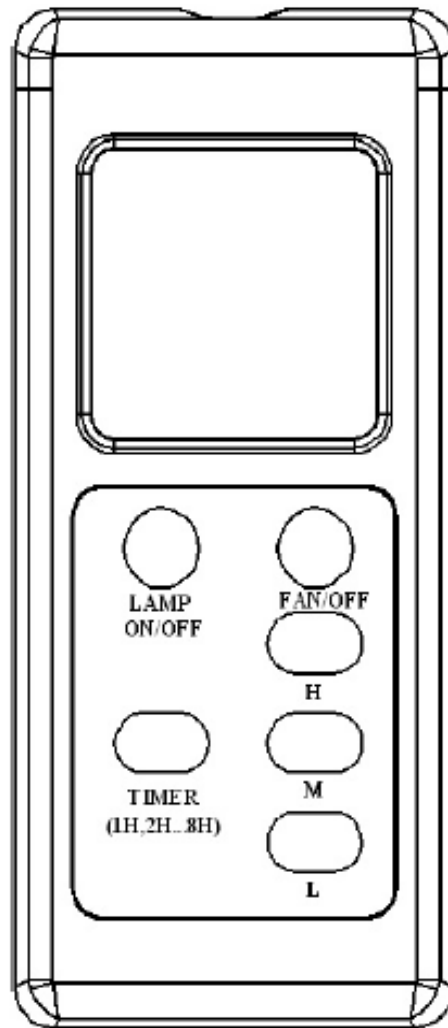# MERCATOR

THE QUALITY BRAND IN FANS

Minor design changes or otherwise may result in slight variations between the product illustrated and that which is contained within this package

INSTALLATION AND OPERATION INSTRUCTION BOOK, REV 3.0

Models: FRM97

LCD REMOTE CONTROLLER FOR CEILING FANS

TABLE OF CONTENTS

> **Suitable for use with fluorescent or compact fluorescent lamps**
>
> **Suitable for use with energy saving halogen globe or equivalent**

INTRODUCTION

CONGRATULATIONS ON YOUR CHOICE

Thank you and we are delighted you have chosen a MERCATOR remote controller for your home. Please read all instructions carefully before assembly and use.

SAFETY NOTICES

WARNING / CAUTION

A WARNING / CAUTION notice denotes a hazard. It calls attention to an installation procedure, operating procedure, maintenance procedure, or the like, that if not correctly performed or adhered to, could result in damage to this appliance, personal injury or death. Do not proceed beyond a WARNING / CAUTION notice until the indicated conditions are fully understood and met.

SAFETY SYMBOLS

∼	Alternating current
⏚	Protective earth
⚠	Warning/Caution

SAFETY PRECAUTIONS

Please observe the following general safety precautions carefully before and during all phases of handling, installation, removal, operation and maintenance of this product. Failure to comply with these precautions violates safety standards of design, manufacture and intended use of the product. Mercator Lighting assumes no liability for customer's failure to comply with these requirements.

⚠WARNING

SAFETY WARNINGS

1. Read all instructions and safety information. Review assembly diagrams provided before installing your new ceiling fan.
2. **This remote controller must be installed by a licensed and qualified electrician according to SAA and local authority regulations.**
3. This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
4. Young children should be supervised to ensure that they do not play with the appliance.
5. **All electrical works must only be undertaken after disconnection of the power by removing fuses or turning off the circuit breaker, to ensure all pole isolation of the electrical supply.**
6. Do not use outdoors where it could be exposed to water or moisture.
7. This product is for indoor use only.
8. This product requires 220-240Vac 50Hz power supply.
9. This product is to be used only for controlling a ceiling fan.
10. The remote controller receiver must be earthed during installation.
11. Do not pull or cut short lead wires.
12. Do not drop or bump the remote controller set.
13. Do not use this remote controller in conjunction with any variable (rheostat) wall controller.
14. Do not use the remote controller transmitter (handset) with any other receiver.
15. Keep battery out of reach of children.
16. This manual is not intended to instruct or assist untrained or unqualified persons to install this remote controller.
17. **It is the responsibility of qualified, licensed installer and user to apply common sense and care at all times during installation and operation.**

