FaxCatcher TCI

Installation and Reference Manual

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How It Works

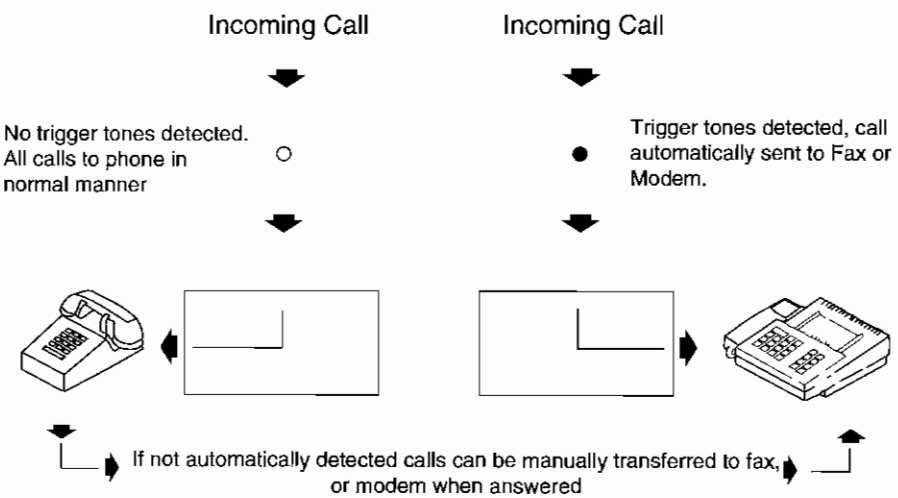
The FaxCatcher TCI works by answering the ringing telephone line and listening for trigger tones which are produced by the majority of modern Fax Machines, Modems and Tone Phones.

10-15% of fax machines do not produce a trigger tone. Modems have to be programmed to send trigger tones when dialing. Either you or the caller must enter an access code to redirect these calls.

Remember

A switch that is not triggered cannot switch.

To manually send the call	to the fax dial	99
	to the modem	44



Introduction

Line Sharing

The FaxCatcher TCI is a telephone line voice-data switch, designed for the small office and home environment. It allows a fax, modem, answering machine and telephones to share a common telephone line. Using sophisticated technology, incoming calls can be screened for automatic routing to the appropriate apparatus. Alsol, calls connected to the phones can be redirected back to the fax or modem if required.

How it Works

The Faxcatcher TCI has two modes of operation – *SmartMode* and *AutoMode*. In AutoMode all calls are answered by the FaxCatcher TCI and screened for trigger tones. In SmartMode, calls are usually answered personally with fax calls being manually redirected to the fax via a code being entered on the phone the call was answered on.

AutoMode

The FaxCatcher TCI answers the ringing telephone and listens for trigger tones to determine where the call should go. Most fax machines produce the international call tone of 1100Hz (the CNG tone) – this is the beep you hear if you listen to a fax waiting to transmit. When this tone is recognised the call will be sent to the fax port. The fax machine will answer the ringing port and normal communication will continue. The whole procedure takes only a few seconds. If there is no fax CNG tone, the FaxCatcher TCI checks to see whether there are any other tones to which it should respond. If not, the call is routed to the telephone port. This is where the phones of the installation are connected. The phones ring and are answered in the normal manner.

The FaxCatcher TCI has to receive a trigger tone to enable it to respond and switch appropriately. If there is no tone, or the tone is unclear, the unit always assumes a voice call and rings the phone port. If the call is answered and it is not for the phone – i.e. a fax or modem is calling, it is possible to re-route the call by entering the appropriate code on the phone. The factory preprogrammed DTMF codes (which can be changed) are

99 to transfer to the fax port
44 to transfer to the modem port.

These codes can be entered at either the receiving end or the originating end using any tone phone. It is also possible to redirect using decadic phones provided they are connected directly to the FaxCatcher TCI. It is not possible to redirect remotely using decadic (pulse) phones.

It appears 10 to15% of fax machines do not produce the CNG trigger tone. To correctly route these calls, a trigger tone has to be supplied either by you – the answering party, or by the calling party, either by their having prior knowledge of the fax access code or via an appropriate answerphone message.

