Installation Instructions for Clocks with a Speaker Baffle Combo Panel – V1.0

The instructions provided in this guide are only for the purpose of mounting Sapling Synchronized Clocks to speaker baffle panels.

There are additional mandatory instructions and settings for synchronized clocks depending on their model and how they are powered, which are available in the specific clock model manual.

https://sapling-inc.com/manuals/

Instructions regarding the speaker baffle clock panel, including mounting it to the wall, are to be provided by the manufacturer of the speaker baffle panel.

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Manuals may change without prior notice

Installation Instructions for Clocks with a Speaker Baffle Combo Panel

**Installing Sapling Synchronized Clocks on Quam Speaker Baffle panels:**

Installing a Sapling 12" round slimline clock on the Quam C5/BU/CK1/S Speaker Baffle panel:

1. The Sapling 12" round slimline clock is provided with a detachable mounting bracket (shown below).

   For brushed aluminum or wood cases, the mounting bracket will have an additional tab (release lever) that will allow for easier fixation when pushed down. If installing a brushed aluminum or wooden clock, insert the release lever into the hole on top of the mounting piece latch, as shown below. When attaching the clock to the bracket, push down this tab/lever to allow the clock to snap into place easier.

*release lever is only provided with brushed aluminum or wooden clocks*
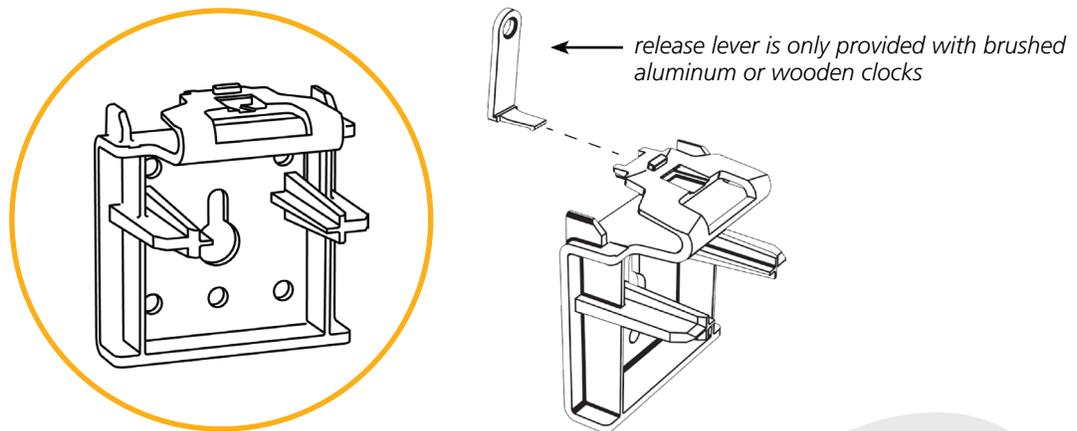
2. Screw the mounting bracket to the speaker baffle panel designated holes using two (2) 8-32 x 3/4" Phillips pan head screws (not provided).
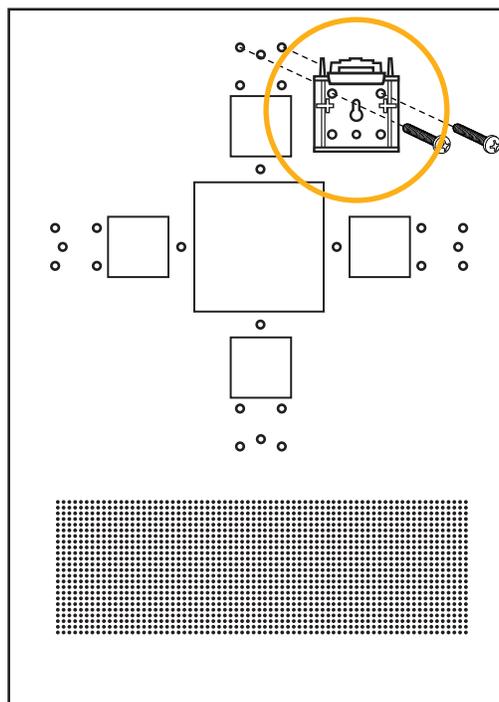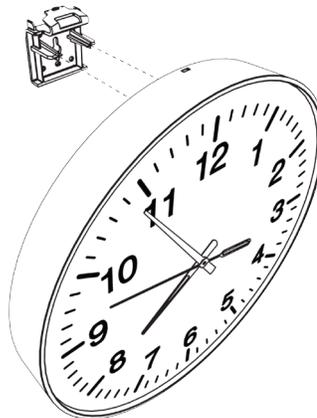
Installation Instructions for Clocks with a Speaker Baffle Combo Panel

3. Once the clock mounting bracket has been screwed into position on the speaker baffle panel, **remove the gearbox locking pin**, follow wiring instructions in the specific clock model manual and run any necessary wiring to the clock through the speaker baffle panel (or insert batteries if the clock is battery powered).
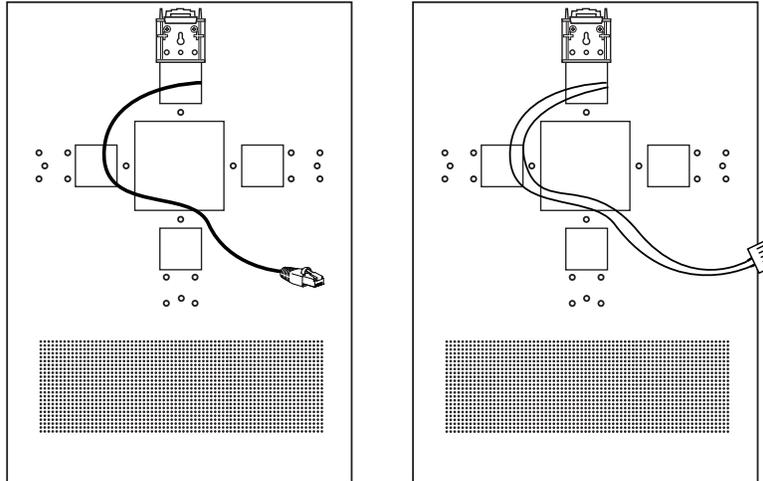
4. Once the clock has been wired or batteries have been installed, attach the clock to the mounting bracket by sliding the clock back onto it. You should hear a clicking noise as the latch engages.

5. Once the clock is pushed all the way into the mounting bracket and a clicking noise is heard, the clock is locked in position. Pull it gently to verify that the clock is indeed locked into position.
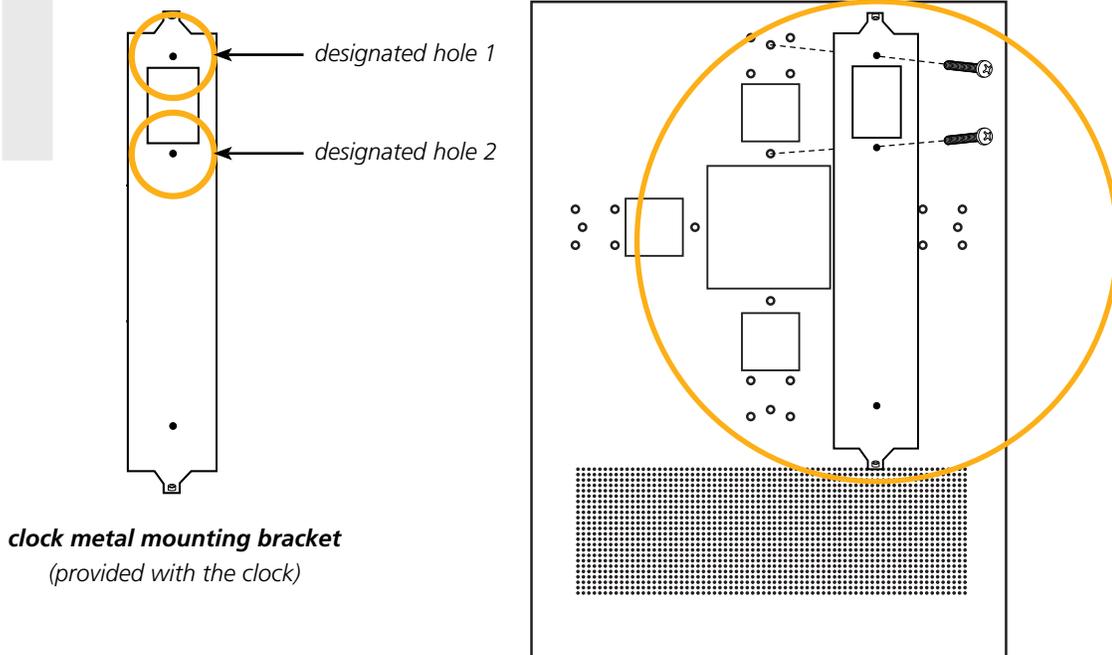
Installation Instructions for Clocks with a Speaker Baffle Combo Panel

6. If there is a need to remove the clock from the speaker baffle panel after installation, it can be done by inserting a flat-blade screwdriver into a the top of a clock with a slimline ABS case or by pushing down the release lever for clocks with brushed aluminum or wooden cases.
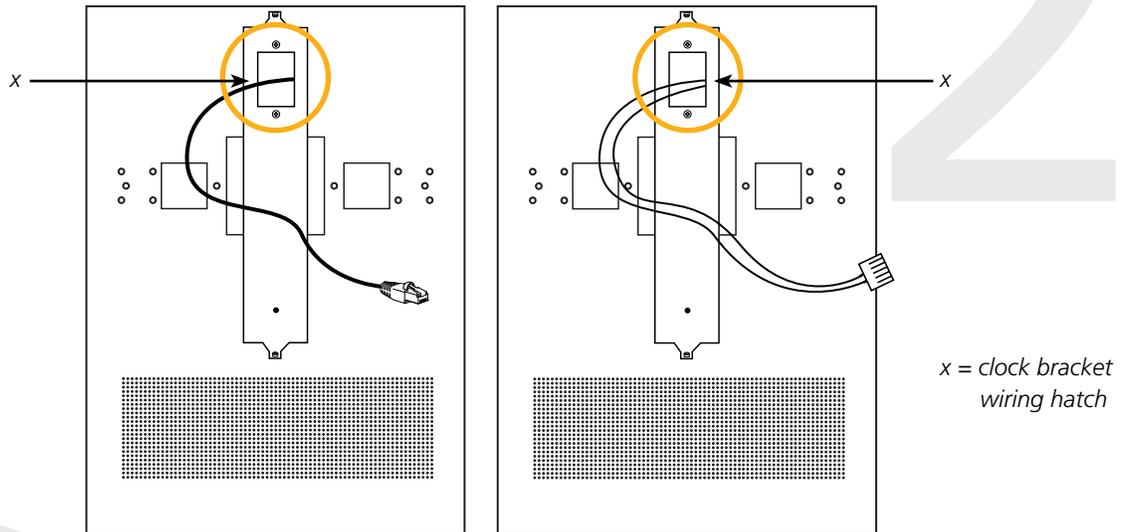

release lever is only provided with brushed aluminum or wooden clocks
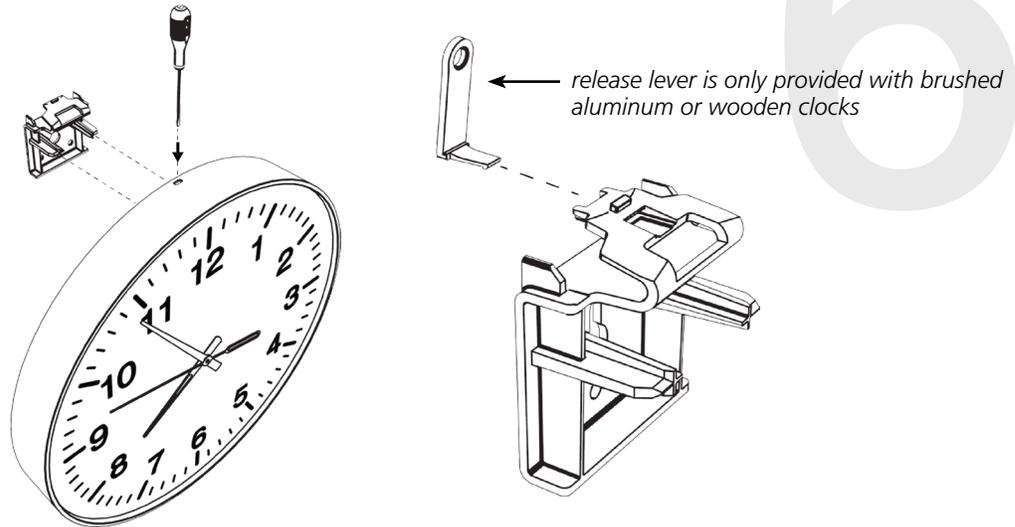
Installing a Sapling 12" round metal clock on the Quam C5/BU/CK1/S Speaker Baffle panel:

