MAESTRO IR®
Fan/Light

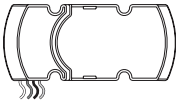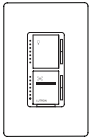## IR Quiet Fan Speed and Incandescent/Halogen Dimmer Single-Location System

Canopy Module
CM-L300FQ1: 120 V~ 60 Hz
300 W light / 1 A fan (3.5 A total)

Wall Control
MIR-LFQ35: 120 V~ 60 Hz
3.5 A (one CM-L300FQ1)

Infrared Wireless Transmitter
MIR-ITFS-LF: 3 V⎓ 0.15 W

Warning: For use with one ceiling paddle fan and light only. Do not use with an exhaust fan or more than one fan.

One ceiling fan only
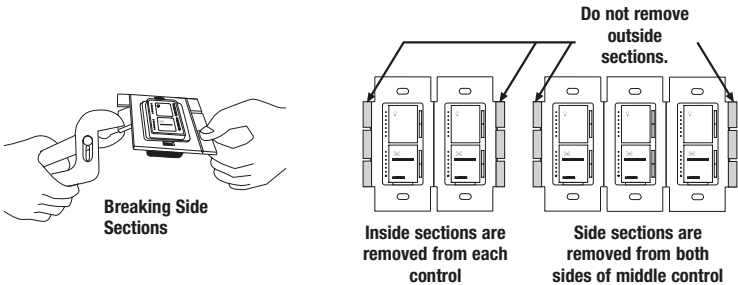
No exhaust fans

Important Notes
Please read before installing.

1. **Caution:** To avoid overheating and possible damage to other equipment, do not use to control receptacles, fluorescent or neon lighting fixtures, transformer-supplied appliances, solid state fan motors, **or exhaust fans**. For exhaust fans use Lutron fully variable fan speed controls.
2. Install in accordance with all national and local electrical codes.
3. When no "grounding means" exist within the wallbox then the NEC® 2005, Article 404.9 allows a wall control without a grounding connection to be installed as a replacement, as long as a plastic, noncombustible wallplate is used. For this type of installation, cap or remove the green ground wire on the wall control and use an appropriate wallplate such as Lutron's *Claro®* series wallplates.
4. The *Maestro®* IR dual fan/light control system consists of a Wall Control and a Canopy Module. Both must be installed correctly before attempting to control the fan/light fixture. Do not attempt to mix Lutron controls with those from other manufacturers, or mix Lutron controls not labeled for use together.
5. This system is not compatible with fans having a control system built into the motor.
6. Do not paint Wall Control or Canopy Module.
7. Do not use where total lamp wattage is less than 40 W or greater than 300 W.
8. Operate between 32 °F (0 °C) and 104 °F (40 °C) room temperature. For indoor use only.
9. Wall Control may feel warm to the touch during normal operation.
10. Recommended wallbox depth is 2.5 in (64 mm) minimum.
11. **Clean Wall Control with a *soft damp cloth only*.** Do not use any chemical cleaners.
12. This system cannot be used to change the direction of the fan. To change the fan direction, stop the fan, and then change the position of the switch located on the body of the fan.
13. To maximize light bulb life, use bulbs recommended for fan or "rough service" use.
14. Do not use pull chains to operate fan/light after installing this system.
15. Canopy Module must be installed within a fan canopy enclosure.
16. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Multigang Installations
When installing more than one control in the same wallbox, it may be necessary to remove all inner side sections prior to wiring (see below). Using pliers, bend side sections up and down until they break off. Repeat for each side section to be removed. **Note: Product does not require derating when side sections are removed.**

Breaking Side Sections

Do not remove outside sections.

Inside sections are removed from each control

Side sections are removed from both sides of middle control

Operation

Light Level Tap Button
- **Tap once when lights are off -** Lights brighten smoothly to preset intensity.
- **Tap once when lights are on -** Lights dim smoothly to off.
- **Tap twice quickly -** Lights brighten rapidly to full intensity.
- **Press and hold when lights are on -** Activates delayed fade to off mode. As the tap button is held, the LEDs will begin to flash. The first flashing LED represents a 10 second fade to OFF. Each additional flashing LED represents an additional 10 seconds of delay before lights fade to OFF (up to 60 seconds of delay).