To connect the FaxCatcher in AutoMode it is important that the incoming Telecom line is connected only to the *Telecom* port on the back of the FaxCatcher TCI. All the phones are now connected to the *Phone* port, with the Fax, Modem and Answering Machine connected to their various ports. AutoMode usually requires some changes in the existing wiring. This may be minimal where only one phone is involved. However, where there are multiple phones, or the unit is to be used in conjunction with an SBX, the services of an experienced installer are usually required.

SmartMode

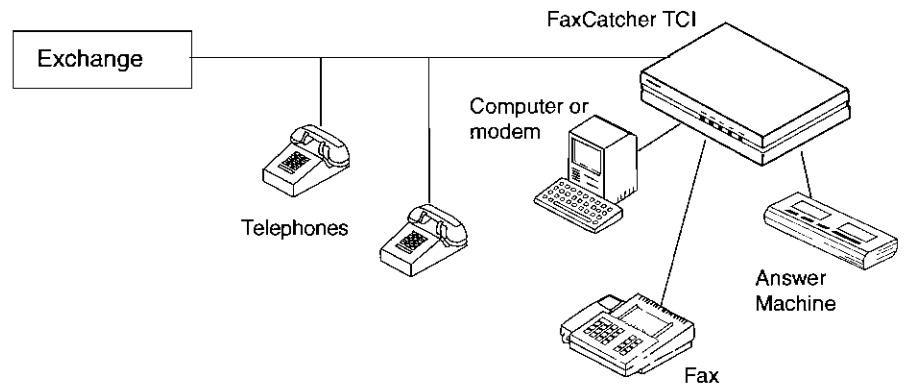
In SmartMode, the FaxCatcher TCI can be plugged into any extension socket conveniently available. No rewiring is required. In this mode ***you*** physically answer every call.

With incoming calls all your phones will ring normally (including your answering machine). You may answer the call from any phone at any time before the 7th ring (programmable). If the FaxCatcher TCI hears a CNG tone it will switch to ring your fax machine and you may simply hang up the phone. Remember that some fax machines calling you may not send the CNG tone. If you do not hear anyone or a tone, it may be a silent fax call. You may route the call to the fax at any time by pressing 99 on your tone phone. (Dial 7 or 8 once on a pulse phone.)

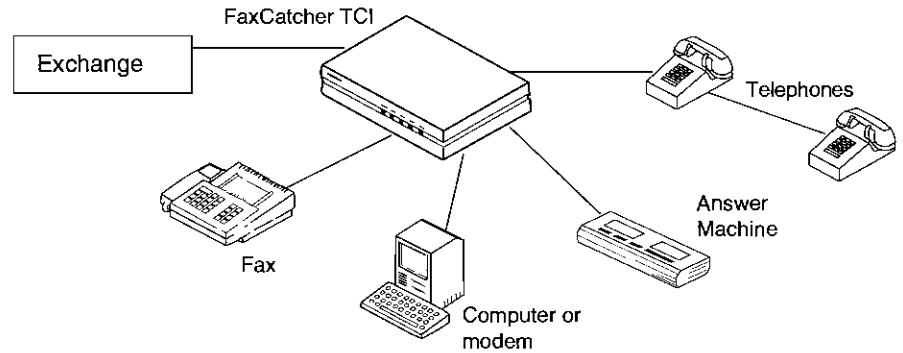
If the phone is not answered, then after the 7th ring the call will be answered by the FaxCatcher TCI and be immediately routed to the Fax. This allows the system to remain operational while you are out and always ensures faxes are received.

