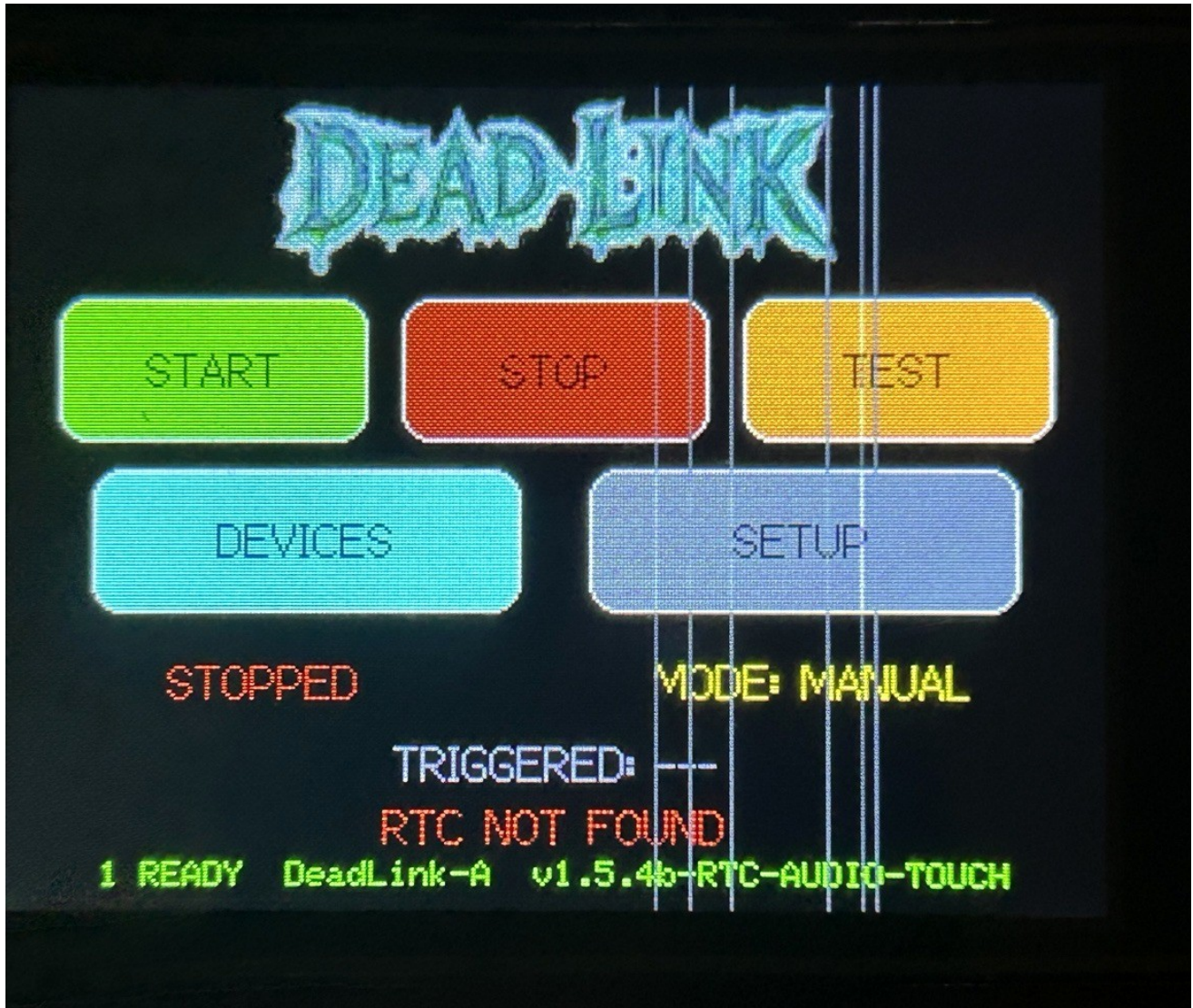


DEAD LINK

Wireless Trigger Master

Operating Manual & Screen Guide



Napier Family Lights

Draft manual based on the current Dead Link CYD interface

Before You Begin

About the screen photos: The photographs in this manual were taken from a test CYD with a damaged display. The vertical lines visible in some images are a hardware defect in that test screen and are not part of the Dead Link interface.

This guide is intended to help an operator run the Dead Link master, confirm receiver status, select operating modes, and configure supported device types. Menu names and values shown in the photos reflect the current test firmware and may change as the firmware is updated.

32 GB microSD Card Required

A 32 GB microSD card must be installed in the CYD master for settings that are stored on the master to be retained. This includes saved timing values and other configuration data used by supported device types. Install the microSD card before configuring the system so changes can be saved normally.

If the microSD card is missing or cannot be read, some settings may appear to work during the current session but may not be retained after a restart or power loss.

Manual Layout

- Part 1 - Quick Start: normal startup and basic operation.
- Part 2 - Screen Guide: each photographed CYD screen explained in plain language.
- Part 3 - Device Types: what Standard, Fog, DMX, Maestro, Timed, and Audio are for.
- Part 4 - Troubleshooting: common status messages and recovery steps.

Screen Map

MAIN CONTROL	DEVICES	DEVICE TYPE / SETTINGS
MAIN CONTROL	SETUP	MODE / DATE-TIME / RESET
DEVICE TYPE	AUDIO / DMX / TIMED	TYPE-SPECIFIC CONTROLS

Part 1 - Quick Start

Normal Startup

- 1. Power the master and receivers.** Allow the system a short time to boot and reconnect.
- 2. Open DEVICES.** Confirm the receivers you plan to use show ONLINE. EMPTY means no receiver is assigned to that slot.
- 3. Check SETUP.** Select Manual, Random, or Sequential mode and adjust the automatic trigger interval if needed.
- 4. Return to the Main screen.** Verify the ready count and current mode.
- 5. Press START.** The master begins operation using the selected mode.
- 6. Press STOP to halt operation.** Use STOP before making major configuration changes.

Quick check: If a prop does not fire, first open DEVICES and confirm that its receiver is ONLINE before changing the master settings.

Main Controls at a Glance

Control	Purpose
START	Begin operation in the selected mode.
STOP	Stop the active sequence or automatic operation.
TEST	Quick system/device test function.
DEVICES	View receiver slots, status, and per-device settings.
SETUP	Mode, trigger interval, date/time, and reset controls.

Part 2 - Screen Guide

The following pages use the actual test-screen photographs. Each page explains the controls visible on that screen.

