15'x42")	3861	14614	1.0	0.4
AR	457cm x 122cm (15'x48")	4440	16805	1.1	0.5
METAL	488cm x 122cm (16'x48")	5061	19156	1.3	0.6
FRAME	549cm x 122cm (18'x48")	6423	24311	1.6	0.7
POOL	640cm x 132cm (21' x 52")	9533	36082	2.4	1.1
	732cm x 132cm (24' x 52")	12481	47241	3.1	1.4
ULTRA	488cm x 122cm (16'x48")	5061	19156	1.3	0.6
FRAME	549cm x 122cm (18'x48")	6423	24311	1.6	0.7
POOL	549cm x 132cm (18'x52")	6981	26423	1.7	0.8
	610cm x 122cm (20'x48")	7947	30079	2.0	0.9
	671cm x 132cm (22'x52")	10472	39637	2.6	1.2
	732cm x 132cm (24'x52")	12481	47241	3.1	1.4
	792cm x 132cm (26'x52")	14667	55515	3.7	1.7
SEQUOI	478cm x 124cm (15'8"x49")	4440	16805	1.1	0.5
A SPIRIT	508cm x 124cm (16'8"x49")	5061	19156	1.3	0.6
POOL SET	569cm x 135cm (18'8" x 53")	6981	26423	1.7	0.8
OVAL	549cm x 305cm x 107cm (10'x18'x42")	2885	10920	0.7	0.3
FRAME POOL	610cm x 366cm x 122cm (12'x20'x48")	4393	16628	1.1	0.5
RECT.	457cm x 274cm x 122cm (15'x9'x48")	3484	13187	0.9	0.4
ULTRA	549cm x 274cm x 132cm (18'x9'x52")	4545	17203	1.1	0.5
FRAME	610cm x 305cm x132cm (20'x10'x52")	5835	22085	1.5	0.7
POOL	732cm x 366cm x 132cm (24'x12'x52")	8403	31805	2.1	1.0
	975cm x 488cm x 132cm (32'x 16'x 52")	14364	54368	3.6	1.6

INTEX POOLS OPERATING TIME TABLE (WITH CYANURIC ACID)

Pool Size		Water Capacity (Calculated at 90% for Frame Pool and 80% for Easy Set % Oval Pool)		Operating Time (hours) at different ambient/air temperatures			Intex Filter pump Operating Time (hours)
		Gals	Litres	10 – 19 °C (50 – 66 °F)	20 – 28 °C (68 – 82 °F)	29 – 36 °C (84 – 97 °F)	
MODEL: EC	CO 7110			(******			
EASY	457cm x 84cm (15'x33")	2587	9792	3	3	4	6
SET	457cm x 91cm (15'x36")	2822	10681	3	4	5	6
POOL	457cm x 107cm (15'x42")	3284	12430	3	4	5	6
	457cm x 122cm (15'x48")	3736	14141	4	5	6	8
	488cm x 107cm (16'x42")	3754	14209	4	5	6	8
	488cm x 122cm (16'x48")	4273	16173	4	5	6	8
	488cm x 132cm (16'x52")	4614	17464	5	6	7	8
	549cm x 107cm (18'x42")	4786	18115	5	6	7	8
	549cm x 122cm (18'x48")	5455	20647	6	7	8	12
CIRCULAR	457cm x 91cm (15'x36")	3282	12422	3	4	5	6
METAL	457cm x 107cm (15'x42")	3861	14614	4	5	6	8
FRAME POOL	457cm x 122cm (15'x48")	4440	16805	5	6	6	8
POOL	488cm x 122cm (16'x48")	5061	19156	5	6	7	8
	549cm x 122cm (18'x48")	6423	24311	7	8	9	12
ULTRA	488cm x 122cm (16'x48")	5061	19156	5	6	7	8
FRAME POOL	549cm x 122cm (18'x48")	6423	24311	7	8	9	12
SEQUOIA SPIRIT	478cm x 124cm (15'8" x 49")	4440	16805	5	6	6	8
POOL SET	508cm x 124cm (16'8" x 49")	5061	19156	5	6	7	8
OVAL FRAME	549cm x 305cm x 107cm (18' x 10' x 42")	2885	10920	3	4	5	6
POOL	610cm x 366cm 122cm (20' x 12' x 48")	4393	16628	5	5	6	8
RECT. ULTRA	457cm x 274cm x 122cm (15' x 9' x 48")	3484	13187	3	4	5	6
FRAME POOL	549cm x 274cm x 132cm (18' x 9' x 52")	4545	17203	5	6	7	8
	610cm x 305cm x 132cm (20' x 10' x 52")	5835	22085	6	7	8	12