Typical Applications

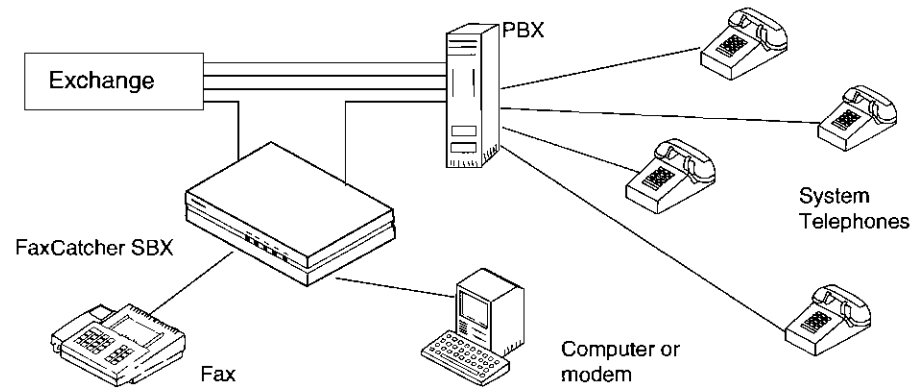
Single Line
Installation
SmartMode



Single Line
Installation
AutoMode



Multiline
Installations SBX
AutoMode



Hum Tone

This sound is generated by the FaxCatcher TCI when it acknowledges a programming change. Most, but not all programming steps require the entry of one control digit to produce the hum tone. i.e., 1 = on, 0 = off. However, to obtain a hum tone for ring rollover, Fax and Modem transfer codes, all digit spaces must be filled.
e.g. To achieve the hum tone for programming a 5 ring rollover, enter 05. If you enter 5 only, the FaxCatcher TCI will not acknowledge with a hum tone, but it will accept the programming once the phone is hung up.
The same applies for the 4 digit Fax and Modem transfer codes.
For a Fax transfer code of 68 program # # 4 # 0068 to get hum tone.
Just programming # # 4 # 68 will work but will not give the hum tone.

Note

Where reference is made to a programming or function access code in this manual the value used is the factory default value.

Programming

The Basics

Programming is accomplished by using a tone (DTMF) phone connected to the ***Phone*** port on the rear of the unit. Do not attempt to program through other ports or via other phone equipment or with a pulse phone. **Pulse phones cannot program the FaxCatcher TCI.** All characters and numbers are available on the tone phone's keypad.

A tone phone will make varying pitched sounds as you press the buttons. A pulse, or decadic phone will make a clicking sound or no sound at all. Remember, some modern looking phones may be decadic or may be switchable between pulse and tone.

Programming Sequence

Lift handset to obtain dial tone.

Programme System Reset # # 0 # 9

When programming push keys slowly and deliberately. Press # # and wait until the lights on the front of the unit flash. Then program the rest of the code, waiting after each character has been pressed for the lights to go off. If you programme too quickly, the unit may not respond. Pay no attention to funny beeps coming from the phone handset, they have no bearing on things.

Once a programming change has been accepted you will hear an organ like 'hum' from the phone handset.
We call this the *Hum Tone* – it is explained on the opposite page.

When you have heard the hum tone, either hang up, or continue by programming your required features as described on the next pages.

Programming and

FEATURE	CODE	FACTORY SPECIFICATION
Reset	# # 0 # 9	When programmed this sets the other codes to give the conditions below.
AutoMode	# # 0 # 1	on
SmartMode	# # 0 # 0	off
Rollover Ring count	# # 1 # 01 to 99 (auto) # # 1 # 01 to 09 (smart)	7 rings
TripleCheck™	# # 2 # 1 = on 0 = off	Off
CNG Detect	# # 3 # 1 = on 0 = off	On
Fax Transfer Code	# # 4 # 0 to 9999	99
Modem Transfer Code	# # 5 # 0 to 9999	44
Pulse Recognition	# # 7 # 1 = on 0 = off	On
Nightwatch	# # 8 # **1** = on 0 = off	Off

Function Codes

EXPLANATION	Fill in for future reference USER PREFERENCES
Wipes the slate clean. Brings you back to the factory settings	Please programme this before programming other functions
Provides automatic answering of every call and automatic routing of fax and modem calls (Transfer code 99 required for rogue faxes)	
Sets the unit for manual answering of calls, with automatic fax rollover answering after 7 rings or as programmed. (Push 99 – call is transferred to fax from any phone.	
The number of rings the telephone gives before the call is transferred to fax. Up to 99 rings when in AutoMode.	
When turned on, calls answered by answering machine will be routed to fax when answering machine hangs up.	
The automatic fax detection circuit. Switch off **only** when sharing modem and fax on the same line.	
The standard is 99. Change to a different code if 99 clashes with your answering machine. Programme all 4 digit spaces eg 0088 (for an 88 redirect) to obtain the hum tone.	
The standard is 44. Programme up to a 4 digit code for security access if required.	
Allows FaxCatcher TCI to recognise older pulse (decadic) equipment. Dial 7 or 8 for a redirect to Fax.	
Turn on before bed, off again in morning. Sends all calls direct to fax.	

System & Programme Testing

Once the FaxCatcher TCI is installed and programmed, the various functions should be checked. The best method is to make a series of **incoming** calls – get a friend or the receptionst from the company supplying the FaxCatcher TCI to make these calls.

