

LIM300-EU

Local Input Module Installation Guide

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This package should contain the following:

1 x Opus LIM300 (assembled) comprising: 1 x LIM300 module, 1 x LIM300 faceplate, 1 x LIM300 subplate, 2 x M3.5mm x 20 screws, 1 x installation guide.

Introduction

The LIM300 Local Input Module (LIM) is an in-wall module that allows the user to add an additional local source to those distributed by the MCU300. The local source may only be heard in the room where it is connected and the corresponding sub-zone (if connected) and is not distributed to other rooms. LIM300s can be fitted in as many rooms as are desired. The LIM300 connects between an MCU300 audio hub and a WCU300 amplified control module using Cat-5/5e wiring.

Each main zone can support two LIM300s, giving you the option of listening to one or two local sources (e.g. Playstation, MP3 player). Each local source can be controlled through the Opus remote and/or keypad (for instructions on entering local source rotate mode, see page 11).

The LIM300 can also support subzones (where fitted) so that the local source is audible in both main and subzone areas.

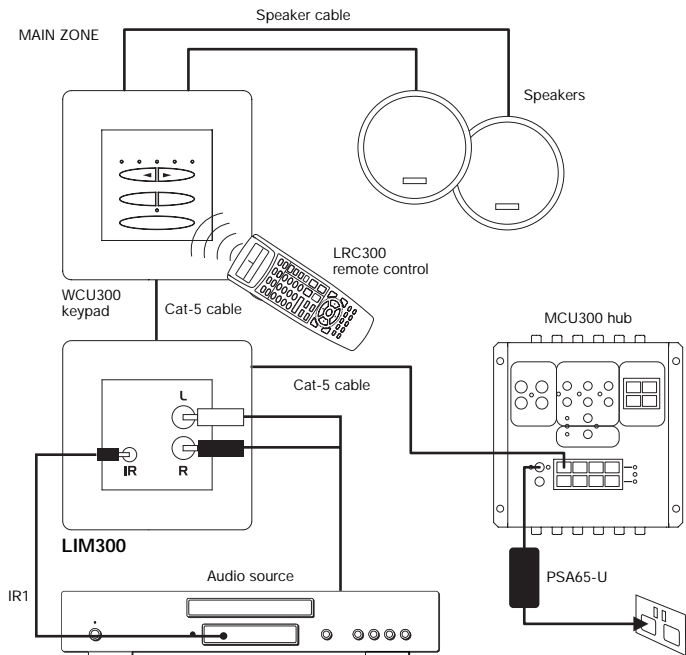
Before fitting the LIM300:

Make sure that the power supply is not connected to the hub.

The recommended maximum length for use with standard Cat-5 cable is 30m from hub to LIM to keypad in total. Screened Cat-5 can also be used.

Once all the connections have been made, the power supply can be connected to the MCU300 hub.

System setup



Mounting

Locate the LIM300 near the local source. Check all connections and test the system's operation before installing the LIM300 into the wall. Using the included hardware, install the LIM300 into a standard electricians' back-box (pattress) (UK47mm depth single gang).

Important

Care should be taken in choosing a site for the LIM300 — ALWAYS refer to the precautions later in this guide. Bear in mind that any local sources will likely require mains power. The LIM300 must never be installed in a back-box (pattress) which also contains mains wiring.

Fitting the LIM300

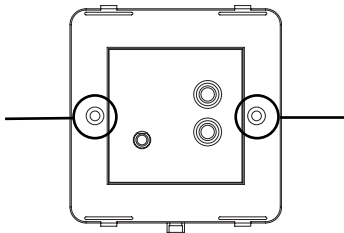
Note: The LIM300 is powered via the Cat-5 cable and no mains connection is required.

The procedure for fitting is as follows:

Remove the supplied faceplate from the LIM300 (see page 7 for details).

Connect each wire in the Cat-5 cable to its respective terminal in the punch-down connector on the back of the LIM300. Be very careful to follow the colour-code that is indicated on the connector. Always double-check your connections, and your punching.

Fit the LIM300 to the back-box (pattress) that you have fitted in your wall. This is done with the two supplied screws (M3.5mm x 20).



Gently push the faceplate back on to the LIM module.

