



## INTEGRITI INTERCOM COMMUNICATIONS TASK



**INNER RANGE recommends that all Inner Range systems be installed & maintained by FACTORY CERTIFIED TECHNICIANS.**

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# *Integrati Intercom Communications Task*

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## Integriti Intercom Comms Task and the Kenwei Intercom Interface

### Description of the Integriti Intercom Comm Task:

The Integriti Controller has an Intercom Comms Task and an Apartment entity structure. The Integriti Controller's philosophy for an Intercom system is that there is an Apartment that can grant access to a Call Location. An Apartment can optionally have a Floor defined as well as having an Intercom System Floor and an Intercom System Unit. Up to 32 Call Locations can be defined in the Intercom Comms Task and each can optionally have a Door and/or up to 4 Lift Cars defined. When the Intercom Comms Task detects that an Apartment has granted access to a Call Location, the defined Door and Lift(s) are temporarily unlocked/unsecured to allow access.

Currently the only Intercom system that the Integriti's Intercom Comms Task interfaces with is the Kenwei Intercom system.

The screenshot displays the 'Apartment 301' configuration window in the Integriti System Designer. The window is divided into two main sections: 'Properties' on the left and 'Settings' on the right.

**Properties Section:**

- Site:** Default Site
- Controller:** New Controller (PT00...), ID: AP1
- Name:** Apartment 301
- Last Changed By:** Installer
- Created:** 14/09/2012
- Modified:** 31/10/2012
- Notes:** (Empty text area)