☎ Call One

Checking redirect to fax.
Answer an extension. Press 99 (or your custom programmed number) on your tone phone or 7 or 8 on a pulse phone to check redirect to fax. If no redirect to fax happens, read the section on pulse equipment. Remember, a redirect from a pulse phone is only possible with phones plugged directly into the FaxCatcher TCI. Phones **before** the FaxCatcher TCI, including the callers, will effect a redirect as long as they are tone. **Check all extensions are redirecting correctly.**

☎ Call Two

Checking Answering Machine.
Switch your answering machine on and get the caller to leave a short message. Make sure you have read the section covering answering machine installation and operation. In the rare situation the answering machine will not respond to the FaxCatcher TCI seek help from your supplier. **Make sure the answering machine message is changed to tell people the fax is available by pressing 99 or remaining silent.**

☎ Call Three

Silence detect test for answerphone.
Tell caller to ring and remain silent. The caller should hear the answerphone outgoing message and then after about 4 seconds be transferred to the fax. This confirms safety checks are working.

Answering Machines

The FaxCatcher TCI supports the use of an answering machine and includes a number of features to ensure reliable fax switching of rogue faxes when the call is answered this way.

Basic set up

Connect the answering machine to the *Ans. Phone* Port on the FaxCatcher TCI, and ensure it is set to answer **as soon as possible.**

To ensure reliable fax call processing **do not** use a long outgoing message – 20 seconds is about the limit.

Change your current message to advise people the fax is available by pressing 99 on a tone phone or by remaining silent.

If your answering machine includes a telephone, remember that if you answer any calls on that phone, should you remain silent for 4 or more seconds the call will be transfered to the fax.. Outgoing calls are not affected.

TripleCheck ™

This is the name given to the collective group of tests used to ensure a rogue fax is transfered to the fax machine even though it may initially arrive at the answering machine. One aspect of this is the rollover to the fax when the answering machine terminates the call. This particular aspect can be turned off by programming as follows:

Rollover on: # # 2 # 1
Rollover off: # # 2 # 0

This action is only required when the answerphone hangs up before the 5 second rogue fax detect circuit gets a chance to work.

Message retrieval

When calling in to retrieve messages from your answering machine, it is necessary to stop the FaxCatcher TCI responding to any codes the answering machine may require. This is done by pressing a ✳ **before entering** the answering machine access codes. The FaxCatcher TCI will revert to normal operation after the call has concluded.

Fax Connections

In AutoMode the FaxCatcher TCI screens all incoming calls and when a fax call is detected it is sent to the fax, automatically, without any other phones ringing. Despite an international (CCITT) standard to which all fax machines are expected to comply about 10% – 15% of daily fax traffic does not conform and calls from these machines require special handling. We call this type of fax call a ***Rogue Fax*** of which there are two types:

Manual Fax

A manual fax maybe from an older type fax machine which does not have a key pad and uses the normal telephone to dial. When making a call to your fax machine they say *'Would you please transfer me to your fax machine'.*

Silent Fax

A silent fax is from a machine which does not produce the internationally recognised fax calling tone. When the phone is answered the line is completely silent. If no one responds to your greeting, presume it is a silent fax and transfer to the fax machine by pushing 99 on your tone phone.

Depending on your particular business situation, especially if you have light fax traffic, the rogue fax may be more predominant. This is because your number of different fax callers is too small to allow an accurate reflection of the overall fax traffic pattern. The FaxCatcher TCI has several features that allow the satisfactory routing of the rogue call to the fax machine.

To transfer a rogue fax to the Fax machine press 99 on the tone phone you answered the call on. (7 or 8 on a pulse phone). When you are out the automatic rollover will send the call to the fax machine after 7 rings (programmable). If you leave an answering machine on, the special TripleCheck™ software identifies rogue faxes and automatically sends them back to the fax. In SmartMode you always have to transfer fax and modem calls once you have answered the phone.

Programming

When using a tone phone this redirect code can be any user programmable number between 0 and 9999. The programme access code is:

4 # X, where X is the desired number.
(remember if X is say 88, program 0088 to get the hum tone)

Rollover Ring Count

Rollover is the number of rings made by an unanswered phone before the call is diverted to a fax machine. This ensures that when an answering machine is not used, all rogue fax calls will be correctly connected. The factory default is 7 rings. If required it can be reprogrammed as follows:

1 # Y where Y is between 0 and 99 in AutoMode
or 0 and 09 in SmartMode

An excessively long rollover count may prevent some fax machines connecting correctly as the rollover delay added to call conection delays and initial screening may exceed the on-line time for the calling machine. 10 - 12 rings should be considered the absolute maximum.