Screen 1 - Main Control

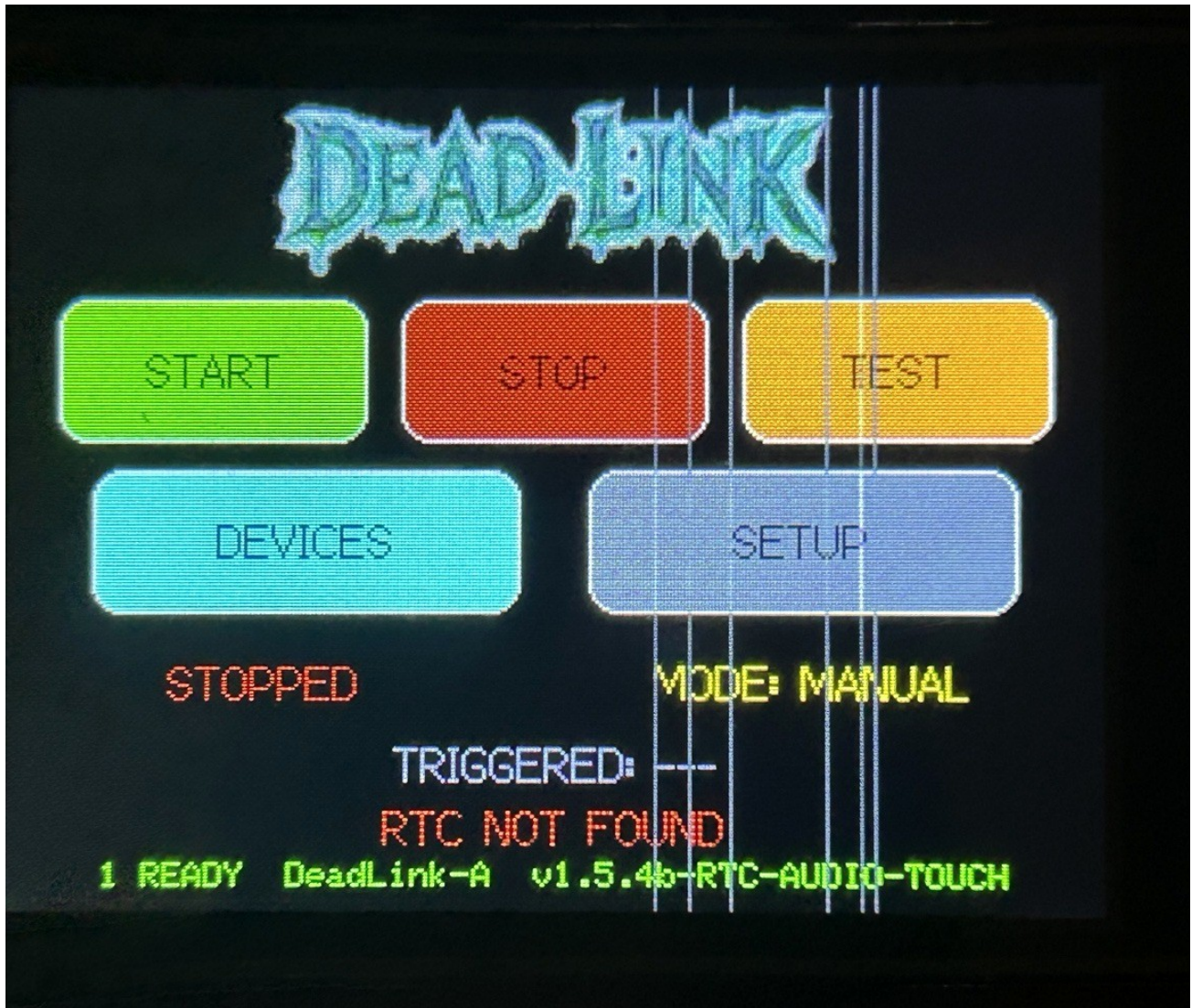


Figure 1. Actual CYD test-screen photograph.

What it does: The normal operating screen for the Dead Link master.

START: Begins operation using the currently selected mode.

STOP: Stops the active run or automatic sequence.

TEST: Runs a quick test function.

DEVICES: Opens the receiver list.

SETUP: Opens the master configuration screens.

Status area: Shows STOPPED/RUNNING state, current mode, triggered device, RTC status, ready count, master name, and firmware version.

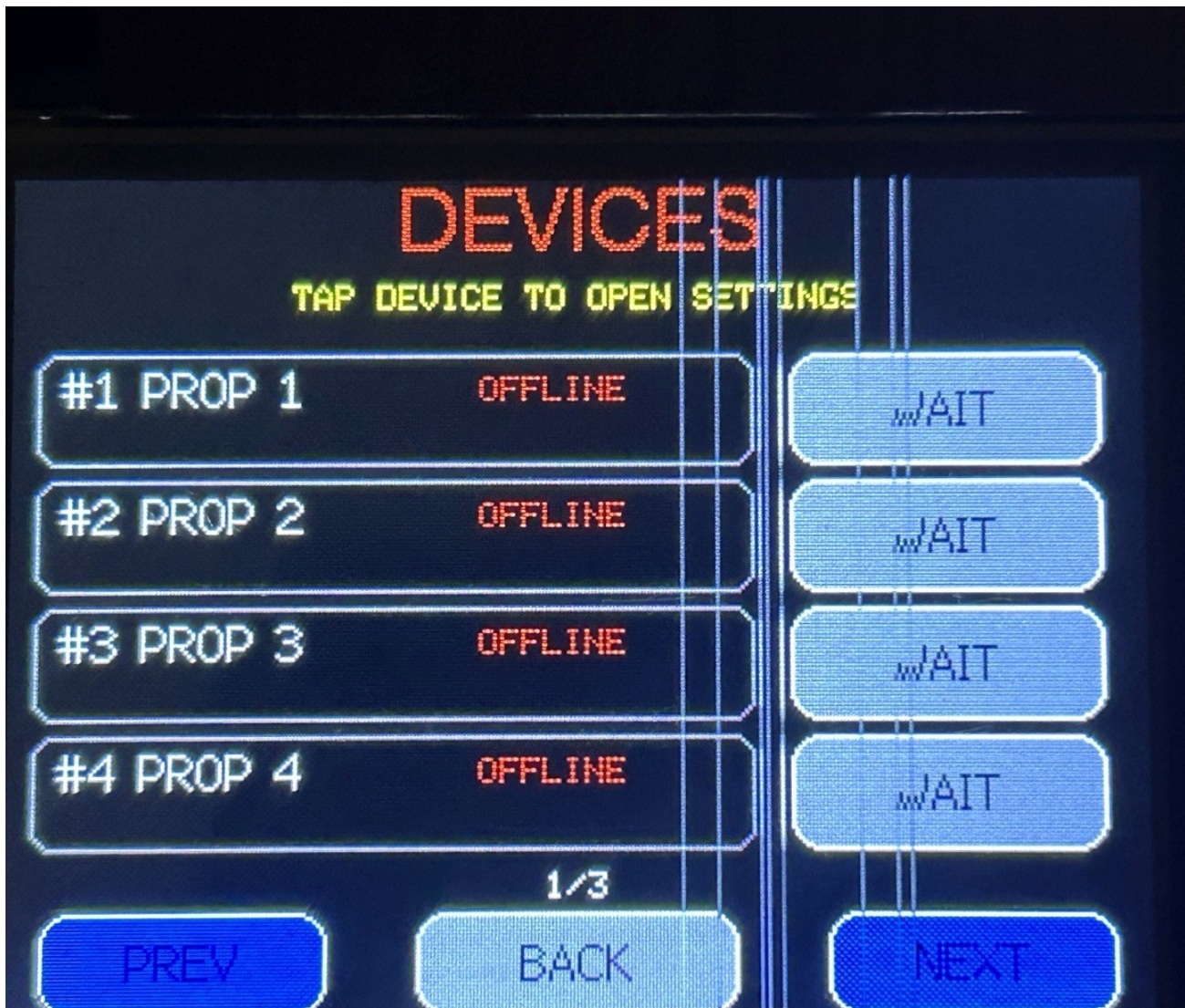


Figure 2. Actual CYD test-screen photograph.

Purpose: Shows Props 1-4 and their receiver states.

ONLINE: The receiver is currently communicating with the master.

OFFLINE: The slot is assigned, but the receiver is not currently communicating.

WAIT / action area: The right-side button/status area changes according to the receiver state and current firmware behavior.

Tap a device row: Opens the settings for that device position.

PREV / NEXT: Moves between device pages.

BACK: Returns to the Main screen.

