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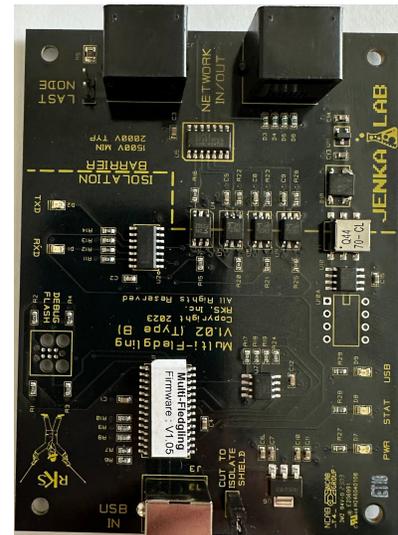
NAUTILUS GAME BOARD PINOUT
08 March 2024

Hardware Overview

The game kit requires the following component:

1. Jenka Lab Logic Board *(included)*
2. Jenka Lab I/O Board + USB cable *(included)*
3. RKS Multi Fledgling Board + USB cable *(included)*
4. USB Mouse (***required, not included***)
5. Serial Port extension board (***optional, not included***)
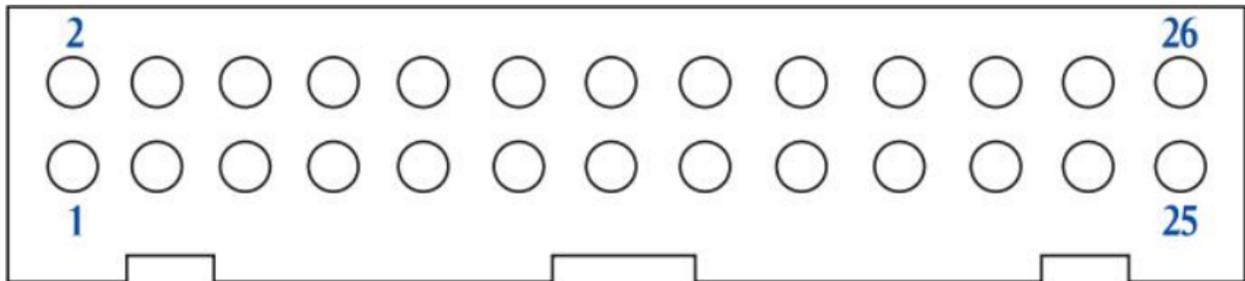6. RKS Print Station (***required, not included***)

Logic Board Pinout

PART SIDE	#	SOLDER SIDE
	1	
	2	
Speaker Right +	3	Speaker Right -
Speaker Left +	4	Speaker Left -
JOYSTICK DOWN	5	Speaker Left -
JOYSTICK UP	6	
JOYSTICK RIGHT	7	
JOYSTICK LEFT	8	
	9	
	10	PLAY Button
	11	
	12	Speaker Left +
	13	
Belly Door Sw	14	Logic Door Sw
	15	Main Door Sw
	16	TICKET Lamp
	17	
	18	
	19	
CLERK Menu Sw	20	ADMIN Menu Sw
	21	TICKET Button
	22	
Meter Total In	23	
	24	
	25	
	26	
	27	
Meter Total Out	28	
	29	
	30	
	31	PLAY Lamp
	32	
	33	
	34	
	35	
Speaker Right -	36	GROUND

Logic Board Pinout

PART SIDE		SOLDER SIDE
10 Pin Connector (Logic Board)		
PART SIDE		SOLDER SIDE
GROUND	1	GROUND
GROUND	2	GROUND
+5 V	3	+5 V
+5 V	4	+5 V
+12 V	5	+12 V
+12 V	6	+12 V
	7	
	8	
GROUND	9	GROUND
GROUND	10	GROUND

I/O Board Pinout

Each player station has the same pinout:

2	4	6	8	10	12	14	16	18	20	22	24	26
DOWN	LEFT	SHOOT					Bet Lamp			GND	GND	GND
UP	RIGHT	BET		COLLECT			Shoot Lamp			GND	GND	GND
1	3	5	7	9	11	13	15	17	19	21	23	25

COM Ports Connection

The game requires serial bill acceptor connection (MEI, Astro, ICT, JCM, ITL). There are 4 COM ports on the logic board which works for 4 players. The additional 4 bill acceptors are connected through USB-Serial extension board.

- COM1 - Bill Validator #1
- COM2 - Bill Validator #2
- COM3 - Bill Validator #3
- COM4 - Bill Validator #4
- *Optional*: Serial Extension Port 1 - Bill Validator #5
- *Optional*: Serial Extension Port 2 - Bill Validator #6
- *Optional*: Serial Extension Port 3 - Bill Validator #7
- *Optional*: Serial Extension Port 4 - Bill Validator #8

Sound

Use 3.5mm Audio Jack with speaker system OR connect passive speakers through the 36-pin harness.

Dual Screen Setup

The logic board will run the game on 2 screens automatically, when 2 HDMI screens are detected:

- Digital-1: Left Screen
- Digital-2: Right Screen

Board Setup

The settings must be set on the initial start. Once you save the settings, the game requires Factory Reset to change them.

USB Mouse is required to use the service menu since the game doesn't have a touch screen.

The Fledgling uses the setting "MACHINE NUMBER" and it will be the number of the 1st player station. The additional numbers will be added to this value based on the number of players settings. For 4-players the Fledgling will handle terminals 1 through 4.

The Fledgling connection to the RKS print station is standard, through CAT5 cable with daisy-chain capability.

Notable Settings:

- **Machine Number**: RKS Fledgling terminal number for the 1st station
- **Payout**: High - high payout / low hold; Very Low - lowest payout / highest hold
- **Denom**: cost of 1 bullet
- **Num Players**: number of player stations 1 - 8
- **Fence Bullets**: bullets reflect when hit edges
- **Auto Play**: laser auto weapon
- **Stand Up**: show all players at the bottom (up to 4 per screen)

Verify all the settings before hitting the Save button during initial setup!

Remote Crediting with RKS Ciao Baby unit

The game supports remote crediting from RKS Ciao Baby unit (turn on DIP Switch #1 Pin 8 on the Mother Goose unit to enable). The regular credits will be accounted as "REMOTE CREDITS" and the promo credits will be accounted as "PROMO CREDITS".

Contact RKS for more information about their products.

Single-Player Standup Machine

The game supports single player standup cabinets as displayed on this image:

Here's the process to set it up:

1. In the machine Settings menu, use **DISPLAY ORIENTATION** button to select **Vertical Screen** layout for the game. The machine will reboot after changing this option.
2. In the machine Settings, select Number of Players to 1
3. In the machine Settings on the Terminals tab, select the bill acceptor and printer device for Terminal 1.

COM Port Diagram for Single-Player Standup:

- **COM1** - Serial Bill Acceptor (USB won't work yet)
- **COM2** - Serial Touch Screen (USB Touch works fine as well)
- **COM3** - SAS
- **COM4** - Serial Printer (USB won't work)