For a unit operating in SmartMode the rollover ring count is the delay (in rings) before the FaxCatcher TCI answers the call.

NightWatch

NightWatch is a programming code which allows all incoming calls to be transferred directly to the fax machine without ringing any phones regardless of the type of call. This saves intrusion from late night fax traffic requiring redirection.

To program:

8 # 1 turns NightWatch on

8 # 0 turns NightWatch off

The factory default is off. NightWatch is only available in AutoMode.

Triple Check™

This is a series of checks designed to operate in conjunction with an answering machine connected to the answerphone port. Should a rogue fax end up at the answerphone TripleCheck™ will ensure it is sent to the fax machine. Answering machines connected elsewhere will work satisfactorily but will not have the benefit of TripleCheck™.

If the answering machine has a handset connected and it is used to answer a call, it should be noted the 4 second silence detect will transfer the phone call to the fax if the phone hand set is left unattended. This can be prevented by placing the hand set in front of any noise source - e.g. a radio. This situation does not arise with phones connected to the other ports.

Eliminating Rogue Faxes

When one or two distant fax machines account for most of the rogue fax traffic it is possible to counteract the problem by the following techniques when operating in the AutoMode.

1. To be used when the calling fax is dialled manually:

   Ask the person initiating the call to dial your number and when the call is connected press 99 (or your programmed transfer code) to access the fax machine directly. Remember to wait until the FaxCatcher TCI has answered the call, and to dial during the silence between the ringing.

2 When the call is dialled on the fax machine or via a memory system:

   Enter the number and then follow it by pause and then a string of 9's (or groups of your redirect code)

e.g. 365-0224 pause 99 pause 99 pause 99 etc.

Explanation

The wires connecting your premises and that of the caller respond in exactly the same way whether the call is voice or machine. The only way to differentiate between calls is to answer the call and look for identifying tones or codes which tells the answering equipment what is initiating the call. The international fax call signal of 1100Hz (the CNG

Explanation...

tone) is what the FaxCatcher TCI is looking for to enable the call to be treated as a fax call. If there is no CNG tone some other method has to be used to tell the FaxCatcher TCI – or any other system, to treat the call as a fax call. In the above techniques we are replacing the CNG tone with the FaxCatcher TCI's redirect code.

The telephone exchange will recognise the first group of digits as the required number, connect the call and disregard the 99's. When the FaxCatcher TCI answers it will transfer the call to the fax as soon as it recognises a 99 redirect code.

To enable this system to work reliably it is necessary to ensure the transmitting fax is still sending out a 99 code after the FaxCatcher TCI has answered the call. As the time to connect a call varies – 20 seconds or longer for international calls, some experimenting will be necessary to ensure sufficient pauses and groups of 99's are sent to overcome the longest connection delays expected.

Modem Connections

The FaxCatcher TCI supports the use of a modem as an ancillary device. It is connected to the port labeled *Modem*. The modem initiating the call has to access the modem port. This is done in a manner similar to that used to automatically access the fax port using the fax's autodial memory.

Access Code

The default access code to the modem port is 44. This may be changed by programming as follows:

5 # Z , where Z is the access code, any number 0 – 9999

Unless you are operating in SmartMode you will need to inform modem users of your access code and how to use it. It is necessary for the FaxCatcher TCI to answer the call before an access code can be recognised so it is important to ensure sufficient delay is incorporated to allow for telephone network switching. Using The Hayes 'AT' command set for modem protocol, a typical call would be:

for tone dialled calls

ATDT 123-4567,,44,44,44,44 ("," = pause)

and for pulse dialled calls

ATDP 123-4567,,,T44,44,44,44

More or less (,) s may be required to give the appropriate delay. It is advised callers dial with the modem speaker on to monitor the progress of the call and adjust the dial command as necessary.

Dialling speed must not be too fast to ensure the FaxCatcher will recognise the access code.

A minimum of 80 - 100ms of tone per digit is satisfactory, with an 80 - 100 ms interdigit silence.

Sharing a fax and 2 modems on one line.

The FaxCatcher TCI in AutoMode can also be configured to share a fax and up to two modems on a single line. This is achieved by:

Plugging fax into phone port.

