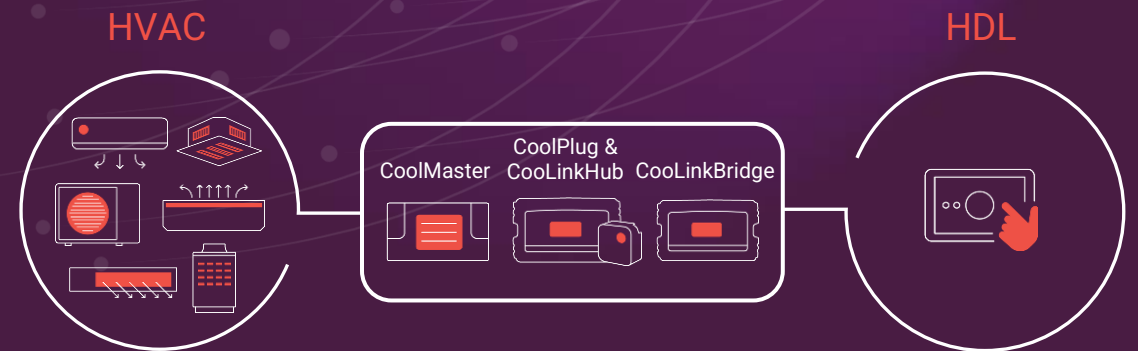


HDL & CoolAutomation live webinar

Seamless HVAC integration with HDL

Agenda

- Introduction- Coolautomation overview
- HVAC Market Segmentation
- CoolAutomation Solutions
- Products and connectivity
- Setup and Configuration with HDL
- Solution Design Process
- FAQ
- Support and technical recourses



CoolAutomation

Founded
2009

Solutions
for HVAC
Integration,
Control,
Management
and Service

Privately
Held & Funded

Worldwide
Presence
100+
Countries

5000 Sites
Added Annually
100,000
+
Systems
Worldwide

- 50+ Distributors worldwide
- Local offices in North America, LATAM, EMEA, Australia and Asia

Our Expertise

HVAC Gateways



Technology Partners



HVAC Big Data for Service



HVAC Private Cloud



Coolautomation solutions



HVAC Systems - Overview

VRF Systems



Minisplit / Multi split Systems



Heat Pumps



Underfloor heating



Unitary / DX



Chilled water systems



Heat reclaim ventilation (HRV)



Zoning systems



HVAC Systems - Applications

Small Scale

Residential Sector



Medium Scale

Commercial Sector



Large Scale

Large-Commercial Sector



Multi-Split (single split)
(Inverter / Non-Inverter)



Chillers



HRV systems



Fan Coils
(FCU)



Zoning systems



Rooftop +
Custom



Radiant Floor Heating
(Hydronic or Electric)



VRF Systems
(Inverter, up
to 256 zones)



VRF Systems – CoolMaster Family



CoolMaster

CoolMasterPro

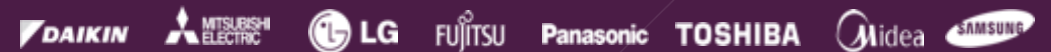
	CoolMaster	CoolMasterPro
Market Segment	Residential Medium Size Commercial	Medium to Large Commercial
Main Use	Home Automation Integration, Remote Control App	BMS Integration
Max Connected Units*	32	256
Local Access to Advanced Data	✗	✓

* Maximum number of connected units may change based on limitations of the specific VRF/VRV brand. Connected units include VRF indoor unit, CoolPlugs, sensors, fan coils or any other HVAC units.

VRF Systems - CoolMaster

Simple-to-Commission Universal VRF Integration

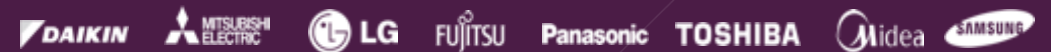
- Supports all VRF manufacturers
- Plug & Play solution for on-site integration
- Auto-discovery of all connected indoor units
- Full two-way communication
- Remote Access for Support
- User-friendly Touch Screen
- Up to 32 indoors (residential use)



VRF Systems - CoolMasterPro

Simple-to-Commission Universal VRF Integration

- Support for all VRF manufacturers
- Plug & Play solution for on-site integration
- Auto-discovery of all connected indoor units
- Remote Access for Support
- User-friendly Touch Screen
- Up to 255 indoors (brand dependent, for commercial use)