Screen 3 - Device Type: Standard Selected

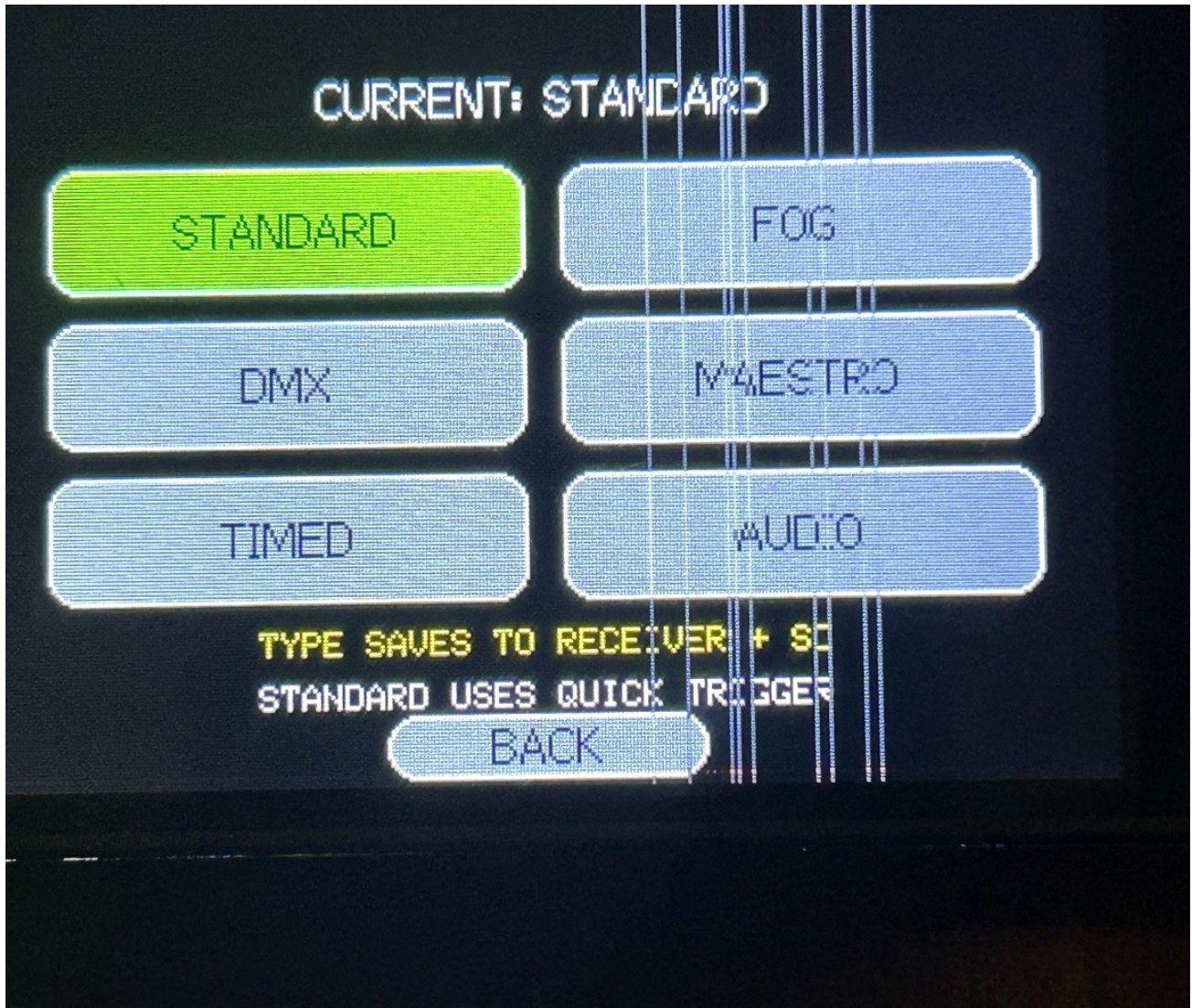


Figure 3. Actual CYD test-screen photograph.

Purpose: Assigns the operating type used by a receiver/device slot.

STANDARD: Normal quick-trigger prop operation.

FOG: Fog-machine style timed control.

DMX: DMX command output settings.

MAESTRO: Settings intended for a Maestro-based device.

TIMED: Delay/run timing operation.

AUDIO: Dead Link audio-player receiver.

Important: The selected type is saved for the receiver/device slot. Standard is the normal choice for simple dry-contact prop triggers.

Screen 4 - Device Type: Audio Selected

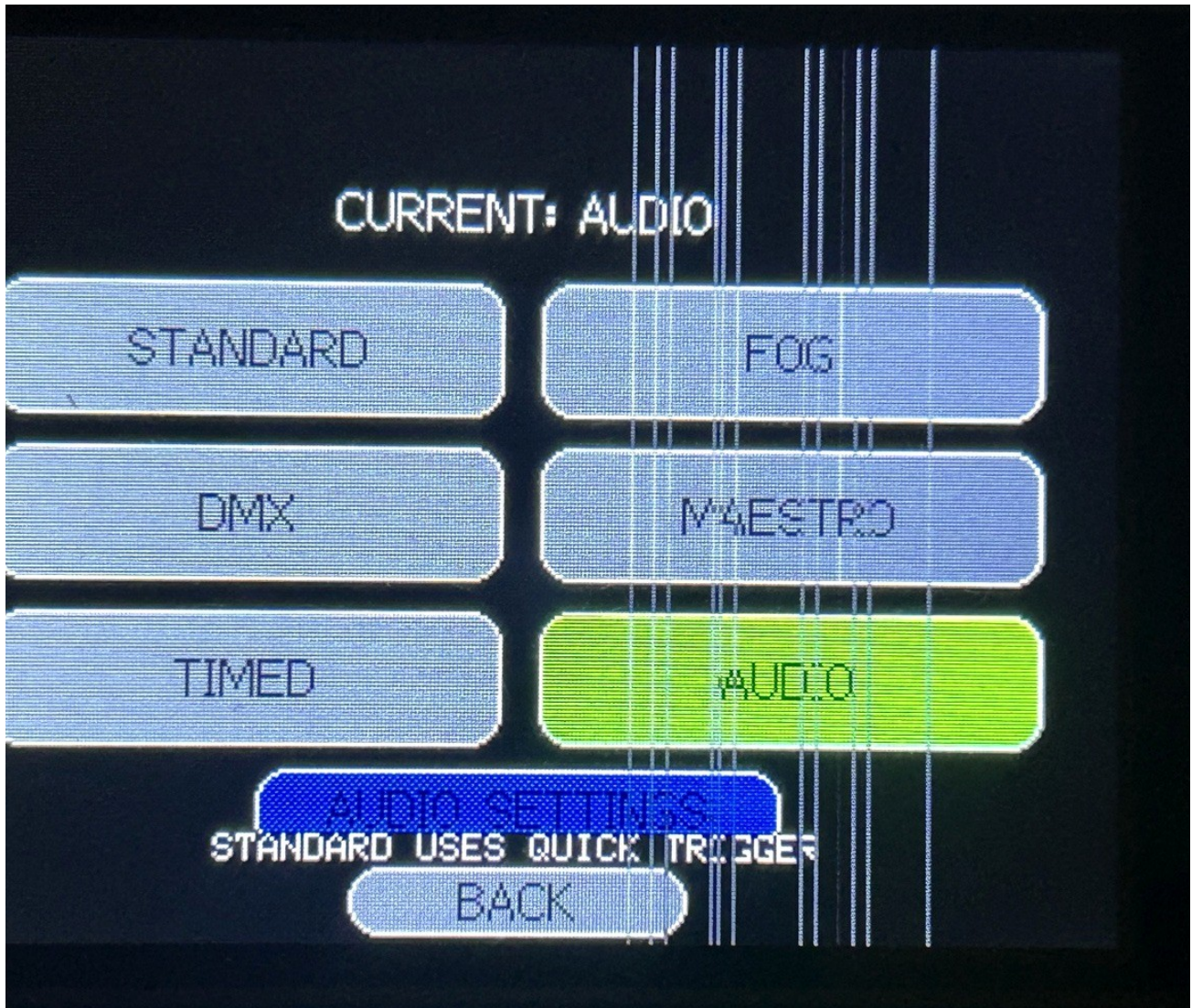


Figure 4. Actual CYD test-screen photograph.