Plugging modem 1 into modem port.

Plugging modem 2 into fax port.

Turning CNG detect off # # 3 # 0.

This arrangement operates as follows:

All calls not producing a modem access code (44, 99, or your programmed access code) will go straight to the fax machine as normal with no manual intervention required. The initiating modems supply their own access codes as described on the previous page, giving immediate connection to the appropriate device.

Installation

If only one or two phones are required and they can be plugged directly into the FaxCatcher TCI you can install the system yourself with the likelyhood of little difficulty. If you have a number of phones or a multiline system then an installer is recommended. This is particularly true where SBX or Keyphone systems are in use.

The following information provides the basic installation requirements. If you are at all unsure about what is required, consult your supplier or an authorised Telecom service person.

The standard package includes the control unit, power adaptor pack, BT to WE (RJ11) adaptors and line leads, user manual and warranty registration. Some additional leads may be required for specific installations.

The unit should be connected to the line at the primary interface point and then all phones in the system are connected to the FaxCatcher *Phone* port. This usually requires changes in the existing wiring to ensure the primary interface point is available at the location where the FaxCatcher TCI is to be installed.

Single Line Installations

1 Locate the position where the line is connected to the master termination point on 2 -5.
(See page 3 and wiring diagram page 20.)

2 If necessary, shift this master socket and the incoming line to the work area. This should be undertaken by approved Telecom service people.

3 It is recommended the master and a slave block (connected to the rest of the office/building phones) be connected side by side. Connect the master to the *Telecom* port on the FaxCatcher TCI and the *Phone* port to the slave block using the appropriate cables.

Installation. . .

This provides a simple method of linking the FaxCatcher TCI in and out of the phone system and provides a quick method of restoring the office to a pre FaxCatcher TCI condition.

4 Connect other equipment as required and then power up and programme a reset # # 0 # 9. (See page 5)

5 Check operation of Answering machine and redirect capability from all phones. (See page 9)

6 Programme any specific customisation required for access codes. Check answering machine message is appropriate and that the fax and answering machine are set to answer quickly – 1st or 2nd ring.

Caution

Be aware that using more than one master socket could cause problems when dialling out on pulse dial phones, particularly to old exchanges.

When rewiring an installation, care must be taken to ensure the incoming line goes first and only to the socket connecting to the FaxCatcher's *Telecom* port. If the line is left connected to the sytem elsewhere and it becomes connected to FaxCatcher's output ports all sorts of problems will occur. Apart from damage to the FaxCatcher TCI the most disruptive to Telecom is the FaxCatcher's ringing voltage (70 Volts RMS) being fed back up the line. This causes immediate dropping of calls, problems to other subscribers and irate Telecom staff. You could also be subject to prosecution.

Loading and the R.A.L. Number

All telephones and extension bells have a R.A.L. number which signifies how much power they draw from the ringing circuit on the line. The Telecom specification allows for an R.A.L. total value of 5, although only guarantees one handset to operate correctly. Most lines will usually drive an R.A.L. load greater than 5. If you have a number of bells and phones connected to the line it pays to check the R.A.L.

On all Telepermitted equipment there is a label stating the R.A.L. value of the device. Add these values up and if the total is greater than 5 remove some equipment until you know things are working correctly before reconnecting. **The FaxCatcher TCI will normally drive an R.A.L. of 5 but as a condition of its Telepermit is unable to drive more.**

Most standard 'Pert' phones have an R.A.L. of 1. Teleace, Digitel, mechanical bells and many unpermitted 'supermarket' type phones have an R.A.L. of 2 or more.

Unusual Operation – Power Surges

By its very nature telecommunication equipment is exposed to unusual hazards. Long lengths of wire connect assorted electrical equipment together as a network. Equipment making up this network has to comply with stringent safety requirements and the FaxCatcher TCI meets the appropriate standards.

However, the FaxCatcher TCI relies on power from the mains to operate and this network is subjected to localized anomalies, particularly surges and momentry cuts during switching.

As an additional measure to ensure reliable operation of the FaxCatcher TCI it is recommended that a reputable surge protector be installed on the mains supply e.g. a *Button* or equivalent in areas where power quality is questionable.

Read page 24 for problems that may be related to power surges.