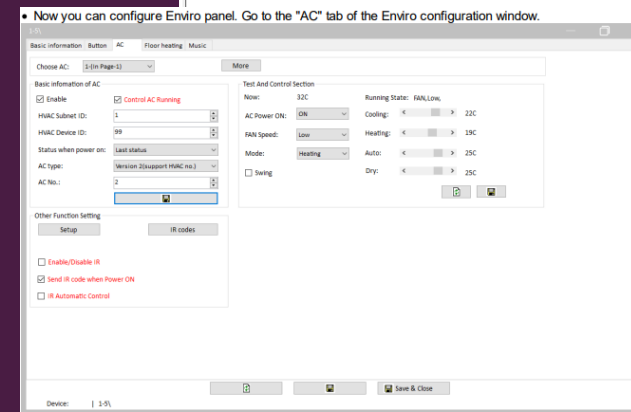
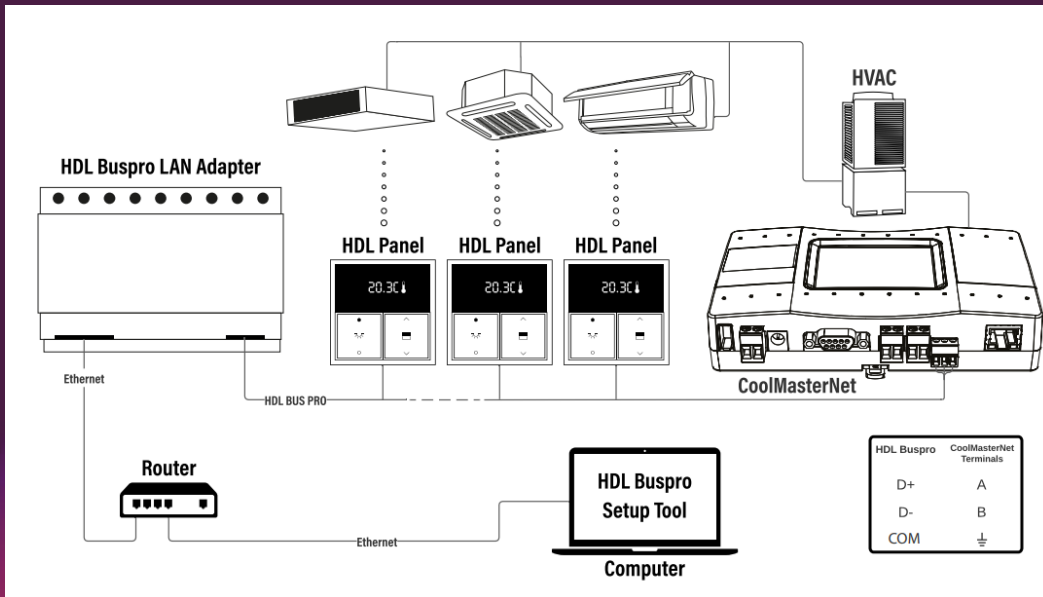
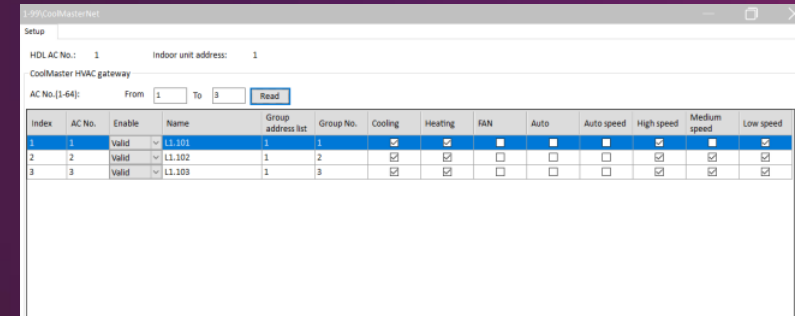
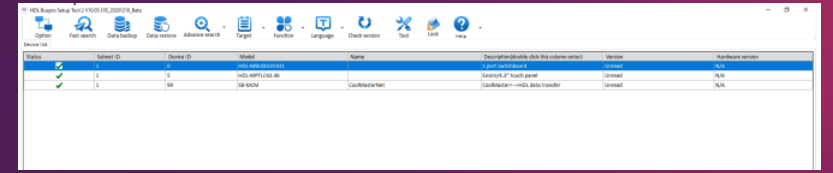


VRF Systems – CoolMaster connection to VRF

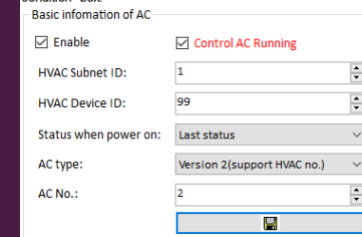


VRF Systems – CoolMaster connection to HDL

1. Connect CoolMaster to A/C system
2. Connect CoolMaster to Buspro via RS485 or ethernet
3. Open HDL set up tool and search
4. Detailed guideline is [here](#)



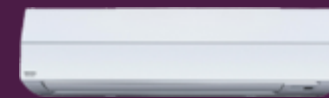
Relation between specific Enviro panel and the indoor unit is made with fields in "Basic information of air-condition" box:



Split/Multi Split - CoolPlugs & CoolLinkHub

Cost-effective single split and multi-split HVAC integration

- Support different HVAC manufacturers
- Comprehensive solutions for on-site integration
- Wired & Wireless connectivity allows flexibility onsite
- Remote Access for Support
- Full bi - directional communication (control and live monitoring)