**Settings Section:**

Settings	
Floor	Lift Floor 3
Intercom System Floor	1
Intercom System Unit	1

Figure 1: Apartment configuration from the Integriti System Designer

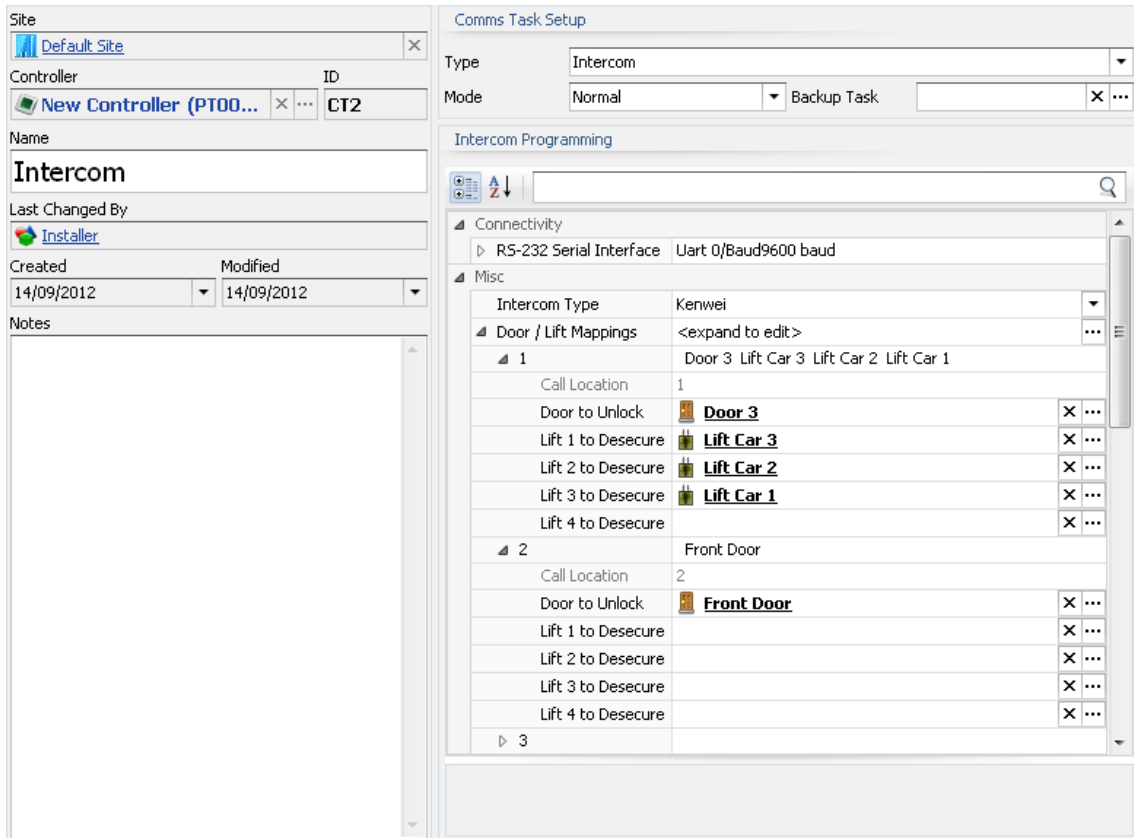


Figure 2: Intercom Comms Task configuration from the Integriti System Designer

## Description of Kenwei Intercom system:

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The Kenwei Intercom system consists of Indoor Monitor units and Outdoor Camera units. Distributor modules are used to connect the Indoor and Outdoor units. The standard Distributor module has a dip switch that is used as the Floor selection for the Kenwei Intercom system and allows for up to 4 Indoor Monitor units connected to a single Distributor module. There is also a special type of Distributor module that allows for up to 4 Outdoor Camera unit connections. Distributor modules can be connected in series to build up the intercom system to the required size for the installation.

The Kenwei Intercom system addresses the Indoor Monitor units via the Distributor module's Floor and then the terminal location. For example, if the Distributor module was set to Floor 17 and the Indoor Monitor was connected to terminal location 3, the Indoor Monitor's address would be 1703.

The Kenwei Intercom system addresses the Outdoor Camera unit as number 1 when it is connected directly to a Distributor module or via the terminal location when connected to a special Outdoor Camera Distributor module. For example, if the Outdoor Camera unit was connected to terminal location 3 of an Outdoor Distributor module, the Outdoor Camera's address would be 3.