Fan Speed Tap Button
- **Tap once when fan is off -** Fan speed increases to preset level.
- **Tap once when fan is on -** Fan speed slows to off.
- **Tap twice quickly -** Fan speed increases to full speed.

Light Level LEDs
Indicate approximate light level
LEDs may not change with each press

Press to increase light level
Press to decrease light level

Fan speed LEDs
Indicate exact fan speed
LEDs will change with each press

Press to increase fan speed
Press to decrease fan speed

(LEDs not available on Accessory Controls)

FASS™ - Front Accessible Service Switch

IMPORTANT NOTICE:
To replace bulb, remove power by pulling the *FASS* switch out on the Control.
For any procedure other than routine bulb replacement, power must be disconnected at the main electrical panel.

Troubleshooting

Symptom	Possible Cause
Light or fan does not turn ON or no LEDs turn ON.	• Front Accessible Service Switch (*FASS*) on control is pulled out to the OFF position. • Manual switch on fan is off (ex: pull chain). • Light bulb(s) burned out. • Breaker is OFF or tripped (or fuse blown). • Fan direction switch is between forward and reverse. • Wiring error, call **Lutron Technical Support Center** at 1.800.523.9466.
Upper LEDs on Wall Control cycle rapidly and bottom LED is ON.	• Unit is not activated properly. Activate system as described in Step 14. • Wiring error, call **Lutron Technical Support Center** at 1.800.523.9466.
Upper LEDs on Wall Control cycle rapidly and second lowest LED is ON.	• Communication error. Check wiring; if error continues, call **Lutron Technical Support Center** at 1.800.523.9466.
Fan vibrates or wobbles.	• Fan blades not properly balanced. See fan manufacturer's instructions.
Light dims in large steps and fan is noisy or does not spin at correct speed.	• Fan and light control wires on Canopy Module are reversed.
Light button controls fan and vice-versa.	• Fan and light control wires on Canopy Module are reversed.
Fan speeds too slow.	• Fan pull chain not set to high.
Wall Control LEDs respond as expected but fan and/or light does not respond properly.	• Fan and/or light pull chains not set to high/on. • Wiring error, call **Lutron Technical Support Center** at 1.800.523.9466.
Light or fan does not respond to infrared wireless transmitter.	• Transmitter batteries installed incorrectly. • Transmitter batteries are dead. • Transmitter not aimed directly at wall control. • Transmitter outside operating range. • Wall control has already received and responded to command.

Technical Assistance
If you have questions concerning the installation or operation of this product, call the *Lutron Technical Support Center*. Please provide exact model number when calling.