DAIKIN

MITSUBISHI
ELECTRIC

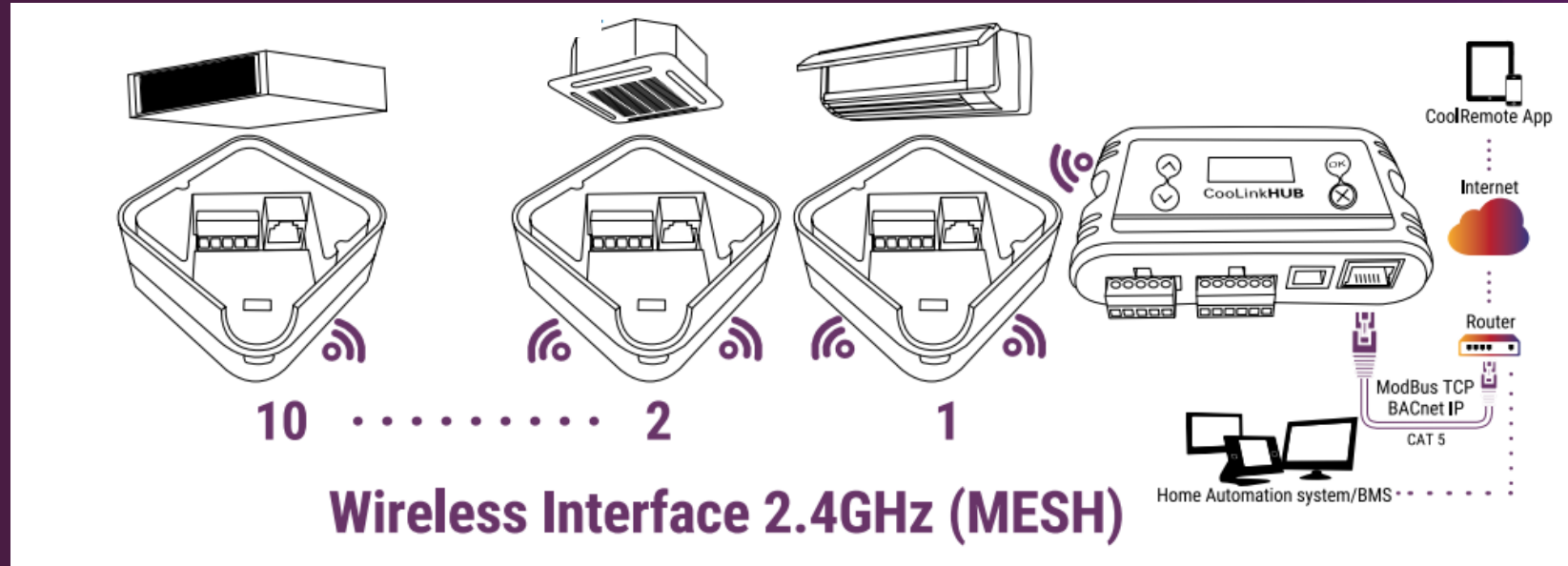
LG

FUJITSU

Midea

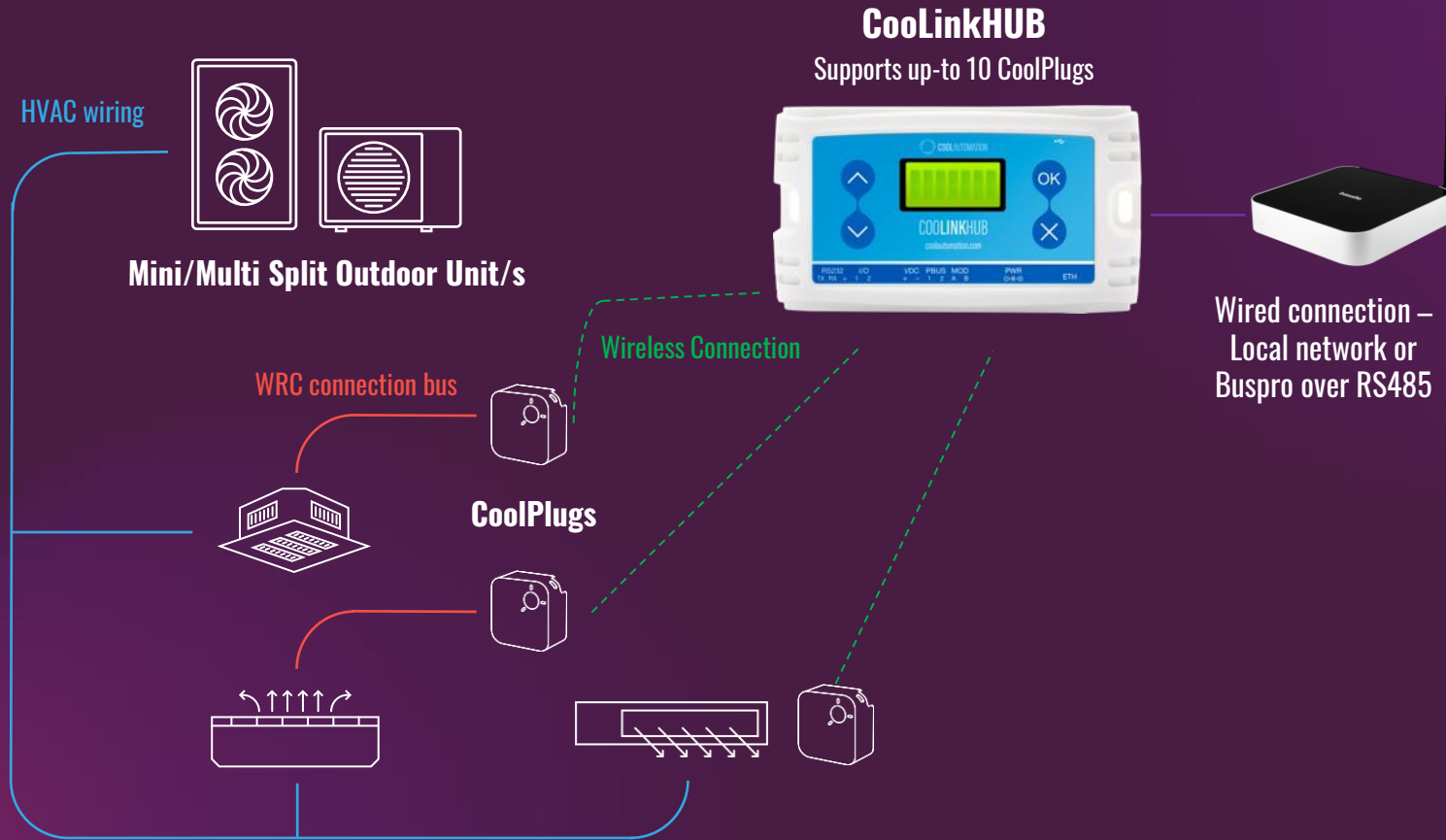
SAMSUNG

Split/Multi Split – Wireless CoolPlugs & CoolLinkHub



- Up to 10 CoolPlugs per CoolLinkHub
- Powered directly by the indoor units
- Full Plug n' Play installation process
- Optional Pre-Pairing in the factory or easy pairing in field
- Different (brands) CoolPlugs can be connected to the same CoolLinkHub