SAVE THESE INSTRUCTIONS

Page 14 SAVE THESE INSTRUCTIONS

SAL	SALI CALCULATION FORMULA FOR ALL POOLS				
Salt Needed for Startup (Lbs)	Salt Needed for Startup (Kgs)	Salt Needed when Low Salt Detected (Lbs)	Salt Needed when Low Salt Detected (Kgs)		
Water Capacity (Gals) x 0.025	Water Capacity (Litres) x 0.003	Water Capacity (Gals) x 0.0067	Water Capacity (Litres) x 0.0008		

SALT CALCULATION FORMULA FOR ALL POOLS

SALT TABLE FOR COMMON NON-INTEX POOLS

Water	Capacity	Salt Needed for Startup Salt Needed wh Detected (CC			
Gals	Litres	Lbs	Kgs	Lbs	Kgs
2000	7500	50	20	10	5
4000	15000	100	45	25	10
6000	22500	150	65	40	20
8000	30000	200	90	55	25
10000	37500	250	110	70	30
12000	45500	300	135	80	35
14000	53000	350	160	95	45

CYANURIC ACID TABLE FOR COMMON NON-INTEX POOLS

Water	Water Capacity		ded for Startup 0ppm)
Gals	Litres	Lbs	Kgs
2000	7500	0.5	0.23
4000	15000	1.0	0.45
6000	22500	1.5	0.68
8000	30000	2.0	0.90
10000	37500	2.5	1.13
12000	45500	3.0	1.37
14000	53000	3.5	1.59

OPERATING TIME TABLE FOR COMMON NON-INTEX POOLS (WITH CYANURIC ACID)

Water Capacity		Operating Time (hours)		
		at different ambient/air temperatures		
Gals	Litres	10 – 19°C 20-28°C 29-36°C		
		(50 – 66°F)	(68-82°F)	(84-97°F)
2000	7500	2	3	4
4000	15000	4	5	6
6000	22500	6	7	8

OPERATING INSTRUCTIONS

1. Turn on the filter pump.

2. Start up the unit:

Plug the power cord into the electrical outlet and test the GFCI/RCD (circuit breaker). Switch on the unit. Flashing code "00" appears on the electronic control station's LED, indicating that the unit is ready to be programmed.

3. Set operating hours for Saltwater system:

With code "00" flashing, press button to set the desired operating hours. See the "Operating Time Table" for the required operating hours related to each pool size.

Pressing will increase the time from 01 to 12 hours maximum. If you have

selected too many hours keep pressing to repeat the cycle. The built-in timer will now activate your Saltwater System, at the same time each day, for the number of hours you have set.

NOTE: The Saltwater System will not operate if the filter pump is not operating. Make sure to program your filter pump (or start it manually) for operation beginning 5 minutes before the Saltwater System and finishing 15 minutes after the Saltwater System.

4. Lock keypad controls:

With the desired hour value showing, press button until you hear a "beep". A green "WORKING" indicator on the control panel will light up within a few seconds to indicate that the Saltwater System has started chlorine production. Locking the control buttons into this setting prevents unauthorized changing of the operating cycle.

NOTE: If you forget to lock the keypad controls, the system will automatically lock it and start working 1 minute later.

5. Readjust operating time if necessary:

The operating hours can be re-adjusted if necessary. Press button until you hear a "beep" to unlock the keypad and the current programmed time will flash. Repeat steps 3 to 4.

