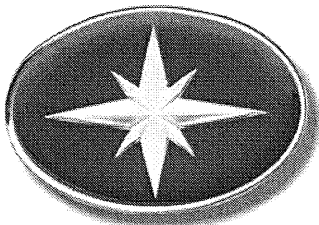
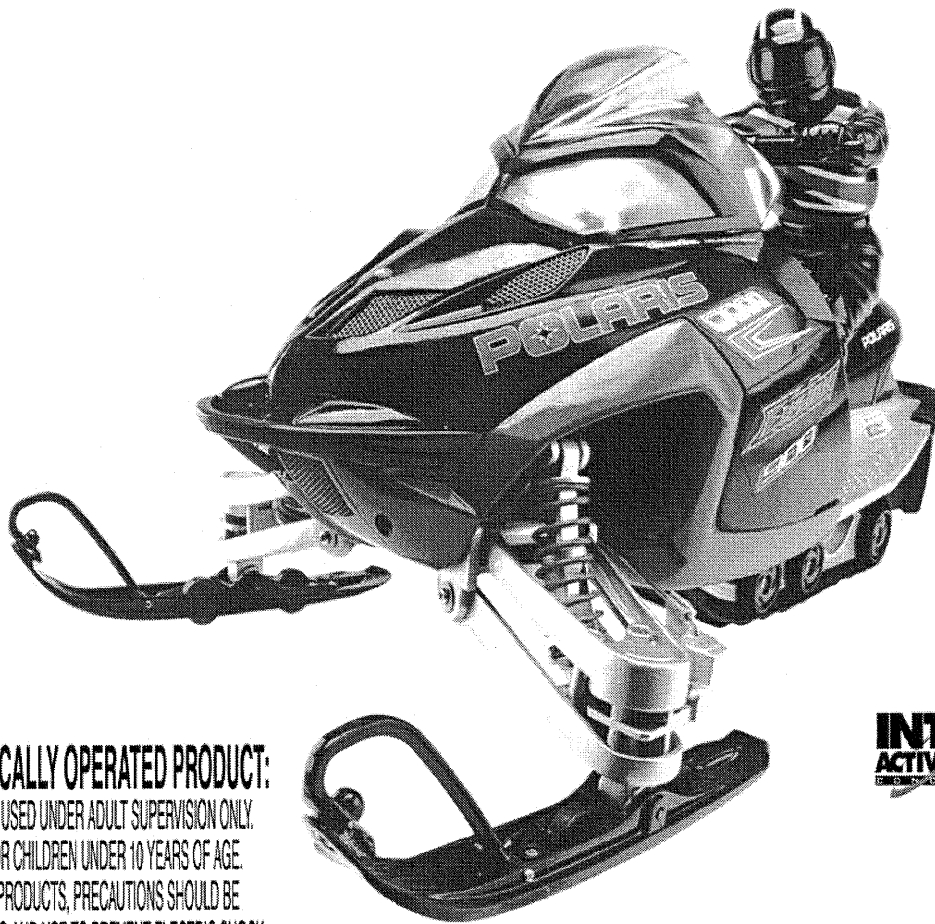


Radio Controlled Snowmobile



# POLARIS

## FUSION 900



**INTER  
ACTIVE TOY**

### CAUTION - ELECTRICALLY OPERATED PRODUCT:

THE AC CHARGER IS TO BE USED UNDER ADULT SUPERVISION ONLY.  
NOT RECOMMENDED FOR CHILDREN UNDER 10 YEARS OF AGE.  
AS WITH ALL ELECTRIC PRODUCTS, PRECAUTIONS SHOULD BE  
OBSERVED DURING HANDING AND USE TO PREVENT ELECTRIC SHOCK.

INPUT: AC 120V 60HZ 9W

OUTPUT: DC 9V 500mA UL LISTED CHARGER

\*The AC adapter should be examined periodically to ensure that it is undamaged.  
Failure to do this may result in the risk of fire, electric shock, or injury to people.  
In the event that the adapter shows signs of abuse, it should not be used until  
repaired by a certified technician.

