



## SFMTA Specifications for Blind Accessible Taxi Payment Information Monitors

The SFMTA requires all taxi color scheme permit holders to sign a contract by December 1, 2013 for the installation of type certified Passenger Information Monitors (PIMs) that are accessible to passengers who are blind or have low vision. The PIMs must comply with SFMTA standards for accessibility which are outlined below.

### A. PIM Capabilities

The Passenger Information Monitor must include the following capabilities and settings:

- PIM is activated when the meter is turned on
- PIM audio is set to mute upon entry of passenger, and cab company name and vehicle number are displayed on initial screen
- Allow the Driver to activate accessible features upon request
- Allow the Driver and passenger to completely mute the sound and dim or turn off the display
- Allow customers to swipe their own credit card and choose their own tip amount using the Fare Payment screen
- Allow the Driver to monitor, and provide assistance with, the credit card payment process from the front seat using the Driver Information Monitor (DIM) if requested (Paratransit debit cards should still be processed by the Driver using the DIM)
- If PIN entry is required, provide for PIN entry via a key pad or other means, per California Finance Code section 13082
- Display Taxi Information including:
  - Lost & Found
  - Complaints/Compliment
  - Passenger Bill of Rights
  - San Francisco Taxicab Rates of Fare
  - Passenger Survey
  - Display Vehicle Information including:
    - Cab company name
    - Vehicle number
- Display SFMTA Public Service Announcements [Content of PSAs and amount of screen time dedicated to PSAs is TBD]
- Allow the Driver to back out of a transaction and return to the point where the passenger makes the payment option selection
- PIM reverts to "vacant" state when payment process is complete
- PIM is required to be operational
- PIM is required to be PCI compliant
- PIM is required to be installed in a stationary mounting; flexible arm mounts are not permitted



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## B. PIM Display Features

In order to be accessible to people who are blind or have low vision the devices must include the features listed below:

- Touch screen user interface
- Ability for accessible touch screen features to be activated and deactivated by the user by multi-tapping the touch screen
- Text-to-speech capability (to relay information that appears on the screen as automated speech)
- Baseline rate of speech output that is no slower than 180 words per minute
- Media screen minimum size of 7"
- Means to navigate touch screens visually or using audible prompts that are developed by the device manufacturer
- Screen mapped to quadrants using a button design, with two buttons on the top of the screen and three on the bottom
- Buttons in the bottom row should range in size from 1.5" x .75" to 3.7" x 4.25", depending on screen size
- Buttons in the top row should range in size from 2.25" x .75" to 5.56 x 4.1", depending on screen size
- Button text should maximize readability in terms of screen font size and color contrast
- Each button is identified with a distinct color, and color contrast among buttons is maximized
- No "dead space" between buttons
- The Bottom center button functions as a "repeat" button, and is identified by a raised feature on the bezel of the device for orientation (additional raised features may be provided at the corners of the bezel to facilitate orientation, at the discretion of the vendor)
- The function of the bottom left button is "back," "cancel" or "exit," depending on the screen.
- The function of the bottom right button is "ok," "accept," or is unassigned, depending on the screen.
- The top buttons function as menu selection options, depending on the screen. For example, when activated, the top left button of the Initial touch screen is "Audio Options" and the top right button is "Information." On the Fare Payment Screen, top left is "cash," top right is "charge."
- For volume control, rate of audio output, and adjusting tip amount, the top left button is a minus sign, and the top right button is a plus sign.



### C. PIM Accessibility Mode Operational Requirements

The accessible features of the PIM shall be activated by the passenger with a multi-tap gesture on the screen.

Video programming is turned off when accessibility mode is activated. The passenger can exit and return to accessibility mode as often as desired during a trip. Video programming is restored when accessibility mode is disabled.

If accessibility mode is active at the end of the trip, and the payment process has started, the ability to exit accessibility mode is removed and the payment must be completed in accessibility mode.

Upon activation, the Initial Screen provides the customer the option to select an Audio Options screen with options to adjust the audio output (top left button) or to select the Information Screen with options to receive taxi or vehicle information (top right button).

The Audio Options screen allows the passenger to select volume or rate of annunciation. The volume and rate can be adjusted using the plus and minus sign buttons.

The Information screen allows the passenger to select "Rider Info" or "Taxi Info".

During the trip the passenger can receive information on the incremental fare increases displayed on the taximeter by pressing the "repeat" button.

When the trip is complete, the meter is turned off and the itemized fare (including tolls, surcharges and other charges) are annunciated. The Fare Payment screen is displayed. Payment options include "cash" (top left button) and "charge" (top right button).

When the "cash" button is selected, instructions to pay the driver are annunciated. When the "credit" button is selected, the charge screen is displayed.

The charge screen offers the passenger the option of adding a tip to the fare payment. The base tip amount is 0, and the amount can be increased in increments of 5% of the total fare by pressing the plus sign button (top right). The tip amount can be adjusted downward by pressing the minus sign button (top left). Each time the tip increment is adjusted, the percentage and dollar amount of the tip are annunciated.

When the tip amount is confirmed, the total fare and tip amount are annunciated again and the passenger can select the "ok" button to accept the amount, and can proceed to pay by swiping a credit card on the device. Upon approval of payment, passenger receipt will print.