- Can be connected instead or alongside with original WRC

Wireless CoolPlug connection to HVAC



WRLS CoolPlug – connect to HDL

1. Connect CoolPlug to A/C unit

you can find [here](#), installation manual for the different HVAC systems

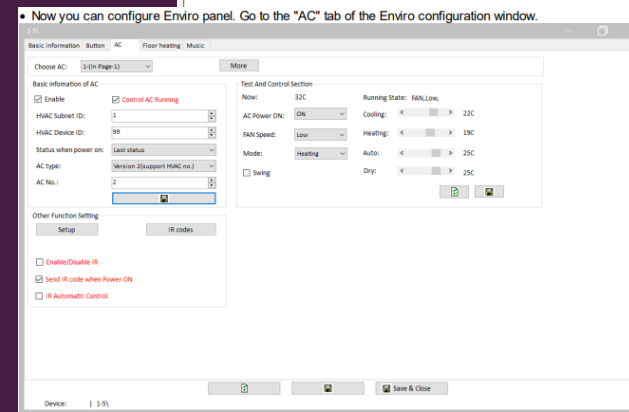
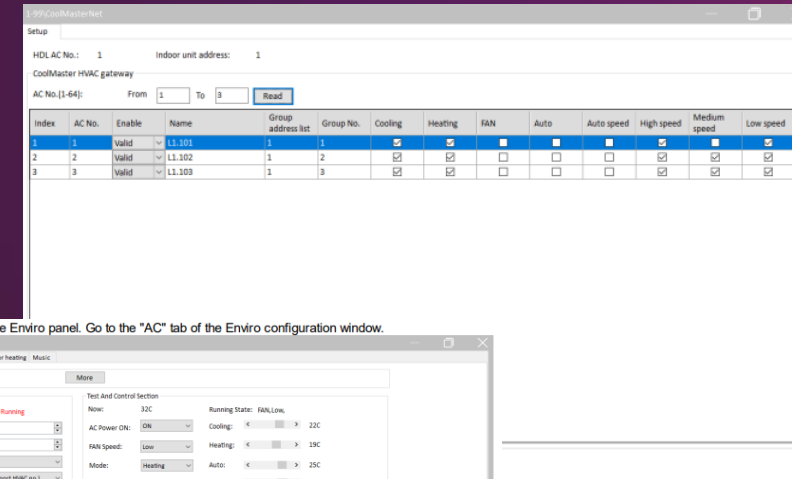
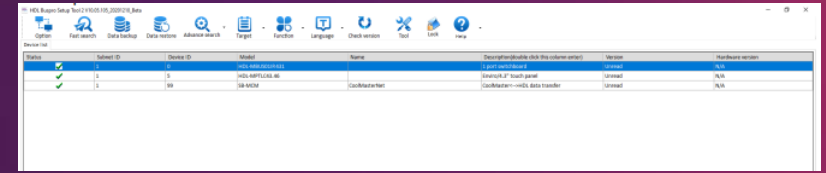
2. Pair CoolPlugs with CoolLinkHub (optional factory pre-set is available per project/request).

