

MONITECH

TOUCH SCREEN & OVERLAY

Installation Guide

READ FIRST — TEST BEFORE YOU INSTALL

Complete the bench test first. Follow these steps only after the replacement touch screen has been tested and verified using the *Monitech Universal Touch Screen Pre-Installation Testing Guide*.

Once a touch screen has been bonded, or an overlay has been removed, the parts generally cannot be returned.

Safety & Handling

- **Isolate power at the main disconnect and follow your lockout/tagout procedure before opening the terminal.**
- Work on a static-safe (ESD) surface with a wrist strap. Touch panels and control boards are static sensitive.
- Work in a clean, dust-free area. Dust trapped under bonded glass or an overlay is permanent and shows in the viewing area.
- Wear clean nitrile or lint-free gloves. Fingerprints on a bonding surface cause adhesion failure and are visible once assembled.
- Handle glass by the edges. Never flex the panel or pull on the ribbon tail.

What You Will Need

Item	Notes
ESD mat and wrist strap	Required
Phillips / Torx drivers	To suit the terminal
Plastic pry tools / spudgers	Preferred over metal near glass
X-Acto knife / molybdenum wire	Adhesive separation only
Heat gun or hair dryer	Low setting
Adhesive remover (Goo Gone)	Residue removal
Isopropyl alcohol 70–99%	Final wipe before bonding
Lint-free cloths	No paper towel
Double-sided tape ≤ 10 mm	3M or equivalent
Squeegee or soft plastic card	Overlay application
Camera / phone	Photograph every step

Photograph as you go. Take a picture at every stage of disassembly and of every connector before unplugging it. This is the fastest way to guarantee correct reassembly.

Stage 1 — Identify and Verify

1.1 Identify the terminal and screen size

Record the terminal manufacturer, model and part number from the rear label. The terminal size determines the touch screen size — confirm it before opening anything.

1.2 Confirm what you received

Monitech supplies touch screens in several configurations. Check your packing slip against the table below, because the configuration decides how much disassembly is actually required.

What you received	Work required
Touch screen only	Full removal and re-bonding of the glass
Touch screen + overlay	Full removal, re-bonding, plus new overlay
Touch screen with front bezel	Bezel swap — no de-bonding needed
LCD + touch screen assembly	Assembly swap — no de-bonding needed
LCD + touch + keypad assembly	Assembly swap — no de-bonding needed

If you received a pre-assembled bezel or assembly, skip the removal work in Stage 3 and go straight to Stage 6 (Reassembly and Test).

1.3 Open the terminal

1. Remove the back cover and set the fasteners aside in a labelled container.
2. Locate the touch screen connector on the control board and note its type and pin count.
3. Compare the replacement against the original **before removing anything**: overall glass size, active area, ribbon tail position and length, and connector type and pin count.

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VERIFY THE OVERLAY NOW

If your kit includes an overlay, test-fit it on the bezel before you remove the old one.

Removing the old overlay destroys it. If the new overlay turns out to be the wrong size, the machine stays down. Confirm the fit first, then proceed.

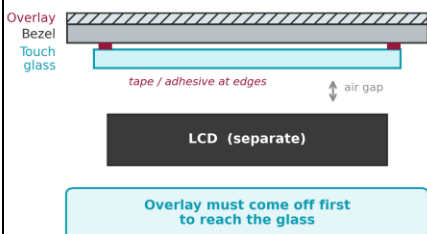
Stage 2 — Disassembly

1. Photograph the board and all cabling in place.
2. Label every connector and its position on the board — masking tape and a marker are enough — then unplug them.
3. Remove the control board from the terminal and set it on the ESD mat.
4. Remove the LCD.

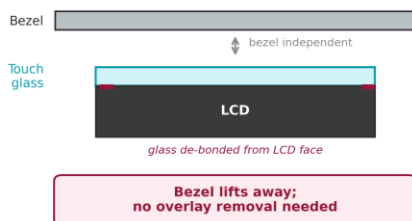
Which scenario do you have?

With the LCD out, the touch glass will be bonded to one of two places. Identify which before going further.

SCENARIO I Touch glass bonded to the BEZEL



SCENARIO II Touch glass bonded to the LCD



Scenario I — glass bonded to the bezel under the overlay. Scenario II — glass bonded to the LCD face.

Stage 3 — Removing the Old Touch Screen

Scenario II — glass bonded to the LCD face

1. **Warm the assembly first**, roughly **50–60°C**. The goal is just to soften the adhesive. Find a corner where you can see the seam between the touch glass and LCD/polarizer.

