



XPAND Pi Cinema 3D Glasses
Model No. X103-CP
User Guide

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V I S I O N

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XPAND Infinity 3D Glasses (X103c)



New Generation of Cinema 3D Glasses

XPAND Infinity 3D Glasses are professional quality, easy-to-use glasses for 3D cinema, a part of XPAND 3D cinema glasses system for creating stereoscopic images based on active glasses technology. With active glasses technology, two slightly different versions of the same image (the right- and left-eye version) are shown on the screen sequentially and the active glasses separate these two images by blocking each eye using liquid crystal shutters. The human brain then combines these images and creates the illusion of a third dimension to a viewer. The glasses must be synchronized with the image presented on the screen which is done via an Infra Red signal (IR link). The synchronisation signal is fed from a digital projector to the XPAND system which generates IR pulses to be received and recognized by the glasses. This approach yields the highest performance, a wide viewing angle, immunity to head tilt problems and eliminating crosstalk .

XPAND Infinity 3D Glasses work in automatic modes – there is no power switch to turn the glasses “ON” or “OFF”. Their default mode is “OFF”. When the glasses are “OFF”, the electronic circuit periodically checks for a presence of a valid IR signal. If a valid IR signal is present, the glasses turn “ON”.

Compatibility

XPAND Infinity 3D Glasses are an electronic device for watching 3D stereoscopic content in XPAND 3D cinema or other XPAND Secured Emitters.

Anti-theft System

Anti-theft System, specifically designed for XPAND Infinity Cinema 3D Glasses, is optional accessory and is not a part of standard XPAND Infinity 3D Glasses package.

Testing of the glasses

Testing of the glasses prior to distribution to a user can be performed using the AT100 Active Glasses Tester. The AT100 is “ON” if the “ON/OFF” button is pressed and the red LED is lit. The AT100 is designed to generate a low intensity IR signal that, when passed within 2 feet (60 cm) of the X101 glasses, causes the lenses to flicker in response to the IR signal. Both lenses should flicker at a visible rate and in doing so indicate that the glasses are functioning properly and are ready for distribution. If the lenses do not flicker, the battery is empty and should be replaced before further use. The AT100 shuts off automatically after several hours or can be turned off manually.

Handling Instructions

Battery Replacement Guide

The following document is to help you to open the battery compartment in your X103 Infinity 3D Glasses.

Step 1 Insert the tool into the opening of the battery case.

Step 2 Use the inserted tool as a lever – while it's inserted in the opening of the battery case, gently push it downwards.

Step 3 If done correctly plastic cover slides out smoothly. Now you can easily remove it and replace the battery.

Step 4 When covering the lid, put the cover into place in vertical movement. The cover will smoothly slide into the lid. Click at the end means that the cover has locked in.

Attention!

Never push the tool towards the inner side of the glasses. You will be unable to uncover the lid, the hook on the cover will however get broken and it'll be impossible to really close the lid again.

Changing Ear Handles

If broken or damaged, ear handles can be replaced with new ones.

Step 1: Unscrew the screw and remove the ear handle.

Step 2: The new ear handle is inserted into the glasses and tighten the screw back in.

Installing Anti-theft System

Anti-theft system in XPAND Infinity 3D Glasses is a part of the left ear handle. To install the anti-theft system, you should do the following:

Step 1: Unscrew the screw and remove the ear handle as described in *Changing Ear Handles*

Step 2: Anti-theft tag is placed in plastic compartment of the anti-theft ear handle (a and b)

Step 3: The anti-theft ear handle is inserted into the glasses and tighten the screw back in as described in *Changing Ear Handles*.

Storage

It is recommended that the glasses be stored away from any IR source such as fluorescent lights. It is sufficient to cover the glasses so that any IR signal does not accidentally trigger the glasses on. The storage temperature should be standard office temperatures as higher temperatures reduce battery life. In cinema, the optimal storage solution is the XPAND Trolley – these trolleys were designed to provide the cinemas with optimal solution for storage, handling, distribution, service and collection of XPAND Cinema 3D Glasses.

Handling



The durable and robust frame is designed to protect the electronics and the lenses, however the lenses are susceptible to cracking if the glasses are twisted. Do not twist or bend the glasses! Broken lenses are not covered by the warranty. The glasses



should be held by the frame in order to avoid getting fingerprints on the lenses or scratching them. The user must be aware of these limitations and avoid any twisting,

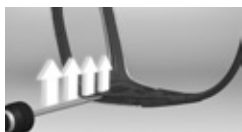


bending, rotation or manual adjustment.

Cleaning



XPAND carefully designed cleaning and sanitizing wipes that maximize the life-time of the glasses. Usage of wipes minimizes the handling cost (as the glasses are cleaned by the user), maximizes the durability (as the glasses are not exposed to high temperatures).



Troubleshooting

Glasses don't work: make sure that emitter is correctly positioned, connected to projector and that the projector is in 3D mode. If glasses don't work, the reason might be dead battery or cracked lenses.



Limited Warranty Coverage



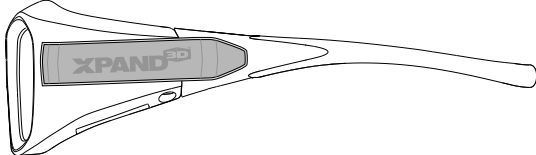
What IS Covered

If your product does not work properly because of a defect in materials or workmanship, XPAND (referred to as “the warrantor”) will, for the length of the period on the chart below, which starts with the date of original purchase (“warranty period”), at its option either (a) repair your product with new or refurbished parts, (b) replace it with a new or a refurbished equivalent value product, or (c) refund your purchase price. The decision to repair, replace or refund will be made by the warrantor.

