

Comms Task Programming

Introduction

All system communication is controlled by means of **Comms Tasks**. As the name suggests a Comms Task is a communications task or job that you wish the system to carry out. Because there can be more than one Comms Task, it is also possible for more than one communications task to be operating at once. For example, to configure the system for a review printer you simply allocate one of the available Comms Tasks to perform the review printer function. If you wish an alarms dialer to be operational as well, you simply assign another Comms Tasks the job of being a dialer format such as Contact ID. The number of Comms Tasks available is dependent upon the Memory Configuration.

Comms Tasks can either be “active” or “idle”. When the system is powered up, all programmed Comms Tasks are set to active so they can immediately start their intended function. If you wish to stop a Comms Task, for example abort a dialer format halfway through reporting, simply set that Comms Tasks to idle.

Communications Ports

Comms Tasks use **communications ports** to communicate with the outside world. Listed below are the possible communications ports:

Port Name	Location	Description
Telecom	Control Module PCB	Connected to the telephone network or a direct line network and used for upload-download, dialer reporting formats, direct line formats etc.
UART 0	Control Module PCB	Only used during installation. Can be used for direct connect upload/download with an adaptor <i>only during installation</i> .
UART 1	UART Expander	A general purpose RS232 port used for review printers, external PC connections, access control monitoring, special formats such as Securitel, fast modems to dial-up lines. Baud rate programmable.
UART 2	UART Expander	Same as UART 1
UART 3	UART Expander	Same as UART 1
UART 4	UART Expander	Same as UART 1

NOTE: The number of UART Ports available will depend upon the version of UART Expander fitted.

When a Comms Task is set to carry out a function, for example send data to a review printer, it will be configured to use one of the communications ports listed above. For example a Comms Tasks programmed for a review printer may be configured to use UART Port 3. This means that UART Port 3 cannot be used for any other purpose unless the Comms Task is set to idle.

Some Comms Tasks may share ports with other Comms Tasks. For example, a Comms Task programmed as a Contact ID dialer and another programmed as an IRfast format dialer. Although both these tasks are configured to use the Telecom port, when they are not reporting they are not using the port. If both tasks needed to use the Telecom port for reporting at the same time, one Comms Task will use the port first and, when finished, the other Comms Task will use the port.

Comms Task Formats.

Comms Task formats describe the job a particular Comms Task is to perform. For example, programming Comms Task CT003 to Contact ID format will invoke a Contact ID dialer using CT003. The programming of options for the Contact ID dialer using CT003 are unique to Comms Task CT003. If another Comms Task, CT005, were also to be programmed to Contact ID format, the Contact ID options for this Comms Task will be separate from those of CT003. This allows the commissioning of dual reporting with each Comms Task using its own Telephone Numbers and options.

Listed below and opposite are the possible formats that may be assigned to a Comms Task.

Programming of individual formats are explained in more detail in "Comms Task Formats" in the following sections.

<u>Comms Format</u>	<u>Section Number</u>	
Monitor	Comms- 1	
Answer Call	Comms- 2	
PC Direct	Comms- 3	
IRfast Dialer	Comms- 4	
Contact ID Dialer	Comms- 5	
EMS	Comms- 6	
EarthNet Direct Line	Comms- 7	
Securitel	Comms- 8	
Printer	Comms- 9	
External Modem	Comms-10	
Inet	Comms-11	
Accept	Comms-12	
Poll Data	Comms-13	
PACOM	Comms-14	
IRfast Backup Dialer	Comms-15	See Note 1
CID Backup Dialer	Comms-16	See Note 1
GSM	Comms-17	See Note 1
SpreadNet Wireless Interface	Comms-18	
4+2 Pulse Dialer	Comms-19	
Geoquip	Comms-21	
8 pin	Comms-22	
C-Bus	Comms-23	See Note 2
Inovonics	Comms-24	See Note 2

IMPORTANT NOTES:

- 1) Any Comms Task used as a "Backup" Task operates as an independent Comms Task and must therefore have all the normal options programmed. i.e. Programming options are not automatically taken from the main Comms Task.
- 2) Available in Type 2 (CE) Control Modules or later only.

Comms Task Baud Rates

IMPORTANT INFORMATION

Whenever more than one Comms Task is programmed it is important to ensure that the **combined** Baud rate of all Comms Tasks to be active at the same time does not exceed:

Type 0 / Type 1 Control Modules: 19,200 Baud.
Type 2 Control Modules: 38,400 Baud.

eg. On a Type 1 Controller, if a "SpreadNet" Comms Task, which must communicate at 9600, and a "Printer" Comms Task, set to 1200, are used concurrently; a "PC Direct" Comms Task for PC System Management would have to be set to 4800 Baud to ensure that the total Baud rate does not exceed 19,200. In this example, the total Baud rate would be 15,600.