You can find [here](#) video tutorial how to pair CoolPlugs with CoolLinkHub

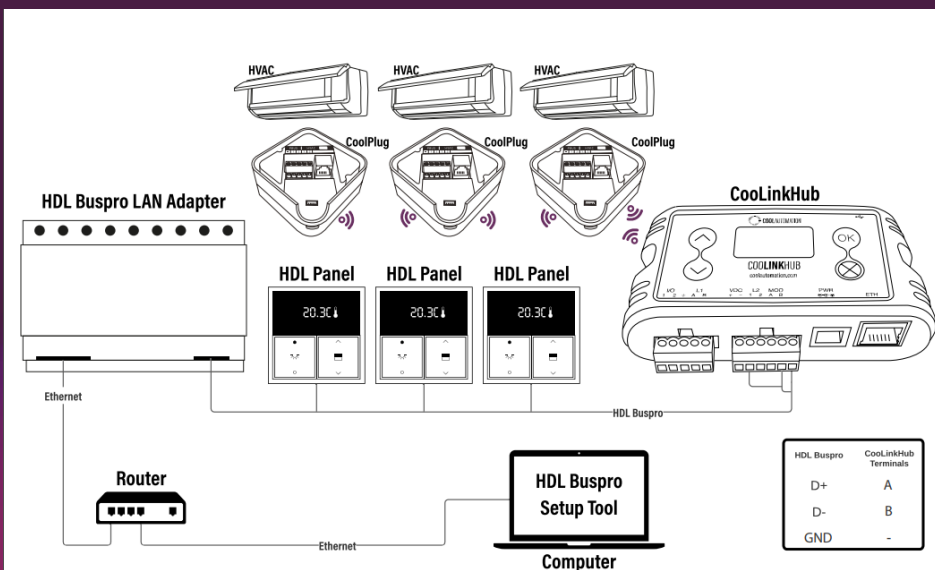
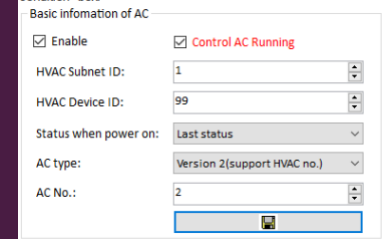
3. Connect CoolLinkHub to Buspro via RS485 or ethernet

4. Open HDL set up tool and search

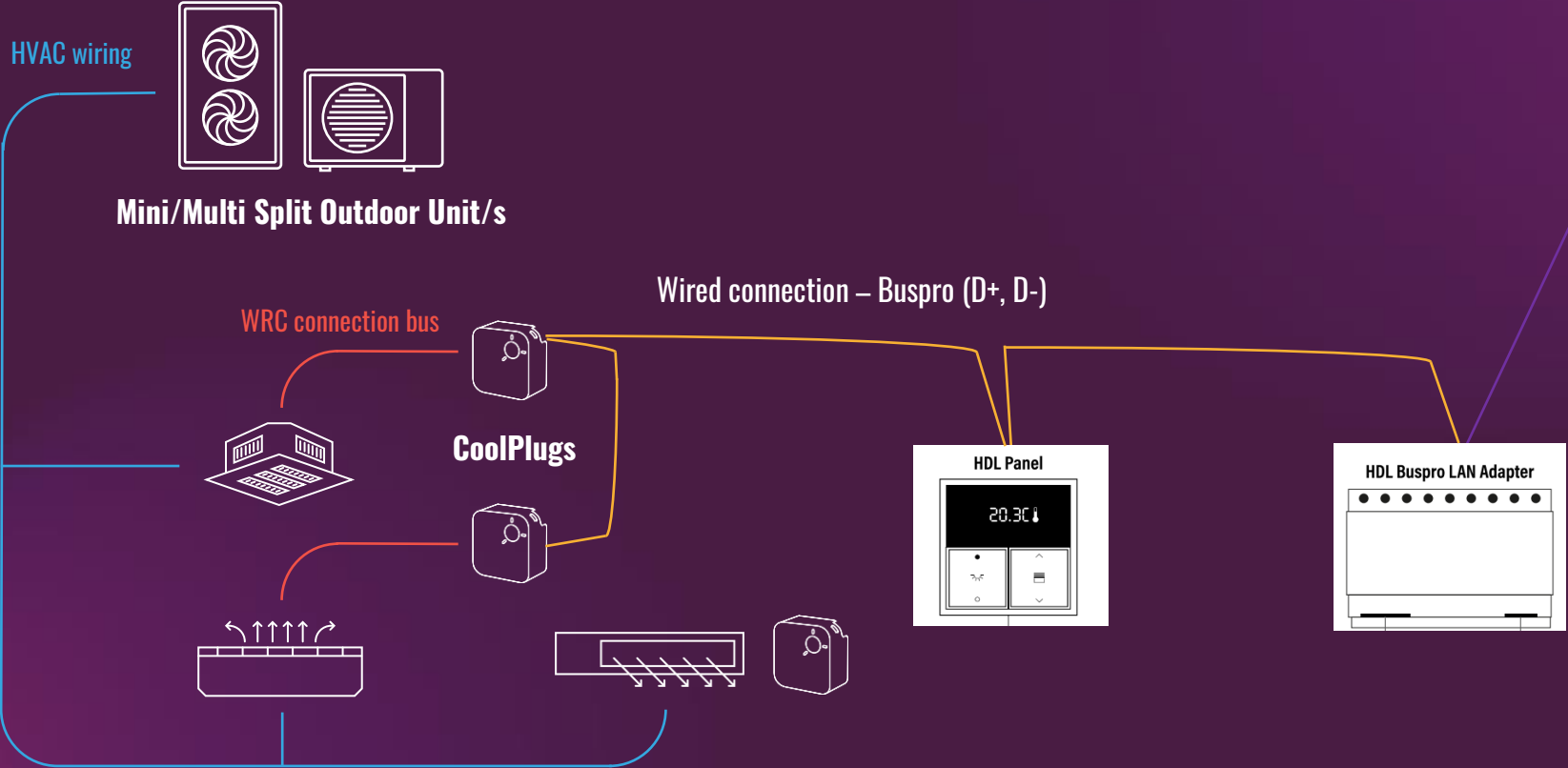
5. Detailed guideline is [here](#)



