

"Answer Call" Comms Task Format**Answer Call (with Callback & Fax Bypass option)**

The Answer Call format is used if you wish the Model 3000 to be able to answer the dialer line (or call back the computer) and provide:

- A modem connection for the purposes of upload / download.
- Panel remote control from any "touch-tone" (DTMF) telephone or mobile phone.

It can also be used to automatically monitor the status of the dialer line by periodically checking for DC voltage on the line. You cannot have more than one Comms Task assigned to answer the phone. If more than one "Answer Call" Comms Task has been programmed in error, the Comms Task with the **lower** Comms Task number will answer the call (CT001 will take priority over CT002). Normal operation is as follows:

The task will periodically test the dialer line for DC voltage and will alarm / restore the Control Module System Input "Phone" (C01:S22) as required. In addition, the task will monitor the dialer line for a ringing phone and after the required amount of rings will answer the dialer line and attempt a modem connection at the highest baud rate available (300 or 1200 Baud).

If Callback is programmed, the panel will hang-up, wait 15 seconds, then dial the pre-programmed "Callback Tel. No." (If another Comms Task requires the phone line during the 15 second pause, Callback will be aborted) After dialling, the Concept 3000 waits 30 seconds for the start of the modem answer tone. (If the phone is ringing whilst attempting a call back, the Model 3000 will wait until the ringing stops before trying to dial.)

If Fax Bypass is programmed and rings are sensed but cease before the required number of rings is reached, the task will loop the line in parallel with whatever may have answered the dialer line and wait a pre-determined time for a single or series of DTMF tones. If a DTMF tone is sensed, the task will seize the line and wait a further time before initiating the modem answer connect sequence. If DTMF tone is not sensed within the required time, the task will un-loop the line. This allows fax machines and the like to be bypassed by simply sending any DTMF tone when the fax machine answers.

Answer Call Options

Options are reached by pressing HELP, "9" at the Active / Idle screen. Options are divided into common options and less common or Special options. Usually only the common options need to be programmed, however, Special options are reached by pressing HELP, "9" twice at the Active / Idle screen.

**CT001 Rings to
Answer: 000**

This screen sets the number of rings to answer the incoming call. Legal values are between 001 and 019 rings.

**CT001 Ans.F3CTSD..
Options-> nnnnnnnn**

This screen allows some answer options to be programmed:

F Fax bypass

This option enables Fax bypass by sensing if the phone stops ringing before the required amount of rings. If detected the Comms Task will then loop the line in parallel with whatever answered the phone and wait a pre-determined time for DTMF tone to be sensed.

3	300 Baud	This option forces 300 Baud to be used to connect the modem, irrespective of the modem type installed.
C	Call back	This option forces the panel to always Call back the Upload / Download package thus implementing a higher degree of security. The "Remote Access" option in the Installer's Menu Group must be set to "Yes".
T	Timed bypass	This option enables Timed Bypass. The [F]ax Bypass option above must be set to "No". This option allows the PC Operator to achieve Fax Bypass by dialling the panel, aborting the call immediately after the fax has answered ([F10] then "Yes") and then dialling the panel again <u>1 minute</u> later. The panel will now answer on the first ring, thereby gaining the line before the fax/answering machine can answer.
S	Single DTMF	This option must be set to "Y" if the "F" flag above is set to Yes and DTMF Control is to be used. This instructs the modem to monitor the line for a DTMF tone for a time once a fax or other device has answered the line.
D	DTMF Control	This option enables DTMF Control, once the system has answered a call and the correct DTMF tone has been detected. "Single DTMF Tone" must also be programmed in special options below. DTMF cannot be used with Timed bypass. See "DTMF Control Programming" [MENU 7,3,3].
.	Spare	This option has been left spare for future development.
.	Spare	This option has been left spare for future development.

CT001 Line Test Time: 000 min

This screen sets the time between automatic dialer line tests. Dialer line tests are performed by detecting line voltage. If the line voltage is detected then C01:S22 will be set to the alarm condition. Setting a time of 000 minutes disables line testing. The maximum time is 255 minutes (4 hours, 15 minutes).

Answer Call Special Options

Special options are reached by pressing HELP, "9" twice at the Active / Idle screen, or by pressing HELP, "9" from any common options screen. HELP, "0" will take you back to the common options, when programming of special options is complete.

CT001 PpDTM.6 Dial -> nnnnnnnn

This screen sets various dialling options:

P	Pulse Dial (Tel)	Selects Pulse ("decadic") dial when dialling the main Telephone Number.
p	Pulse Dial (PABX)	Selects Pulse ("decadic") dial when dialling the PABX phone number if present.
D	Dumb Dialling	Selects Dumb dialling. If "n" then Smart dialling is selected (default). <i>See the section on "Introduction to Dialer formats" at the end of this chapter for more details.</i>
F	Force 300 Baud	Not used in "Answer Call" Comms Task.

T	Test Mode	Not used in "Answer Call" Comms Task.
M	Max Count	Not used in "Answer Call" Comms Task.
.	Spare	Spare for future development.
6	60 sec Redial	Not used in "Answer Call" Comms Task.

CT001 PABX No. -> None

These screens allow the installer to define an optional PABX Access number and Call-back Telephone Number. When the Call-back number is defined, extra security is provided by forcing the task to ring back this number on a successful log-on sequence as an added precaution against "hacking".

CT001 PABX No. -> TN000

Telephone numbers are selected from a pre-programmed list of Telephone Numbers, selected alphabetically by name or by number, if desired.

CT001 Back No. -> None

See Telephone Number Programming.