1. The Sapling 12" round metal clock is provided with a detachable metal mounting bracket (shown below). Screw the mounting bracket to the speaker baffle panel using two (2) 8-32 x 3/4" Phillips pan head screws (not provided) through the designated holes shown in the image below.
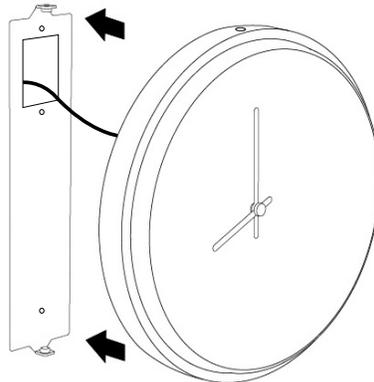

designated hole 1

designated hole 2

clock metal mounting bracket
(provided with the clock)

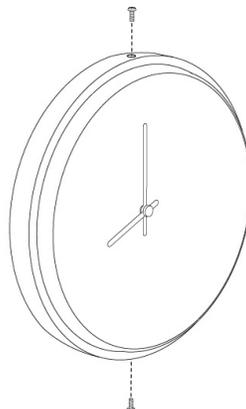## Installation Instructions for Clocks with a Speaker Baffle Combo Panel

2. Once the clock mounting bracket is screwed into position on the speaker baffle panel, **remove the gearbox locking pin from the back of the clock**, follow wiring instructions in the specific clock model manual and run any necessary wiring through the clock bracket wiring hatch to the clock.

x = clock bracket wiring hatch

3. Once the clock has been wired (following wiring instructions in the specific clock model manual), attach the clock to the mounting piece so that the hole at the top of the clock lines up with the hole at the top of the mounting piece, and the hole at the bottom of the clock lines up with the hole at the bottom of the mounting piece.


4. Use the two (2) M4-0.5x10 screws provided with the clock to secure the clock to its mounting bracket. The screws should pass through the top and bottom holes on the clock, followed by the top and bottom holes of the mounting bracket.
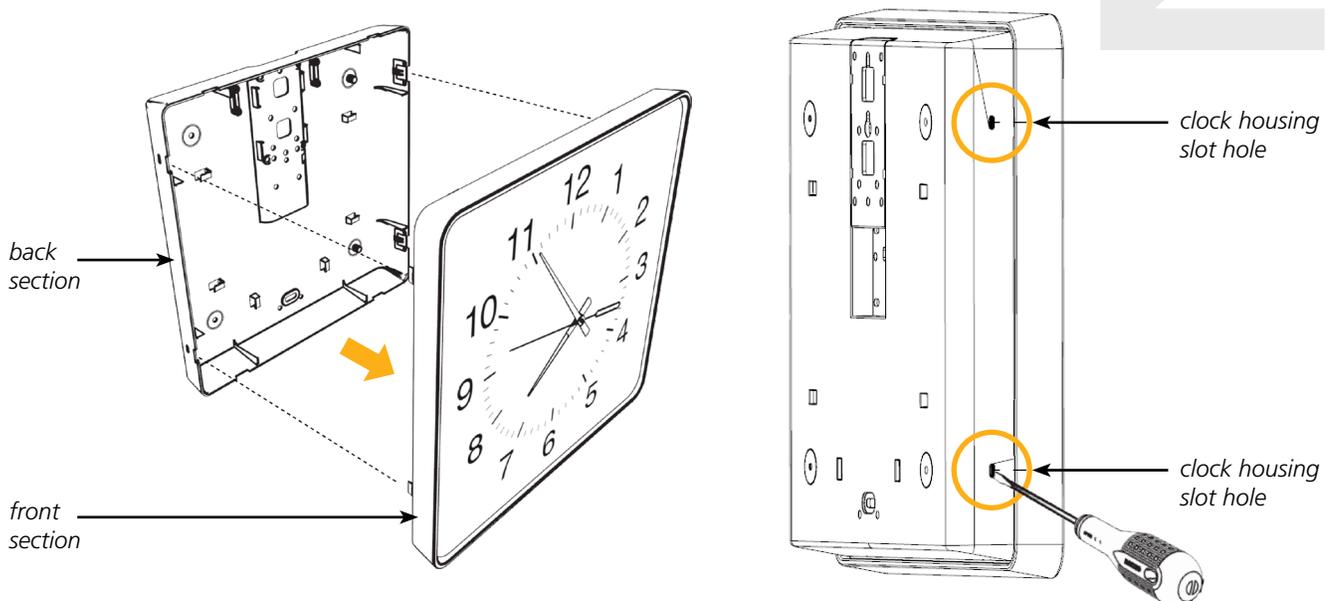
Installation Instructions for Clocks with a Speaker Baffle Combo Panel

Installing a Sapling 12" square clock on the Quam C5/BU/CK1/S Speaker Baffle panel:

1. The Sapling 12" Square Clock comes with a detachable mounting bracket attached to its housing (shown below). This detachable mounting bracket was made for a different application; therefore, when installing the square clock on the speaker baffle panel, <u>do not detach the mounting bracket</u> from the clock housing.

detachable mounting bracket is to be kept in position on the clock back housing
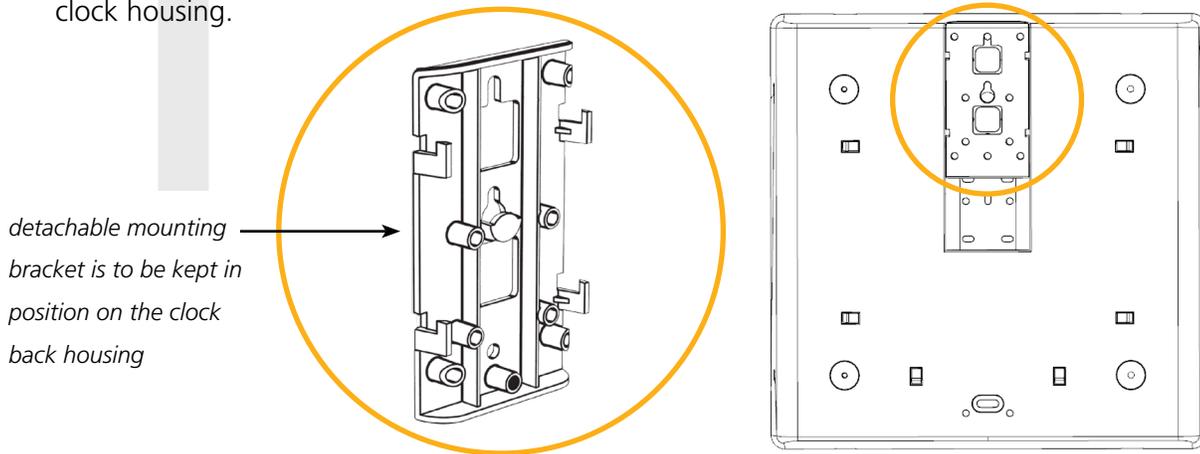
2. The square clock housing consists of 2 main parts: a **front section**, which consists of the clock front crystal, an outer frame/rim, and movement housing, and a **back section**, which is the clock back housing. Detach the clock back housing by inserting a flat-blade screwdriver about 1/8inch into each of the clock housing slot holes (as shown in the below image) until the housing detaches. You may hear a clicking noise as the latches disengage.

back section

front section

clock housing slot hole

clock housing slot hole

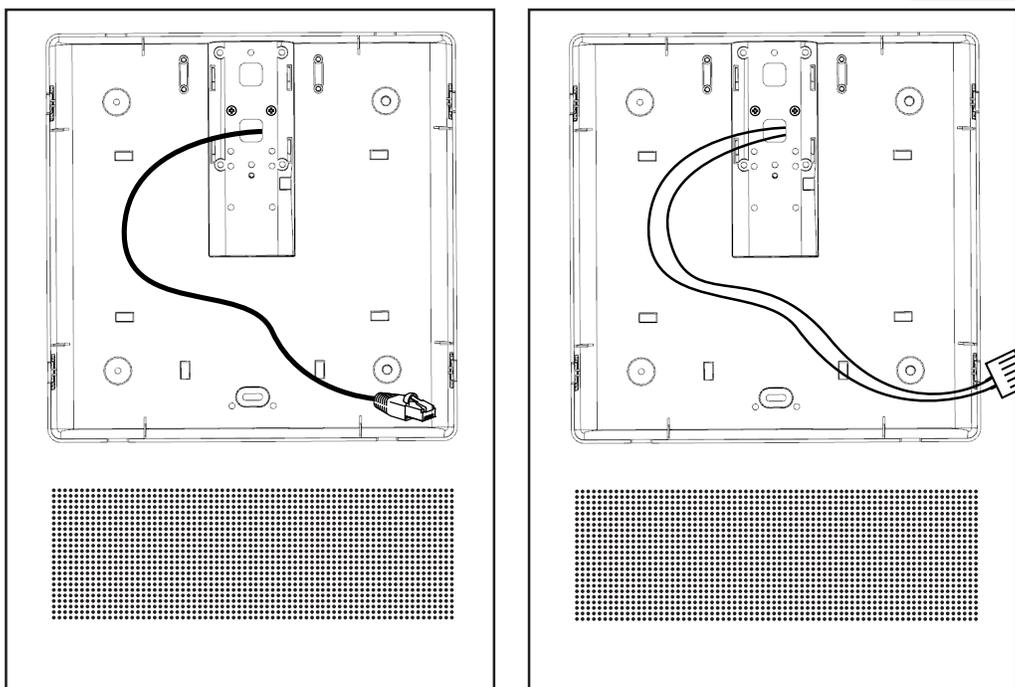## Installation Instructions for Clocks with a Speaker Baffle Combo Panel

3. Screw the square clock back housing to the speaker baffle panel using two (2) 8-32 x 3/4" Phillips pan head screws (not provided with the clock).
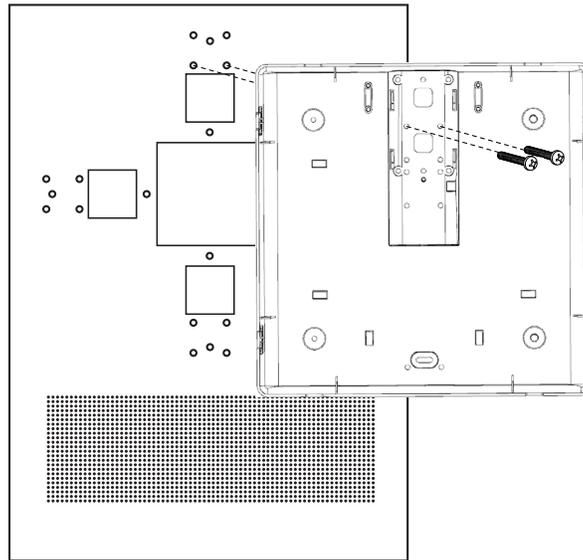
4. Once the clock back housing has been screwed into position on the speaker baffle panel, **remove the gearbox locking pin from the back of the clock**, follow wiring instructions in the specific clock model manual and run any necessary wiring to the clock through the speaker baffle panel and back housing (or insert batteries if the clock is battery powered).
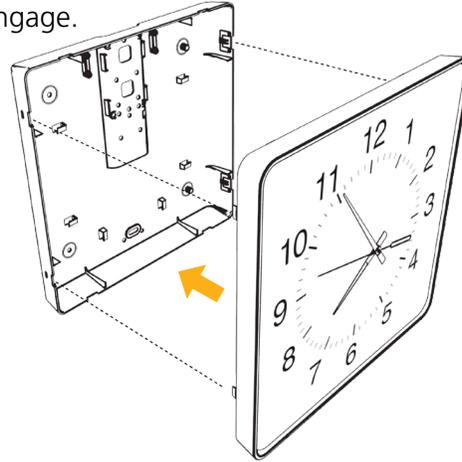
Installation Instructions for Clocks with a Speaker Baffle Combo Panel

5. Align the clock front section with the clock back housing engagement tabs and push it into place. You should hear a snapping noise as the latches reengage.