U.S.A. and Canada (24 hrs/7days):
1.800.523.9466

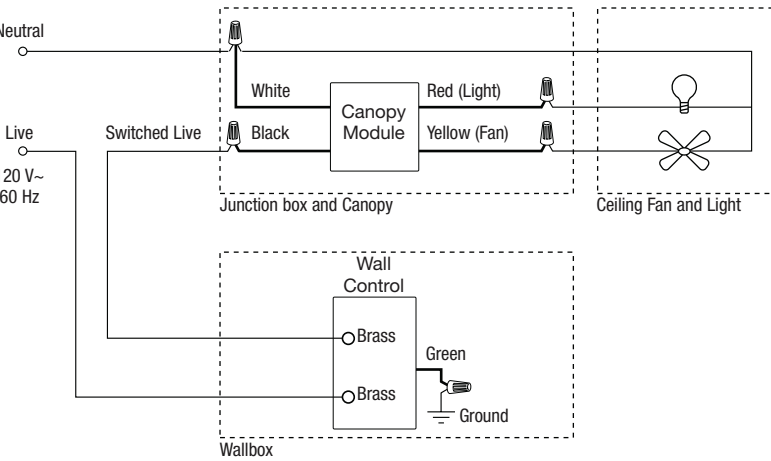**Other countries 8am – 8pm ET:**
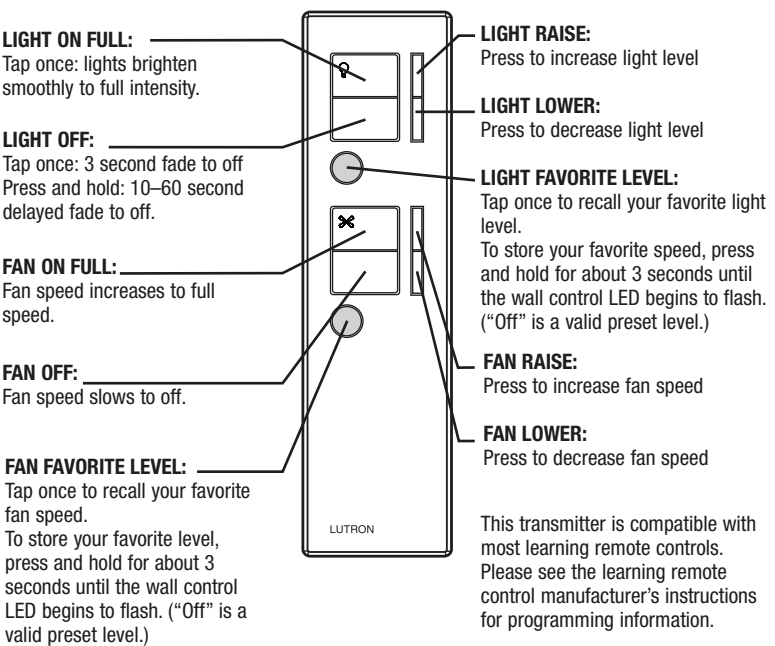+1.610.282.3800
México
+1.888.235.2910

Fax +1.610.282.1243

http://www.lutron.com

Reference Wiring Diagram

Neutral

Live
120 V~
60 Hz

Switched Live

White

Black

Canopy Module

Red (Light)

Yellow (Fan)

Junction box and Canopy

Ceiling Fan and Light

Wall Control

Brass

Brass

Green

Ground

Wallbox

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Limited Warranty

Infrared Wireless Transmitter Operation
Point the transmitter at the *Maestro IR®* Wall Control(s), then use the buttons as outlined below.

LIGHT ON FULL:
Tap once: lights brighten smoothly to full intensity.

LIGHT OFF:
Tap once: 3 second fade to off
Press and hold: 10–60 second delayed fade to off.

FAN ON FULL:
Fan speed increases to full speed.

FAN OFF:
Fan speed slows to off.

FAN FAVORITE LEVEL:
Tap once to recall your favorite fan speed.
To store your favorite level, press and hold for about 3 seconds until the wall control LED begins to flash. ("Off" is a valid preset level.)

LIGHT RAISE:
Press to increase light level

LIGHT LOWER:
Press to decrease light level

LIGHT FAVORITE LEVEL:
Tap once to recall your favorite light level.
To store your favorite speed, press and hold for about 3 seconds until the wall control LED begins to flash. ("Off" is a valid preset level.)

FAN RAISE:
Press to increase fan speed

FAN LOWER:
Press to decrease fan speed

This transmitter is compatible with most learning remote controls. Please see the learning remote control manufacturer's instructions for programming information.
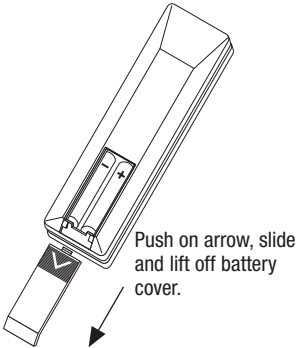
Multiple Gang Application
Maestro IR® fan controls may be ganged together with Maestro IR® dimmers, but should not be ganged with other *Maestro IR®* fan or fan/light controls. If ganged with Maestro IR® dimmers, **button presses on a Dimmer IR transmitter will affect all light controls; button presses on a Fan IR transmitter will affect only the fan control.**
- Pressing the ON FULL button will cause each control to fade to its highest level, regardless of whether some are on and some are off.
- Pressing the OFF button will cause all controls to turn off.
- Pressing the RAISE or LOWER buttons will change the control level on all units at the same rate until the button is released or until the controls have reached their maximum or minimum level. If any units are off when the RAISE button is pressed, they will turn on at the minimum control level.
- To save your favorite control level, adjust all the controls to the desired level, then press and hold the FAVORITE button for about 3 seconds until the LEDs begin to flash. Once your favorite level is set, pressing the FAVORITE button will cause each control to return to your programmed favorite level.