OPERATING INSTRUCTIONS (continued)

6. Boost cycle

• First time installation, press and hold "BOOST" button for 5 seconds until the indicator lights up and the LED display "80". This indicates that the saltwater system has started E.C.O. and more chlorine sanitizer production. You can press and hold the "BOOST" button for another 5 seconds until the indicator is off, which will cancel the Boost cycle.

• The boost operating hours is 8 times the amount of time programmed into the system, i.e. if your saltwater system operating time is 2 hours, the boost procedure will run 8 x 2 = 16 hours. After boost procedure has been completed, the system will automatically switch to the normal working mode.

• After a heavy rain or if the pool is dirty, press the "BOOST" button to shock the pool again.

7. Stand-by/power saving mode:

• When the cycle ends, the green "SLEEP" indicator on the control panel lights up and the LED display flashes "93". The system is now in Stand-By mode. After a while, it shuts down and sets itself in a Power Saving mode. The system will automatically turn itself back on in 24 hours, starting its daily cycle of chlorine production.

• The "SLEEP" indicator stays ON, while the system is in the Power Saving mode.

The LED display however, goes blank after 5 minutes. Press any button (or) to view the last LED code.

	LED CODE CHART		
LED Reading	Definitions		
FP	Filter Pump Working Mode		
80	Boost Mode		
00	Stand-By Mode (Start-up)		
01	Minimum Operating Hour (1 hour remaining)		
02	Operating Hours (2 hours remaining)		
03	Operating Hours (3 hours remaining)		
04	Operating Hours (4 hours remaining)		
05	Operating Hours (5 hours remaining)		
06	Operating Hours (6 hours remaining)		
07	Operating Hours (7 hours remaining)		
08	Operating Hours (8 hours remaining)		
09	Operating Hours (9 hours remaining)		
10	Operating Hours (10 hours remaining)		
11	Operating Hours (11 hours remaining)		
12	Maximum Operating Hours (12 hours remaining)		
90	Alarm Code (Low Pump Flow / No Pump Flow)		
91	Alarm Code (Low Salt Level)		
92	Alarm Code (High Salt Level)		
93	Stand-By Mode (Operating Process Finished)		
"BLANK"	No Power or "Power Saving Mode" waiting to start next		
	Saltwater System cycle		

When Code "90" alarm is shown, ensure the timer of the filter pump is set one (1) hour longer than the SALTWATER SYSTEM.

If the filter pump does not have a built-in timer, the filter pump needs to be turned ON/OFF manually every day.

Unplug the power cord before cleaning your system. Also close the plunger valves on your pool or insert the black hat-like plugs in the strainer opening to prevent water spillage. After completing all maintenance tasks, you must plug the power cord back in and open the plunger valves or remove the plugs.

Flow Sensor Cleaning

- 1. In a counter-clockwise motion unscrew the collar of the flow sensor (6) and remove it from the electrolytic cell conduit. See "Part Reference".
- **2.** If deposits and debris are seen on the surface of the flow sensor, then use a garden hose to wash it off.
- **3.** If flushing with water does not remove the deposits, use a plastic brush to clean the surface and the hinge if necessary. Do not use a metal brush.
- **4.** After the flow sensor has been inspected and cleaned, align the locator notch on the flow sensor to the connection ridge in the conduit. Now turn the collar in a clockwise motion, tightening the sensor back into its position. Do not over tighten.

TITANIUM AND E.C.O. ELECTRODES CLEANING

The titanium electrode and E.C.O. electrodes have a self-cleaning function incorporated into the electronic control's programming. In most cases this self-cleaning action will keep the electrodes working at optimum efficiency. If the pool water is hard (high mineral content) the cell may require periodic manual cleaning. To maintain maximum performance, we recommend that you open and visually inspect the titanium and E.C.O. electrodes (4 &5) monthly.

The following steps provide instructions on how to clean your cell.

Inspection and cleaning:

1.Switch off the unit, unplug the power cord from the electrical socket.

2. For filter pumps with 32mm (1-1/4") hose size - To prevent water from flowing out of the pool, unscrew the strainer grids from the strainer connectors and insert the hat-like plugs into the strainer connectors.

