Pudding Screen

User’s Guide

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# Change Record

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Changes | By |
| 1.0 | **4/7/2016** | Original Version | Hunter Russ |

# Welcome to Pudding

Pudding is an interactive mirror that allows you to view the time, the weather, and news headlines – all while still acting as a mirror. This convenient display requires little-to-no input and (after initial setup) determines when to display information based on your movement. This creates a state-of-the-art experience that blends in perfectly with your home.

# Platform

Pudding is run on a Raspberry Pi 1 Model B (some models use the newer Raspberry Pi 3) running a modified version of the Raspbian operating system. Upon boot, Pudding loads the Midori browser that automatically loads a page that is locally hosted on a LAMP server. The LAMP server allows Pudding to run JavaScript and save information about the user as needed. The software is written in a combination of HTML, CSS, JavaScript, and PHP.

Upon plugging in the Pudding, the internal computer will automatically boot and search for either a wired internet connection or an open wireless internet connection. Upon securing an internet connection, the Pudding will boot to the configuration page so that the user may properly set up aspects of the Pudding.

# Definitions

* Pudding – the Smart mirror you are using, that displays the weather, time, news, and images and text, while also being a mirror
* Wi-Fi- wireless internet access
* IP address-a unique serial number to your devise
* QR code-a series of pixel squares that make an image able to be scanned from a smart phone
* motion sensor-a feature installed into the hardware that detects motion in front of Pudding
* RSS feeds-a feed of current information being taken from a website

# Getting Started

All necessary software has been pre-installed on Pudding. To properly control Pudding (after first-time setup), the user must synchronize their phone with the mirror to be able to change settings and interact with the mirror.

Step 0: If using a wired internet connection, connect the internal computer to your router using an Ethernet cable.

Step 1: Plug the Pudding into the nearest wall outlet.

Step 2: If using a wireless internet connection, the user will be prompted for Wi-Fi information. This must be entered using a USB keyboard (not included).

Step 3: The Pudding will then begin the setup procedure.

Step 4: The Pudding will display the internal IP address of the system, and display a QR code so the mobile app to control the Pudding can be downloaded.

Step 5: Using your now-synchronized mobile device, follow all prompts from the Pudding to finish setup procedure.

Step 6: Enjoy!

# User’s Manual

## Phone Sync

1. After downloading the Remote software on your mobile device (*Getting Started - Step 4*), run the app.
2. In the top-right corner of your mobile device, tap "Add".
3. To add your new Pudding, enter "Pudding" next to "Name".
4. Next to "Host" enter the internal IP address that was displayed in *Getting Started - Step 4*.
5. Tap "Save" in the top-right corner of your mobile device.
6. To control the Pudding, tap "Pudding" on the main menu.

## Turning the Mirror On/Off

There is a manual power button located on the lower-left side of the mirror.

### To turn Pudding OFF:

Press, but do not hold, the power button. This will initiate a shutdown sequence. Once all images have ceased to display on the Pudding, unplug it until the next time you wish to use it.

### To turn Pudding ON:

To turn pudding on, you merely need to plug it in. After a brief loading period, the mirror will display a short video clip, and the setup procedure will begin.

### To set Pudding to SLEEP:

The mirror will automatically dim if it does not detect movement for 5 minutes, and will turn off after 10 more minutes have passed.

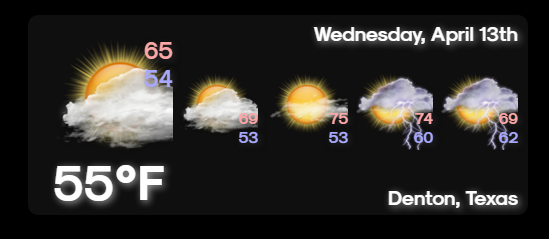
### To WAKE Pudding up:

The motion sensor will automatically wake up the display if enough movement has been detected.

## Weather

All weather information will be displayed in the top-right corner of the Pudding. It pulls all weather information from Yahoo! Weather and displays a 5-day weather forecast. Images related to the weather are also displayed, such as a sun for sunny weather, rain for rainy weather, etc. The forecasted high and low are also displayed on top of the weather icon for each day.

In addition to this, on certain models of Pudding (run by the Raspberry Pi 3), the Pudding will display an animated background that shows current weather conditions.



## Time

The time is displayed in the center of the mirror. The time is displayed in a standard time format based on the time zone you are located (based on your IP address). This time is pulled from internet servers and cannot be updated manually.



## Message

Underneath the time, the mirror also displays a custom message depending on the time of day. This message greets the user based on the time of day, or even based on the day of the year. There are many different messages, try to see if you can see all of them!

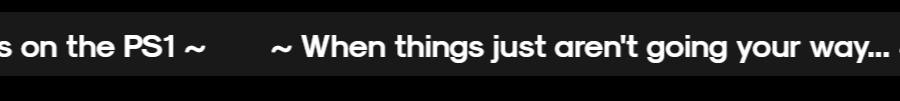


## News Ticker

Over the course of the setup, the user is asked to enter up to 3 RSS feeds to pull headlines from. If this step is skipped, the Pudding has three news sites that it automatically pulls information from (CNN, Reddit News, etc.). This is displayed one of two ways:

Early Model Pudding: News information is displayed by headline in the top-left corner of the screen. This information updates every 5 minutes.

Later Model Pudding: News information is displayed as a news ticker on the bottom of the screen. This information updates every 3 minutes.



## Configuration

To access configuration at any time, click the gear icon in the top-left corner to access the system setup again.

# Pudding Diagram

Configuration

Weather

Time

News Ticker

Message