

## Information on the Liebherr HomeDialog System

### Liebherr HomeDialog System



#### What is the HomeDialog system?

Liebherr's HomeDialog system, as it has been known until present, has allowed e.g. a NoFrost freezer with Premium control system situated in the basement to be controlled using the electronic display in the door of a combined fridge-freezer. Now, starting 2008, the new, extended HomeDialog system will enable not only networking a freezer, as in the past, but up to 6 additional, external Liebherr appliances. The appliances are indicated in the display of the combined fridge-freezer with a PremiumPlus electronic control system, permitting their convenient control. Among the Liebherr appliances capable of being networked are wine cabinets, freezers, refrigerators and combined fridge-refrigerators.

#### What advantages does the HomeDialog system offers customers?

All the functions of the appliances can be accessed and conveniently set on the display, e.g.:

- temperature setting
- SuperFrost mode ON/OFF
- DuraFreeze mode ON/OFF
- alarm acknowledgement

Furthermore, the HomeDialog system allows the functions of say the freezer to be constantly monitored:

- Temperature display: Indicates that the freezer is operating normally, i.e. failure-free and so the food is stored safe and sound inside.
- Door alarm: Especially useful should children fetch an iced-lolly and forget to close the freezer door properly.
- Power failure: Should there be power failure in the basement, this is displayed on the refrigerator in the kitchen.
- Temperature alarm: Is also displayed on the appliance, e.g. in the kitchen.

### How does the HomeDialog system work?



This system always needs at least two appliances: a refrigerator with the display in the door and another Liebherr appliance with HomeDialog capability.

The refrigerator in the kitchen is the master appliance because it can be used to control as many as six other appliances, these being the slave appliances.

To enable master and slave to communicate, one HBM PLC home bus module per appliance is needed. There are two kinds of module: a master module being needed for the refrigerator with electronic display in the door and a slave module for the other appliances.



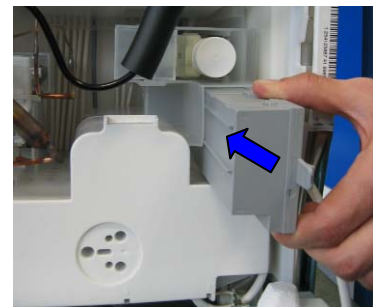
The data (control commands, current temperature data, door alarm etc.) are transmitted using the power line. That is to say, no complicated cable routing is required. The data packages are modulated onto the power supply line. To enable the appliances to communicate with one another, they have to be connected to the same power supply line.

### How is the HomeDialog system installed?

Installation involves just two steps, taking about 5 to 10 minutes in all:

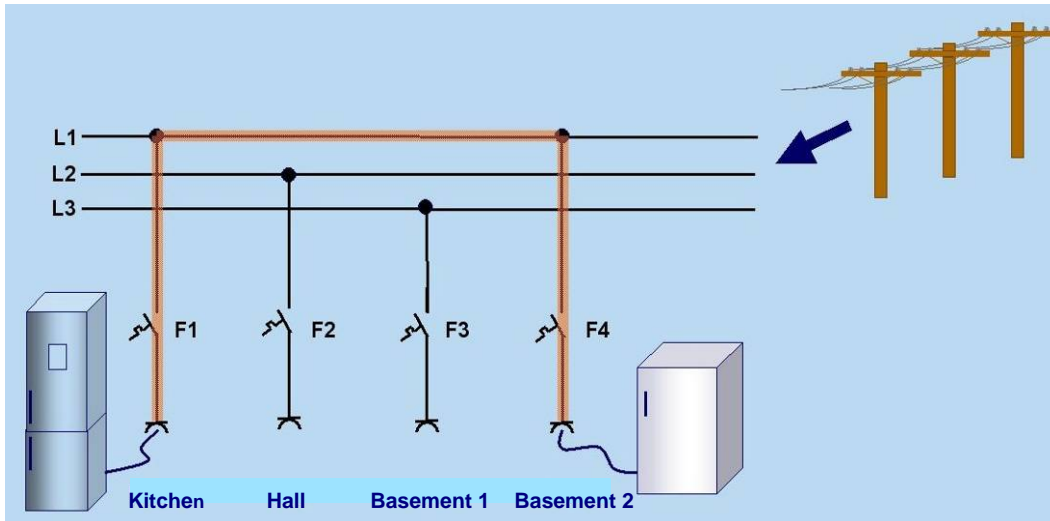
- First the home bus modules are inserted into the slots provided for the purpose at the back of the appliances (the master module is inserted into the refrigerator, the slave module into the other appliances).
- Then a setup has to be carried out for the appliances to perform a handshake.

Detailed installation instructions accompany the home bus modules.

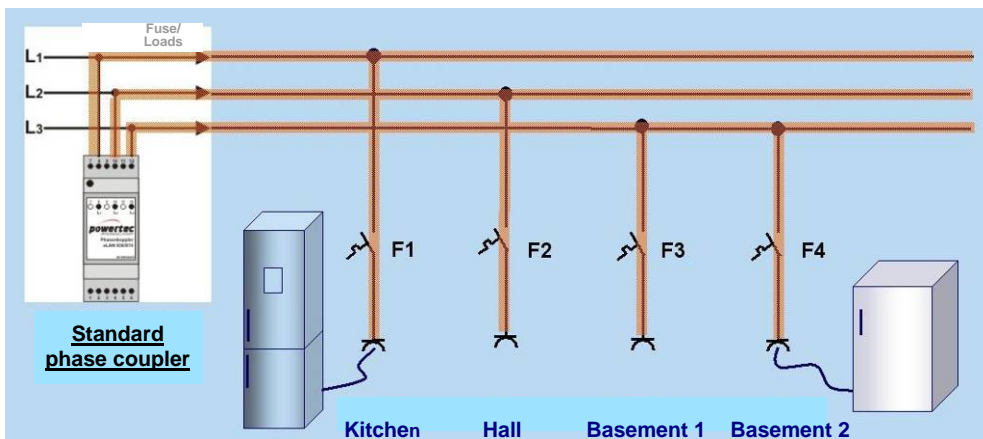


### What points must be noted when installing the HomeDialog system?

What is important is that the appliances are connected to the same power supply line (= to the same phase). To explain: the power supply utilities always use three phases (L1, L2, L3) for domestic power supply.