For filter pumps with 38mm (1-1/2") hose size - Turn both plunger valve handles fully clockwise until they stop. This closes the valve, prevents the water from flowing out of the pool.

MAINTENANCE (continued)

3. Disconnect the 2 hoses from the Saltwater System and attach the cell covers (9) to the inlet and outlet of the electrolytic cell.

4. Unscrew the collar of the flow sensor **(6)** and pull out the flow sensor from the electrolytic cell **(3)** housing.

5. Pour kitchen grade vinegar into the electrolytic cell **(3)** to immerse the titanium and ECO electrodes.

6. Open one side of the cell cover **(9)**, drain and properly dispose of the vinegar. Connect the hose which goes from the pool to the cell. Flush the electrolytic cell housing with the pool water.

7. Reverse steps 3, 4, 5 and 6 to reconnect the electrolytic cell.

MAINTENANCE (continued)

INTEX® TEST STRIPS (PACKED WITH THE PRODUCT)

The Test Strips can test the "Free Chlorine", "pH", "Calcium Hardness" and "Total Alkalinity" levels at the same time. We recommend that you test the water chemistry daily, and maintain the chlorine concentration at 1.0-3.0 ppm.

Directions and Use

1. Dip the entire strip into the water and remove immediately.

2. Hold the strip level for 15 seconds. Do not shake excess water from the strip.

3. Now compare the strip pad to the color chart on the packaging label. If necessary, adjust the chemical level in the pool water. It is very important, to use the proper technique when testing the water's chemical level. Read and follow the written strip instructions carefully.

LONG TERM STORAGE

1. Disconnect the power cord from the electrical outlet.

2. After the pool is completely empty, disconnect the Saltwater System from the hoses by reversing the installation instructions.

3. Air-dry the unit before you store it. This might be a good time to visually inspect and clean the electrolytic cell.

4. Store the unit and accessories in a dry place. The temperature should be controlled, between 0°C (32°F) and 36°C (97°F).

5. The original package can be used for storage.

POOL MAINTENANCE & CHEMICAL DEFINITIONS

	Swimming pool
Free available chlorine	1.0 - 3.0 ppm
рН	7.2 - 7.8
Total alkalinity	100 - 120 ppm
Calcium hardness	200 - 300 ppm
Cyanuric acid (stabilizer, used in outdoor pools only)	30-100 ppm

Preferred Water Chemistry Reading

Free Chlorine - Combined Chlorine -	Is the chlorine residual present in pool water. Is formed by the reaction of free chlorine with ammonia wastes.
рН -	Result if too high - Sharp chlorinous odor, eye irritation. A value that indicates how acidic or basic a solution is. Result if too low - Corroded metals, eye & skin irritation, destruction of total alkalinity.

	Result if too high - Scale formation, cloudy water, shorter filter runs, eye & skin irritation, poor chlorine efficiency.
Total Alkalinity -	Indicates the degree of the water's resistance to change in pH. It determines the speed and ease of pH change, so always adjust total alkalinity before adjusting the pH level. Result if too low - Corroded metals, eye & skin irritation. Low alkalinity will cause the pH to be unstable. Any chemical added to the water will have an effect on pH. Result if too high - Scale formation, cloudy water, eye & skin irritation, poor chlorine efficiency.
Calcium Hardness -	Refers to the amount of calcium and magnesium dissolved in the water.
	Result if too high - Eye & skin irritation, difficulty balancing water and poor chlorine efficiency. Scale will form and will cause the water to become cloudy.
Stabilizer -	Stabilizers extend the life of chlorine in swimming pools.
(Cyanuric Acid)	

• Do not add pool chemicals directly to the skimmer. This may damage the cell.

• Maintaining a salt and sanitizer level above the recommended range can contribute to the corrosion of the pool equipment.

• Check the expiry date of the test kit as the test results may be inaccurate if the kit is used after that date.

• If, due to heavy pool usage, it is required to increase the sanitizer level, then use a chemical based on Trichloro-s-triazinetrione or sodium dichloro-s-triazinetrione dihydrate.