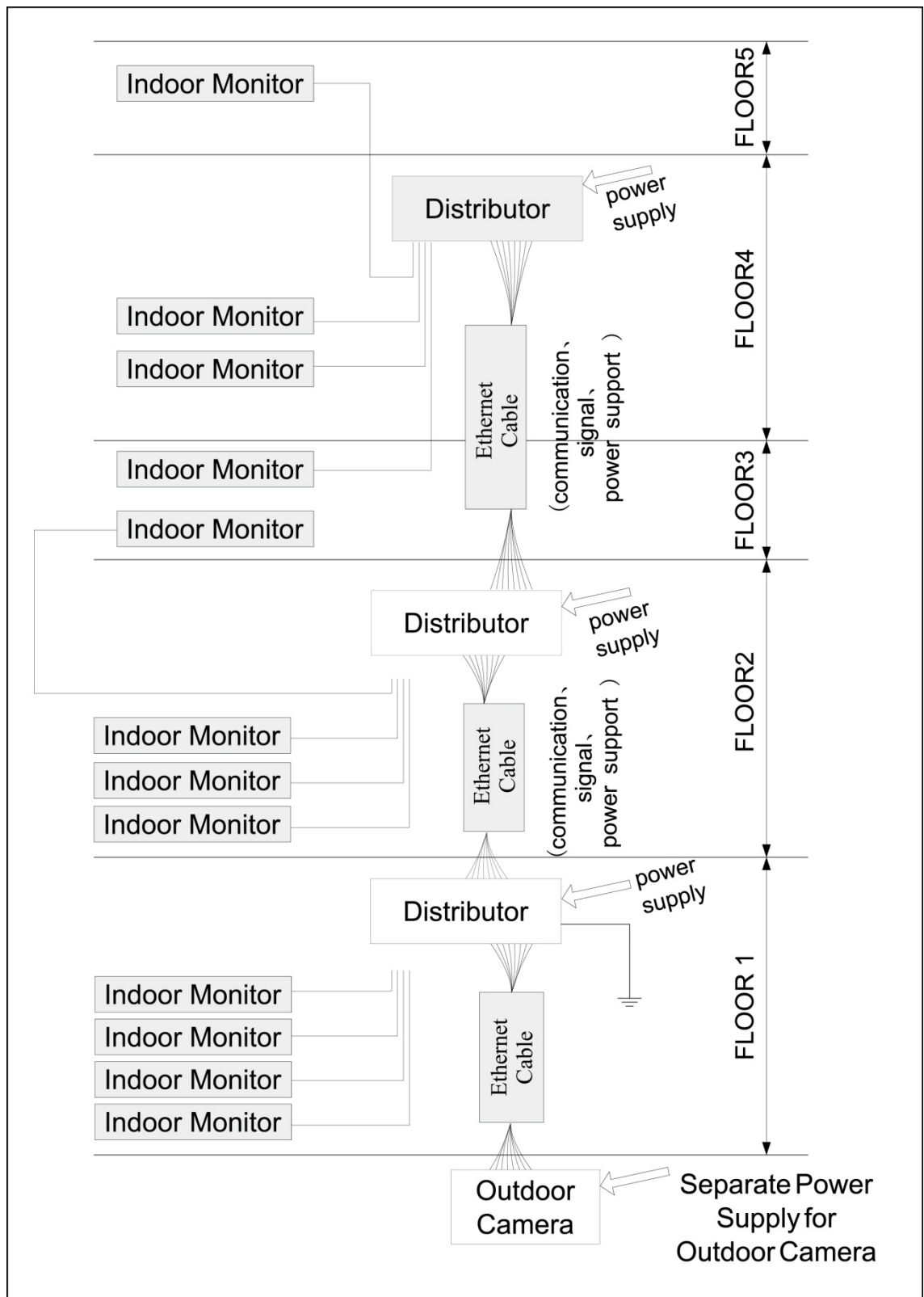


Figure 3: Standard Distributors connected in series (Extracted from Kenwei installation manual)