If the setup cannot be carried out successfully once the appliances have been installed, then they are presumably not connected to the same phase. In that case an electrician has to install a so-called phase coupler in the fuse box.



The phase coupler permits data transmission from one phase to the other phases, enabling the appliances to communicate.

**It is possible for an external Liebherr appliance to be controlled by a third-party appliance?**

No. A setup has to be carried out during installation of the system. In this setup the appliances perform a handshake – the expert says each appliance receives its own address. As a result, the appliances recognise whether a data package comes from a familiar appliance or from an unfamiliar appliance. If the data package is from an unfamiliar appliance, it is simply ignored. This rules out the possibility of a HomeDialog system intervening with the neighbour’s HomeDialog system.

**Does the system also work in a multi-storey building?**

Yes and no. The longer the transmission length, the more difficult data transmission becomes because the signal is weakened (=attenuated).

**Which appliances can communicate with one another via the HomeDialog system?****The master appliances are:****Up to model year 2007**

Liebherr CNPes 3867  
Liebherr CBN 3857  
Liebherr CBNes 3857  
Liebherr CN 5067  
Liebherr CNes 5057  
Liebherr CNes 5067  
Liebherr CBNes 5067

HBM PLC master home bus module **up to model year 2007**  
Order No. 9988 088

**From model year 2008/2009**

Liebherr CBNes 3967  
Liebherr CBNes 3957  
Liebherr CBNes 5167

HBM PLC master home bus module **from model year 2008/2009**  
Order No. 9988 178

**The slave appliances are:****Up to model year 2007**

Liebherr GN 1856  
Liebherr GN 2056  
Liebherr GN 2156  
Liebherr GN 2456  
Liebherr GN 2556  
Liebherr GN 2856  
Liebherr GN 2956  
Liebherr GN 3356  
Liebherr GNP 2076  
Liebherr GNP 2476  
Liebherr GNP 2976  
Liebherr GNP 3376

HBM PLC slave home bus module **up to model year 2007** and WK(es) 29-46, WTes 41  
Order No. 9988 074

**From model year 2008/2009**

Liebherr GN 1956  
Liebherr GN 2356  
Liebherr GN 2756  
Liebherr GN 3056  
Liebherr GNes 3066  
Liebherr GN 3076  
Liebherr GNes 3076  
Liebherr CBN 3956

Liebherr CBNes 3956  
Liebherr CBNes 3966  
Liebherr WTNes 3056  
Liebherr BNes 3256  
Liebherr CBN 4656  
Liebherr CBNes 4656  
Liebherr CBN 5156  
Liebherr CBNes 5156  
Liebherr SBSes 7273

HBM PLC slave home bus module **from model year 2008/2009**  
Order No. 9988 176

A retrofit kit is available as an accessory for the following appliances which are not pre-fitted in readiness for the HomeDialog system (HomeDialogReady).

**Wine cabinets:**

Liebherr WK 2976  
Liebherr WK 2977  
Liebherr WK 4176  
Liebherr WK 4177  
Liebherr WK 4676  
Liebherr WK 4677  
Liebherr WKes 4176  
Liebherr WKes 4177  
Liebherr WT 4176  
Liebherr WT 4177  
Liebherr WTes 4176  
Liebherr WTes 4177

HBM PLC HomeDialog home bus module (slave) retrofit kit (wine cabinets)  
Order No. 9590 585

In addition to the retrofit kit, these appliances have to be fitted with the HBM PLC slave home bus module No. 9988 074.

**Combined fridge-freezers:**

Liebherr CN 3556  
Liebherr CNes 3556  
Liebherr CN 3956  
Liebherr CN 4056  
Liebherr CNes 4056  
Liebherr CNes 4066  
Liebherr CN 4656  
Liebherr CNes 4656  
Liebherr CN 5156  
Liebherr CNes 5156

**Freestanding refrigerators, 60 cm wide:**

Liebherr K 3670  
Liebherr Kes 3670  
Liebherr K 4270  
Liebherr Kes 4270

Liebherr KB 3160  
Liebherr KBes 3160  
Liebherr KB 3660  
Liebherr KBes 3660  
Liebherr KB 4260  
Liebherr KBes 4260

**Combined Side-by-Side appliances:**

SBS 6352 (SK 3610)  
SBSes 6352 (SKes 3610)  
SBS 7252 (SK 4210)  
SBSes 7252 (SKes 4210)  
SBS 7262 (SK 4210)  
SBSes 7253 (SKBes 4210)  
SBSes 7353 (SKes 4210)  
SBSes 7263 (SKBes 4210)  
SBSes 7155 (SKBes 4211)

Retrofit kit (combined fridge-freezers, freestanding refrigerators, combined Side-by-side appliances) HBM PLC HomeDialog home bus module (slave)  
Order No. 9590 094

In addition to the retrofit kit, these appliances have to be fitted with the HBM PLC slave home bus module, Order No. 9988 176.

The retrofit kits have to be installed by qualified personnel only.

Issued by: Udo T. Weinstock Product Management, LHG-MA, 09/2005 amended 01/2009 LHG-MA Michael Rist
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