Older type 4 wire telephone cable systems

It is not always possible to conveniently get the incoming line to the point wanted and maintain a 3 wire system. Often there is only a four wire cable connecting Phone Blocks together. As the FaxCatcher TCI sends ringing on both pins 3 and 2, the 4 wire cable may be used (2 for the incoming line and 2 out from the FaxCatcher TCI to the rest of the internal network) to connect to a master socket further down the line where appropriate. The 3 wire circuit can continue from this point.

Multiline Installations.

If you have a P.A.B.X., S.B.X. or Keyphone System the FaxCatcher TCI will primarily be used to screen for fax or data calls on one line, usually the least used.

Specialist installation is required as adjustments are needed to the existing equipment to enable correct operation of the complete system.

Program the FaxCatcher TCI by a tone phone connected directly to the unit. Some S.B.X. systems do not transmit DTMF tones directly to trunk lines. If the 99 redirect is not functioning, programme a function key such as the recall button to **hook flash 3 times** which will enable successful redirection of rogue fax traffic during office hours.

Stepping Lines

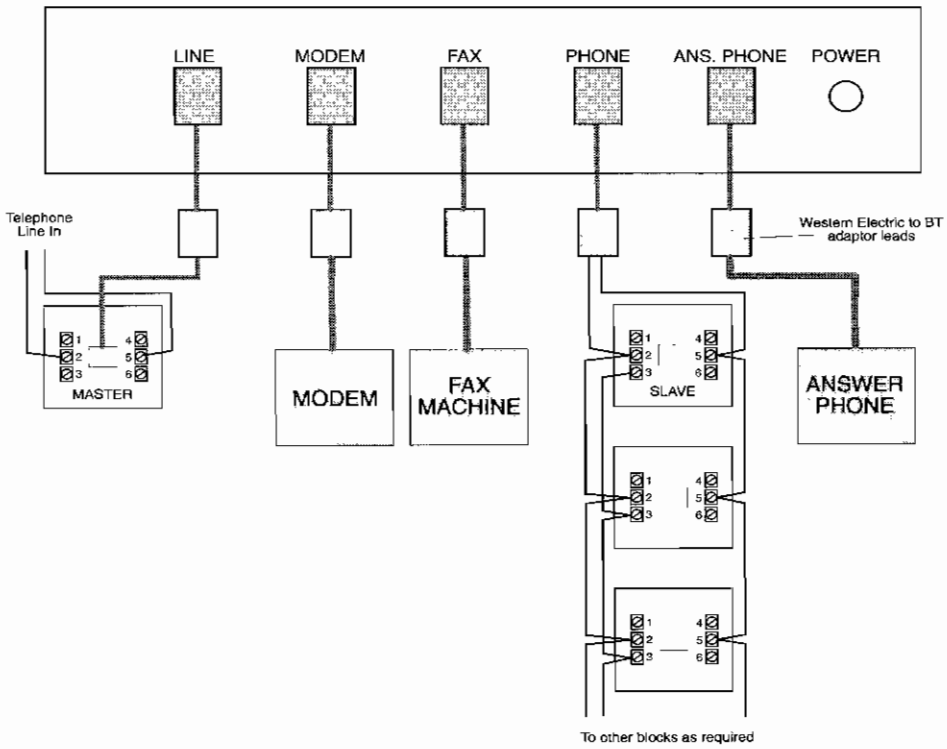
Beware of Telecom's Stepping facility for multiple lines. If a subscriber has two lines with separate numbers, generally the call will go to line 1, irrespective of the number dialled. If line 1 is busy the exchange will send the call to line 2. The opposite also applies. This system works well until a FaxCatcher TCI is installed on one line – assume line 2. The number associated with line 2 is advertised as the fax line. A fax call is made, line 1 is not busy so the call is directed there by the exchange. The FaxCatcher TCI does not see the call, cannot respond and the call cannot be sent to the fax. If line 1 is busy the call goes to line 2 and everything works normally.

It is necessary to ask Telecom to ensure the line only steps one way – down. i.e. Calls to line 1 will go to line 2 if line 1 is busy but calls to line 2 will only go to line 2 and if line 2 is busy they will not be stepped to line 1. This guarantees all calls to line 2 (the number advertised as the fax number) will be processed by the FaxCatcher TCI.
A Telecom Works Order is required to achieve this condition and must be applied for by the user from Telephone Services.

Note

If you are using Philips SBX 6, Oki Keyphone or Philips Sopho K Keyphone systems, use FaxCatcher SBX, as this unit has be designed to operate specifically with these systems

Suggested wiring for FaxCatcher TCI



This diagram shows the general wiring requirements for connecting the FaxCatcher TCI to the Telecom line and the various extensions.