Product	Parts	Labor
XPAND Infinity Cinema 3D Glasses	12 Months	Not Applicable

During the “Parts” warranty period, there will be no charge for parts. This Limited Warranty excludes both parts and labor for non-rechargeable batteries and frame.

This warranty is extended only to the original purchaser of a new product which was not sold "as is".



What IS NOT Covered

This warranty **ONLY COVERS** failures due to defects in materials or workmanship, and **DOES NOT COVER** normal wear and tear or cosmetic damage. The warranty **ALSO DOES NOT COVER** damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, Improper maintenance, power line surge, lightning damage, modification, introduction of sand, humidity or liquids, commercial use such as hotel, office, restaurant, or other business or rental use of the product, or service by anyone other than a Factory Service Center or other Authorized Servicer, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED



WARRANTY COVERAGE".

THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGE RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY.

(As examples, this excludes damages for lost time, travel to and from the servicer, loss of or damage to media or images, data or other memory or recorded content. The items listed are not exclusive, but for illustration only.)

ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Service Center. If the problem is not handled to your satisfaction, then write to the warrantor's Consumer Affairs Department.

PARTS AND SERVICE, WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY, ARE YOUR RESPONSIBILITY.

Length of Warranty

The above limited warranties extend for 12 months from the date the XPAND Infinity 3D Glasses are delivered to you as the original purchaser.

What You Must Do

You must inspect your XPAND Infinity 3D Glasses for damage before using them. If the XPAND Infinity 3D Glasses have been damaged in shipping, please return them immediately to the place of purchase for replacement.

To be eligible for warranty service, you must return the XPAND Infinity 3D Glasses within 12 months of purchase accompanied by proof of purchase to: ATTN: RMA Department, XPAND, 1017 Cole Ave, Los Angeles, CA 90038

Before returning the XPAND Infinity 3D Glasses for warranty repair, you must obtain a Return Material Authorization (RMA) number by contacting our Technical Support staff at rma@xpandcinema.com. Please pack the XPAND Infinity 3D Glasses carefully, showing the RMA# on the outside of the box. Prepay and insure them, because we are not responsible for them while en route to us. If you do not insure the XPAND Infinity Cinema 3D GLASSES, you assume the risk of loss or damage in transit. We will pay return shipping.

Other Conditions

The warranties set forth above are in lieu of all other implied and express warranties, whether oral or written. The agents, employees, distributors, and dealers of XPAND, are not authorized to make modifications to the warranties, nor are any additional warranties binding on XPAND.

Accordingly, additional statements such as dealer advertising or presentations, whether oral or written, do not constitute warranties by XPAND, and should not be relied upon as a warranty of XPAND.



Attention – Consult Accompanying Documentation

Important Safety Instructions

- » Read these instructions.
- » Keep these instructions.
- » Heed all warnings.
- » Follow all instructions.
- » Do not use this apparatus near water.
- » Clean only with dry cloth.
- » Only use the attachments/accessories included.

Battery



Replace Battery With Type CR2032 Only. Use of Another Battery May Present A Risk Of Fire Or Explosion.



WARNING, Battery May Explode If Mistreated. Do Not Recharge, Disassemble, Or Dispose of In Fire.



Dispose Of Used Battery Promptly. Keep Away From Children.

General Health And Safety Warning

Warning!

Carefully read and follow all warnings in the User's Guide to reduce health risks associated with viewing media in 3D. Before allowing a child to view 3D media, Parents or Guardians must read and follow the warnings and ensure that the child understands and follows the warnings.

May Cause Seizures

Some people have a condition that can cause them to experience seizures or lose consciousness momentarily while viewing certain kinds of flashing lights or patterns. These persons may have seizures while watching some kinds of television pictures or playing certain video or computer games. Persons who have not had any previous seizures may still have an undetected seizure condition.

If you or anyone in your family has experienced symptoms linked to a seizure condition, including experiencing seizures or a loss of awareness, consult your physician before viewing 3D media.

We recommend that Parents or Guardians observe their children while the children use 3D glasses. Discontinue use immediately and consult your physician if you or your child experience any of the following symptoms: dizziness, altered vision, eye or muscle twitching, involuntary movements, loss of awareness, unconsciousness, disorientation, or seizures. Do not use 3D glasses for extended periods of time.

May Cause Eye Fatigue

Some users have reported dizziness, headaches, or eye fatigue as a result of viewing media in 3D. Discontinue use if you or your child experience any of these conditions. Do not use 3D glasses for extended periods of time. Parents or Guardians should limit use by children to no more than a few hours per day.

Young Children

The vision of young children (especially children under the age of six) is still under development. Consult your doctor (such as a pediatrician or eye doctor) before allowing young children to watch 3D video images or play 3D video games. Parents or Guardians should supervise young children to ensure they follow these recommendations.

Choking Hazard: Keep Out of Reach of Small Children

Babies and young children could choke on small pieces associated with 3D glasses. Keep the 3D glasses out of reach of small children.

Stereoscopic Viewing May Cause a slight After-Effect in Your Vision

Your eyes change to accommodate viewing through stereoscopic glasses. Wait a few moments after you remove the 3D glasses for your eyesight to return to normal before resuming your regular activities.

Do Not Use 3D Glasses for other purposes than viewing 3D visual content

Do not wear 3D Glasses as sunglasses or safety glasses. Never wear 3D glasses while driving, swimming, or operating machinery. Do not use near staircases, ledges or balconies. You may risk falling during or after use.

Never use 3D glasses if you are tired, fatigued, or ill.

Specifications

- » Weight (Stereoscopic 3D Glasses): 1.76oz (50g)
- » Power Supply: Battery type CR2032; 3Vdc / 0.2A
- » Operating Temperature: 5 °C (41 °F) – 40 °C (104 °F)

For further information go to the XPAND web site at www.xpandvision.com



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