- Radio-Controlled Model
- Outdoor / Indoor Use
- Quiet & Clean Electric Power.
- Requires a 9V Battery for the Transmitter (not included).
- Requires a 7.2 V rechargeable NiCd or NiMH battery for snowmobile (may be included in this package).

Congratulations on the purchase of your POLARIS® radio controlled snowmobile. Your new snowmobile is modeled after the real life POLARIS® and is specifically designed to be used outdoors on flat, packed snow. However to make your model more versatile, we have included a second set of (indoor) skis with built-in wheels to allow you to use your sled indoors on low-pile carpet.

The design of the radio controlled POLARIS® closely follows its full-size counterpart in terms of styling and functionality featuring true front and rear suspension systems, a high speed drive track, powerful electric motors and even a scale rider figure!

Use under adult supervision!

### Safety

The POLARIS® is a sophisticated model and should be treated as such. Improper use could cause damage to you, bystanders and/or property. Please follow all safety precautions and assembly instructions listed within this manual and use common sense when operating the model! Be careful not to hit anything with the skis to prevent damage to them and to the steering mechanism. Do not operate it near roads, bodies of water, vehicles, 'real' snowmobiles, pets and bystanders.

Note that the POLARIS® model is electric powered and that electricity and water do not 'mix' well. While the snowmobile is snow-resistant, it is not waterproof. Keep it out of wet snow, rain and away from puddles. Otherwise you may seriously damage your machine.

### Learning to Operate your R/C snowmobile

We strongly recommend that you seek the help of an experienced R/C hobbyist to help you to learn to operate your new model.

### Basic Safety Precautions

- 1) Do not modify the snowmobile or radio; this will void your warranty.
- 2) Test your snowmobile before every use and clean any packed snow out of the drivetrain area.
- 3) The POLARIS® is designed to be used on packed, flat snow only. Do not attempt to use the sled in powder or on rough and broken snow as it may fall into ruts and holes or hit snow-boulders. Damage to your sled may result.
- 4) Always use your snowmobile in large open areas only. Do not operate your model near people, cars, buildings, trees or other obstructions.
- 5) Ensure that the transmitter has fresh batteries and that the onboard battery pack is fully charged before operating your model.
- 6) Always range-check your transmitter prior to every session.

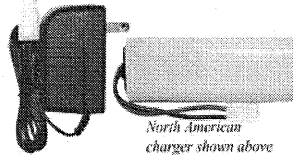
The POLARIS® is quite rugged but, as with any sophisticated device, you must learn how to operate it and care for it. Please read this manual thoroughly and be sure to operate your model only under adult supervision.

Do not attempt to open the body of the snowmobile or to modify the snowmobile or radio control unit in any way. Doing so will void your warranty and may result in permanent damage to your model.

### Glossary

**Motor:** The POLARIS® snowmobile has a sealed electric motor for propulsion and a separate electric motor for steering.

**Battery Pack:** The POLARIS® uses a standard 7.2V NiCd or NiMH rechargeable battery pack with a standard Tamiya-style connector plug. This battery pack is used to power the electric drive and steering motors as well as the radio receiver. Run time is approximately 10 to 15 minutes of constant use on a full charge.



North American charger shown above

**Transmitter:** The radio control transmitter allows you to control the model's direction of motion. The trigger causes the model to move forward or backward and the steering wheel causes the sled to turn left or right.

### Your Snowmobile package contains the following

Transmitter  
Transmitter antenna  
Snowmobile  
Indoor Skis

### Prepare the Transmitter

Install remote control unit battery:

Requires 1 pc 9V battery (not included).

- 1) Unscrew and remove the battery door, the battery cover located on the **UNDERSIDE** of the transmitter.
- 2) Install a 9V alkaline battery, ensuring that the polarity is correct.
- 3) Reinstall and screw the battery cover, do not overtighten.
- 4) Insert the transmitter antenna into the top of the transmitter and thread it into place. Do not overtighten.