CT001 Back No. -> TN000

CT001 Cust No. -> None

This screen allows the installer to specify the Telephone Number of the dialer line connected to the panel and is useful for reference purposes. It is not required for programming or panel functionality.

CT001 Cust No. -> TN000

CT001 Seize Aux C01:X08

This screen allows an Auxiliary output to be specified that will turn on whenever the dialer line is seized and turn off whenever the dialer line is released.

CT001 DTMF Tone Wait: 000/10 sec

This screen sets the time a task will wait to sense the DTMF tone when in fax bypass mode. The time is programmable from 1/10 second to 255/10ths of a second (25.5 secs). If this option is left at 000/10 then the default time of 5 seconds will be used.

The DTMF tone wait time is also used as the main dial tone wait time in Callback operation and is best left at its default value (000/10) if Callback is utilised.

If the phone is ringing whilst attempting a call back, the system 3000 will wait till the ringing stops before trying to dial.

CT002 Single DTMF Tone: 000

This screen allows the Installer to specify the DTMF tone which will be used to initiate the modem answer sequence in fax bypass mode and also selects the tone that will be used to initiate DTMF Control Mode. The programmed tone is the one that will initiate the modem connect sequence. The programmed tone **plus one** is the tone that will initiate DTMF Control Mode..

eg. if "005" is programmed, the DTMF digit 5 will be the Fax bypass tone in PC Direct and DTMF tone 6 will initiate DTMF Control Mode.

"(D)TMF Control" option must be set to "Yes" under "Answer Options" above. See "DTMF Control Programming" [Menu 7,3,3] for more details.

CT001 Line Test Count: 000

This screen sets parameters associated with line testing and should be left at 000 unless advised by the manufacturer.

CT001 Answer Wait: 000/10 sec

This screen allows an answer wait time between 0 and 255/10ths of a second (25.5 seconds) to be programmed. The default is 0 seconds. When a non-zero answer wait time is programmed, upon answering the call and accessing the interpreter for upload/download, all incoming characters will be ignored until the answer wait time has expired. This is useful when connecting with a mobile data network where unnecessary additional characters are output immediately after modem connection.

The Answer Wait time is also used as the PABX dial tone wait in Callback operation and is best left at its default value (000/10) if Callback is utilised.

Introduction to Dialer Formats

When activated, a Comms Task set to a Dialer format (Contact ID, IRfast, or SIA) will continually look for any reports to be sent. When a reportable event is found, the dialer line will be used to attempt a connection to the Central Station. If the dialer line is being used, the attempt will be deferred until whatever is using the dialer line is finished. When finished, this Comms Task will "take-over" the dialer line and will not release it until it is finished. The connection attempt works in one of two ways:

- ◆ Smart Dial This is the default setting. The task will monitor the line for line faults, dial-tone, busy etc. and make dialling decisions based on results of attempts to connect to the Central Station as quickly as possible. All activity will be recorded to review.
- ◆ Dumb Dial This setting does not make "smart" decisions based on sensed tones, although all tones sensed and dialer progress are recorded to review.

The operation of these two modes is described in more detail in the section headed "Attempting Dialer Connection".

Once connected, the task will report all alarms until either there are no more alarms, or the on-line timer expires (default is 10 minutes). Alternatively, if the "Look Ahead" option is set, old alarms will be skipped in favour of new alarms.

Attempting Dialer Connections

Most Comms Tasks formats which need to dial a number to report information follow the logic below. Either smart dial or dumb dial can be selected on a per Comms Task basis.

Smart Dial

1. Seize Line and wait 3 seconds to see if phone is ringing. If phone is ringing wait till it stops ringing.
2. Test Line for DC voltage. If no line then unloop line, wait variable time then try again to same Telephone Number up to maximum attempts.
3. If got PABX number then loop line and wait for dial tone. If get dial tone then begin dialling. If get busy then unloop line, wait variable time then try again up to maximum attempts. If don't get dial tone then dial PABX number anyway.
4. Now wait for main dial tone. If get dial tone then begin dialling. If get busy or don't decode dial-tone then unloop line, wait variable time then try again to same Telephone Number up to maximum attempts.
5. Wait for Central Station required handshake for this format. If get dial tone or busy then unloop line, wait variable time then try again to a new Telephone Number up to maximum attempts. If get time out then unloop line, wait variable time then try again to a new Telephone Number up to maximum attempts. If get required handshake then start on-line timer.
6. Proceed with communications for this format. If redial is required due to errors then unloop line, wait minimum time then try again to the same Telephone Number up to maximum attempts.

Dumb Dial

1. Seize Line and wait 3 seconds to see if phone is ringing. If phone is ringing wait until it stops ringing.
2. Test Line for DC voltage. If no line, save review message and continue.
3. If got PABX number then loop line and wait for dial tone. If get dial tone, begin dialling. If get busy, save review message and continue. If do not get dial tone, dial PABX number anyway.
4. Wait for main dial tone. If get dial tone, begin dialling. If get time-out or any other tone, save to review and continue.
5. Wait for Central Station required handshake for this format. If get time-out, unloop line, wait variable time then try again to a new Telephone Number up to maximum attempts. If get required handshake, start on-line timer.
6. Proceed with communications for this format. If redial is required due to errors, unloop line, wait minimum time then try again to the same Telephone Number up to maximum attempts.

NOTE:

Many telephone lines in Australia and New Zealand have a Message Bank or similar service connected. The differential dial tones used as indicators for such services can impede communication by the panel.

To avoid possible communication problems either disable the connected service or set the (D)umb Dialling option in Comms Task Programming.