If there is a need to take the clock off the speaker baffle panel after the installation has been completed, insert a flat-blade screwdriver into the clock housing slot holes located on either side of the housing to detach the housing from the back of the clock.

clock housing slot hole

clock housing slot hole
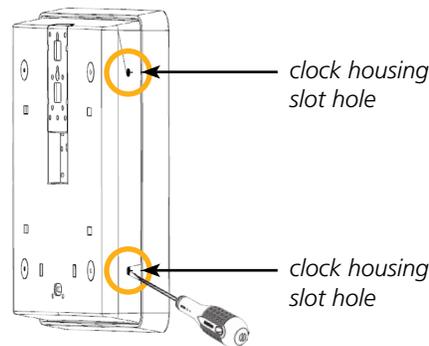
Installing Sapling surface mount digital clocks on the Quam C5/BU/CK2/S Speaker Baffle panel:

1. The Quam C5/BU/CK2/S Speaker Baffle panel comes with an additional plate attached to the back of the speaker baffle panel, allowing Sapling surface mount digital clocks to be mounted to the panel.
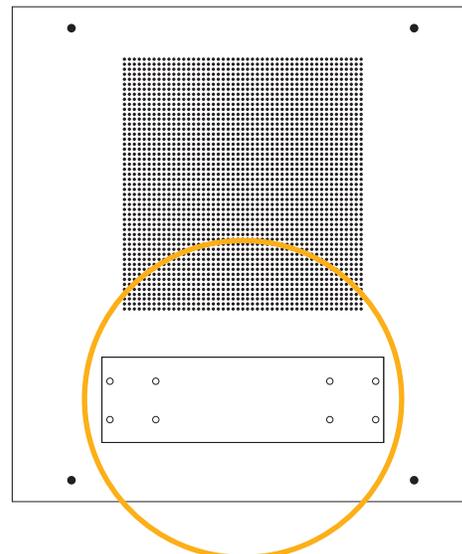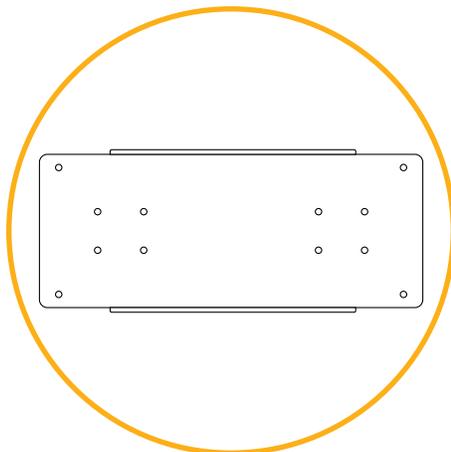
Installation Instructions for Clocks with a Speaker Baffle Combo Panel

The Sapling Digital Clock consists of 2 main parts: a **front section**, which consists of the clock display, an outer frame/rim, and a front filter, and a **back section**, which is the clock back housing. Out of the box, the clock housing and the front section do not come screwed together, allowing the installer to first mount the clock back housing and run wires before securing its front section.
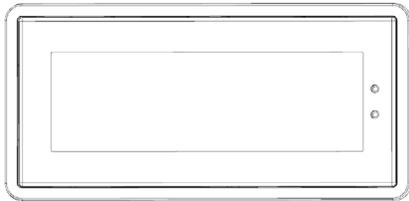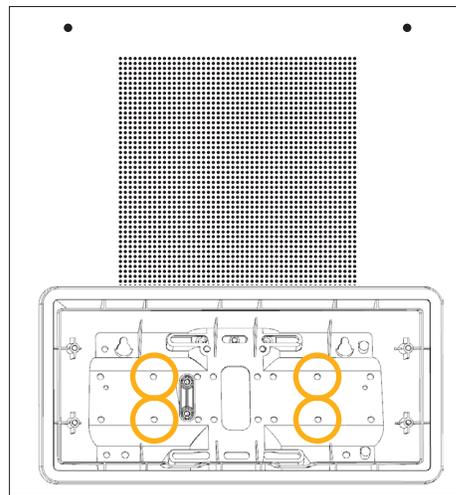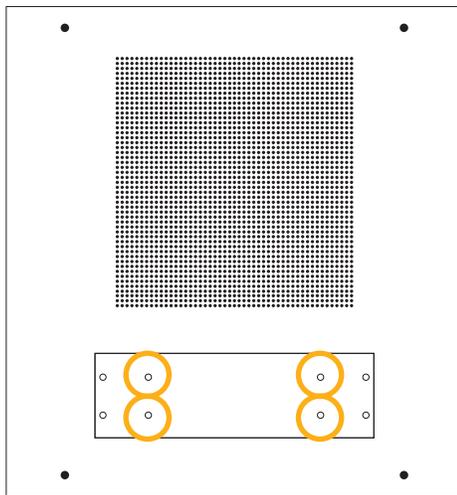
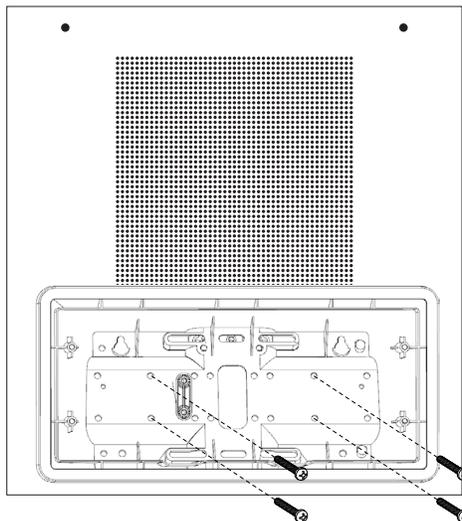**front section**   **back section**
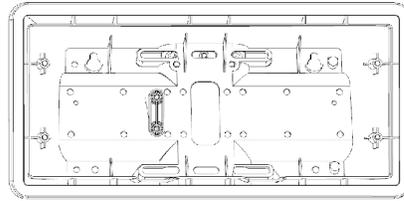
Place the digital clock back housing on the speaker baffle panel plate. Align the designated holes on the clock back housing with the designated holes on the speaker baffle panel additional plate.


2. Using four (4) 8-32 x 3/4" Phillips pan head screws and 8-32 hex nuts (not provided), attach the clock housing to the speaker baffle panel plate.
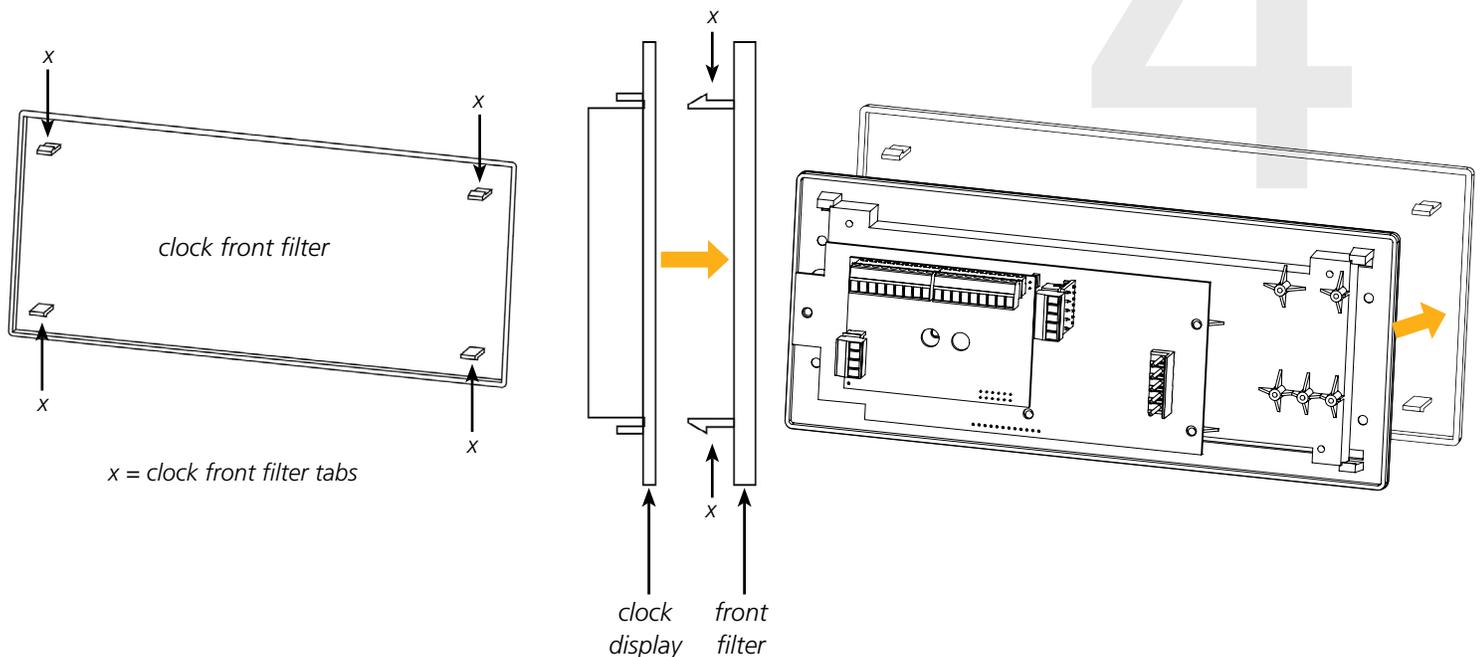
Installation Instructions for Clocks with a Speaker Baffle Combo Panel

3. Thread the clock wiring through the back of the clock housing following wiring instructions in the specific clock model manual. Secure it by passing it through the wire clamp. The wire clamp is mounted in the clock housing and can be opened by using a Phillips head screwdriver.

wire clamp   *wire clamp*
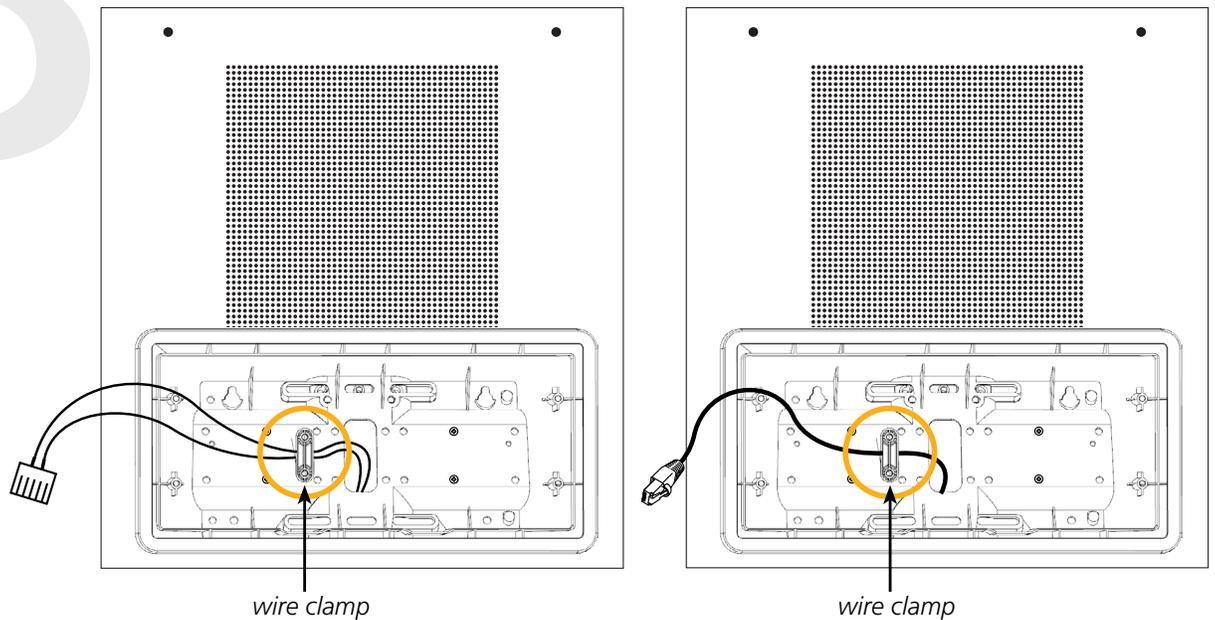
4. Sapling Digital Clocks come with a protective filter that snaps onto the clock display utilizing four flexible tabs. Detach the filter from the clock display board by pressing inward on the filter tabs. This will allow access for screwing the display to the clock housing, which will be required in one of the next steps.

