
**PARTS**
**AND**
**TOOLS**
**NEEDED**
☒ I/O-NXT Board  
(A-007228-xx)

☒ ESD wrist strap

**MODEL(S) AFFECTED**
**UNIT AFFECTED**
**THEME**
**ESTIMATED TIME**

36x, 55x

I/O board

any

5 min. per game

## Installing I/O-NXT

### Overview

This document details the installation of the new I/O-NXT™ board (A-007228-xx) on the Upright (55x) and Slant Top (36x) models.

The NXT I/O system provides the means of interfacing devices throughout the game and the CPU.

The I/O-NXT board supports the original complement of existing inputs/outputs (I/O), such as lamps, player panel buttons, bell, knocker, and key switches, and may be used as a drop in replacement for the current I/O system used in the field (A-18886-01).

No RAM Clear is required to install and run the new board.

**NOTICE:** Ensure all jumper settings are properly set prior to installing the I/O board.

**A** - Buffers

**B** - Progressive Port Jumpers Pulse/RS-232

**C** - Door Monitor Circuit

**D** - Option Switches

**E** - Fail LED

**J** - Coin Lock-Out Polarity Jumper

**F** - Serial Peripheral Network (SPN) Port

**G** - Custom Logic Device

**H** - Quad Universal Asynchronous Receiver/Transmitters UARTs (2)

**I** - Power LED Indicator

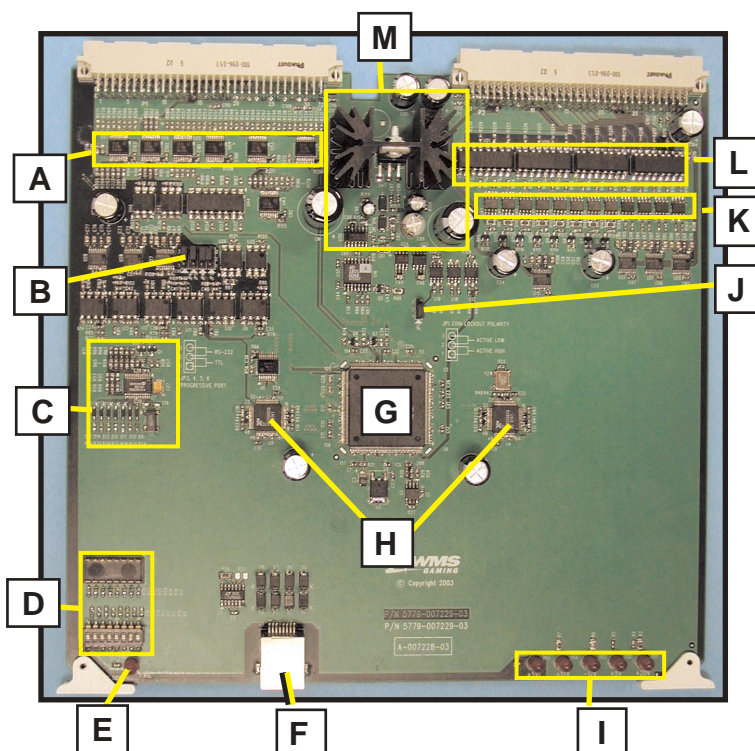
**K** - Lamp Matrix

**L** - Switch/Key Opto Isolators

**M** - Audio

The NXT I/O system has the following features:

- 8 serial ports
- Audio amplifier with multiple input options
- 16 game button inputs
- 4 key switch inputs
- SDSII interface
- 8x8 lamp matrix
- Door monitor circuitry
- Temperature sensor