Purpose: Same device-type menu with AUDIO selected.

AUDIO selected: The receiver/device slot is configured for audio playback control.

AUDIO SETTINGS: Opens track, volume, loop, play, and stop controls.

BACK: Returns to the previous device screen.

Screen 5 - Audio Settings

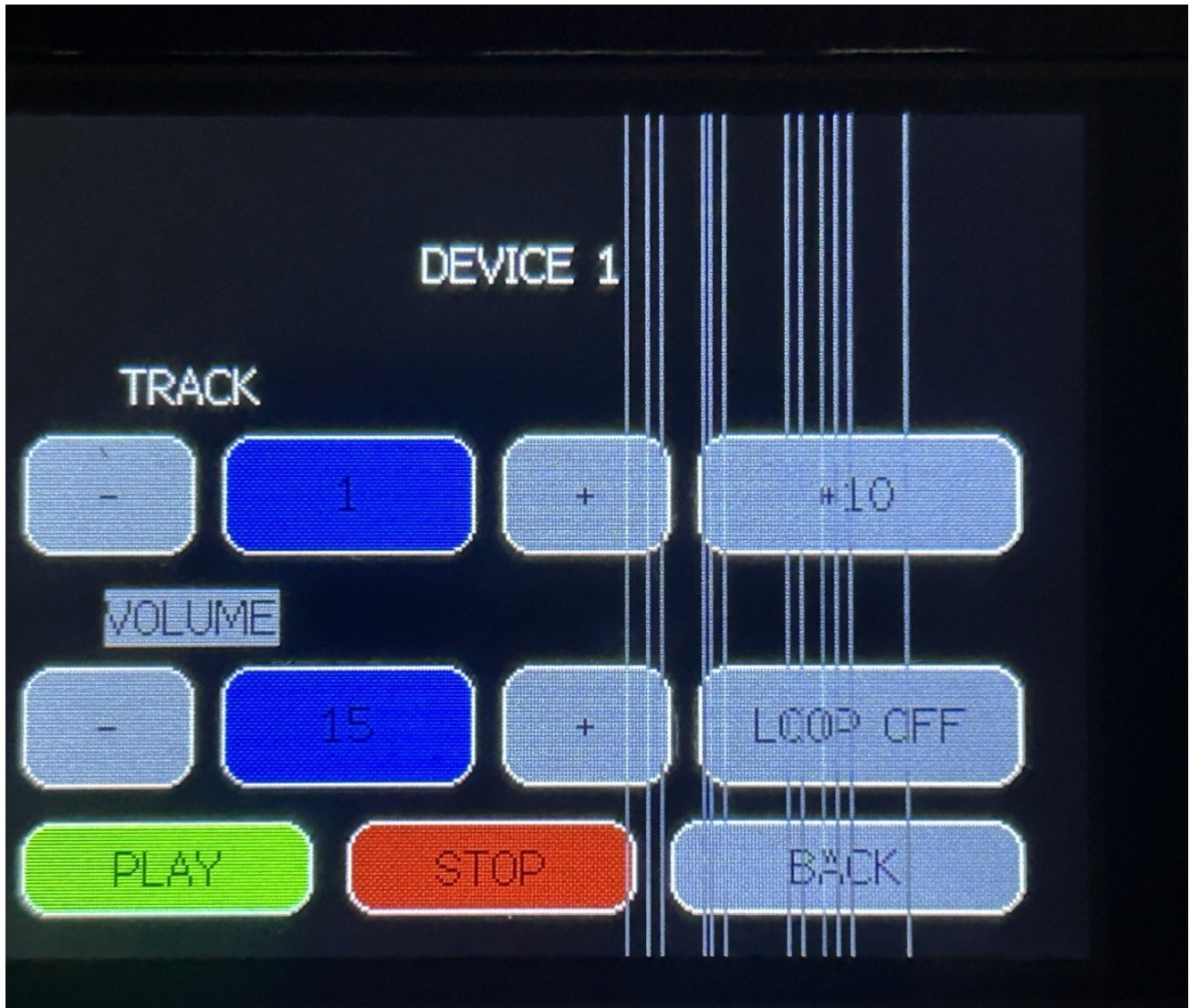


Figure 5. Actual CYD test-screen photograph.

TRACK: Use - and + to select the audio track number.

VOLUME: Use - and + to adjust playback volume.

LOOP: Turns repeating playback on or off.

PLAY: Starts the selected track.

STOP: Stops playback.

BACK: Returns to the Audio device settings screen.