clock front filter

x = clock front filter tabs

*clock display*   *front filter*

Installation Instructions for Clocks with a Speaker Baffle Combo Panel

5. Attach wires threaded through the housing to the clock wiring harness before reattaching the clock filter and front frame.
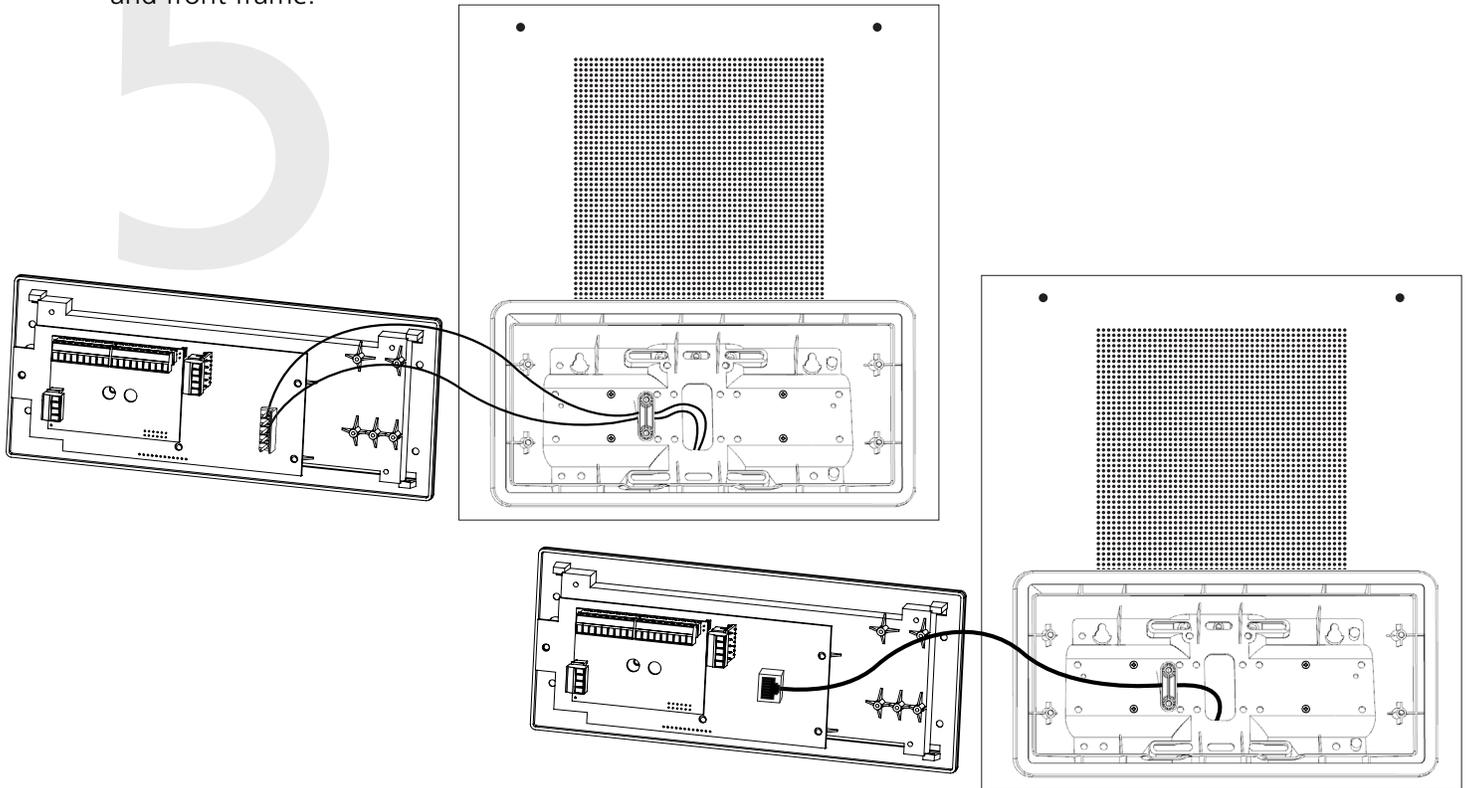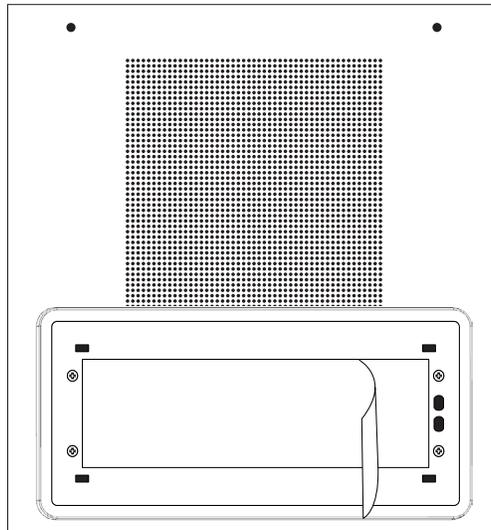

6. Use the four (4) #6-19 x 3/8 black flat head thread-forming screws that are provided with the clock in order to screw the clock display to the clock housing.
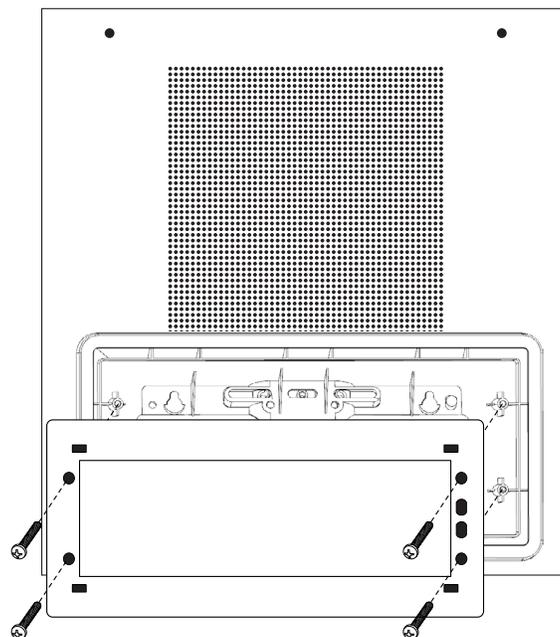
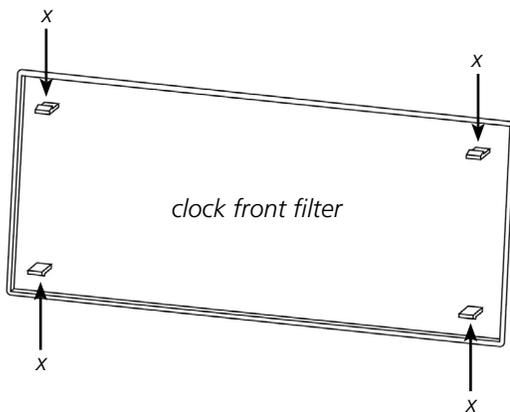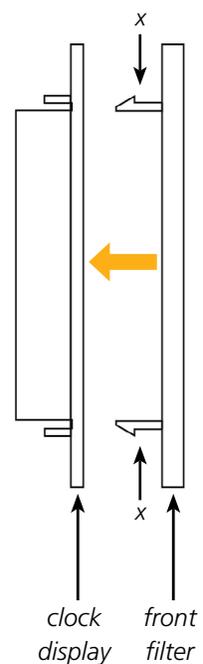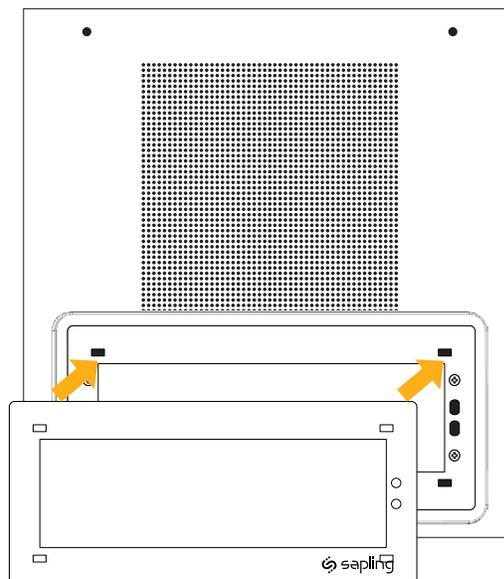## Installation Instructions for Clocks with a Speaker Baffle Combo Panel

7. Remove the clear plastic protective film from the display board.

8. Place the clock filter over the display board by lining up the filter tabs with the holes on the display board. You should hear a clicking noise as the filter flex tabs latch into place.

clock front filter

x = clock front filter tabs

clock display   *front filter*

## Installation Instructions for Clocks with a Speaker Baffle Combo Panel

9. Reattach the front frame/rim to the outside of the clock housing and make sure that the top and bottom latches on both the frame/rim and the housing lock together. You should hear a clicking noise when each latch locks into place. Then, remove the adhesive clear protective film from the clock filter, as shown below.

x = frame/rim latches
y = clock housing latches
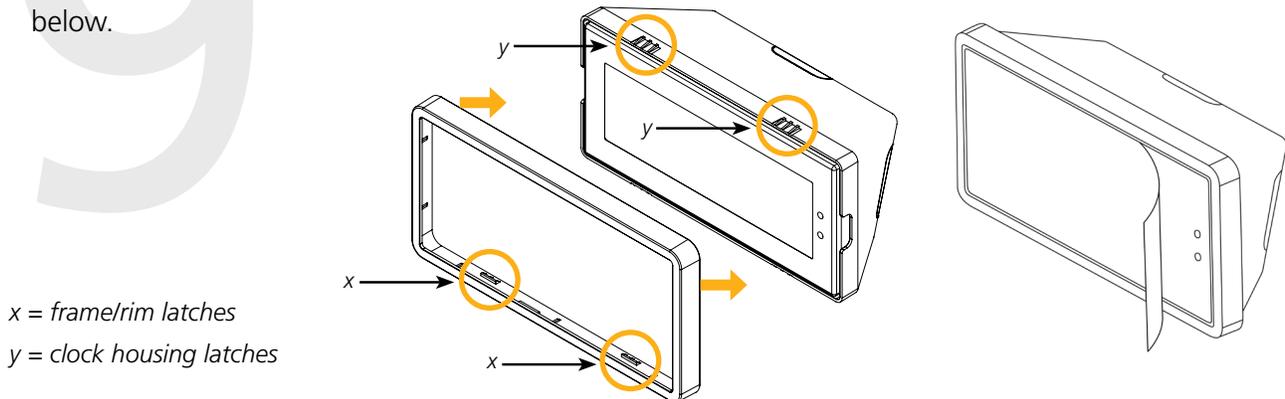
* Installing Sapling SBD or SBP digital displays <u>behind</u> the Quam C5/BU/CK2/S Speaker Baffle panel:

** The previous instructions were made for installing a clock <u>on</u> the surface of a speaker baffle panel. The following instructions are made for installing the clock display <u>**behind**</u> the speaker baffle panel, which in this case, the options are limited to 2.5", 4-digit display SBD or SBP models only (and there is no need to use the clock housing).*