INSTALLATION INSTRUCTIONS

⚠WARNING

- Make sure electricity is turned off at the main power box before commencing work. Turn off the power by removing fuse or turning off circuit breaker before installing remote controller.
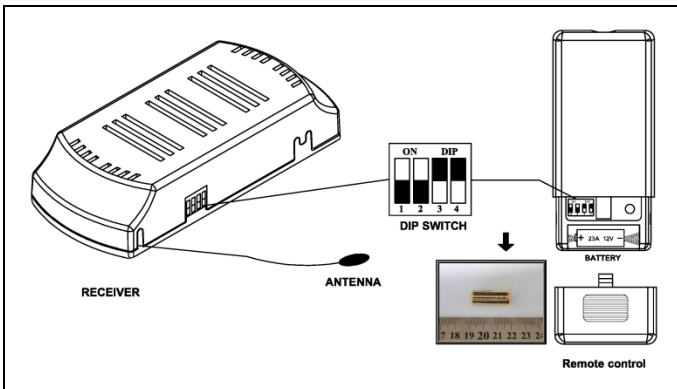
READ BEFORE INSTALLATION

1. Power supply to input wires of remote controller receiver must be connected through an isolation switch (e.g. wall switch).
2. Install remote controller receiver inside ceiling fan canopy to ensure proper protection.
3. Set ceiling fan speed control rotary switch (if any) to HIGH setting and control switch for light kit (if any) to ON position before operating remote control functions.
4. For ceiling fan with pull chain switches, set pull chain switches accordingly so that ceiling fan speed setting is at HIGH and fan light setting (if any) is at ON position before operating remote control functions.
5. Battery will weaken over time and should be replaced before leaking takes place as this will damage the transmitter. Dispose of used battery properly.
6. **If remote controller is to be used for controlling a ceiling fan (i) of other brands, (ii) with a low profile (hugger) design, or (iii) that has a smaller hanging bracket, then you should**
   a. Check to confirm electrical compatibility of the remote controller set with the ceiling fan before installation.
   b. Make sure the hanging bracket will fit remote controller receiver. Otherwise, if the receiver cannot be inserted into the hanging bracket due to dimension limitations or because there is no hanging bracket as may be in the case of a low profile (hugger design) ceiling fan, then the receiver can be enclosed in an Electrical Insulation Box (installation must comply to Australian wiring regulations) and placed in the ceiling. Electrical Insulation Box is not supplied. In this case, remember to draw the antenna / aerial wire away from the insulation box through a small hole.

INSTALLATION INSTRUCTIONS

⚠WARNING

- Make sure electricity is turned off at the main power box before commencing work. Turn off the power by removing fuse or turning off circuit breaker before installing remote controller.

HOW TO INSTALL REMOTE CONTROLLER

1. This remote controller set has 16 possible code combinations for wireless control communication. Code setting on remote control transmitter and receiver **must match each other for operation**. **Otherwise the remote controller will not work.** The code setting can be adjusted through 4 switches found on both the transmitter and the receiver.

   Setting the code on transmitter
   I. Remove battery cover.
   II. Slide code switches to your choice of ON or OFF position. Use a small screw driver or ball point pen to slide each switch firmly up or down.
   III. Install battery (included)
   IV. Install battery cover on transmitter
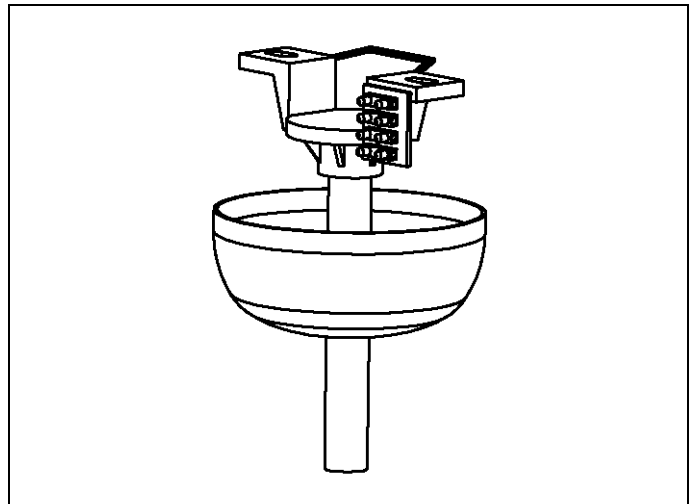
   Setting the code on receiver
   I. Slide code switches on the receiver so that they are on the same positions as those set on the transmitter.
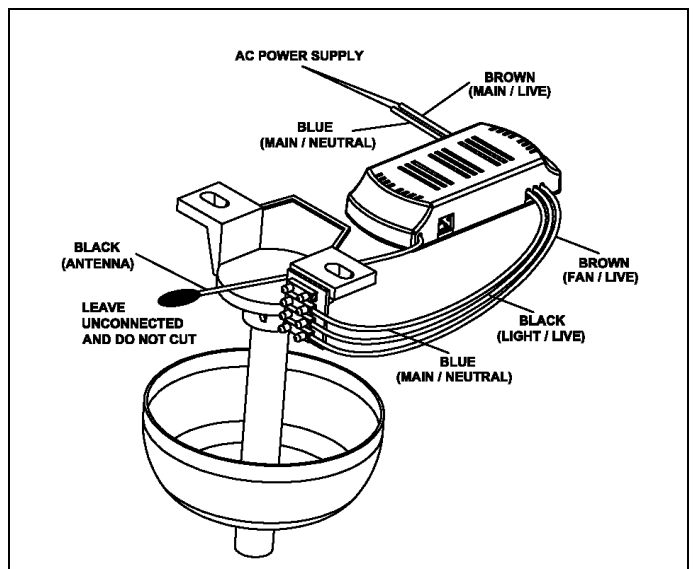
   If you wish to control two or more ceiling fans independently with different set of remote controllers, set different codes for each remote controller set.