• The life expectancy of the electrode is 3000 hours under normal use conditions.

When replacing the electrode, only use replacement electrodes having a label that clearly states that it is a replacement electrode for the chlorine generating Krystal Clear Saltwater System Model ECO 7110, REGISTRATION NUMBER 32059, PEST CONTROL PRODUCTS ACT.

TROUBLESHOOTING GUIDE			
PROBLEM	CAUSE	SOLUTION	
INSUFFICIENT CHLORINE	 Insufficient operating hours of the Saltwater System. The salt level in the pool water is less than 2000 ppm. This is insufficient. Chlorine loss due to intense sunlight exposure. The bather load has increased. Clogged or dirty electrolytic cell. High UV level exposure. 	 Increase the daily Saltwater System operating time. See "Operating Instructions". Check the salt level with the Test Kit. Adjust as needed. See "Salt & Pool Water Volumes". Use a pool cover when the pool is not in use and/or when the unit is operating. Increase the daily Saltwater System operating time. See "Operating Instructions". Remove the cell for inspection, clean it if necessary. See "Maintenance". Cover the pool with a pool cover for 2 days with the device running and then test the water using the test strips. If the pool is clean and clear, add stabilizer to the water and then test the water with the device running. 	
WHITE FLAKES IN THE WATER	•Excessive calcium hardness is present in pool water.	• Drain about 20 to 25% of the pool water and add fresh water to decrease the calcium hardness. Inspect the electrolytic cell for scale buildup. Clean the electrolytic cell if necessary.	
NO LED DISPLAY	 No power supply. RCD/GFCI has not been reset. A power fuse has blown. LED failure. 	 Plug the cell cord firmly into the cell housing receptacle. Find the switch and turn ON. Reset the RCD/GFCI. Contact Intex Service Center. 	

TROUBLESHOOTING GUIDE (continued)			
PROBLEM	CAUSE	SOLUTION	
	e Flash & Alarm On (NOTE: Alway		
cleaning and se		·	
	1.Filter pump not attached to system and/or switch ON.	• Ensure filter pump is attached and operating. See "Setup Instruction".	
90	2. Circulation line is blocked.	 If your unit has plunger valves, ensure that they are open. Clear your filter cartridge and cell from debris and dirt. See "Maintenance". Release all trapped air in the circulation line. See the filter pump manual. 	
	3. Incorrect inlet and outlet hose direction.	•Check the direction of the inlet and the outlet hose. Reverse the hoses if necessary. See "Set Up Instructions".	
	4. Scale on the flow sensor.	•Clean the flow sensor, paying special attention to the hinge. See "Maintenance".	
	5. Flow sensor cord is loose.	• Plug the flow sensor firmly into the flow sensor receptacle.	
	 Inner timer confliction between filter pump and saltwater system. 	 Reset both timers on the filter pump and saltwater system. See "Boost Cycle". 	
	7. Flow sensor failure.	Contact Intex Service Center.	
91	1. Dirt or scale on titanium plates.	 Remove the electrolytic cell for inspection. Clean it if necessary. See "Maintenance". 	
	2. Low salt level / No salt.	Add salt. See "Salt & Pool Water Volumes".	
	3. Electrolytic cell cord is loose.	• Ensure that the cell cord is plugged firmly into the cell housing receptacle.	
	4. Possible electrolytic cell failure.	Contact Intex Service Center. Replace the cell if needed.	
92	1. High salt level.	Partially drain the pool and refill it with fresh water. See "Salt & Pool Water Volumes".	



If you continue to experience difficulty, please contact our Consumer Service Department for assistance. See separate "Authorized Service Centers" sheet.

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GENERAL AQUATIC SAFETY

Water recreation is both fun and therapeutic. However, it involves inherent risks of injury and death. To reduce your risk of injury, read and follow all product, package and package insert warnings and instructions. Remember, however, that product warnings, instructions and safety guidelines cover some common risks of water recreation, but do not cover all risks and dangers.