Screen 6 - Timed Cycle Settings

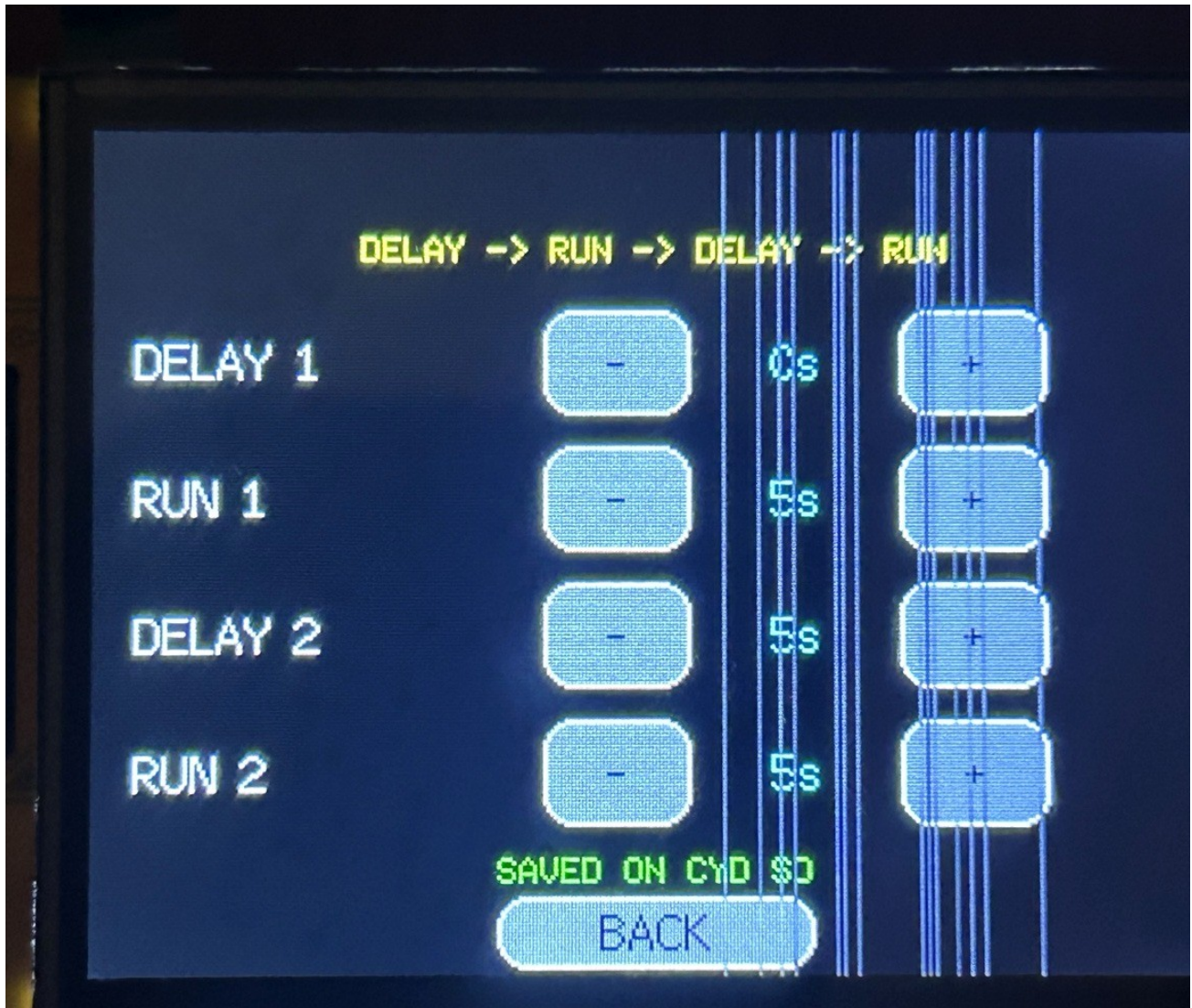


Figure 6. Actual CYD test-screen photograph.

Pattern: DELAY -> RUN -> DELAY -> RUN.

DELAY 1: Wait time before the first output period.

RUN 1: Length of the first output period.

DELAY 2: Wait time before the second output period.

RUN 2: Length of the second output period.

Storage: These values are saved on the CYD microSD card. A 32 GB microSD card is required for the master to retain these settings.

Use case: Useful for repeating equipment cycles that need separate on/off timing windows.

Screen 7 - DMX Settings

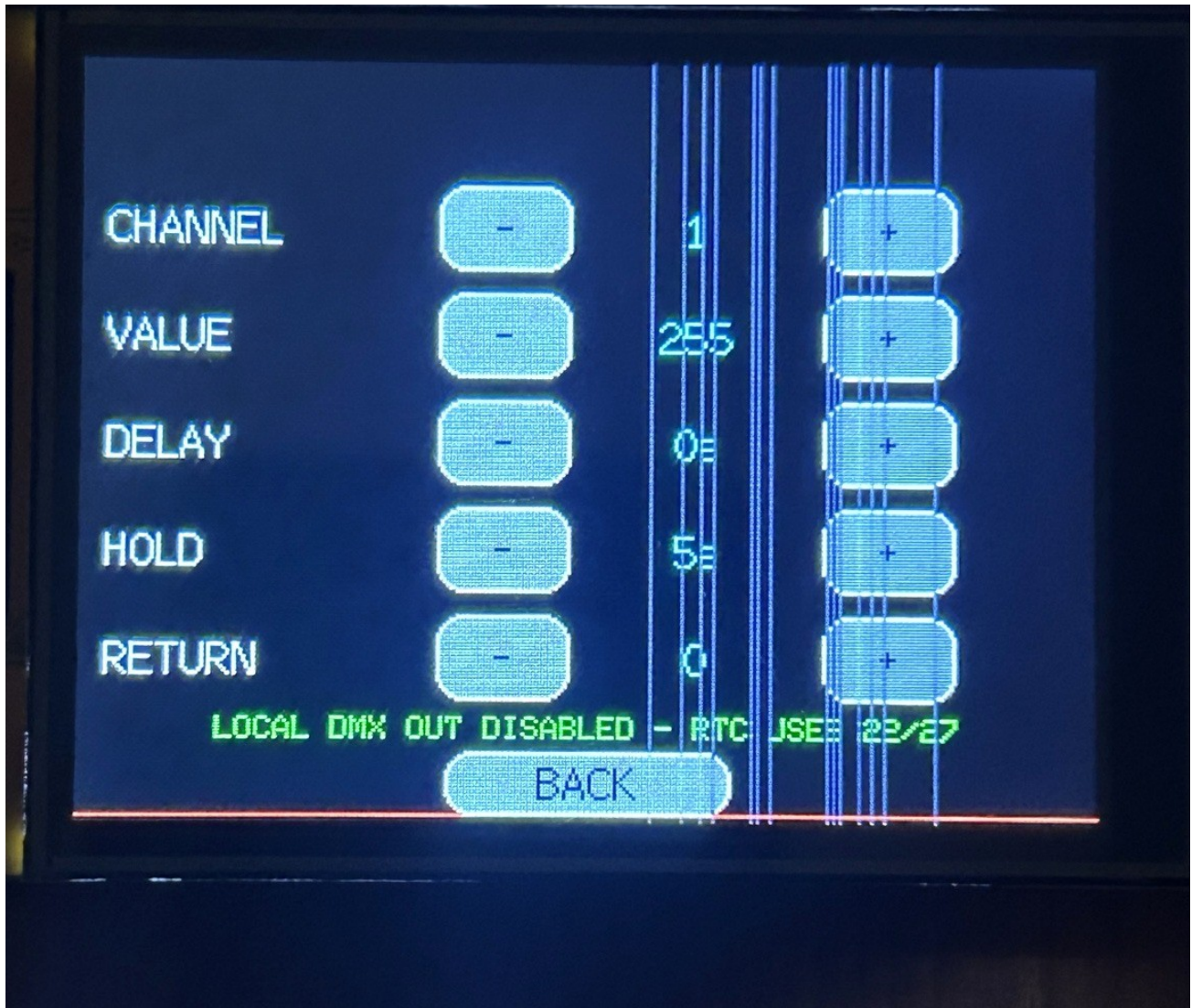


Figure 7. Actual CYD test-screen photograph.

CHANNEL: Selects the DMX channel.

VALUE: Sets the DMX value sent to that channel.

DELAY: Wait time before applying the DMX command.

HOLD: How long the selected value remains active.

RETURN: Value sent after the hold period.

Status line: Displays the local DMX output status and RTC-related information.

BACK: Returns to the previous screen.