1. When installing the SBD or SBP digital clock display behind the speaker baffle panel, the user is only to purchase the display without the housing.
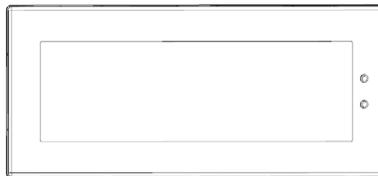
2. Sapling digital displays come with a front filter that snaps onto it utilizing four flexible tabs. Detach the filter from the display board by pressing inward on the filter tabs. **This front filter will not be used in this installation configuration.**

clock front filter
(not used in this configuration)

x = clock front filter tabs
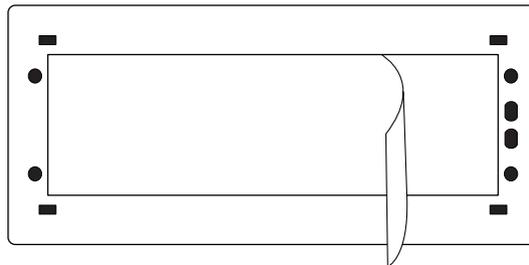
clock display   front filter
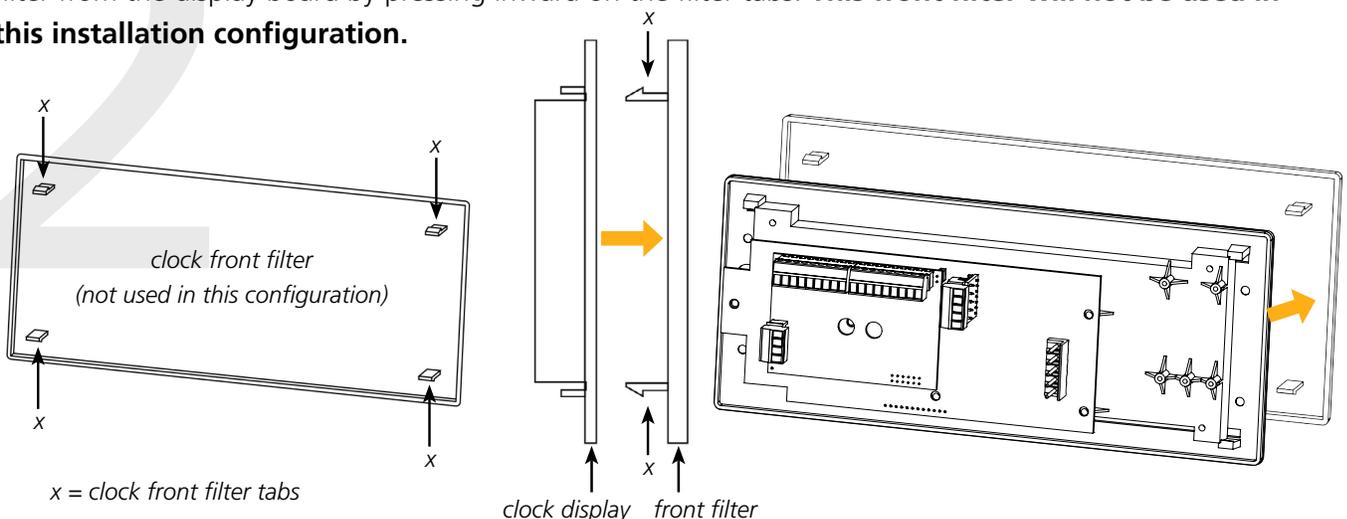
Installation Instructions for Clocks with a Speaker Baffle Combo Panel

3. After the front filter has been removed, flip the display over so that it is face down. There are four standoff tabs that are needed to be broken off, allowing room to secure the nuts later on. Identify the location of these four standoff tabs shown in the below image and use needle nose pliers to gently snap these tabs off.
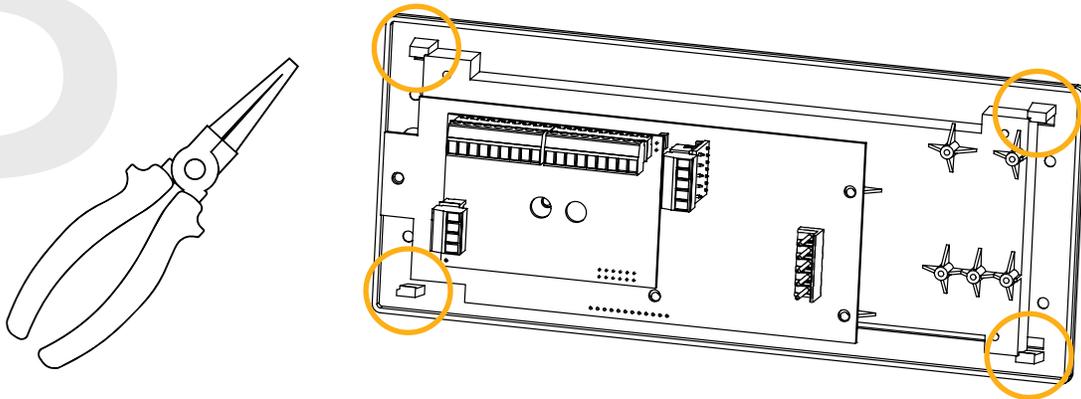
4. Remove the clear plastic protective film from the display board.

5. Insert the display into the standoff threads on the back of the speaker baffle panel utilizing the filter tab holes on the display, as shown in the below image. Removing the front filter, as described in step #2, will allow the standoff threads on the speaker baffle panel to be inserted into the removed front filter tab holes.
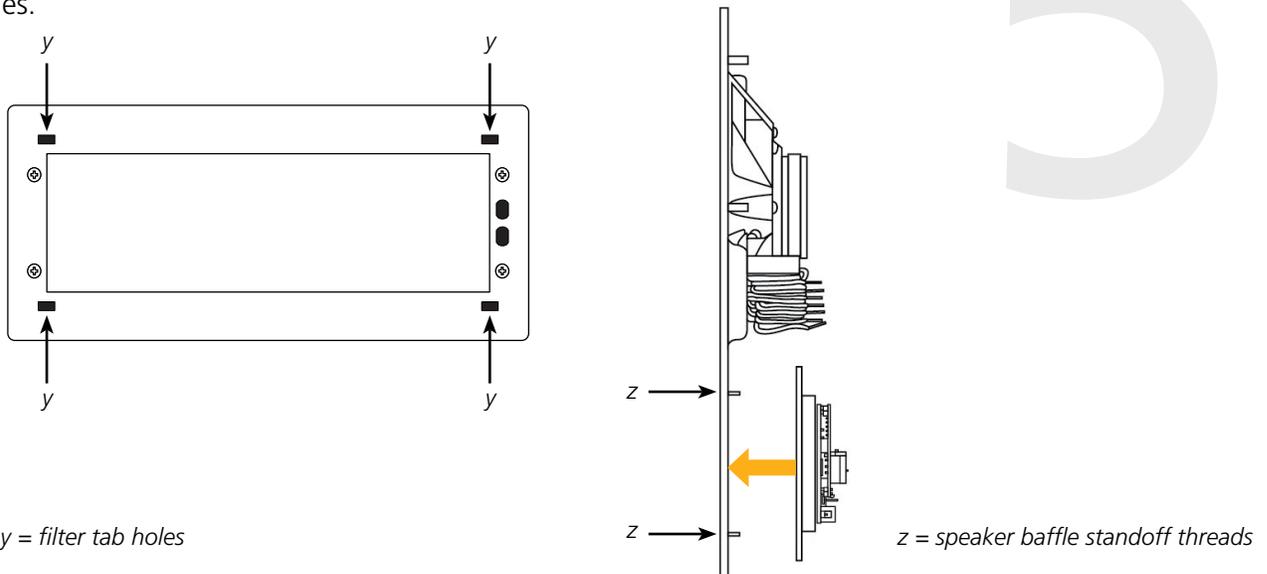
y = filter tab holes

z = speaker baffle standoff threads

Installation Instructions for Clocks with a Speaker Baffle Combo Panel

6. Secure the display to the speaker baffle standoff threads by using four (4) steel narrow 8-32 hex nuts (not provided). Use pliers or a wrench to tighten the nuts.

z

z = speaker baffle standoff threads

z
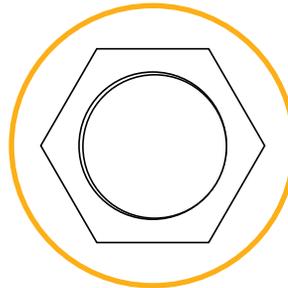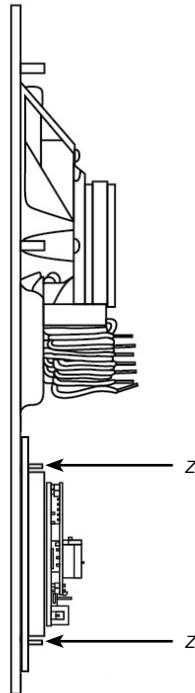
7. Connect the necessary wiring to the display following the wiring instructions in the specific clock model manual.

Installation Instructions for Clocks with a Speaker Baffle Combo Panel

Installing Sapling Synchronized Clocks on Lowell Speaker Baffle panels:
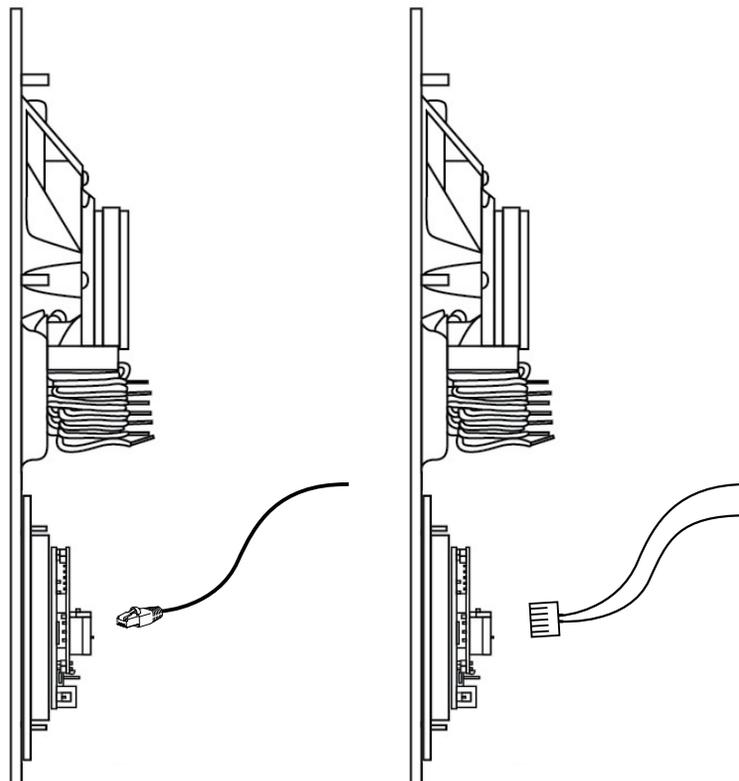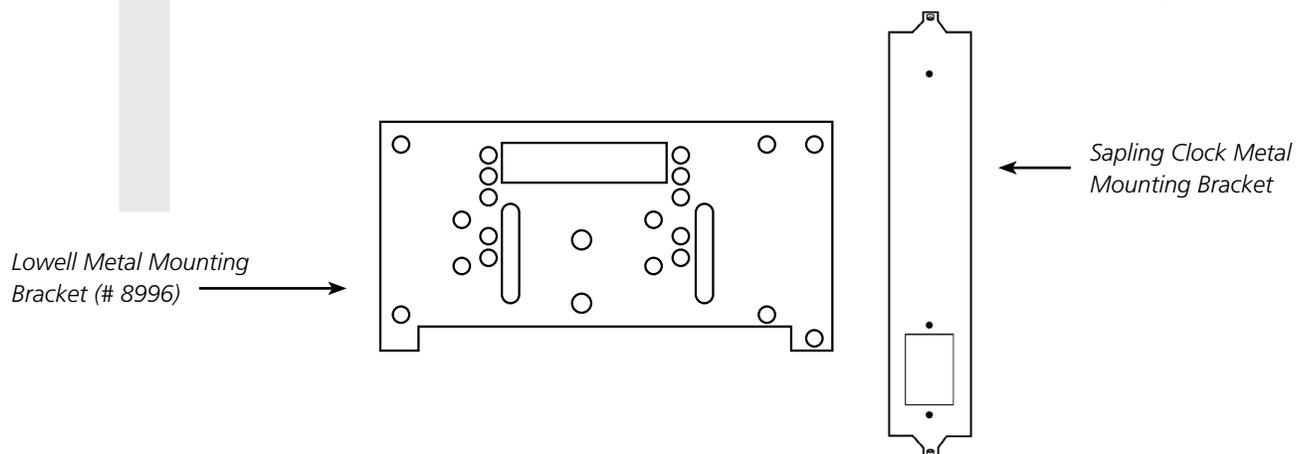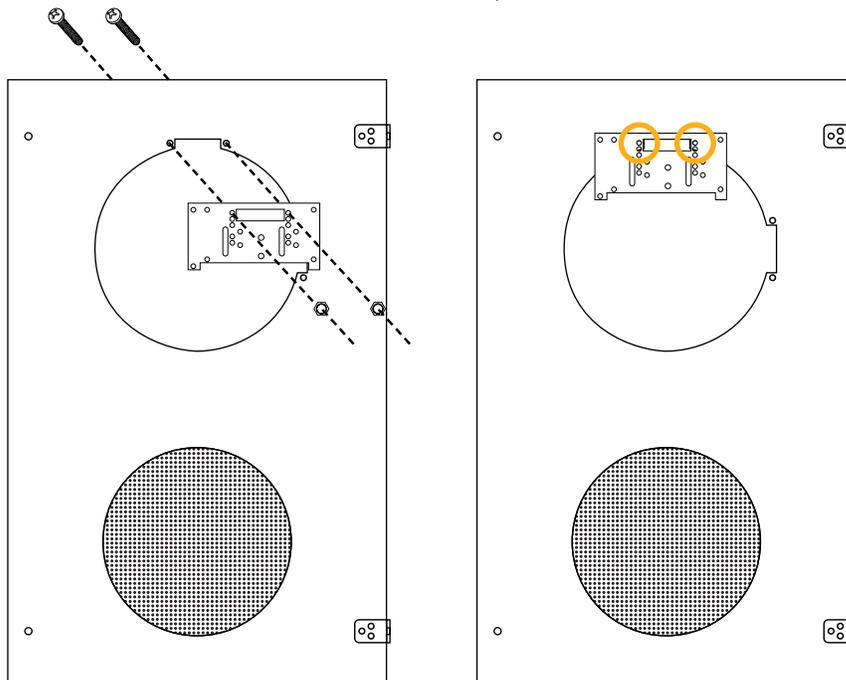
Installing a Sapling 12" round metal clock on the Lowell MC-301 Speaker Baffle Panel:

1. The Lowell MC-301 Speaker Baffle Panel is provided with a detachable metal mounting bracket (Lowell part # 8996), as shown in the image below on the left. The Sapling 12" round metal clock is also provided with a detachable metal mounting bracket, as shown in the image below on the right.

Lowell Metal Mounting Bracket (# 8996)

Sapling Clock Metal Mounting Bracket

There are multiple sets of holes on the Lowell bracket that will line up with the holes on the panel. This is to allow mounting the bracket at different positions. We recommend using the upper set of holes on the bracket, as shown in the below image. Attach the Lowell metal mounting bracket to the back of the Lowell MC-301 Speaker Baffle Panel by inserting two (2) 8-32 x 1 1/2" Phillips pan head screws (not provided) into the holes on the panel that line up with the holes on the bracket. Once the Lowell bracket is screwed onto the panel, secure the screws on the back of the panel with the two 8-32 hex nuts (not provided).

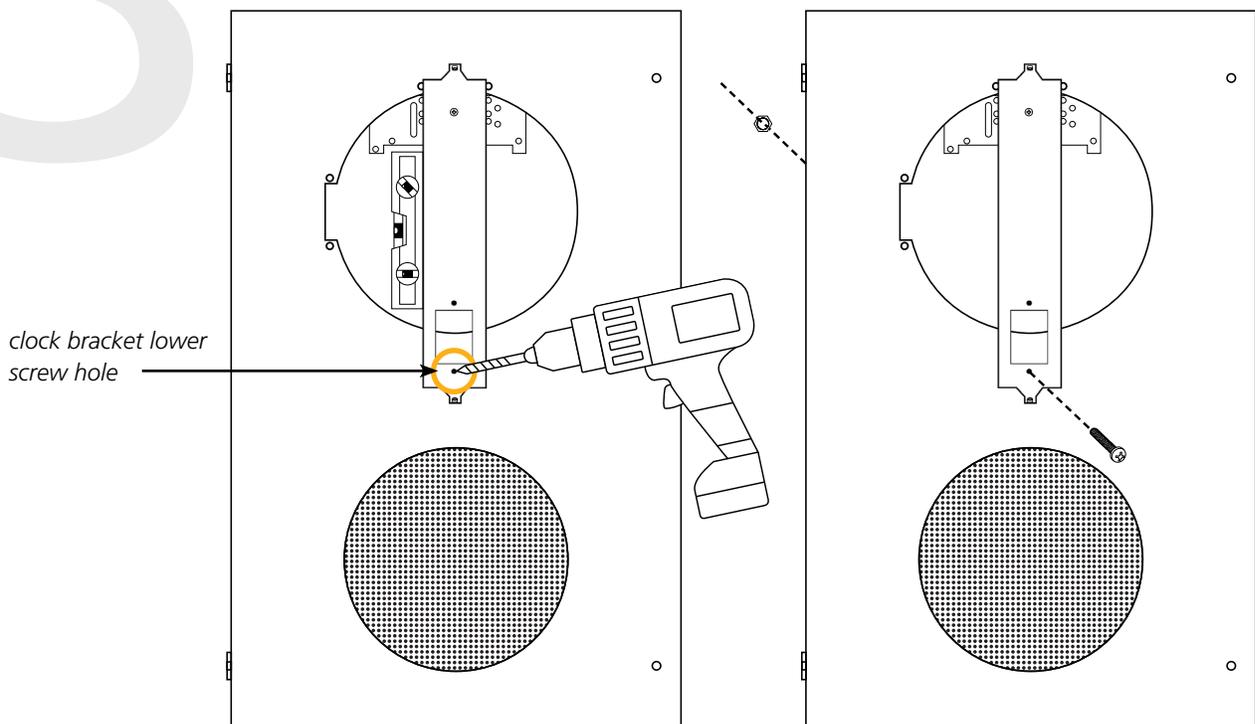**The Lowell MC-301 Speaker Baffle Panel can be oriented vertically or horizontally*

**The back of the Lowell MC-301 will have hinges on the right side when oriented vertically, and on the top when oriented horizontally

2. Once the Lowell mounting bracket has been secured to the back of the Speaker Baffle Panel, attach the Sapling metal mounting bracket to the front of the Lowell mounting bracket by using one (1) 8-32 x 3/4" Phillips pan head screw (not provided) through the clock bracket upper screw hole, as shown in the below image.

clock bracket upper screw hole

clock bracket lower screw hole

clock bracket wiring hatch

**The front of the Lowell MC-301 will have hinges on the left side when oriented vertically, and on the top when oriented horizontally
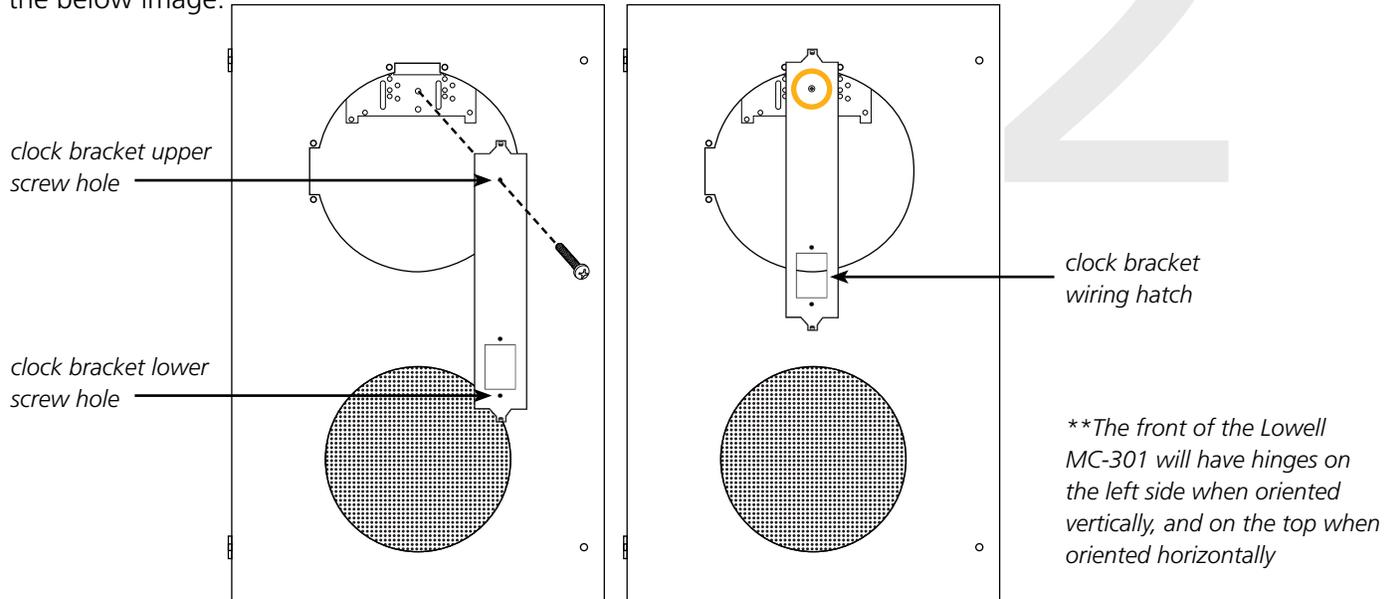
3. In order to further secure the clock bracket in position, first make sure the clock mounting bracket is level with the speaker baffle panel edge. Then, drill a hole through the lower clock bracket screw hole using a .177" drill bit, as shown in the below image. Once the hole has been drilled, use one (1) 8-32 x 1 1/2" Phillips pan head screw and one (1) 8-32 hex nut (not provided).
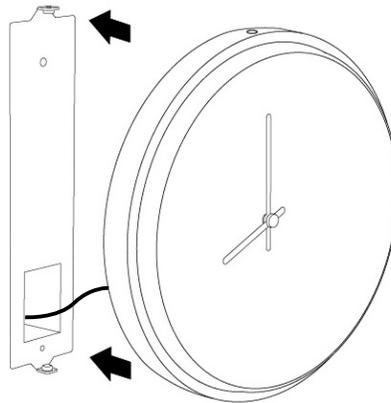

clock bracket lower screw hole

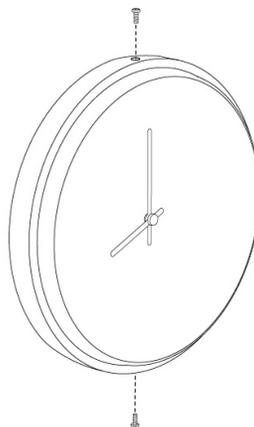## Installation Instructions for Clocks with a Speaker Baffle Combo Panel

4. Once the clock mounting bracket is screwed into position on the speaker baffle panel, **<u>remove the gearbox locking pin from the back of the clock</u>**, follow wiring instructions in the specific clock model manual and run any necessary wiring through the clock bracket wiring hatch to the clock.

