

# Application Note: 3024

How to setup Lead-lag with a Deluxe MA

## Table of Contents

1. [How to setup Lead-lag \(Rotation & Backup + 2<sup>nd</sup> Stage Cut-In\)](#)
2. [Request Codes for Lead-lag \(Rotation & Backup + 2<sup>nd</sup> Stage Cut-in\)](#)

## Overview


The purpose of this Application Note is to illustrate the steps required to enable Lead-lag between two P-series units with one Deluxe MA.

### Notes

1. The contents of this document apply to all Deluxe MA models:  
(PAR-31MAA, PAR32MAA, PAR33MAA, PAR40MAA)
2. The availability of various Request Codes is dependent upon the compatibility of the connected equipment.
3. Reversing polarity will cause communication faults. If the wires between two indoor units are crossed, the second indoor unit will remain in standby mode until the wiring issue is resolved.
4. The Deluxe MA wires must be connected to the indoor unit with the lowest address, which will always be Refrigerant Address **0**.
5. The secondary system's address should be set to **1**, and can be set by either:
  - Locating dipswitch bank **SW1** at the outdoor unit and turning switch **3** on.
  - Turning the rotary dials on a MAC-334IF-E adapter to **0** and **1**.
6. If the first unit experiences an error, the user will not be able to make any changes to the second unit's operation until that error has been resolved.
  - The second unit will still operate, and follow the Rotation, Backup, and Cut-in functions, since they do not require an active command.

# How to setup Lead-lag

## Steps

- 1) Turn the controller **off**
  - Press the  button
  - Scroll down and select **Service**
- 2) Enter the default password - **9999**
- 3) Select **Check**
- 4) Select **Request code**
- 5) Enter the outdoor unit's address and select the desired Lead-lag settings by referencing the table on the next page.
  - Set to **0** or **1** for Lead-lag system

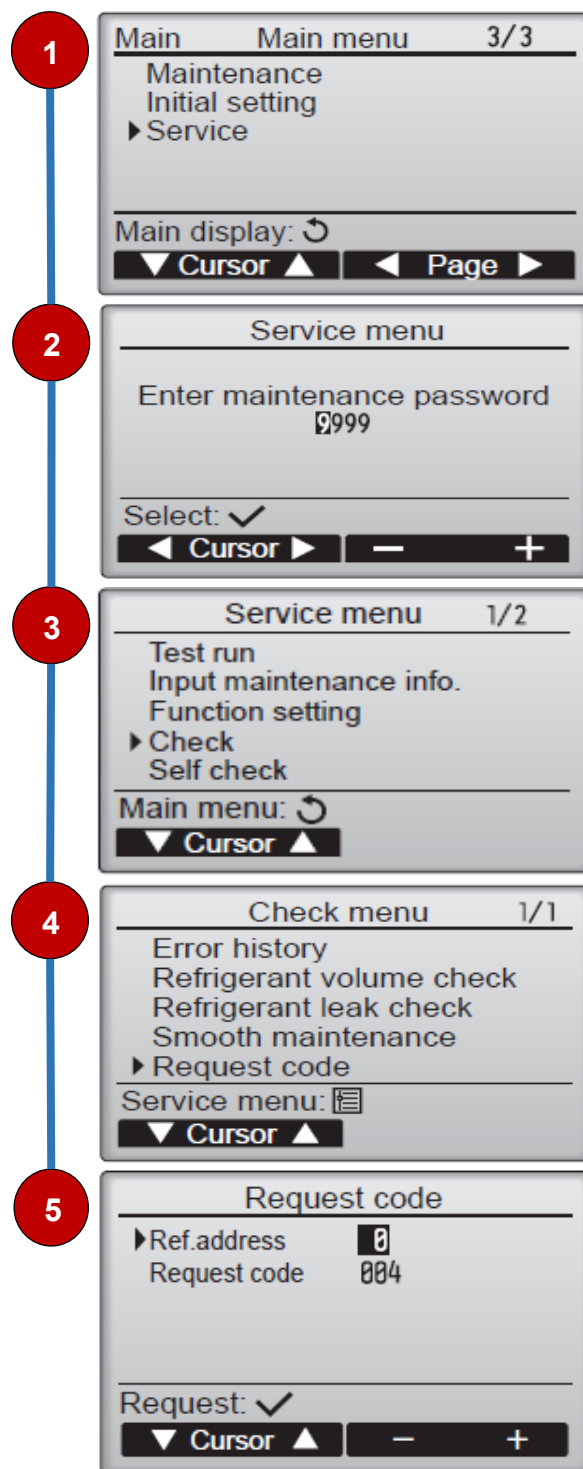
Choose the desired Lead-lag settings by referencing the tables on the next page.

Note: Any settings made for address **0** must also be made for address **1**.

## Troubleshooting

**Request Rejected** may appear if:

- An invalid or incompatible Request Code has been selected.
- The second system has not been addressed at all, or it has been addressed incorrectly.
- No changes are required for the main outdoor unit.
- The control wires between the two indoor units are crossed (polarity).



## Lead-lag Request Codes

Rotation & Backup	
Request Code	Settings
310	Display the current setting
311	Turn Backup & Rotation off
312	Turn Backup <b>on</b> and turn Rotation <b>off</b>
313	Rotation interval = 1 day
314	Rotation interval = 3 days
315	Rotation interval = 5 days
316	Rotation interval = 7 days
317	Rotation interval = 14 days
318	Rotation interval = 28 days
2 <sup>nd</sup> Stage Cut-in	
Request Code	Settings
320	Display the current setting
321	Turn 2 <sup>nd</sup> Stage Cut-in <b>off</b> and leave Rotation <b>on</b>
322	Backup on = 7.2°F above set point
323	Backup on = 10.8°F above set point
324	Backup on = 14.4°F above set point