For additional safeguards, also familiarize yourself with the following general guidelines as well as guidelines provided by nationally recognized Safety Organizations:

• Demand constant supervision. A competent adult should be appointed as a "lifeguard" or water watcher, especially when children are in and around the pool.

- Learn to swim.
- Take the time to learn CPR and first aid.

• Instruct anyone who is supervising pool users about potential pool hazards and about the use of protective devices such as locked doors, barriers, etc.

- Instruct all pool users, including children what to do in case of an emergency.
- Always use common sense and good judgement when enjoying any water activity.
- Supervise, supervise, supervise.

For additional information on safety, please visit

- The Association of Pool and Spa Professionals: The Sensible Way to Enjoy Your Aboveground/Onground Swimming Pool www.nspi.org
- American Academy of Pediatrics: Pool Safety for Children www.aap.org
- Red Cross www.redcross.org
- Safe Kids www.safekids.org
- Home Safety Council: Safety Guide www.homesafetycouncil.org
- Toy Industry Association: Toy Safety www.toy-tia.org

SAFETY IN YOUR POOL

Safe swimming depends on constant attention to the rules. The "NO DIVING" sign within this manual can be posted near your pool to help keep everyone alert to the danger. You may also wish to copy and laminate the sign for protection from the elements.

LIMITED WARRANTY

Your Krystal Clear Saltwater System® has been manufactured using the highest quality materials and workmanship. All Intex products have been inspected and found free of defects prior to leaving the factory. This Limited Warranty applies only to the Krystal Clear Saltwater System® and accessories listed below.

The provisions of this Limited Warranty apply only to the original purchaser and is not transferable. This Limited Warranty is valid for the period noted below from the date of the initial retail purchase. Keep your original sales receipt with this manual, as proof of purchase will be required and must accompany warranty claims or the Limited Warranty is invalid.

Krystal Clear Saltwater System® Warranty – 2 Years Titanium Electrode Warranty – 1 Year E.C.O. electrode Warranty – 1 Year Hoses, Plunger Valves & Fittings Warranty – 180 days

If a manufacturing defect is found within the periods noted above, please contact the appropriate Intex Service Center listed in the separate "Authorized Service Centers" sheet. The Service Center will determine the validity of the claim. If the Service Center directs you to return the product, please carefully package the product and send with shipping and insurance prepaid to the Service Center. Upon receipt of the returned product, the Intex Service Center will inspect the item and determine the validity of the claim. If the provisions of this warranty cover the item, the item will be repaired or replaced at no charge.

Any and all disputes regarding the provisions of this Limited Warranty shall be brought before an informal dispute settlement board and unless and until the provisions of these paragraphs are carried forth, no civil action may be instituted. The methods and procedures of this settlement board shall be subject to the rules and regulations set forth by the Federal Trade Commission (F.T.C.). IMPLIED WARRANTIES ARE LIMITED TO THE TERMS OF THIS WARRANTY AND IN NO EVENT SHALL INTEX, THEIR AUTHORIZED AGENTS OR EMPLOYEES BE LIABLE TO THE BUYER OR ANY OTHER PARTY FOR DIRECT OR CONSEQUENTIAL DAMAGES OR LIABILITIES. Some provinces or jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This Limited Warranty does not apply if the products are subject to negligence, abnormal use or operation, accident, improper operation, improper voltage or current contrary to operating instructions, or to damage by circumstances beyond Intex's control, including but not limited to, ordinary wear and tear and damage caused by exposure to fire, flood, freezing, rain, or other external environmental forces. This Limited Warranty applies only to those parts and components sold by Intex. The Limited Warranty does not cover unauthorized alterations, repairs or disassembly by anyone other than Intex Service Center personnel.

DO NOT GO BACK TO THE PLACE OF PURCHASE FOR RETURN OR REPLACEMENT. IF YOU ARE MISSING PARTS OR NEED ASSISTANCE,

PLEASE CALL US TOLL-FREE (FOR U.S. AND CANADIAN RESIDENTS): 1-800-234-6839 OR VISIT OUR WEBSITE: WWW.INTEXSTORE.COM.

Proof of Purchase must accompany all returns or the warranty claim will be invalid.