## Preparing for Procedure

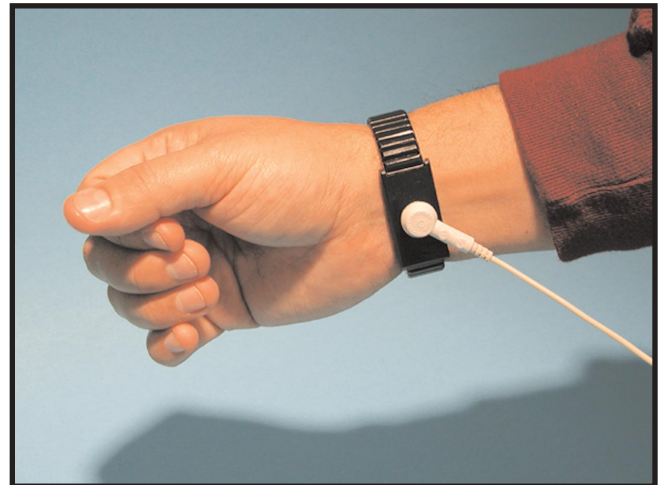


### ELECTROSTATIC DISCHARGE (ESD) WARNING

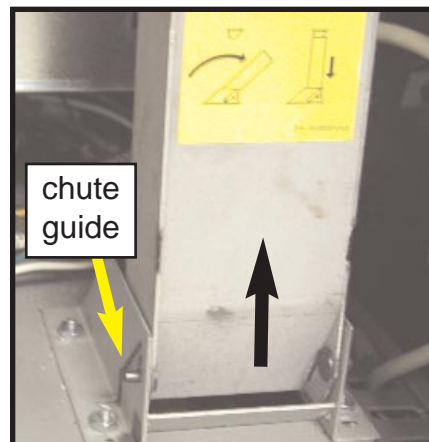
*Electrostatic discharge (ESD) damage causes complete and/or intermittent failures to video game components. Take all necessary precautions to avoid damage.*

Use the following anti-static steps before proceeding.

1. Fasten the ESD wrist strap on arm and ensure that it makes good skin contact, **Image 1**.
2. Connect the clip end of the strap to a ground point.
3. Unlock and open the Main Door.
4. Turn the game power to Off at the PDU.
5. On the 55x, remove the Coin Tray and Hopper. On the 36x, lift and slide the coin chute towards you, **Image 2**.



**Image 1.** ESD strap on arm.

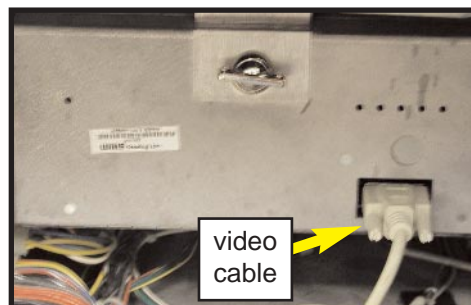
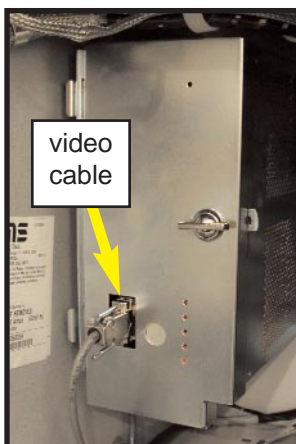


**Image 2.** (36x) Lift and slide the coin chute down the guide, leaning the chute towards you as shown on the label.

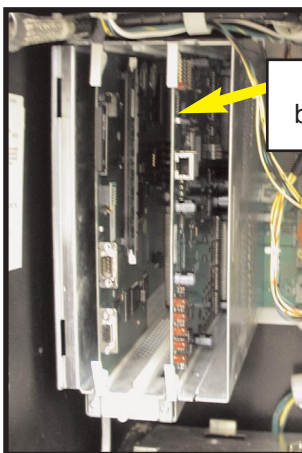


## Installing the I/O Board

6. Disconnect the video cable, **Image 3**.
7. Unlock and open the Card Cage.
8. Pulling on the white board ejector tabs, remove the existing I/O board.
9. Remove the I/O-NXT board from anti-static packaging, handling board around the edges. Avoid touching the traces or components.
10. On the 55x, install the I/O board in the right-most slot, **Image 4a**. On the 36x, install the I/O board in the top slot in the Card Cage, **Image 4b**. Ensure the I/O board is firmly seated.
11. Close and lock the Card Cage door.
12. Reconnect the video cable to the CPU board.
13. Turn the game power to On.
14. On the 55x, replace the Coin Tray and Hopper. On the 36x, lift and return the coin chute to its original position.
15. Close and lock the Main Door.
16. Unfasten the ESD wrist strap from arm and store in a clean and safe location.



**Image 3a** (left) and **3b**. Card Cage and video cable, 55x (left), and 36x.



**Image 4a** (left) and **4b**. CPU and I/O boards installed, 55x (left), and 36x.

END DOCUMENT