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2. Carefully create a **tiny entry point** with a very thin plastic/Mylar pick. Don't push the pick toward the LCD.
3. Feed the molybdenum wire through that opening so you have a length of wire coming out on **both sides**.
4. Hold one end in each hand, preferably using small handles. Keep the wire **tight and nearly parallel with the LCD**.
5. Move the wire **left-right-left-right**, like flossing your teeth, while slowly advancing it through the adhesive.
6. **Don't pull upward**. This is the critical part. Upward tension can force the wire into the LCD polarizer or bend/crack the LCD glass. Your pulling force should stay sideways. If the wire becomes difficult to move, **stop and add a little more heat** rather than pulling harder.

Scenario I — glass bonded to the bezel under the overlay

1. Confirm you have the correct replacement overlay on hand (see Stage 1).
2. Set a heat gun to its lowest setting and warm one corner of the overlay. Lift that corner and peel slowly, heating just ahead of the peel line as you go.
3. Remove the adhesive residue from the bezel with Goo Gone or an equivalent remover.
4. Follow the Scenario II steps above to release the touch glass from the bezel, then clean that surface as well.

CLEAN IN TWO STAGES

Goo Gone leaves an oily film that will stop new adhesive from sticking.

Always follow adhesive remover with an isopropyl alcohol wipe, then dry with a lint-free cloth. The surface must be clean, dry and residue-free before bonding.

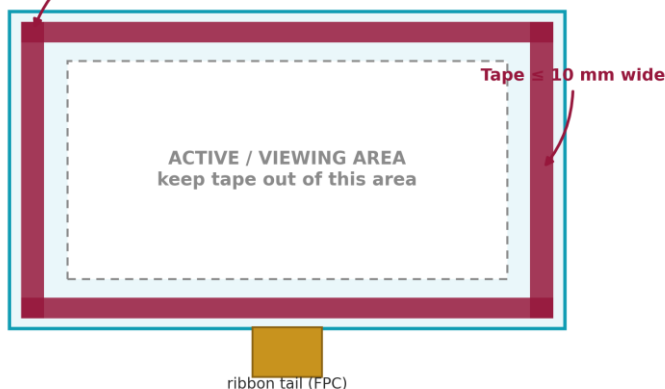
Stage 4 — Fitting the New Touch Screen

1. Peel the thin protective film from the rear (bonding) face of the new touch screen if one is present.
2. Apply double-sided tape no more than 10 mm wide around the rear perimeter. Butt the strips at each corner so there are **no gaps and no overlaps**, and keep all tape clear of the active viewing area. Do not stretch the tape.

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Continuous perimeter — corners butted,
NO gaps between adjacent strips

BONDING SURFACE OF THE TOUCH GLASS (rear face)

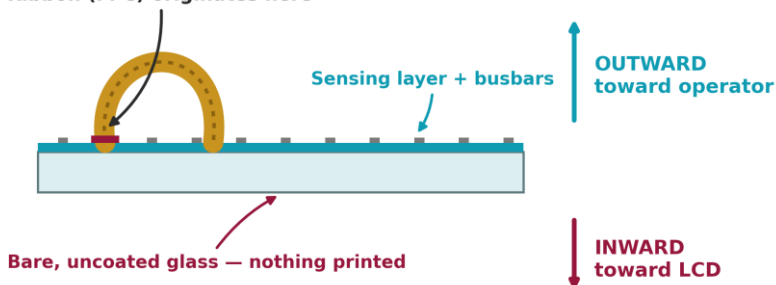


Continuous perimeter tape, butted at the corners, outside the viewing area.

Check the orientation before bonding

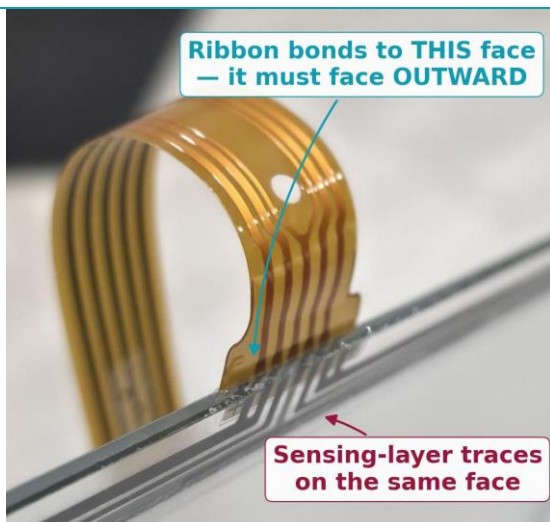
The touch-sensitive face must point outward, toward the operator. The face the ribbon tail is bonded to is the outward face.