When assigning Baud rates, do not forget to include the Baud rate of any Comms Task using the Telecom Port at the same time. (For Contact ID and IRfast formats allow 300 Baud; for Upload/Download formats allow 1200 Baud)

Format	Ports Used	Description
Monitor	UART 0 to 4	For manufacturer's use only.
Answer Call	Shares Telecom	Answers calls for upload/download, DTMF (Touch-tone) Telephone Remote Control and performs telephone line monitoring. Can be programmed to Callback the computer that initiated the call, for added security.
PC Direct	UART 1 to 4	Used to allow a PC to be connected permanently to the 3000/4000 system for upload-download or access monitoring.
IR Fast	Shares Telecom	Reports alarm information in Inner Range fast Format (Extended)
Contact ID	Shares Telecom	Reports alarm information in Ademco Contact ID format.
EMS	UART 1 to 4	Used to communicate directly with high level lift control equipment. V3 or later.
EarthNet	Telecom	Reports alarm information in EarthNet Direct Line format via a direct line. Setting an EarthNet Comms Task to "active" will prevent any other Comms Task from sharing the Telecom Port.
Securitel	UART 1 to 4	Reports alarm information via a Securitel STU connected to a UART port.
Printer	UART 1 to 4	Used to continuously dump review information to a serial printer.
External Modem	Shares telecom or UART 1 to 4	Used to periodically dump review to a remote PC via the Telecom Line or via a separate line connected to an external modem.
Inet	UART 1 to 4	Allows multiple panels to communicate alarm data and a limited amount of database editing commands to and from an automation package via an RS232 based network. Contact the Distributor for details. V3.5 or later.
Accept	UART 1 to 4	Used to permanently connect a PC running ACCEPT System Management Software. V2 or later.
Poll Data	UART 1 to 4	Allows the 3000/4000 system to be monitored and controlled by an external intelligent system using Contact ID format or system text. V3 or later.
PACOM	UART 1 to 4	Allows the 3000/4000 system to be monitored and controlled via a PACOM Network. V3 or later.
IRfast Backup	Shares Telecom	Reports alarm information in Inner Range format (Extended) when primary Comms format fails.
CID Backup	Shares Telecom	Reports alarm information in Ademco Contact ID format when primary Comms format fails.
GSM	UART 1 to 4	Allows secure communications via GSM modem to central stations &/or GSM mobile phones for alarm reporting and remote control. V3.5 or later
SpreadNet	UART 1 to 4	Allows the 3000/4000 system to connect directly to a C&K Spreadnet receiver. V2 or later.
4+2 pulse	Shares Telecom	Allows the 3000/4000 system to connect directly to Central Stations using the 4+2 Pulse format. V3 or later.
Buffer		Special purpose Comms Task generated automatically when the GSM Comms Task is used.
Geoquip		Under development.
8 pin		Under development.
C-Bus	UART 1 to 4	Allows the 3000/4000 system to connect directly to a Clipsal C-Bus Controller. V4 or later. (Not available on Type 0 or 1 Control Modules)
Inovonics	UART 1 to 4	Allows the 3000/4000 system to connect directly to a C&K Spreadnet Receiver. V4 or later. (Not available on Type 0 or 1 Control Modules)

**Comms task to
program: CT001**

This screen allows the programmer to select a Comms Task to programme by using the up and down arrows or by entering a number.

**CT001 Idle ->
None**

The screen has three roles:

1. It allows a Comms Task format to be selected by using the right arrow key to cycle through all the available formats. Pressing the OFF key selects no format for this Comms Task and goes to the start of the list of available formats.
2. The "9" key is used to toggle the Comms Task between the "Idle" state and the "Active" state. **A Comms Task format cannot be changed or programming changes made unless the Comms Task is idle.**
3. Pressing HELP, "9" will allow options to be programmed for the particular format chosen for that Comms Task. It is recommended that options are only changed when the Comms Task is idle.

Example: Contact ID has been selected for Comms Task CT001**CT001 Idle ->
Contact ID**

Although a format has been chosen, because the Comms Task is idle, no dialling or reporting will take place.

To programme options for the Contact ID dialer using Comms Task CT001 press HELP, "9".

**CT001 Active
Contact ID**

To start Comms Task CT001, simply press the "9" key. The display will change to that of the screen on the left.

The Contact ID dialer is now operational using CT001. To stop the Contact ID at any time, simply go to the above screen and press the "9" key to toggle the Comms Task back to idle.

Defaults

In V3 or later, Comms Task 1 (CT001) is defaulted to "PC Direct" format on Port 1 at 9600 Baud.

Programming options and screens will vary depending on the format of Comms Task selected.