INTELIQ

smart control systems

Fingertip control, optimum efficiency, total comfort and clear reporting

warmafloor

we know a touch more

Contents

Intelligent control.
The key to efficiency

Whether an underfloor installation is in a school, warehouse or residential tower, smart control is key to delivering the optimum in climate comfort and energy efficiency.

We provide intelligent solutions designed to give each building's inhabitants or managers the perfect balance of control and functionality.

Our Inteliq smart control systems are the culmination of 30 years' experience in underfloor heating and its precise and practical control. This modular solution puts all our learning and expertise at the user's fingertips. By combining sophisticated functionality and advanced technology it is easy to create the perfect environment, whatever the season, scenario or space.

Our Inteliq systems can interface with multiple energy sources from boilers, heat pumps and solar panels through to energy exchangers, underfloor heating, radiators and fan coil units to optimise the generation and demand side of a building at minimum running costs.

Key system features and benefits

Inteliq is the ultimate in heating and cooling control, providing variable levels of functionality appropriate to particular environments.

- Advanced configuration capability for VRF/VRV and 0-10V Fan Coil Units

- Precise, individual zone/room control for both heating and fan cooling

- Seamless Building Management System integration for single source control of a building's services infrastructure

- Control up to 32 zones from one intelligent touchscreen

- Precision climate control with the capability to dual-sense air and floor temperatures, with high and low limit set points in each zone

- Four time and temperature set options for every day of the week

- In-built Night Set Back and Holiday Mode for optimum efficiency

- Mirror building usage with sensor lock-out of individual zones

- Secure password protected touchscreen

- 'Quick-view' display of zone status including current temperature, set points, demand state and recent activity log

- Auto-optimisation constantly monitors and self-learns settings for enhanced 'curve-control', eliminating heating lag and promoting an efficient 'steady state'

- Sensor accuracy of at least 0.5ºC

- Constant monitoring of all network diagnostics with on-screen 'fault-find' alerts

- Automatic pump and actuator exercise routine reduces maintenance call outs

- Auto frost and building fabric protection with multiple weather compensation settings.

7'' Touchscreen

Remote Access
Hard wire connection option

DHW Priority
Automatically override heating zones

Basic Cooling
Override boiler and activate a single
whole house cooling device

Extend Drop Down List
Basic install commissioning
drop down list

Input Config - Modes
System mode inputs
Trigger seasons and master modes

Alarms
Operated via inputs

PC Link
Controlled via computer

BMS
BMS interface via Modbus
VRF/VRV control option

Configurable 0-10V
Multiple weather
compensation load line
FCU control via 0-10V
Cooling via UFH

Advanced Configuration
Tailored to suit your project
Individual zone cooling F1, F2, F3
Integrate external devices via input
System overrides and enable

4.3" Touchscreen

DHW Priority
Automatically override heating zones

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Override boiler and activate a single
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Input Config - Modes
System mode inputs
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Alarms
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Thermostats

White Digital
CC-T-764WHI (MK-W)

Brushed Stainless Digital
CC-T-MP764BSS

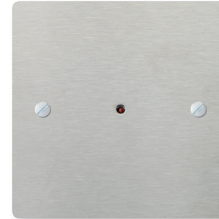**Mirrored Chrome Digital**
CC-T-MP764MC

Screwless Brushed Stainless Steel
CC764-WF

For further colour options please contact Warmafloor

Bead Sensors

White Bead
CC-T-B765WHI

Brushed Stainless Bead
CC-T-B765BSS

Mirrored Chrome Bead
CC-T-B765MC

Alarms

Overview

This software module enables specific alarm messages to be displayed on the home screen of the console in red text. Volt-free signal required from alarm source.

Multiple Messages

If several messages trigger, they will be displayed sequentially on the home screen.

Maximum

Maximum of 8 available alarms.

DHW Priority

Overview

- Schedule and set point control of the DHW
- Boost function capability
- High limit set point
- Priority setting included

Remote Access

Overview

- **Remote access via URL webpage**
  www.warmafloor.uk.com

- **Full control of the touch screen
  from any internet enabled device**

AV Interface

- URL link to external cloud server capability

- URL link via local router capability through AV 'app'