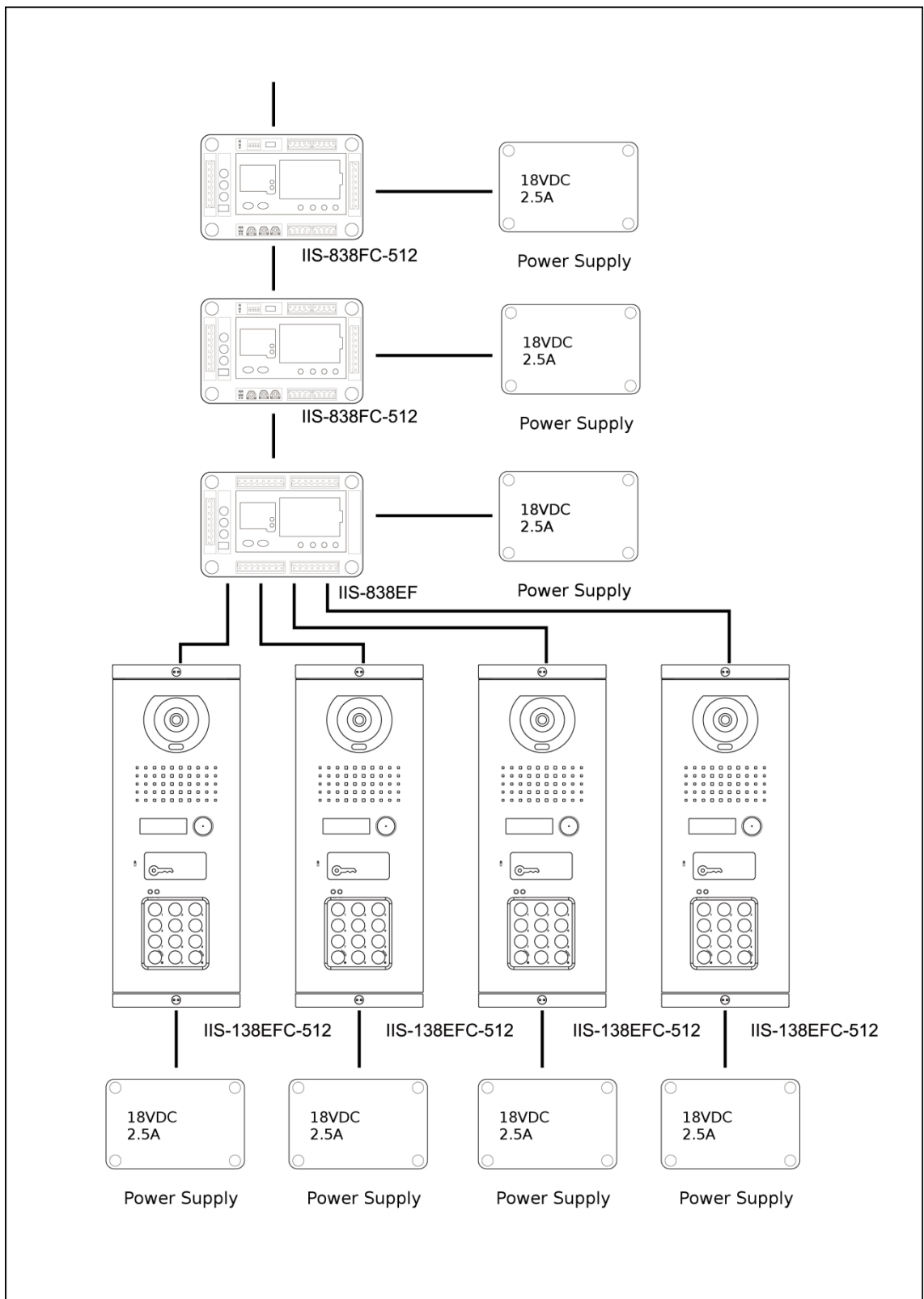


Figure 4: Output Camera Distributor (Extracted from Kenwei installation manual)

### **Interface between Integriti and the Kenwei Intercom system:**

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The Integriti Apartment's Intercom System Floor and an Intercom System Unit equate to Kenwei's Floor and terminal location of an Indoor Monitor unit. The Integriti Intercom Comms Task's Call Location equates to Kenwei's Outdoor Camera address.

When the Intercom Comms task receives an "unlock the door" command from the Kenwei intercom system, the Integriti Intercom Comms Task searches for an Apartment that matches the Kenwei Indoor Monitor's address. If a match is found the defined Door and/or Lift(s) are temporarily unlocked/unsecured to allow access as well as review being logged. If no Apartment is found to match the Kenwei unlock command, then only review is logged. The Kenwei Intercom distributors communicate with one another via an RS485 LAN. This RS485 LAN needs to have an appropriate connection to a UART on the Integriti Controller with the port configuration set to be 9600,N,8,1 (as per Figure 2: Intercom Comms Task configuration from the Integriti System Designer).

### **Limitations of the Integriti to Kenwei interface:**

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A typical standalone installation of a Kenwei Intercom system involves a physical electronic lock and/or a lamp to be directly wired to the Kenwei Outdoor Camera unit. There is 3 ways that access through the door can be granted: via the Indoor Monitor unit, via a key fob access at the Outdoor Camera unit and via a PIN password entry at the Outdoor Camera unit. Key fobs are registered with and PINs are saved to an Outdoor Camera unit.

Using the Kenwei key fob or PIN access from the Outdoor Camera unit cannot be used when using the Integriti to Kenwei interface. This means that the only method to grant access to the Door/Lift(s) is from an Indoor Monitor unit.

To overcome this limitation it would be envisioned that an IR reader head would be installed alongside the Kenwei Outdoor Camera unit.