Screen 8 - Timed Output / Hold Settings

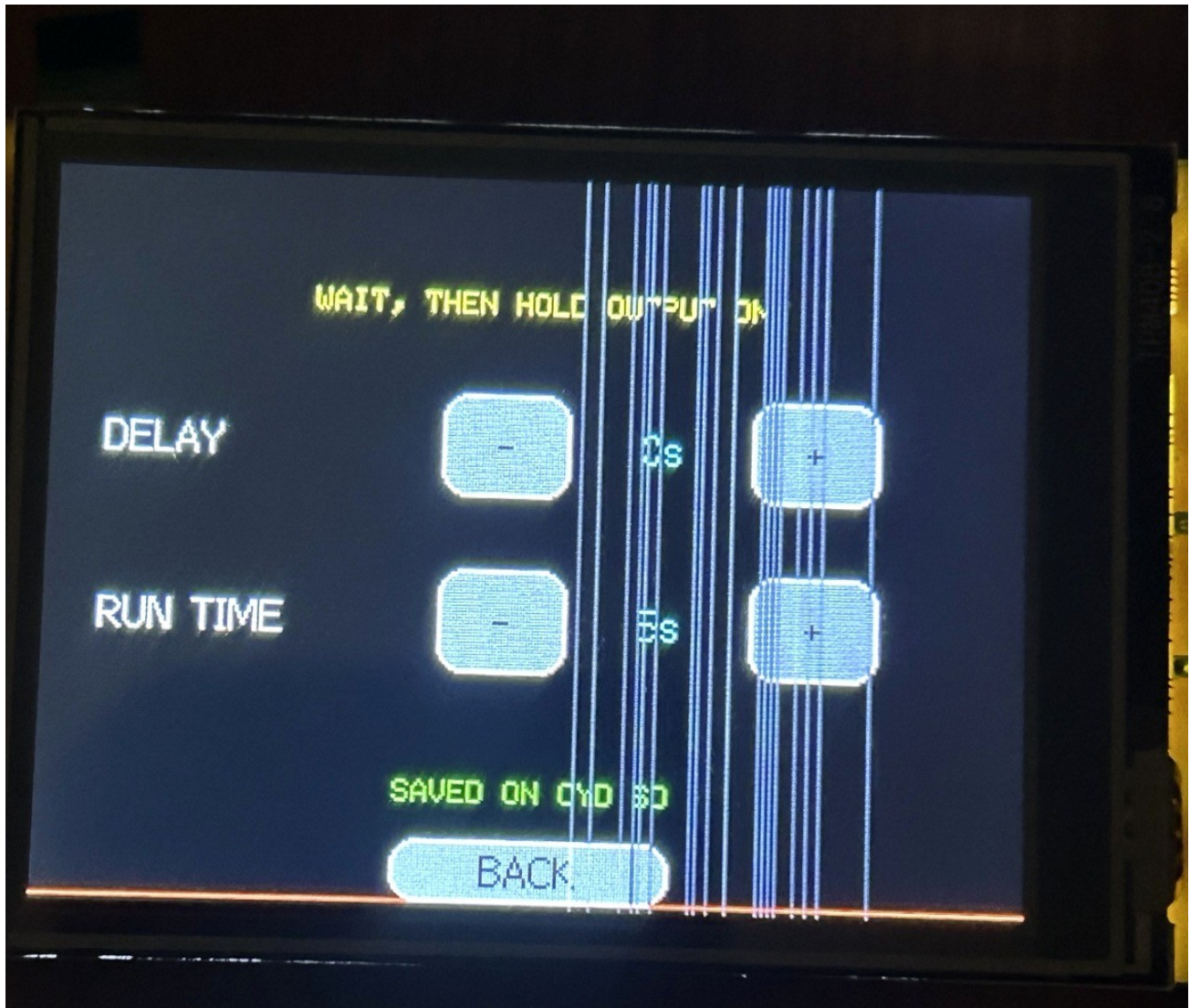


Figure 8. Actual CYD test-screen photograph.

Purpose: Runs a simple wait-then-on timer.

DELAY: How long Dead Link waits before turning the output on.

RUN TIME: How long the output remains active.

Sequence: Wait -> output ON -> hold for Run Time -> output OFF.

Storage: This timing is saved on the CYD microSD card. A 32 GB microSD card is required for the master to retain these settings.

Use case: Useful for fog, relays, and other devices that must remain active for a defined duration.



Figure 9. Actual CYD test-screen photograph.

Purpose: Shows Props 5-8.

ONLINE: An assigned receiver is connected.

EMPTY: No receiver is currently assigned to that device slot.

Action area: The right-side button/status area reflects the state of the slot.

PREV / NEXT: Move between pages 1, 2, and 3.

BACK: Return to the Main screen.



Figure 10. Actual CYD test-screen photograph.

Purpose: Shows Props 9-10, completing the ten available device positions.

EMPTY: The shown slots have no receiver assignment.

PREV: Returns to the previous device page.

NEXT: Cycles navigation according to the current firmware.

BACK: Returns to the Main screen.

Screen 11 - Setup

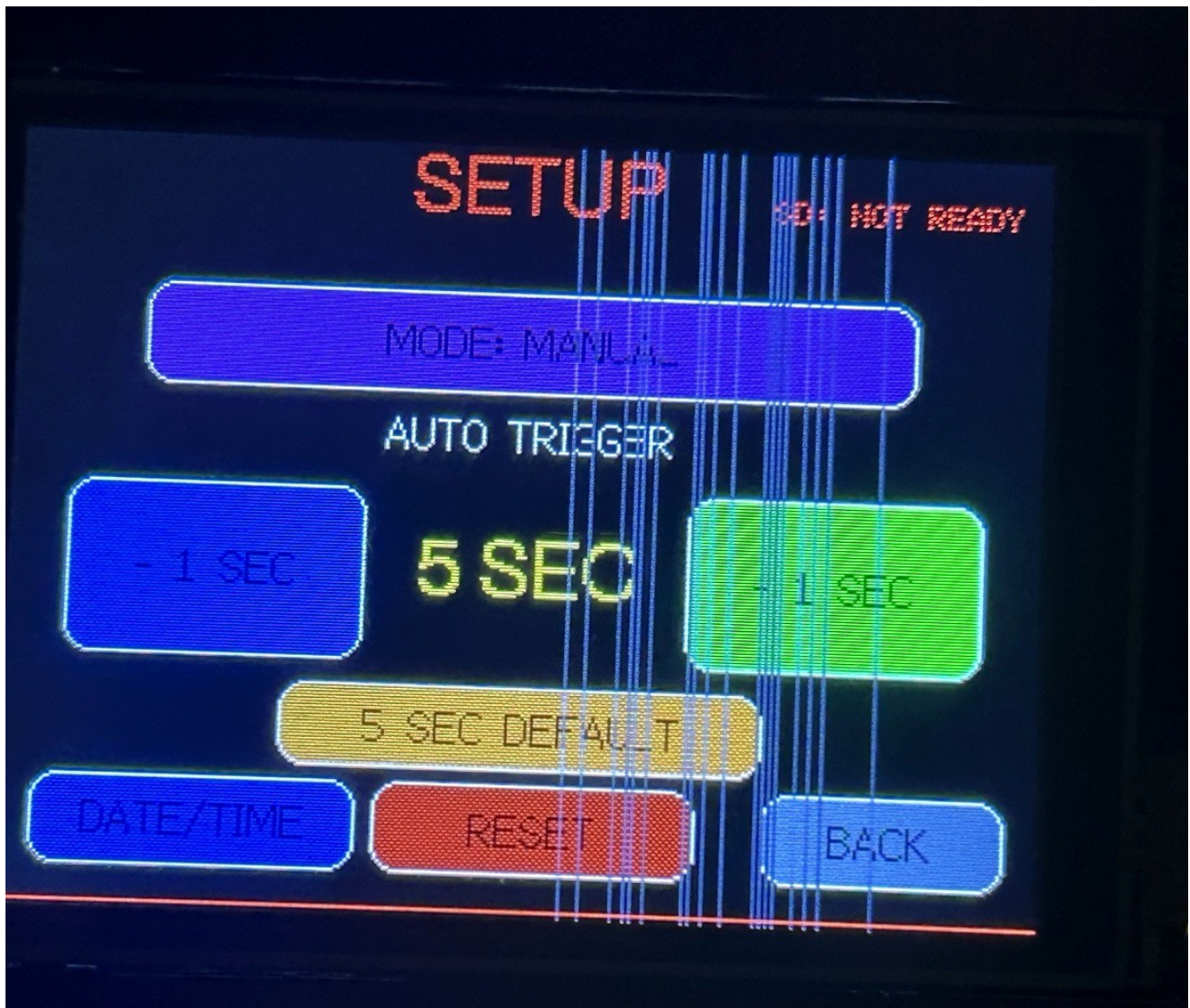


Figure 11. Actual CYD test-screen photograph.

MODE: Shows the current operating mode and opens the mode selector.

AUTO TRIGGER: Shows the current automatic trigger interval.

-1 SEC / +1 SEC: Decrease or increase the trigger interval in one-second steps.

5 SEC DEFAULT: Returns the interval to the five-second default.

DATE/TIME: Opens RTC/date-time setup.

RESET: Opens the receiver-assignment reset confirmation.

BACK: Returns to Main.