Ribbon (FPC) originates here



Cross-section, thickness exaggerated. The face the ribbon leaves is the face that goes outward.

The face the ribbon leaves is the face that goes outward.



Ribbon bonded on the sensing face — this face goes outward.

Seat the glass

1. **Dry-fit first, with the tape liner still on.** Check that the glass seats fully, sits square, and that no tape is visible in the viewing area.
2. When satisfied, peel the tape liner, feed the ribbon tail through its opening, and lower the glass into place. Do not pull on the tail to position the glass.
3. Press firmly and evenly around all edges. Keep the ribbon tail to a gentle radius — a sharp crease can fracture the conductors.
4. Allow the adhesive to set before handling further. Most double-sided tapes reach working strength in about an hour and full strength over 24–72 hours.

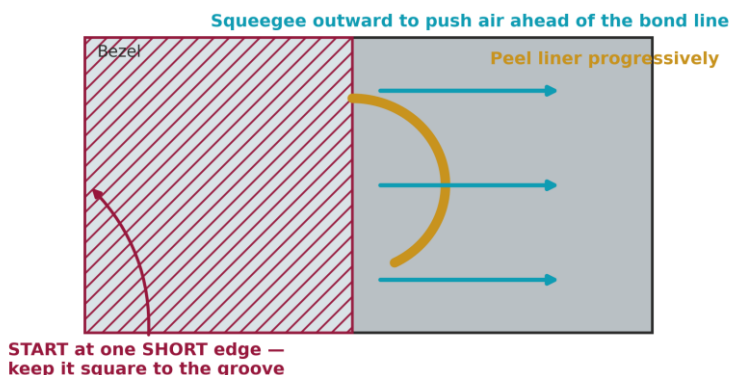
Stage 5 — Fitting the Overlay

Skip this stage if your kit did not include an overlay.

1. Remove any protective film from the front face of the touch screen and check the surface is free of dust and fingerprints. Wipe with isopropyl alcohol and a lint-free cloth if needed.
2. Test-fit the overlay dry on the bezel and confirm the size and cut-outs line up.
3. Peel back a small amount of the adhesive liner at one **short edge**, align that edge squarely in its groove, and tack it down. Check the alignment before committing further.

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4. Peel the liner progressively and lay the overlay down as you go, squeegeeing outward from the bond line so air is pushed ahead of it rather than trapped.



Start square at a short edge, then peel and squeegee progressively.

5. Work any small bubbles out to the nearest edge with the squeegee. Avoid lifting and re-laying the overlay repeatedly — the adhesive will not recover.

KEEP THE FIRST EDGE SQUARE

If the starting edge goes down at an angle, the far end will run off the groove and cannot be corrected without removing the overlay. Take the time to align the first edge.

Stage 6 — Reassembly, Test & Calibration

1. Reconnect every cable to the position recorded in Stage 2, using your photographs. Confirm the touch screen ribbon is fully seated and not pinched.
2. Refit the control board and the LCD into the bezel.
3. **Restore power and test the touch screen before refitting the back cover.** Check all four corners, the centre, and several points across the surface. Catching a fault now saves opening the terminal twice.
4. Calibrate if the terminal requires it, following the controller's user manual.
5. Refit the back cover and return the machine to service.

Troubleshooting

Symptom	Likely cause
No touch response at all	Ribbon not fully seated, pinched, creased, or panel fitted the wrong way round
Touch works but is offset	Calibration required
Dead zone or one bad corner	Cracked glass, damaged ribbon, or pinched tail
Adhesive visible in viewing area	Tape too wide or misplaced — re-bond outside the active area
Bubbles under the overlay	Air trapped during application — work out to the nearest edge
Overlay lifting at an edge	Surface not fully cleaned of Goo Gone residue before bonding
Dust visible under glass or overlay	Assembled in a dusty area — must be re-opened and cleaned

If the panel fails its bench test, stop. Do not bond it or remove the old overlay. Contact Monitech before going further.

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Contact Us

Our technical team is available Monday to Friday and is happy to help with sizing, identification, or any step in this guide.

Technical support & sales

Contact	Details
Toll free	877-493-6105
Local	519-725-2222
Website	monitech.com
Support	monitech.com/technical-support/
Guides	monitech.com/knowledgebase-category/install-guides/

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Office hours

Monday to Friday, 8:00 AM – 5:00 PM EST. Closed Saturday and Sunday.

BEFORE YOU CALL

Have ready: **terminal make, model and part number**, the Monitech part number from your packing slip, and a photo of the rear label and the touch screen connector. This lets us identify the part on the first call.

Thank you for your business.