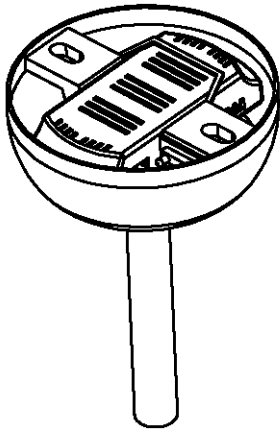| Possible DIP Switch Setting (ON setting represented by 1; OFF setting represented by 0)			
0000	0100	1000	1100
0001	0101	1001	1101
0010	0110	1010	1110
0011	0111	1011	1111

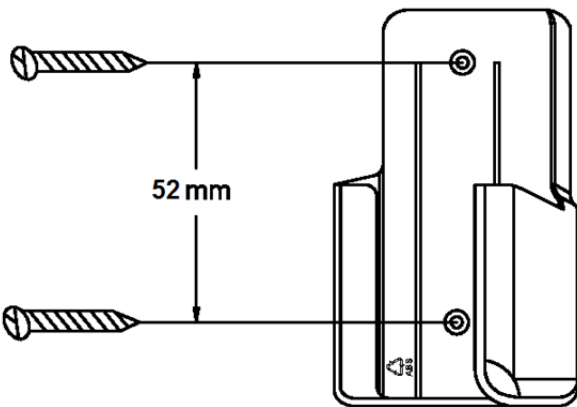2. Make sure power supply is cut off before removing fan canopy.

3. Think about best orientation of remote receiver inside fan canopy. Connect receiver's input and output wires in accordance to wiring diagram provided. **Note: Isolation switch must be installed.**
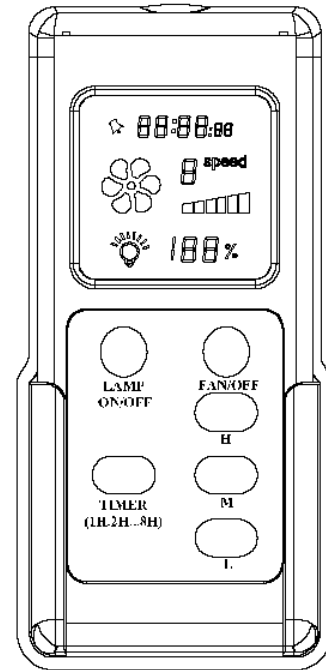
INSTALLATION INSTRUCTIONS