x = clock bracket
wiring hatch
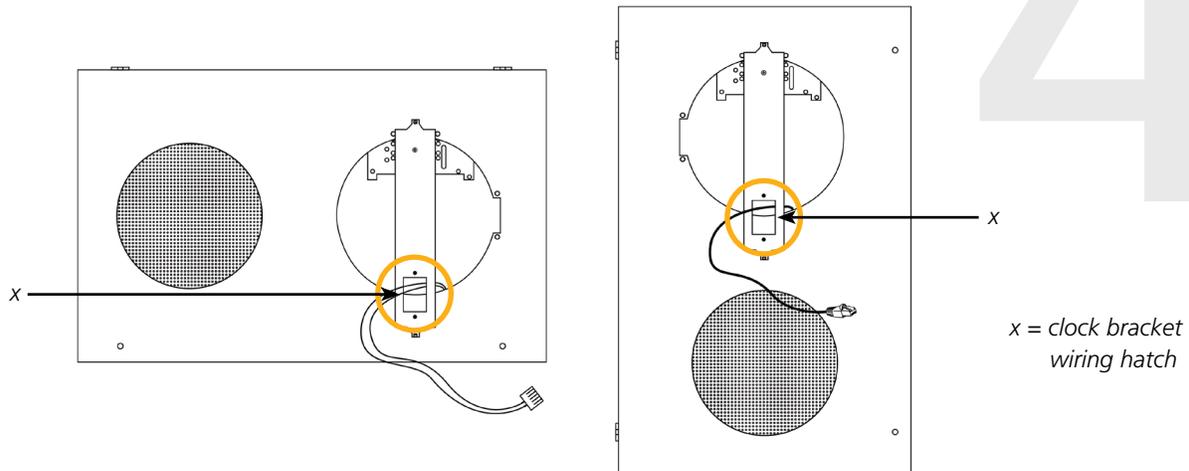
5. Once the clock has been wired (following wiring instructions in the specific clock model manual), attach the clock to the mounting piece so that the hole at the top of the clock lines up with the hole at the top of the mounting piece, and the hole at the bottom of the clock lines up with the hole at the bottom of the mounting piece.
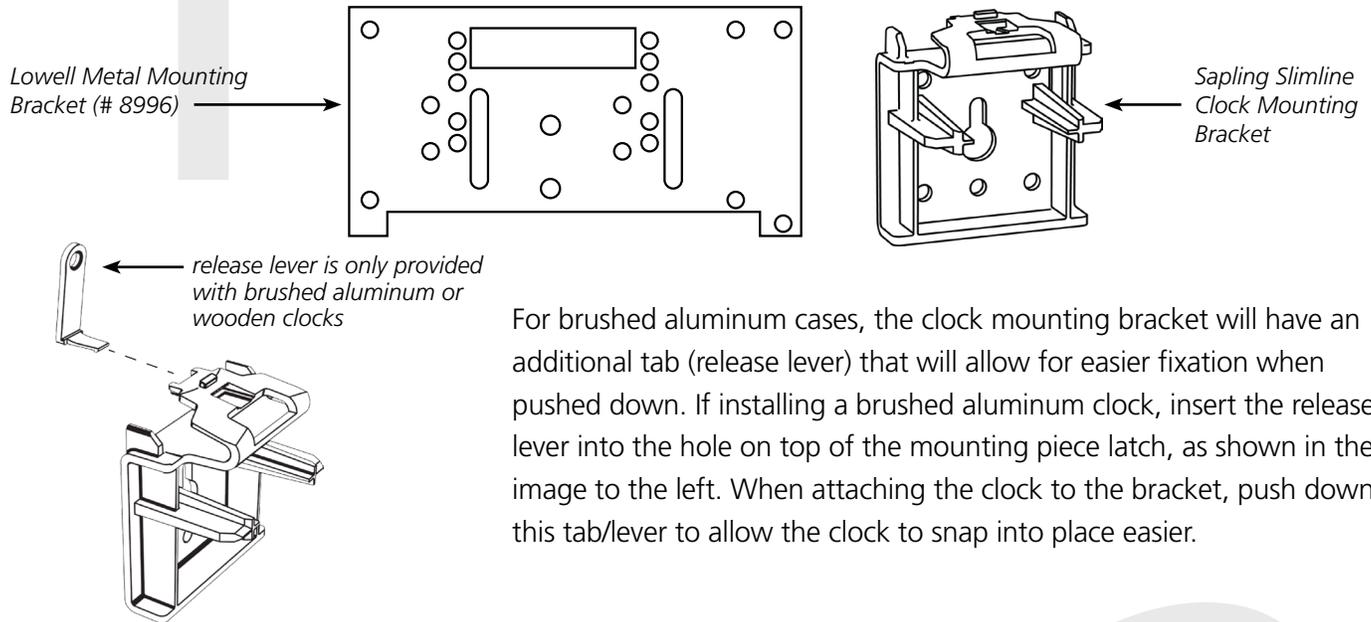

6. Use the two (2) M4-0.5x10 screws provided with the clock to secure the clock to its mounting bracket. The screws should pass through the top and bottom holes on the clock, followed by the top and bottom holes of the mounting bracket.

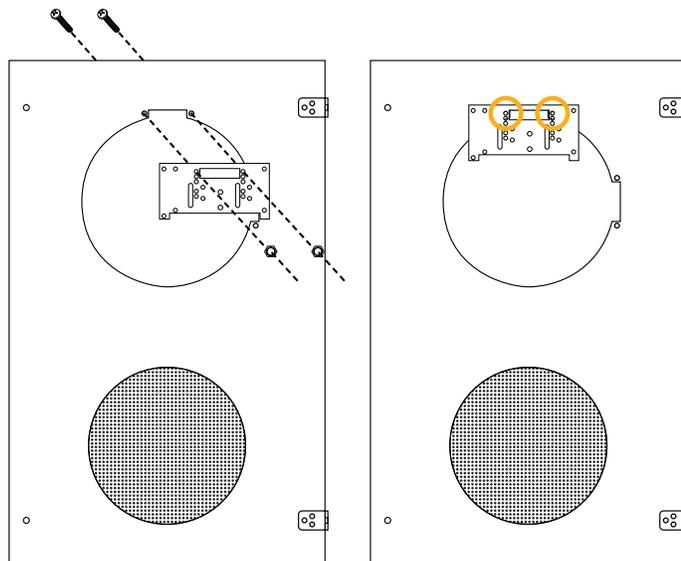## Installation Instructions for Clocks with a Speaker Baffle Combo Panel

Installing a Sapling 12" round slimline clock on the Lowell MC-301 Speaker Baffle Panel:

1. The Lowell MC-301 Speaker Baffle Panel is provided with a detachable mounting bracket (Lowell part # 8996), as shown in the image below on the left. The Sapling 12" round slimline clock is also provided with a detachable mounting bracket, as shown in the image below on the right.

Lowell Metal Mounting Bracket (# 8996) ⟶

Sapling Slimline Clock Mounting Bracket

release lever is only provided with brushed aluminum or wooden clocks

For brushed aluminum cases, the clock mounting bracket will have an additional tab (release lever) that will allow for easier fixation when pushed down. If installing a brushed aluminum clock, insert the release lever into the hole on top of the mounting piece latch, as shown in the image to the left. When attaching the clock to the bracket, push down this tab/lever to allow the clock to snap into place easier.

2. There are multiple sets of holes on the Lowell bracket that will line up with the holes on the panel. This is to allow mounting the bracket at different positions. We recommend using the upper set of holes on the bracket, as shown in the below image. Attach the Lowell metal mounting bracket to the back of the Lowell MC-301 Speaker Baffle Panel by inserting two (2) 8-32 x 1 1/2" Phillips pan head screws (not provided) into the holes on the panel that line up with the holes on the bracket. Once the Lowell bracket is screwed onto the panel, secure the screws on the back of the panel with the two 8-32 hex nuts (not provided).
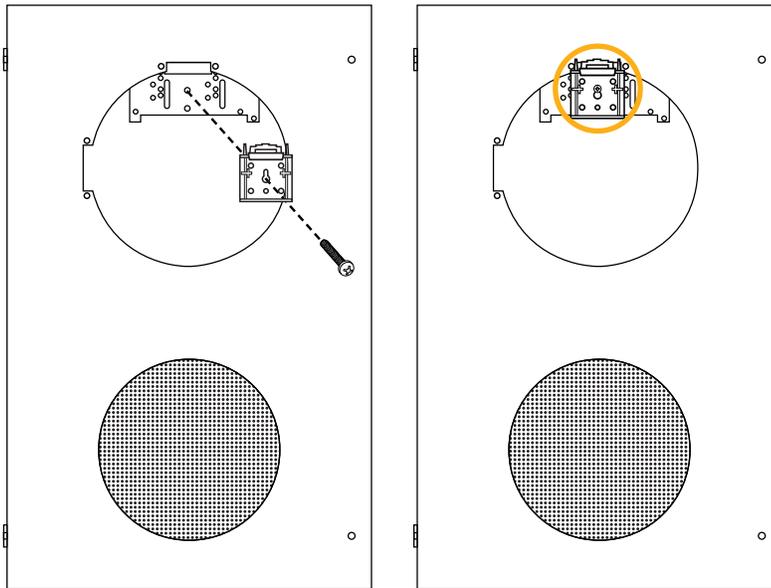
*The Lowell MC-301 Speaker Baffle Panel can be oriented vertically or horizontally

**The back of the Lowell MC-301 will have hinges on the right side when oriented vertically, and on the top when oriented horizontally
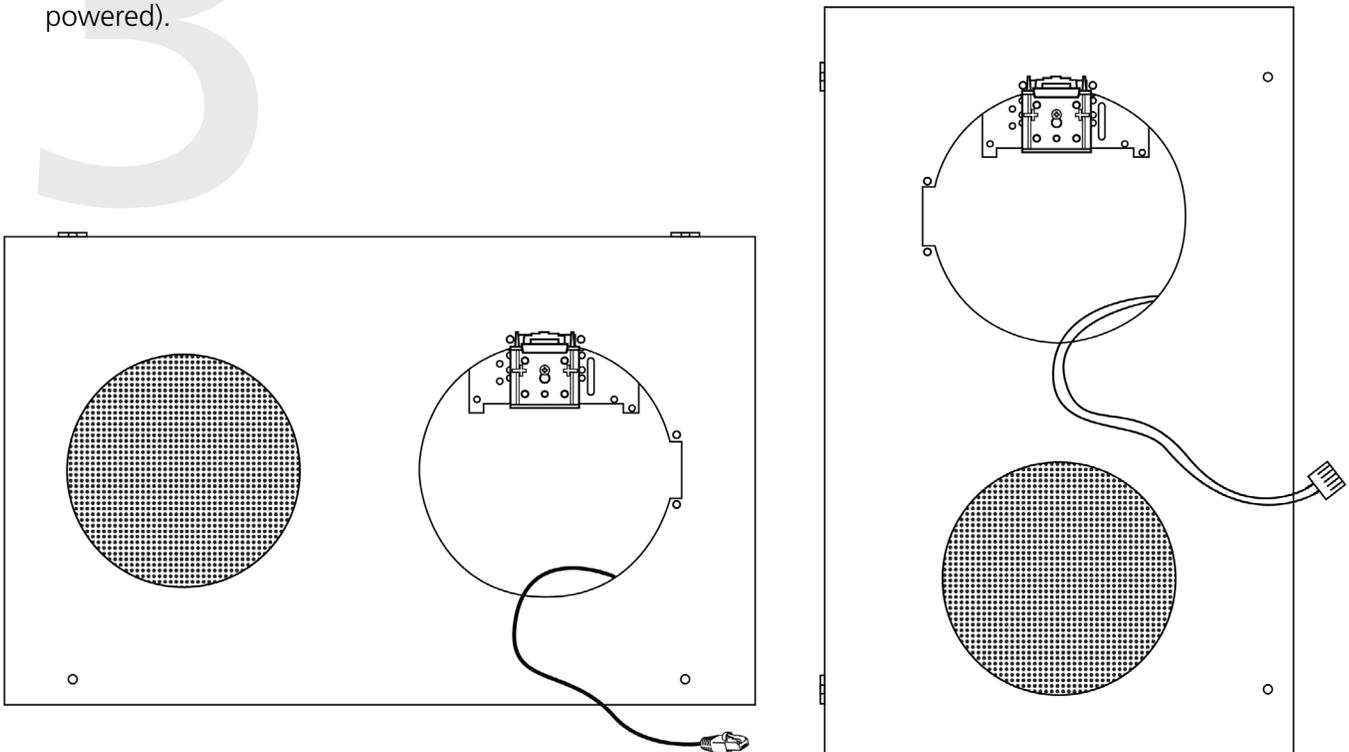
Installation Instructions for Clocks with a Speaker Baffle Combo Panel

3. Once the Lowell mounting bracket has been secured to the back of the Speaker Baffle Panel, attach the Sapling slimline mounting bracket to the front of the Lowell mounting bracket using one (1) 8-32 x 3/4" Phillips pan head screw (not provided) through the keyhole on the slimline bracket.


**The front of the Lowell MC-301 will have hinges on the left side when oriented vertically, and on the top when oriented horizontally

3. Once the clock mounting bracket is locked into position on the speaker baffle panel, **remove the gearbox locking pin from the back of the clock**, follow wiring instructions in the specific clock model manual and run any necessary wiring through to the clock (or insert batteries if the clock is battery powered).