Basic 0-10V Modulation
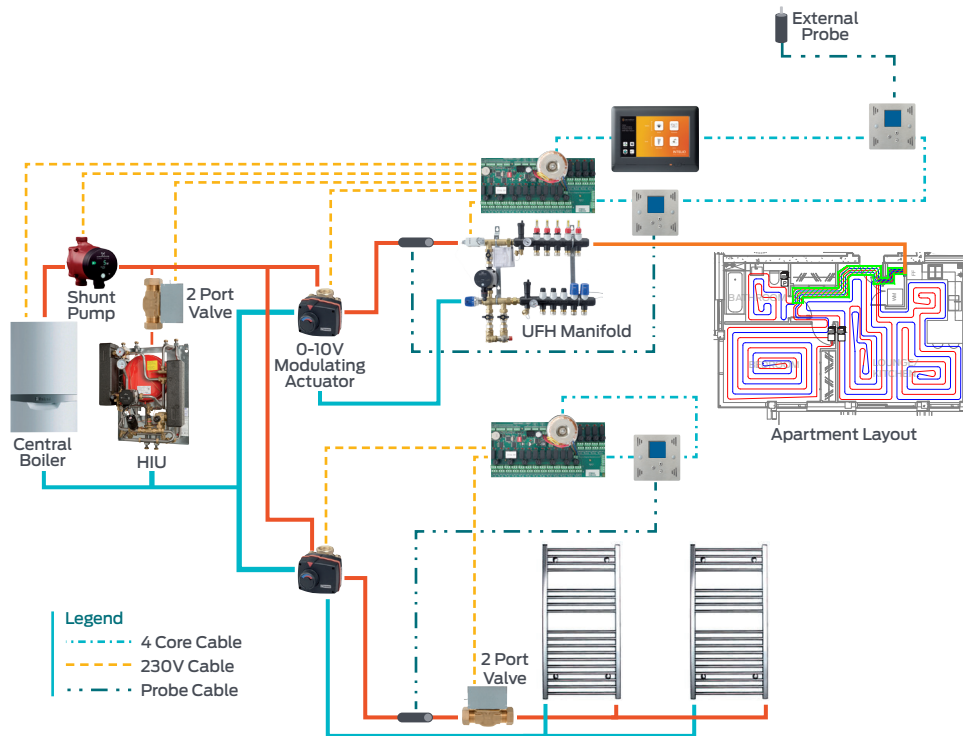
Multiple Weather Compensation

Weather compensate different heat emitters on each floor.

Built in Weather Compensation Facility

The 0-10V output regulates a Modulation Actuator to compensate the flow temp. The system will monitor the outside temperature and calculate a desired flow temperature (DF). This is then compared with the actual flow temp (FT). Based on the result the system will either step open or close. Depending on the difference between DF and FT, the 0-10V output will modulate at a faster or slower rate.

External Probe

Outdoor sensor should be positioned on a north-facing wall away from any heat source.

External Probe

Shunt Pump

2 Port Valve

Central Boiler

HIU

0-10V Modulating Actuator

UFH Manifold

Apartment Layout

2 Port Valve

Legend
- – · – · – 4 Core Cable
- – – – – 230V Cable
- – · – · – Probe Cable

BMS Master VRF Control

BMS Master – Controlling VRF via Modbus – Concept Layout

Modbus Master
Touch screen central console
RS485 Modbus
Procon MOD-IP/50
Cat 5 Cross Over Cable
AE200
Mitsubishi VRF Heating & Cooling
MITSUBISHI VRF (SLAVE)

Modbus Master
Touch screen central console
RS485 Modbus
RTD 10
Daikin VRF Heating & Cooling
DAIKIN VRF (SLAVE)

Modbus Master
Touch screen central console
RS485 Modbus
MelcoBEMS Mini
Mitsubishi VRF Heating & Cooling
MITSUBISHI VRF (SLAVE)

Modbus Master
Touch screen central console
RS485 Modbus
IntesisBox FJ-RC-MBS-1
Fujitsu VRF Heating & Cooling
FUJITSU VRF (SLAVE)

Interface
Serial Communications Interface Type: RS485

Protocol
Communications Protocol: Modbus

Historical Log

Code for Sustainable Homes

- Report use to end user

Historical Log

- Historical log of each zone and whole system

- Based on day/month/years or custom duration

- Duration 2 years

- Data presentation: graphical pie chart or table

- Data format: percentages or on time (hrs)

PC Link

Domestic Applications

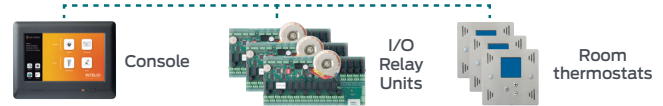- Single console to manage up to 32 zones

Commercial Applications

- Each console can individually manage up to 32 zones
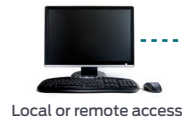- 255 Consoles can be networked to manage up to 8160 zones

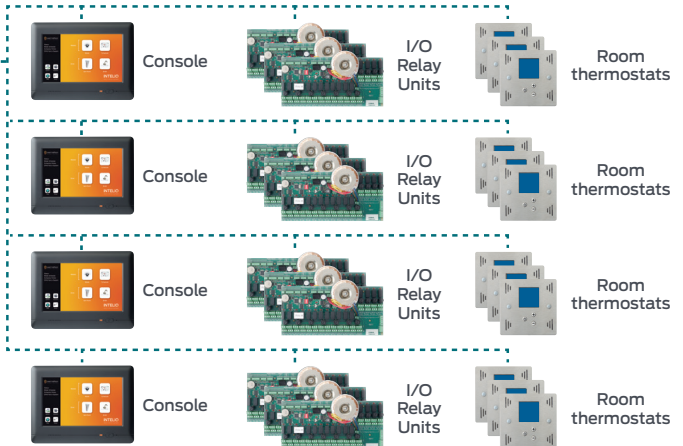### Domestic Application – Single Console with up to 32 zones

Console   I/O Relay Units   Room thermostats

Typical Domestic Project

Commercial Application – Multiple Consoles with up to 32 zones each

Local or remote access

Console   I/O Relay Units   Room thermostats

Console   I/O Relay Units   Room thermostats

Console   I/O Relay Units   Room thermostats

Console   I/O Relay Units   Room thermostats

Apartment block

For further information please contact our office on 01489 581787 or alternatively email sales@warmafloor.co.uk

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