### Charge the Onboard Battery Pack

1) Charge your 7.2V NiCd battery pack. Follow the instructions included with your AC or DC charger. The charge time is around 4 -6 hours for a fully depleted battery pack.

2) After each snowmobiling session, remove the battery pack from the snowmobile and allow it to cool before recharging. Failure to do so will significantly shorten its lifespan.

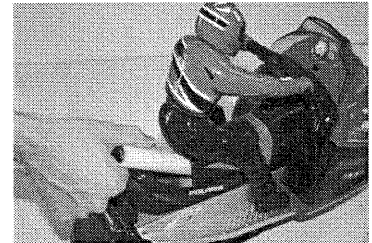
### IMPORTANT Battery Information:

**\*\* Recharge, install or replace the batteries under adult supervision only. \*\***

- 1) Never allow the battery pack to become hot during charging - this will cause permanent damage. Warm is okay - hot is not!
- 2) Never leave a battery pack unattended while it is being charged.
- 3) Never recharge a warm or hot battery. Always allow the battery to cool to ambient temperature.
- 4) Do not overcharge the battery pack by letting it charge for too long.
- 5) Rechargeable batteries are to be removed from toy before being charged.
- 6) Rechargeable batteries are to be charged only under adult supervision.

### Pre-Use Preparation

1) Before turning on your transmitter, make sure that no one in the vicinity is using a radio controlled model on the same frequency as yourself. The frequency of your model is shown on the tag located on the lower right, of your transmitter's face.



2) Open the battery hatch located at the rear of the snowmobile by unscrew and gently pull on it to swing the hinged rear-plate down and back. Then, gently pull the power plug partway out and plug in a freshly charged battery (ensuring that the plug orientations are correct). Close the battery compartment hatch and screw.

3) Switch on the transmitter and confirm that the red power LED illuminates. Note: always switch on the transmitter first and turn it off last. The snowmobile should never be on while the transmitter is off. If it is, then the receiver may receive stray radio signals and cause the motors to switch on and off at random times - this can be quite dangerous.



4) Slide the sled's power switch (located under the windscreen) to the 'on' position.

5) While an assistant holds the model off the ground perform the following tests. Note: caution your assistant to keep his or her fingers away from the drive track and steering mechanisms.

Pull the transmitter's trigger - the track should move from front to back.  
Push the transmitter's trigger - the track should move from back to front.  
Turn the steering wheel to the right - The skis should turn to the right.  
Turn the transmitter steering wheel to the left - The skis should turn to the left.

6) Range check your transmitter - walk about 50 feet from the model and test to see if the motors respond to your stick movements. If they do not, ensure that the 7.2V onboard battery is fully charged or put fresh batteries into the transmitter.

### Site Selection and Weather

Your snowmobiling site should be a large, empty and flat area with a smooth, hard-packed, snow-covered surface. If you try to operate your snowmobile in damp, "packing" snow, you will find that you frequently have to clear snow out of the drivetrain to prevent it from clogging the moving parts.

Avoid places that have many trees, buildings, people or other obstructions. Avoid areas where other R/C models are in operation since your radio transmitter may cause a frequency conflict with them. If this happens, both models will go out of control. Be very careful to keep your model away from people. Though the POLARIS® is lightweight, nevertheless it can cause injury if it hits someone.

### TIP:

Snow can pack the drivetrain of your snowmobile causing a loss of performance. To minimize this, spray some silicone spray on the drivetrain, it will help prevent the snow from becoming packed in the belt.

### Indoor Use

The POLARIS® is designed to be used outdoors on snow however we have included a second set of skis (with built-in wheels) so you can also use your POLARIS® indoors on carpet. Do not use the *indoor* skis outside, and do not use the *outdoor* skis inside. Each is designed for a specific surface.