Relation between specific Enviro panel and the indoor unit is made with fields in "Basic information of air-condition" box:

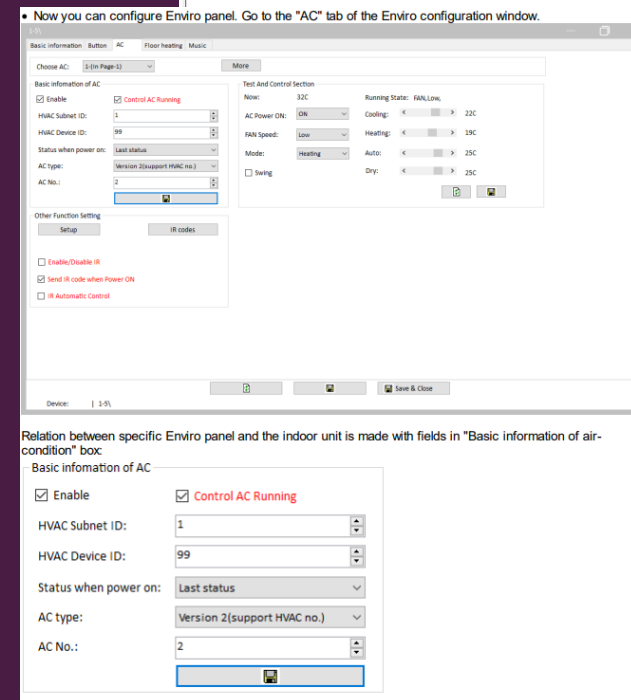
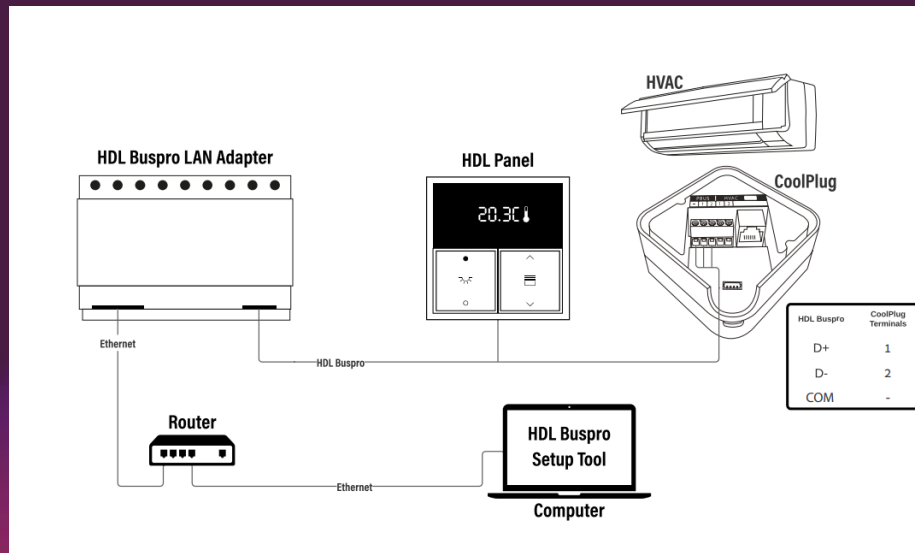
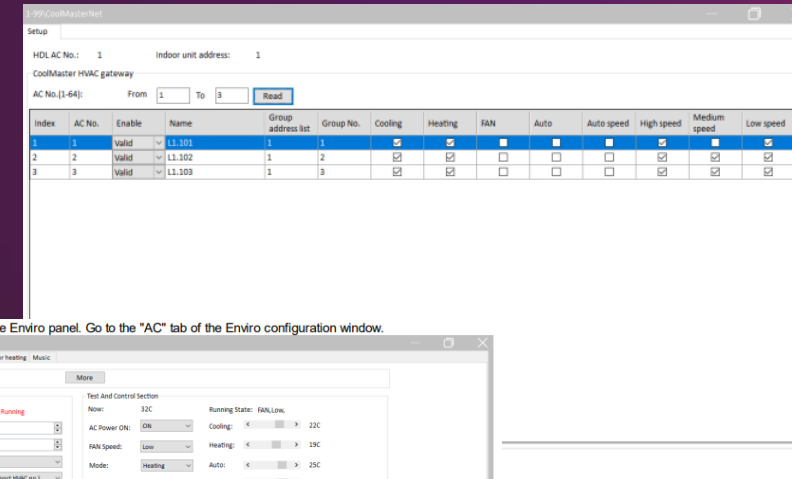
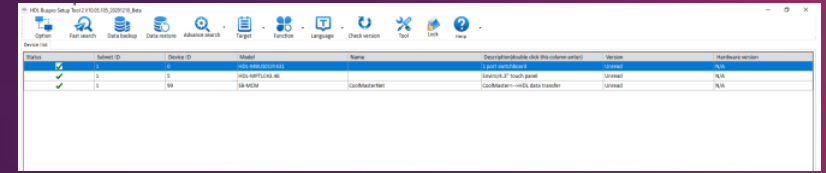