Screen 12 - Select Mode

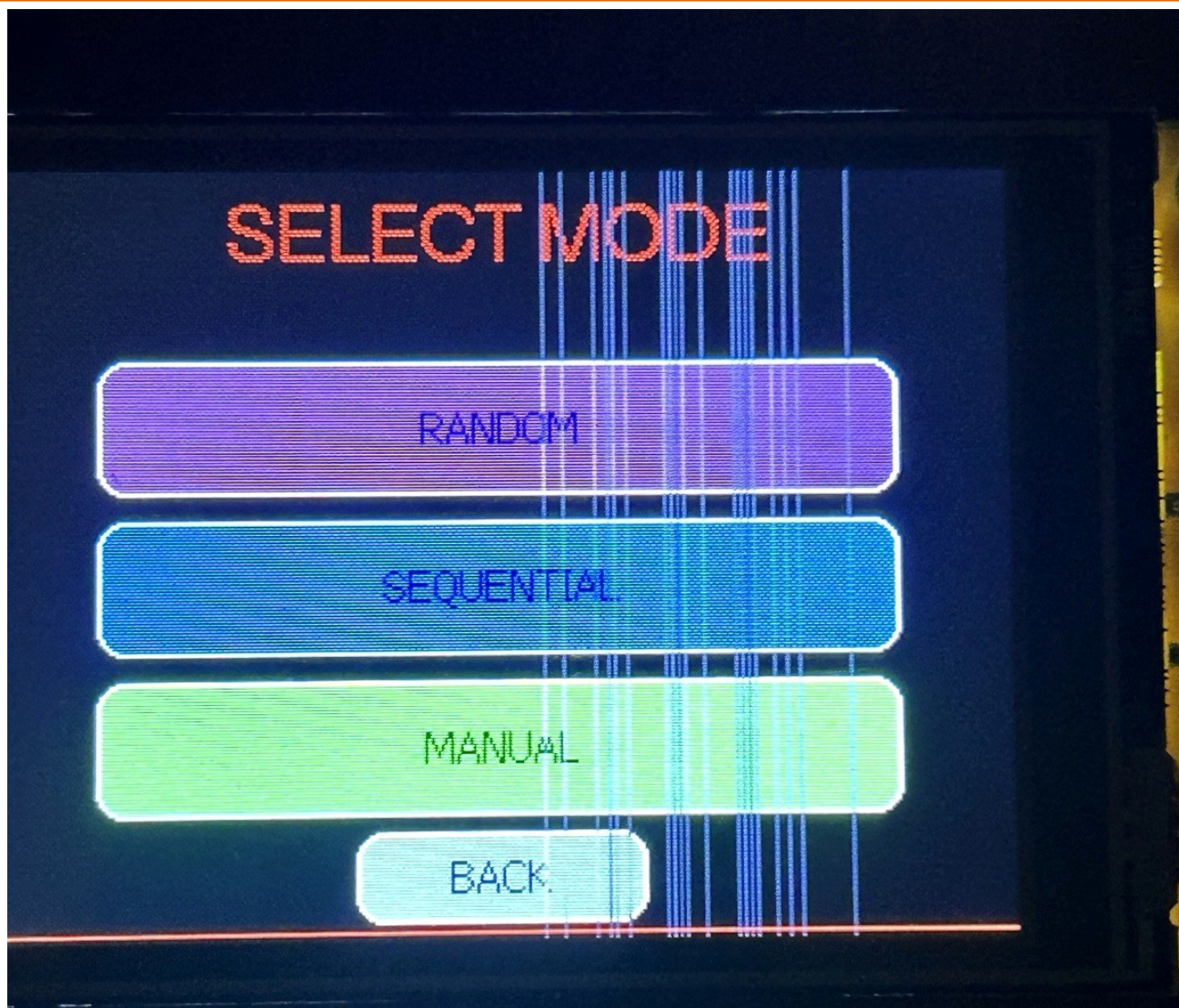


Figure 12. Actual CYD test-screen photograph.

RANDOM: Automatically selects devices in a non-fixed order.

SEQUENTIAL: Triggers devices in order.

MANUAL: Leaves triggering under direct operator control.

BACK: Returns to Setup after selecting the desired mode.

Screen 13 - Date / Time Setup

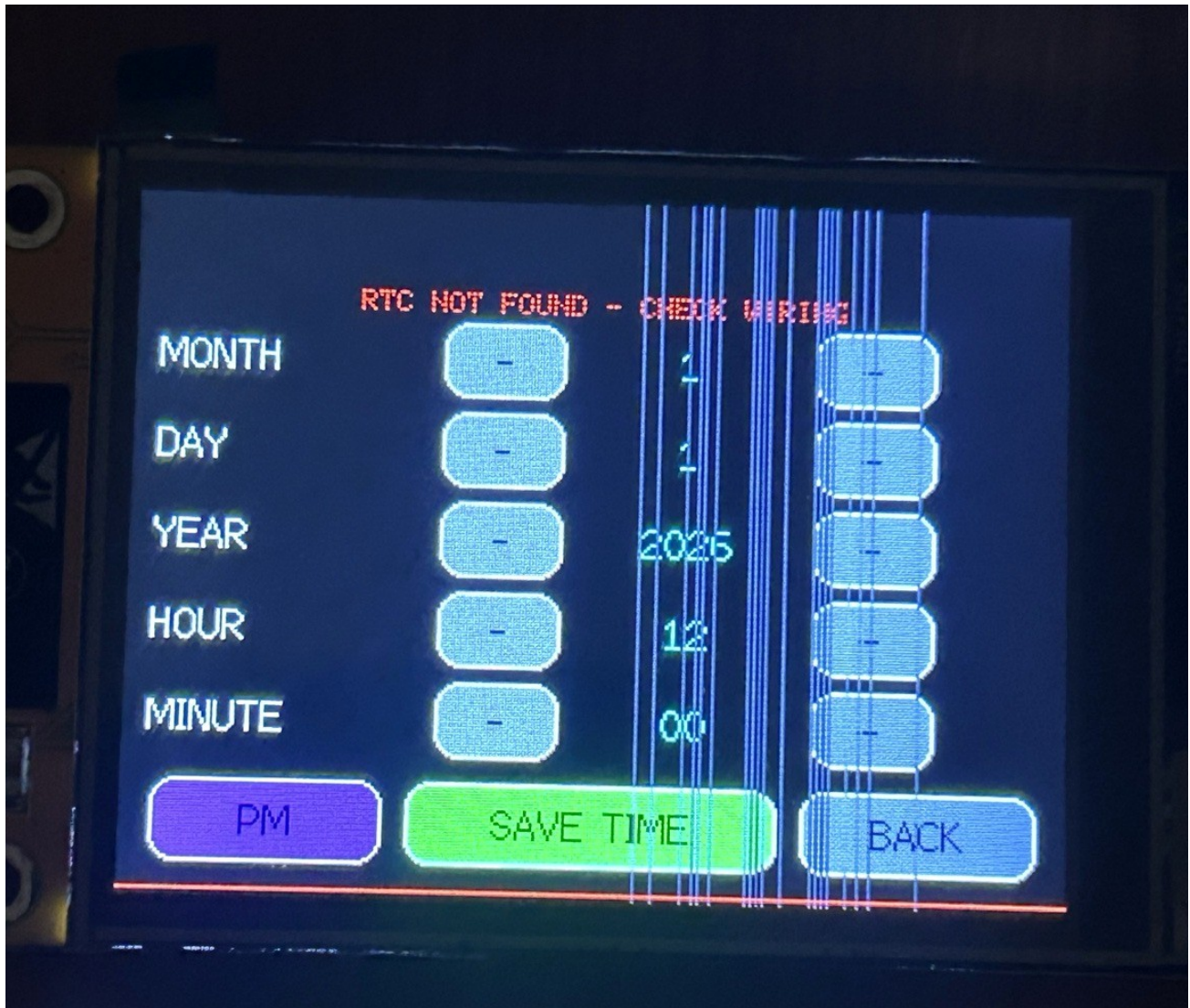


Figure 13. Actual CYD test-screen photograph.