### Installation of Indoor-Skis

Each ski is held to the shock strut of your snowmobile by a small Phillips-head screw located on the ski 'swivel' mount. To change skis, simply remove this screw, swap skis and reinstall the screw.

### Operation

Pull the trigger on the transmitter forward, the POLARIS® will move forward. To cause it to come to a stop simply release the trigger. To reverse, first allow the snowmobile to come to a complete stop then push the trigger away from you. The model will start to move in reverse. To steer, get the sled moving, then move the steering wheel either left or right: the snowmobile will respond by moving either left or right (respectively). Note that all remotely piloted vehicles exhibit control reversal, a phenomenon that takes some getting used to and is very disorienting for beginners. See below for an explanation.

### Control Reversal

As mentioned above, all remotely controlled vehicles exhibit control reversal when approaching the ground-based pilot. When the model is moving away from you and you turn the steering wheel to the left (for instance) the model turns left. However when the model is coming towards you and you turn the steering wheel to the left, the model appears to turn to the right - this is very confusing for students! Though the model is responding correctly, it appears to be turning in the "wrong" direction. If you look at this from the model's perspective though (imagine yourself in the pilot's seat), the model is in fact still turning left. You must get used to this apparent reversal of controls so that your reactions are instinctive regardless of the model's direction. In the beginning, it might help to turn your back to the approaching model and look over your shoulder. Another approach to help you to deal with this phenomenon, is to use a PC simulator-style game and select a remote view of the model. Your virtual model will exhibit control reversal when approaching you. Learning to control a crashable model 'onscreen' will help to prepare you for the 'real' thing.

### After Use

Switch off your sled, and then switch off your transmitter. Open the battery compartment and remove the battery pack. Allow it to cool to room temperature. This is very important. The battery will be quite warm after it's rapid discharge during the snowmobiling session and if you charge it immediately, before allowing it to cool, you will damage the battery. Check the snowmobile thoroughly for any damage and be sure to repair anything that might need to be repaired prior to using it again.

### Replacement Parts

If you need to, you can order replacement parts directly from us. Please call (416) 444-6873 or send email to [info@interactivetoy.com](mailto:info@interactivetoy.com)

### Warranty

Interactive Toy Concepts guarantees your POLARIS® snowmobile to be free from manufacturing defects for a period of 90 days from date of purchase. This warranty does not cover any modifications or parts damaged by the owner. In no case will Interactive Toy Concepts' liability exceed the original cost of the kit. Interactive Toy Concepts reserves the right to change this warranty without notice. Interactive Toy Concepts assumes no liability over final assembly or for any damage resulting from the use of this product. If the buyer is not prepared to accept liability associated with use of the POLARIS® snowmobile, he/she should return it in unused condition to the place of purchase

### Battery Recycling & Disposal

It may be illegal to dispose of the rechargeable NiCd battery in your municipal waste. Please check with local authorities. Do not try to open the battery pack!

### Copyright and Trademark Notices.

POLARIS® is a registered trademark of Polaris Industries Inc. used under license to Interactive Toy Concepts Ltd.

### FCC Note: USA only

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference
- 2) This device must accept any interference received, including interference that may cause undesired operation.

### Industry Canada Notice: Canada only

This device complies with RSS-210 of industry Canada. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference
- 2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a 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 radio 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:

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

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

### Industry Canada Notice: Canada only

This device complies with RSS-210 of industry Canada. Operation is subject to the following two conditions:  
1) This device may not cause harmful interference  
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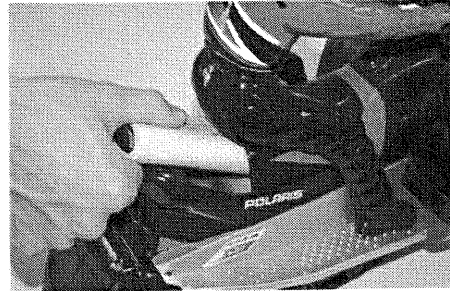
### Field Strength and measurement distance:

27MHz - 45.7 dB uV/m at 3 meter.  
49MHz - 47.3 dB uV/m at 3 meter.