Special Edition - CoolPlug HDL Buspro - connection to HVAC



CoolPlug Buspro – connection to HDL

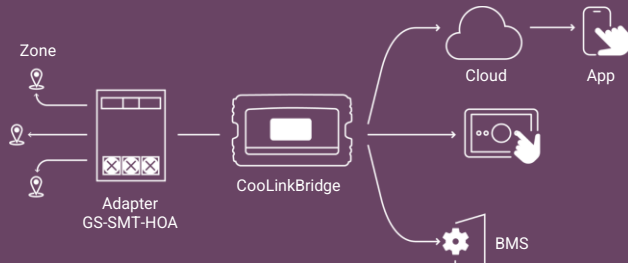
1. Connect CoolPlug to A/C unit
you can find [here](#), installation manual for the different HVAC systems
2. Connect CoolPlug to Buspro ([D+] -> 1, [D-] ->2)
3. Open HDL set up tool and search
4. Detailed guideline is [here](#)



CooLinkBridge – Integrate other HVAC systems

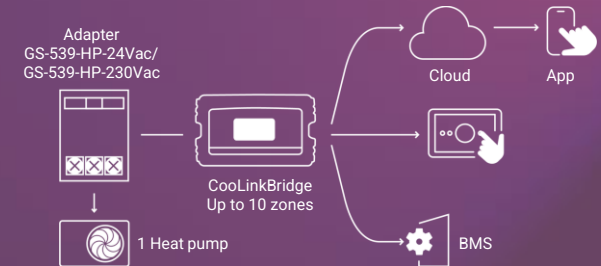
Radiant/electrical underfloor heating

*Additional 3rd party card required



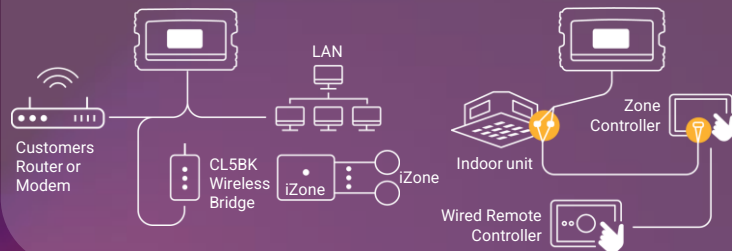
Fan Coils, Heat Pumps

*Compatible with different types of fan coil controllers



Zone control

**Additional card might be required



Chillers

*Additional card might be required



CooLinkBridge – Integrate Heat Pumps and Fan Coils

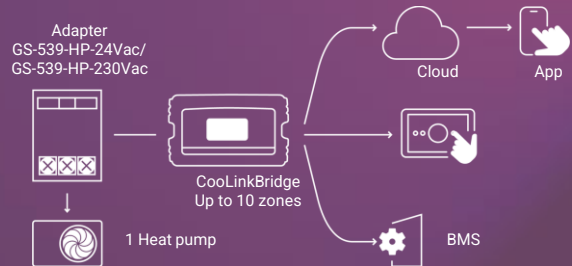
Fan coils

- Connects to several types of Fan Coil controllers
- Supports up to 10 units
- Provides same integration capabilities as CoolMaster and CooLinkHub



Fan Coils, Heat Pumps

*Additional 3rd party controller required for each FC unit



Heat pumps

- Connects to different brands of Heat Pump manufacturers
- Supports a single heat pump
- Provides same level of integration as other products

CooLinkBridge – Integrate Chillers

Features

- Connects to the Modbus gateway of the Chiller's manufacturer
- Allows integrating extended functionality, including on/off, set point, mode, etc..