Fields: Month, Day, Year, Hour, Minute, and AM/PM can be adjusted with - and + controls.

SAVE TIME: Writes the entered time to the RTC when the RTC is available.

RTC NOT FOUND - CHECK WIRING: The master is not communicating with the real-time-clock module.

BACK: Returns to Setup.

Screen 14 - Reset Props Confirmation

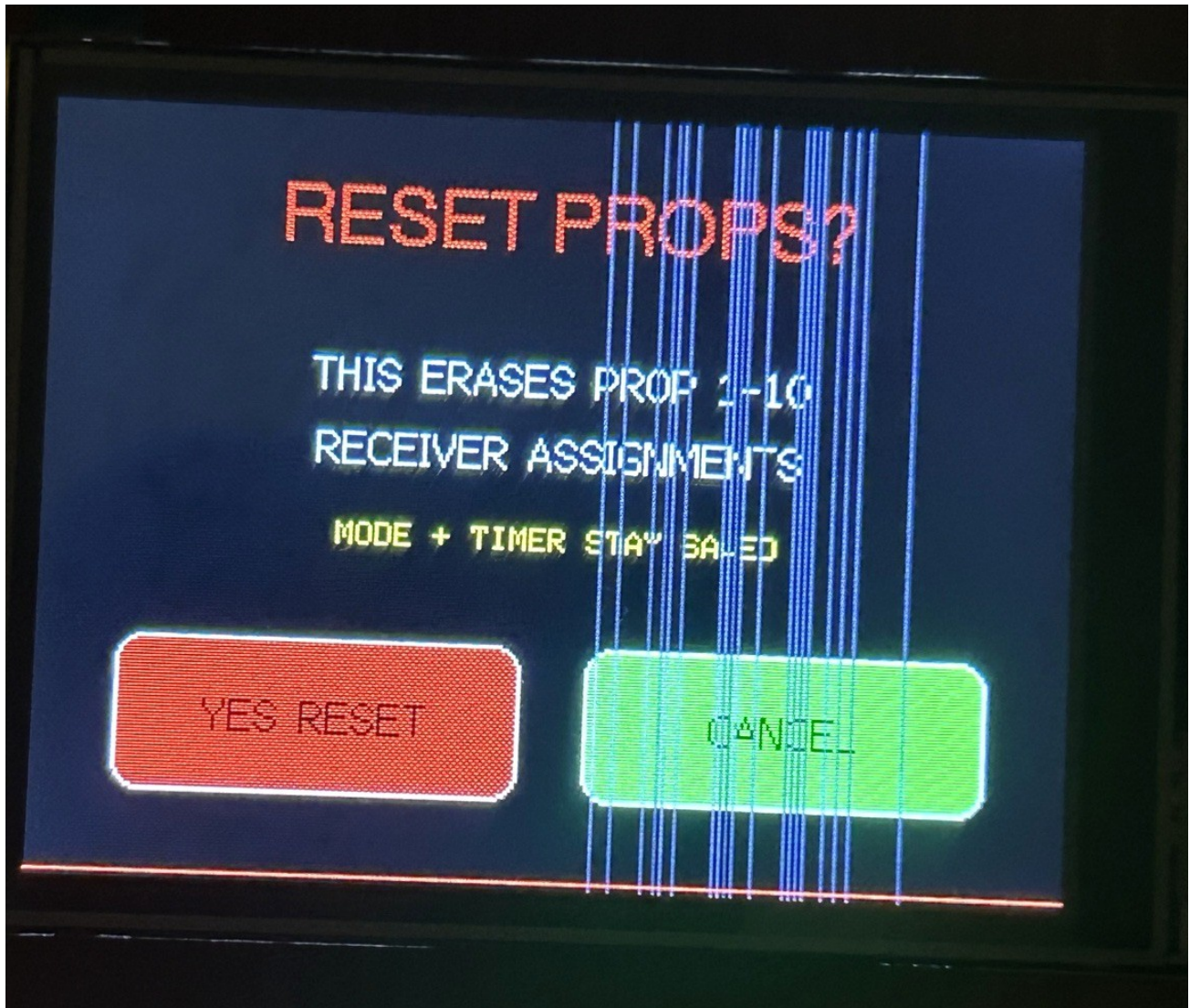


Figure 14. Actual CYD test-screen photograph.

Purpose: Prevents accidental removal of receiver assignments.

YES RESET: Erases receiver assignments for Props 1-10.

CANCEL: Leaves the assignments unchanged.

Retained settings: The screen states that mode and timer settings stay saved.

Important: Use this only when intentionally rebuilding or reassigning the receiver list.

Part 3 - Device Types

Dead Link uses the device type to decide what kind of control behavior and settings are available for a receiver slot.

Type	Typical Use	Control Style
Standard	Normal Halloween prop trigger input	Quick trigger / dry-contact style activation
Fog	Fog machine or timed effect	Delay and run-time control
DMX	Lighting/effect devices	Channel, value, delay, hold, return
Maestro	Pololu Maestro controlled motion/effects	Maestro-specific command/trigger workflow
Timed	Equipment requiring repeat timing	Delay 1 / Run 1 / Delay 2 / Run 2
Audio	Dead Link audio receiver / player	Track, volume, loop, play, stop

Tip: For a normal prop that only needs a quick activation signal, start with STANDARD. Use one of the specialized types only when the connected device needs that additional control behavior.

Part 4 - Troubleshooting

Receiver shows OFFLINE

Confirm the receiver is powered. Check that the receiver is within Wi-Fi range and that it is configured for the correct Dead Link master/network. Power-cycle the receiver if needed, then recheck DEVICES.

Device slot shows EMPTY

No receiver is assigned to that position. Assign or pair a receiver before expecting the slot to trigger.

RTC NOT FOUND - CHECK WIRING

The CYD cannot communicate with the RTC module. Check RTC power, ground, and the two signal connections before attempting to save the time.

Prop does not trigger but receiver is ONLINE

Use the device TEST/trigger function. Check the wiring between the Dead Link receiver and the prop trigger input. Verify the correct device type is selected.

Audio receiver responds but no sound plays

Check track selection, volume, speaker/amplifier connection, and that the expected audio files are present and named correctly on the audio module media.

Unexpected behavior after configuration changes

Press STOP, return to the device/setup screen, confirm the saved values, then restart operation. If rebuilding assignments, use RESET only when intentionally clearing all Prop 1-10 receiver assignments.

Settings do not save after power loss

Check that a 32 GB microSD card is installed in the CYD master and is being recognized. The microSD card is required for settings stored by the master, including timing and other configuration data, to be retained between power cycles.

Recommended Operator Check Before a Show

- Master powers up normally.
- Expected receivers show ONLINE.
- Correct mode is selected.
- Automatic trigger interval is correct for the show.
- Audio track/volume settings are verified if audio is used.
- Fog/timed/DMX values are tested before unattended operation.
- 32 GB microSD card is installed and settings save correctly after a restart.
- STOP button is confirmed to work before the show begins.

Safety note: Dead Link controls connected equipment; it does not replace the safety controls built into props, fog machines, lighting equipment, power distribution, or emergency shutoff systems. Operate connected equipment within the manufacturer's ratings and instructions.

DEAD LINK

Wireless Trigger Master

Props. People. More Fear.

Napier Family Lights

This manual is a working document for the current Dead Link test firmware and can be updated as features are added.