# POLARIS® R/C snowmobile battery information

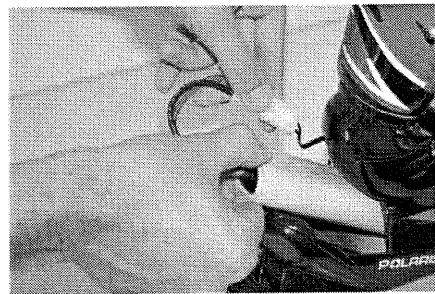
## Open the Battery Compartment & Remove the Battery

- 1) Open the battery compartment located at the rear of the snowmobile, by gently pushing down while pulling backwards on it.
- 2) Gently pull out the battery connector and the battery.
- 3) Unplug the battery from the snowmobile by depressing the catch located on one side of the connector, and pulling the plug halves apart.



## Charge the Battery Pack

- 1) After each snowmobiling session, remove the battery pack from the snowmobile and allow it to cool before recharging. Failure to do so will significantly shorten its lifespan.
- 2) Connect the output plug of the charger to the input plug of the battery pack. Notice that the plugs can only be connected in one orientation - do not force them.



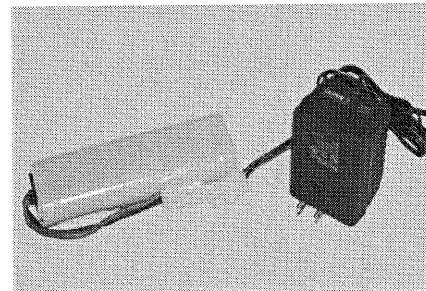
## Install the Battery

Installation is simply the reverse of removal.

## ! IMPORTANT

*"\* Recharge, install or replace the batteries under adult supervision only."*

- 1) *Never allow the battery pack to become hot during charging - this will cause permanent damage. Warm is okay - hot is not!*
- 2) *Never leave a battery unattended while it is being charged.*
- 3) *Never recharge a hot battery. Always allow it to cool*
- 4) *If you use an after-market charger, never charge the battery at a rate greater than 1000 mA.*
- 5) *If the battery is not completely discharged before recharging, the charging time may be reduced. Again, do not allow the battery to get hot!*

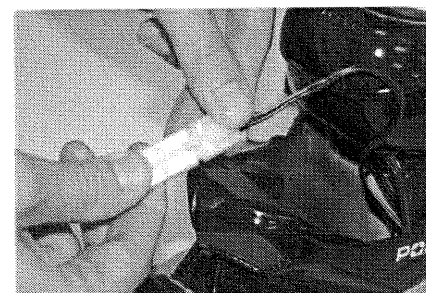


(North American charger shown above)

## Specifications

Some versions of the Snowmobile include a battery pack and charger. Specifications (subject to change without notice) are listed below.

Euro version	USA version
Charger	Charger
Input: 230 V AC, 50 Hz, 15 W	Input: 120 V AC, 60 Hz, 9W
Output: 9 V DC, 500 mA	Output: 9 V DC, 500 mA
Charge Time: 4 -6 hours	Charge Time: 4-6 hours
Battery Output	Battery
Voltage: 7.2 V Capacity: 1600 mAh	Output Voltage: 7.2 V
	Capacity: 1600 mAh



**Declaration of Conformity**

Trade name : Radio Controlled Snowmobile  
Model No. : 51011  
Responsible Party : Interactive Toy Concepts (NY) Ltd.  
Address : 200 5<sup>th</sup> Avenue, Suite 205,  
New York, 10010  
U.S.A.  
Telephone No. : 8662142220

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1)

This device may not cause harmful interference, and (2)

this device must accept any interference received,  
including interference that may cause undesired  
operation.