Chillers

*Additional card might be required



CooLinkBridge – Integrate zoning systems

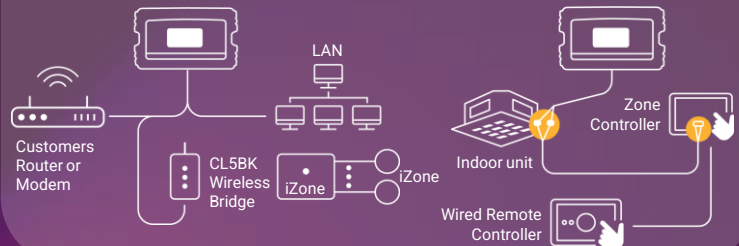
Features

- Connects to different types and brands of zoning systems (e.g i-zone, Airzone, etc)
- Allows to control each zone individually
- Connects directly or to the same network



Zone control

**Additional card might be required



HVAC Systems - Applications

Small Scale

Residential Sector



Medium Scale

Commercial Sector



Large Scale

Large-Commercial Sector



Multi-Split (single split)
(Inverter / Non-Inverter)



Chillers



HRV systems



Fan Coils
(FCU)



Zoning systems



Rooftop +
Custom



Radiant Floor Heating
(Hydronic or Electric)



VRF Systems
(Inverter, up
to 256 zones)



Where our products would be installed



CoolMaster

Connected to outdoor
(one of the indoors)

Installed in the rack,
near HDL controller



CoolLinkHub

Connected to
CoolPlugs

Installed in the rack,
near HDL controller



CoolPlug

Connected to
indoors

Installed near (inside)
indoor unit



CoolLinkBridge

Connected to zone controller,
FC, HP, UF controller

Installed in the rack, near HDL
controller

HVAC Integration: Solution Design Process

Step
1

What is the type and brand of the HVAC, required to integrate?



Get the exact HVAC equipment list

- Mechanical Drawings
- Equipment list

Step
2

How many indoors/zones need to be integrated?



Share the list with your local CoolAutomation Pre-Sale and Solution Design team

Step
3

Device Selection
CoolAutomation provides advice on the right device + connection instructions



Step
4

Open HDL set up tool and search for CoolAutomation devices



Commonly Asked Questions

- Can the original vendor's thermostats/central controllers be removed, or should they remain?
- Where is the temperature measured on the HVAC side if wired remotes are removed?
- Can the CoolMaster work with different systems simultaneously?
- Are there any additional components required from the HVAC Vendors for integration with CA and HDL?
- How to control every indoor individually?
- What to do, if HVAC contractor left the job and/or doesn't support the equipment anymore?
Can we still setup the system by ourselves?

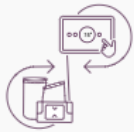
Why CoolAutomation?

- Leverage CoolAutomation's Knowledge and experience in Simple and Complex HVAC Setups
- Plug & Play devices – auto detects all connected HVAC units for all brands and manufacturers
- Bi-directional communication with HVAC systems including real time feedback
- HDL <> CoolAutomation Partnership:
Buspro native support for direct integration
- Superior Support with Remote access capabilities
- Unifying different types of HVAC systems into one simple and straight forward integration process

Technical Support - <https://support.coolautomation.com/hc/en-us>

HOW CAN WE HELP?

🔍 Search...



INTEGRATION SOLUTIONS

Device installation, Specifications, configuration & compatibility



DOWNLOAD CENTER

Reference docs, Submittals, Spec Drawings



REMOTE HVAC SOLUTIONS

Management, Predictive maintenance & Power distribution



VIDEO TUTORIALS

Video guides and certification training



KNOWLEDGE BASE

Troubleshooting, configuration and product best practices



COMMUNITIES

Discussion communities

How can we help?

Select a channel and let's talk.



Open Support Ticket



Message us on WhatsApp



After Sale Support - <https://support.coolautomation.com/hc/en-us/requests/new>

How can we help?

Select a channel and let's talk.




Open Support Ticket



Message us on WhatsApp



SUBMIT A REQUEST

 To avoid delays in resolution, please include as much information as possible when you submit the request. Details such as Device type, Serial number (283B96...), HVAC brand and a detailed description of the issue you are facing will expedite the resolution.



Ask Support a Question



Integration Solutions



Remote HVAC Solutions



Product Enhancement Requests



Ask about your HVAC compatibility



RMA Request

Thank You!

Eugene Gekhtman

Solution Engineer

eugene@coolautomation.com