Always observe the following essential precautions and notes when installing an Opus LIM300:

Avoid placing the LIM300 near to dimmer switches or other items which generate a lot of electrical noise.

Avoid fitting the LIM300 in areas of high humidity.

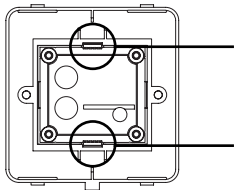
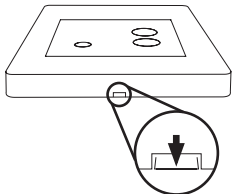
The LIM300 runs on 24V DC supplied through the connecting cable. As such there is no mains voltage present in the LIM300 and the unit is often safe to fit in areas where only extra low voltage (ELV) equipment is permitted. However, it is imperative that you always check the wiring regulations in force for your application and area.

Faceplates

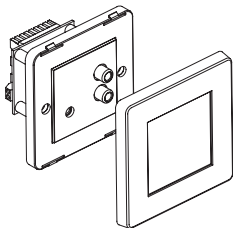
The LIM300 faceplate system is based on the 50x50mm 'easy-clip' module standard and is interchangeable for the wide range of faceplates made by manufacturers such as MK Electric, RPP, etc. that conform to this standard.

If it is desired to fit another faceplate, it can be replaced by gently prising apart the LIM300 faceplate and snapping on another in its place.

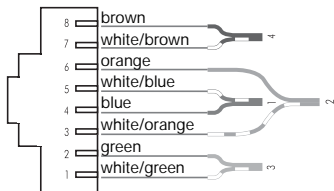
Remove the faceplate as shown by inserting a small, flat-bladed screwdriver into the slot on the bottom face of the LIM300. Gently prise apart and the faceplate should 'pop' off.



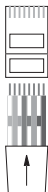
Fit the subplate to the desired 'easy-clip' faceplate. Push the subplates into the new faceplate so that it slides into the faceplate squarely, rather than one edge at a time.



Wiring guide: EIA/TIA 568A wiring standard



View from contact end



Gather pairs, trim and insert into RJ45 plug



Crimp wires securely in place

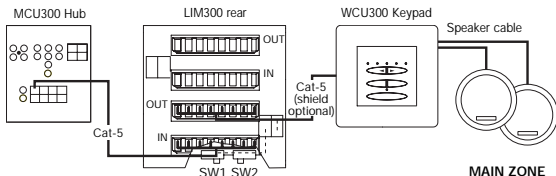
Cat-5 connections

A Cat-5 cable is used to connect the LIM300 to a keypad output on an MCU300 hub, and to a WCU300 amplified control module. Use Cat-5 cables (EIA/TIA 568A RJ-45 wire configuration, see illustration above) to connect from the hub to a LIM300 wall plate (optional), and then wire from the wall plate to the WCU300 (see following diagrams). The LIM300 has punchdown connectors for the eight individual conductors of the Cat-5 cable; use a punchdown tool (Krone blade) to insert conductors. Be sure to use the correct in and out connectors (see following diagrams) and pay attention to the colour coding on the connectors.

If using shielded Cat-5 cable, connect the shields to the green terminal blocks as shown in the following diagrams (dotted lines).

Note: When wiring directly to the LIM300, crimp on a male RJ-45 connector using the EIA/TIA 568A RJ-45 wire configuration (as shown above) for connection to the hub.

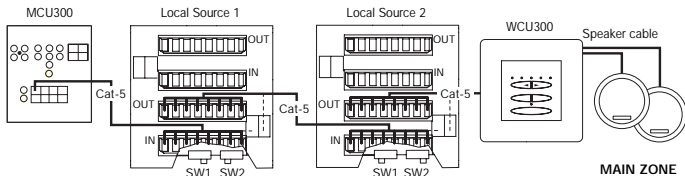
Single Local Audio Source



Switch over SW1 (LC1) to the ON position and Switch 2 (LC2) to the OFF position. The LIM300 will respond to the Local 1 remote command when selected.