Battery Replacement
The Infrared Wireless Transmitter uses 2 AAA batteries that are pre-installed. For best results use alkaline batteries. Do not use NiCad or NiMH batteries.
To replace batteries:
1. Remove the battery cover (see diagram).
2. Replace with 2 size AAA batteries as shown.
   Note: Incorrect installation will cause batteries to drain.
3. Replace the battery cover.

Push on arrow, slide and lift off battery cover.

Canopy Module Installation
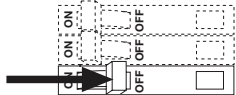
1 Install fan.
• Install fan according to manufacturer's instructions and check for proper operation.

2 Set fan speed and lights.
• Set fan to highest speed and turn lights on using pull chains.
• If two switches control the fan and light separately, note which controls the light.

3 Turn OFF power.
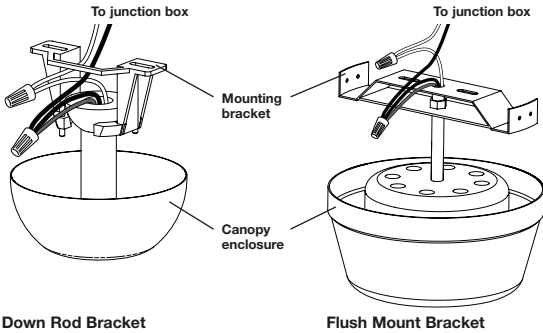• Turn power OFF at circuit breaker (or remove fuse).

4 Disconnect fan.
• Remove canopy enclosure from ceiling fan mounting bracket.
• If separate wires from the junction box power the fan and light, tag the wire connected to the light wire. In Step 5, connect this wire to the black Canopy Module wire.
• Leave any green ground wires connected as directed in fan manufacturer's instructions.
• Disconnect fan from remaining wiring in the ceiling.

Typical Wire Colors	
Fan	Black
Light	Black with White stripe or Blue
Neutral	White

If the fan and light do not have separate wires, the fixture may have a control system built into the motor and cannot be used with this product.

To junction box   To junction box

Mounting bracket

Canopy enclosure

Down Rod Bracket   **Flush Mount Bracket**

Important Wiring Information
When making wire connections, follow the recommended strip lengths and combinations for the supplied wire connectors (see wire connector bag). **Note:** All wire connectors provided are suitable for **copper wire only.** For aluminum wire, consult an electrician.

Wire Connectors:
Use to join 14 or 12 AWG (1.5 or 2.5 mm²) ground wire to 18 AWG (0.75 mm²) Wall Control ground wire, and to join 18 AWG (0.75 mm²) Canopy Module wire to 12, 14, 16 or 18 AWG (2.5, 1.5, 1.0 or 0.75 mm²) wire.

Twist wire connector tight.

5 Connect Canopy Module.
• If you have questions about wiring, call the **Lutron Technical Support Center** at 1.800.523.9466.

To junction box

Switched Live
Black
White
Canopy Module
Neutral
Fan
Yellow
Red
Light
To fixture
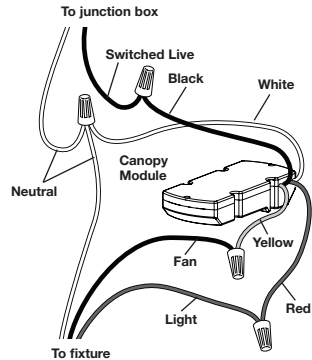
Wiring the Canopy Module (CM-L300FQ1):
Use wire connectors to join wires as indicated below and in the wiring diagram, and to **cap any unused wires**.

| Canopy Module Wire:	Connects to:
White	Neutral wires in the junction box and to fan
Black	Switched Live wire from Wall Control
Yellow	Fan
Red	Light