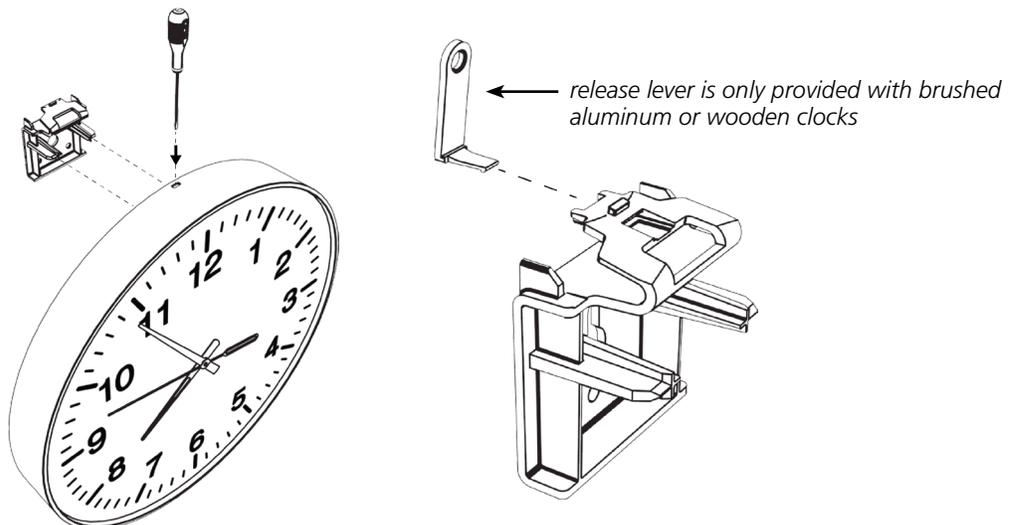## Installation Instructions for Clocks with a Speaker Baffle Combo Panel

4. Once the clock has been wired or batteries have been installed, attach the clock to the mounting bracket by sliding the clock onto it. You should hear a clicking noise as the latch engages.
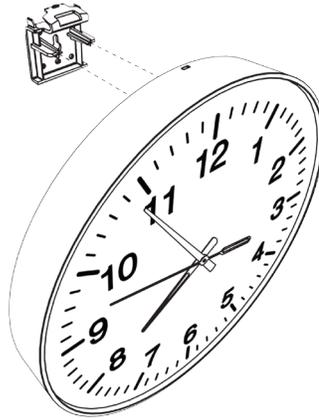
5. Once the clock is pushed all the way into the mounting bracket and a clicking noise is heard, the clock is locked in position. Pull it gently to verify that the clock is indeed locked into position.

6. If there is a need to remove the clock from the speaker baffle panel after installation, it can be done by inserting a flat-blade screwdriver into a the top of a clock with a slimline ABS case or by pushing down the release lever for clocks with brushed aluminum or wooden cases.


release lever is only provided with brushed aluminum or wooden clocks

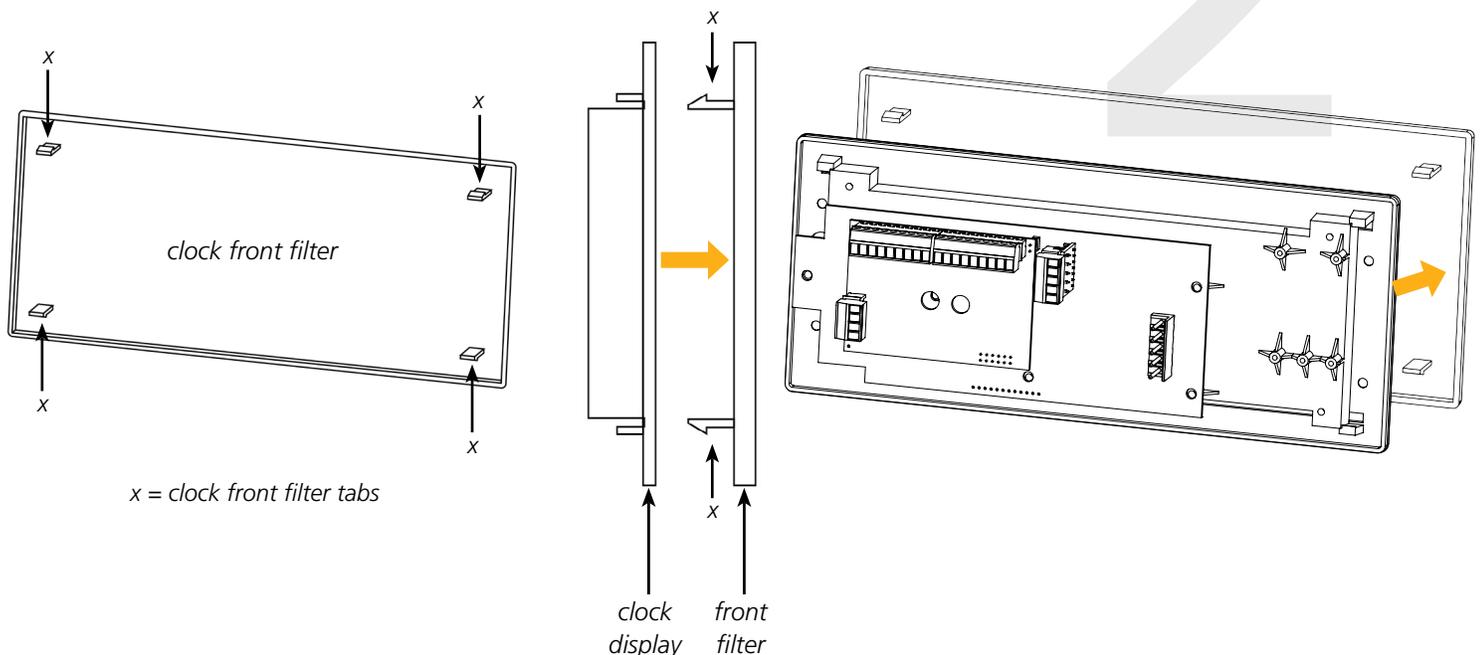## Installation Instructions for Clocks with a Speaker Baffle Combo Panel

* Installing Sapling SBD or SBP digital displays using the Lowell DC802-SAP1 Speaker Baffle panel:

* Please note that the Lowell DC802-SAP1 Speaker Baffle Panel can only accommodate the Sapling 2.5", 4-digit digital SBD or SBP displays (surface mount clock models are not compatible with this speaker baffle panel).

1. When installing an SBD or SBP digital display into the speaker baffle panel, the user is only to purchase the display without the housing.
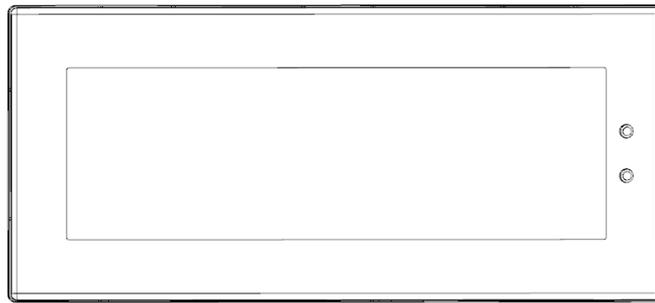

2. Sapling digital displays come with a protective filter that snaps onto the clock display utilizing four flexible tabs. Detach the filter from the clock display board by pressing inward on the filter tabs. Once removed, place the front filter aside, as it will be used later on.
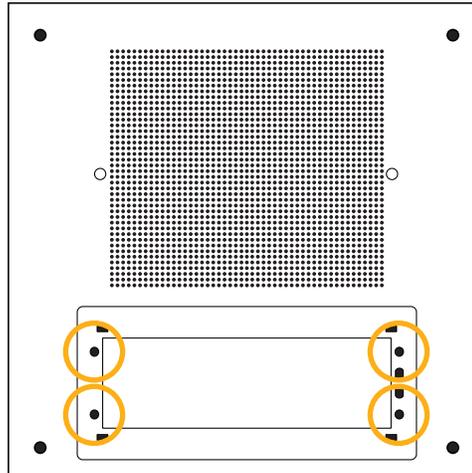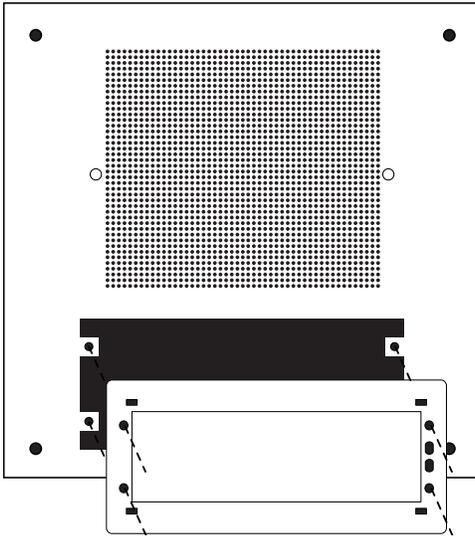

clock front filter

x = clock front filter tabs

clock display   front filter

Installation Instructions for Clocks with a Speaker Baffle Combo Panel

3. Remove the clear plastic protective film from the display board.
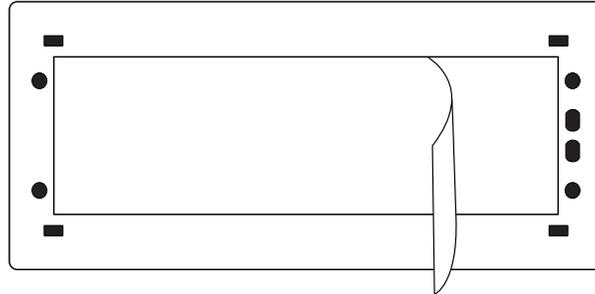
4. Place the display into position aligned with the dedicated holes in the speaker baffle panel, as shown in the below image.
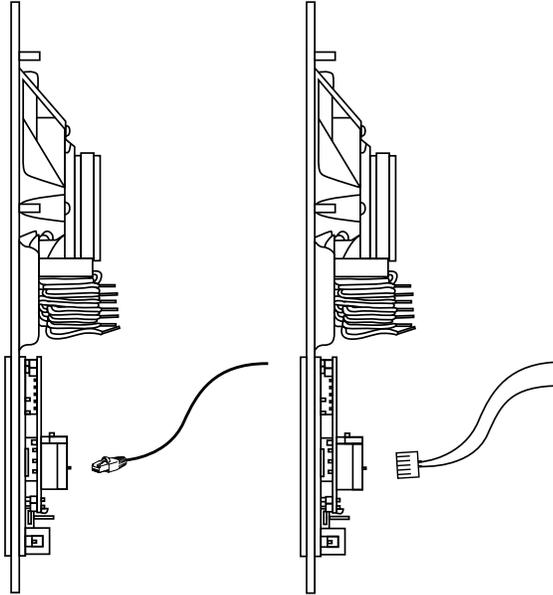

5. Secure the display to the speaker baffle panel by inserting four (4) 6-32 1/2" flat head undercut Phillips head screws with black oxide coating and attaching four (4) 6-32 nuts (not provided).
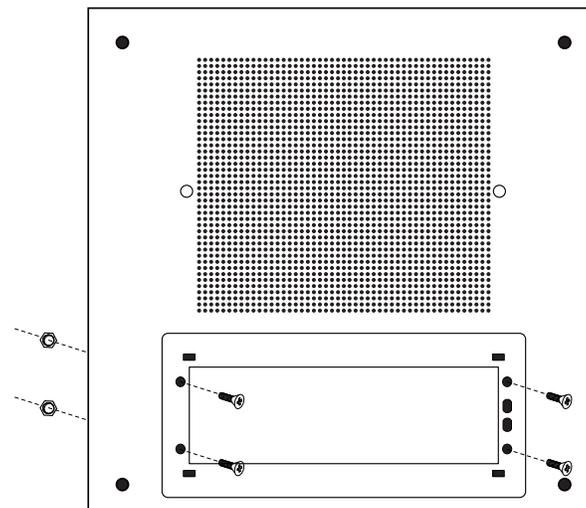
Installation Instructions for Clocks with a Speaker Baffle Combo Panel

6. Connect the necessary wiring to the display following wiring instructions in the specific clock model manual.

7. Reattach the front filter on top of the speaker baffle panel by placing the filter over the display board and lining up the filter tabs with the holes on the display board. You should hear a clicking noise as the filter flex tabs latch into place. Then, remove the adhesive clear protective film from the clock filter.

clock front filter

x = clock front filter tabs

clock display *front filter*