Two LIM300s fitted in a single zone

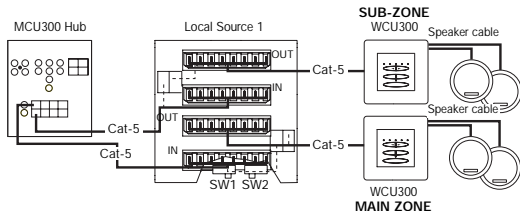
It is possible to add up to two LIM300 units per main zone. This gives you the option to listen to either one by selection from the keypad or LRC300 remote control (Local1/Local 2). The LIM needs to be told whether there are one or two LIMs present.



Local Source 1 – Switch over SW1 (LC1) to the ON position and SW2 (LC2) to the OFF position. Local Source 2 – Switch over SW1 (LC1) to the OFF position and SW2 (LC2) to the ON position.

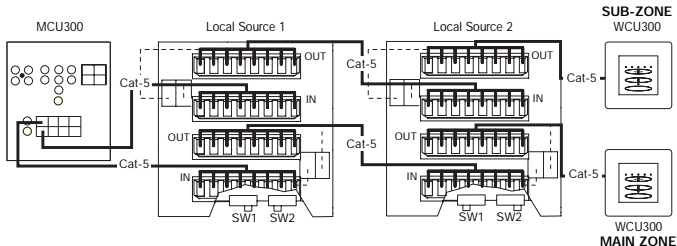
Note: If using a SRC300 to select the local source, this will ONLY select Local 1 as default.

Single LIM300 main and sub-zones fitted



Switch over SW1 (LC1) to the ON position and Switch 2 (LC2) to the OFF position. The LIM300 will respond to the Local 1 remote command when selected.

Dual LIM300s main and sub-zones fitted



Local Source 1 – Switch over SW1 (LC1) to the ON position and SW2 (LC2) to the OFF position. Local Source 2 – Switch over SW1 (LC1) to the OFF position and SW2 (LC2) to the ON position.

Note: If using a SRC300 to select the local source, this will ONLY select Local 1 as default.

IMPORTANT NOTE

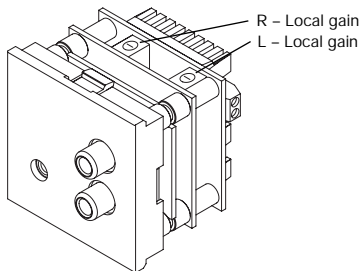
Source rotate for Local 1 and 2 on the keypad

In order to select local sources on an attached Opus WCU300 keypad it is necessary to set the keypad into local source selection mode. Pressing the SELECT button on the keypad allows you to rotate through all six sources as default. However, it is possible to allow the addition of one or two local sources by changing the source rotate menu. To enter SOURCE ROTATE menu depress the volume DOWN button (▶) simultaneously with the volume UP button (◀) for four seconds; the blue Status LED will turn off after one second and then begin to flash. Continue to hold both buttons down until the Status LED reaches the required state from the following sequence:

- one flash source rotates through all six inputs (as default)
- two flashes source rotates through all six inputs + Local 1
- three flashes source rotates through all six inputs + Local 1 and Local 2
- four flashes source rotate all off

Audio level adjustment

The LIM300 has independent gain level adjustments for local source inputs. Adjust levels as required using a small trimmer. Turning the gain level pots clockwise increases the audio level and anti-clockwise decreases it.



The LIM300 also has a local infra-red (IR) output allowing for local source equipment to be controlled via an IR1. This will only pass through remote source or commands once the local source has been selected (Local 1 or Local 2) from the SRC300/LRC300 remotes or WCU300 keypad. Having selected the local source, you will be able to listen to whatever source has been connected to the R/L phono sockets on the LIM300.

Technical specifications

Max line level inputs	2.2V rms
Cat-5 connection type	Krone punchdown
Dimensions	50 x 50 x 45mm
Weight	100g
Maximum cable length	30m/100ft
IR (Infra-red output)	Modulated 34-40 and 55-59 kHz supported
Power requirement	24V DC @ 20 mA max (supplied by hub)

Limited warranty

Opus Technologies warrants this product to be free from defects in materials and workmanship (subject to the terms set forth below). Opus Technologies will repair or replace (at Opus Technologies' option) this product or any defective parts in this product. Warranty periods may vary from country to country. If in doubt consult your dealer and ensure that you retain proof of purchase.

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