6 Insert Canopy Module.

6a - Down Rod Bracket
• Do not install Canopy Module in ceiling.
• Slide Canopy Module into the ceiling fan mounting bracket.
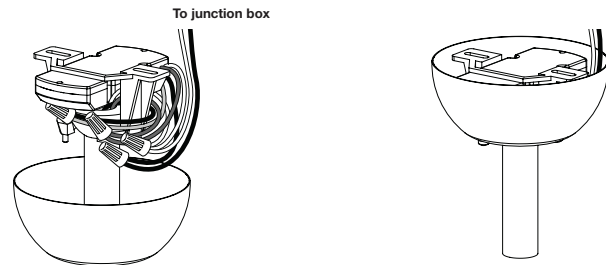
To junction box
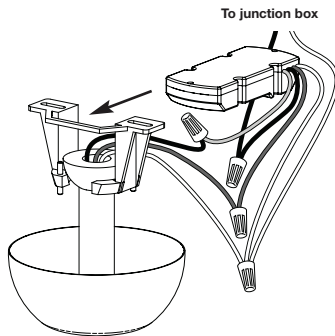
6b - Flush Mount Bracket
• Do not install Canopy Module in ceiling.
• Attach Canopy Module to bracket with a cable tie.
• Ensure cable tie does not come in contact with moving motor parts.
• Install cable tie through notches on Canopy Module. Pull tight and clip excess.

To junction box

Notch   Cable tie
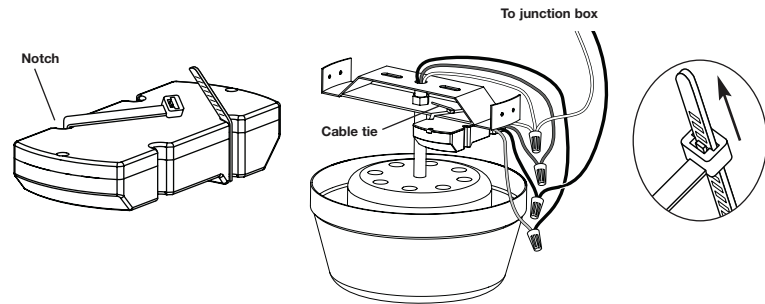
7 Attach canopy.

7a - Down Rod Bracket
• Check all wire connections.
• Tuck the wires into the junction box and/or canopy enclosure.
• Attach the canopy enclosure to the fan mounting bracket, taking care not to pinch any wires.

To junction box

7b - Flush Mount Bracket
• Check all wire connections.
• Tuck the wires into the junction box and/or bracket.
• Ensure wires and/or wire connectors do not come in contact with moving motor parts.
• Attach the canopy enclosure to the fan mounting bracket, taking care not to pinch any wires.
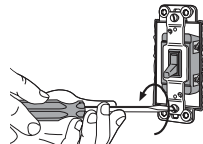
To junction box
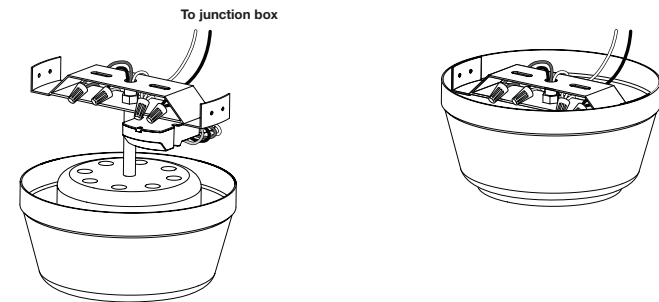
Control Installation

8 Remove original wallplate and switch.
• Remove the wallplate and switch mounting screws.
• Carefully remove switches from wall (**do not remove wires**).
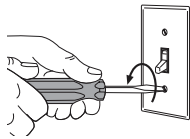
**Danger:** Verify power to each switch is OFF before proceeding.

9 Identify switch wires.
• If two switches control the fan and light separately, tag the wires connected to the light switch. In Step 11, connect these wires to the Wall Control.