4. Tidy up wires and re-install fan canopy. Make sure not to break any wire connection.

52 mm

5. Install wall bracket at a suitable location.

6. Install battery supplied into battery compartment.

FAN/OFF: Turn off ceiling fan
H: Turn on the fan at high speed
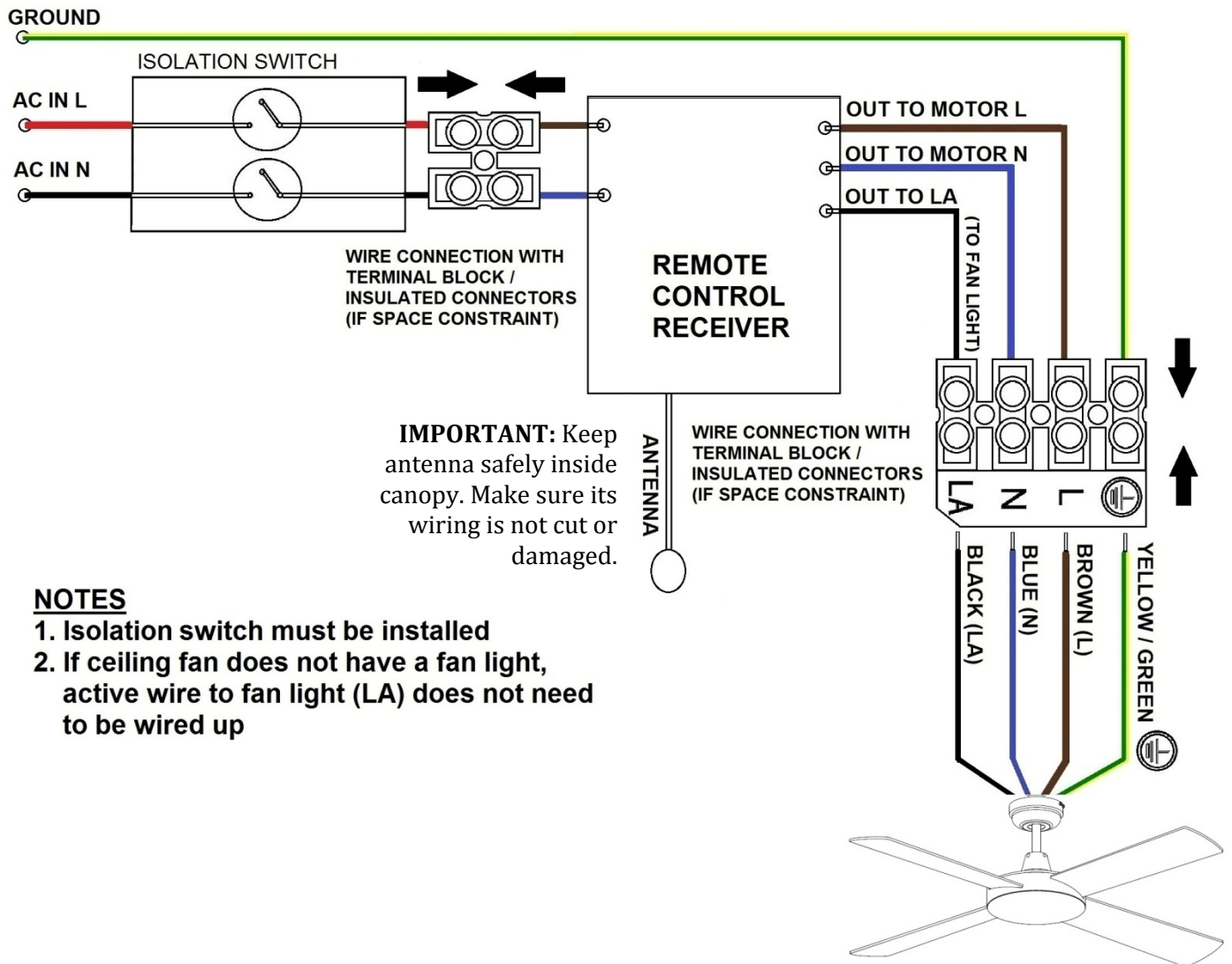**M**: Turn on the fan at medium speed
L: Turn on the fan at low speed
LAMP ON/OFF: Toggle light on or off
TIMER (1H, 2H...8H): Fan delayed off. Possible delay settings are 1H, 2H...up to 8H

WIRING DIAGRAM

WIRING DIAGRAM FOR FAN CONTROLLED WITH REMOTE CONTROLLER

GROUND

ISOLATION SWITCH

AC IN L

AC IN N

WIRE CONNECTION WITH
TERMINAL BLOCK /
INSULATED CONNECTORS
(IF SPACE CONSTRAINT)

REMOTE
CONTROL
RECEIVER

OUT TO MOTOR L

OUT TO MOTOR N

OUT TO LA

(TO FAN LIGHT)

ANTENNA

IMPORTANT: Keep
antenna safely inside
canopy. Make sure its
wiring is not cut or
damaged.

WIRE CONNECTION WITH
TERMINAL BLOCK /
INSULATED CONNECTORS
(IF SPACE CONSTRAINT)

LA   N   L

BLACK (LA)   BLUE (N)   BROWN (L)   YELLOW / GREEN

NOTES
1. **Isolation switch must be installed**
2. **If ceiling fan does not have a fan light, active wire to fan light (LA) does not need to be wired up**