Important Note:
Your wall switch may have two wires attached to the same screw (see illustrations below for examples). Tape these two wires together before disconnecting. When wiring, connect wires to new Controls the same way they were connected to the switch.
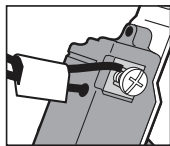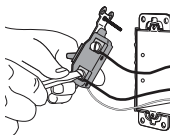
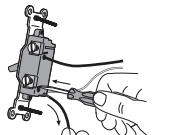One wire in the push-in terminal and one to the screw.
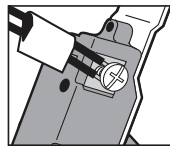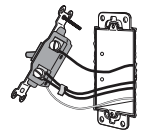
One continuous wire to the screw.

10 Disconnect switch wires.

Screw Terminals: Turn screws to loosen.
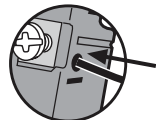
Push-in Terminals: Insert screwdriver. Pull wire out.

Looped Wire: Turn screw to loosen.

Important Wiring Information

Trim or strip wallbox wires to the length indicated by the strip gauge on the back of the control
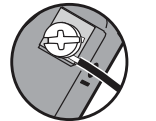
Push-in Terminals: Insert wires fully.
NOTE: Push-in terminals are for use with 14 AWG (1.5 mm²) solid copper wire only. DO NOT use stranded or twisted wire.

OR

Screw Terminals: Tighten securely.
Screw terminals are for use with 12 or 14 AWG (2.5 or 1.5 mm²) solid copper wire only. DO NOT use stranded or twisted wire.

11 Connect Wall Control.
• For installations involving more than one control in a wallbox, refer to Multigang Installations before beginning.
• Remove the wallplate before proceeding with installation. This will expose Wall Control mounting holes and prevent wallplate damage while installing. Grasp Claro wallplate at top and pull forward to remove.
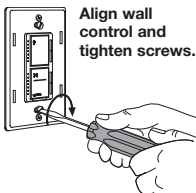
Wall Control
Brass screw
Brass screw
Green wire
Ground
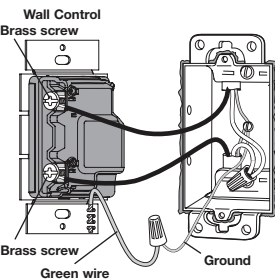
Wiring the Wall Control (MIR-LFQ35):
See reference wiring diagram (on reverse).

• Use wire connectors to connect the **green** ground wire on the Wall Control to the **bare copper** or **green** ground wire in the wallbox (see 4-Important Wiring Information).
• Connect either of the wires removed from the switch to one of the **brass** screw terminals on the Wall Control, or insert fully into the push-in terminal.
• Connect the remaining wire removed from the switch to the other **brass** screw terminal on the Wall Control, or insert fully into the push-in terminal.
• Cap any unused wires.

12 Mount Control(s) to wallbox.
• Form wires carefully into the wallbox, mount and align the Control(s).
• Replace the wallplate.

Align wall control and tighten screws.

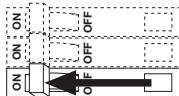**Caution:** Do not overtighten mounting screws.
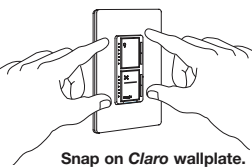
Snap on Claro wallplate.

13 Turn ON power.
• Do not turn on power until Wall Control and Canopy Module have been installed and wired.
• Turn power ON at circuit breaker (or replace fuse).

Warning: Fan will return to full speed when power is restored. Clean up any tools or ladders near the fan first.

14 Activate system.
• Pull out the Front Accessible Service Switch (FASS) at the bottom of the Wall Control, wait 10 seconds, then push it back in.
• The LEDs will cycle for up to 30 seconds.
• If installing more than one Wall Control/Canopy Module system, activate one at a time with FASS pushed in on all other systems.
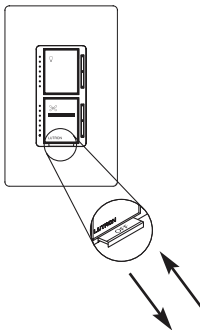
15 Recommended - Disconnect pull chains.
• Disconnect pull chain extensions to prevent light and fan speeds from being adjusted at the fan.