Notes:

There is no limit to the number of slave blocks that can be connected to the Phone port. The total of the R.A.L. number of the phones with ringers operating should be limited to less than 5.

If the answering machine requires 3 wire ringing, connect the answering machine to the FaxCatcher via a Master socket.

The Master terminal block used to connect to the *Telecom* port should be placed in close proximity to the Slave block so that easy linking is possible in case of difficulties.
In the case of system failure, disconnect the lead from the *Phone* port on the FaxCatcher and connect to incoming line master. Shift fax and or answerphone to Phone sockets.

Under no circumstances must any of the incoming line wiring be connected to any of the FaxCatcher output wiring while the FaxCatcher is connected and powered up. Doing so will cause damage to the unit and to Telecom Equipment.

Self Help

Rule Number 1

Remove power for 30 seconds and then re-power

Programme reset # # 0 # 9 and ensure you get the hum tone

Reprogramme your user preferences.

If after programming a reset the problem persists and you are not able to find assistance on the following pages, contact your supplier immediately.

Panic Avoidance with a malfunction.

If the system should malfunction, **do not panic**, there are two easy ways of maintaining your phone system depending on your installation.

1. Turn the FaxCatcher TCI off.

This will connect the incoming Telecom line to the Phone output port on the FaxCatcher TCI. Also connect the Fax to this line and place on manual receive. Change answering machine message if necessary to advise of temporary manual operation of fax.

2. Disconnect the FaxCatcher TCI.

a Connect the incoming line to the extension socket, or, connect the lead originally feeding the extension sockets directly to the incoming line.

b Place Fax on manual receive and connect to the line.

c Connect answering machine and change message if required.

Using the suggested installation technique maintains a standard Telecom installation as well as allowing quick removal of the FaxCatcher TCI for service should it be required.

Pick up the phone and there is nobody there

Silent Fax. Push 99 on tone phone to transfer to fax machine.

Pick up phone and hear a fast busy signal

Occurs when the line is in use by fax, modem or other extension. This is normal.

Ringing noise on answering machine tape

Good sign - silent fax has been picked up. FaxCatcher TCI is ringing fax machine.

Phone rings – dial tone present.

Caller has hung up. FaxCatcher TCI has taken two or three rings to detect this. Phone may briefly continue to ring. This is normal.

Unit doesn't respond to 99 code when phoning in.

When a low level DTMF tone and the ring *burr burr* coincide, the FaxCatcher TCI may not be able to accurately interpret the redirect command. When calling in, push the 99 code between the rings.

Fax Starts up every time the phone is put down.

Phone is on answering machine port or connected to answering machine. This is normal and indicates that TripleCheck™ is working.

To prevent this feature, disable by programming # # 2 # 0.

Phone left unattended, call goes to fax.

More than 4 seconds silence on a phone connected to the *Ans. Phone* port will cause a transfer to the fax. Either provide music on hold or move phone to phone port.

Cycling .. unit goes on and off line.

This signifies the input polarity is incorrect. Swap over incoming line connected to pins 2 and 5.

Installation Problems

All lights locked up with continuous ring.

Crossed wire or faulty line lead. Replace lead.

Will not ring extensions, goes click, click

Unit faulty (failure of ring generator) or too many phones connected. Replace unit or remove some phones or disconnect some bells.

Drops calls in AutoMode after ringing in.

Load is too great. Check for bells, count extensions and compute R.A.L. value. Standard load maximum is R.A.L. total of 5. Unplug bells and turn off ringers. Rebuild system till offending unit(s) located.

No redirect possible from phones

Redirect not possible with older pulse equipment in smart mode unless plugged directly out of the phone port. (Dial 7 or 8). Upgrade with a standard DTMF phone.

Cannot dial out a fax.

Manual dialling fax e.g. PN2000/Sharp FO80. These machines need a phone connected to the fax port coupled with the fax line cord to enable dialling.

Chops people off while speaking

This is unintended re-rirect. Higher pitched voices sometimes have the right harmonic content to cause a redirect. Change the 99 to a different number e.g. 49, or use 3 different numbers e.g. 789.

Chops people off while leaving a message on answering machine.

Very low out going message and/or caller line level. This causes the FaxCatcher TCI to direct to Fax using the silence detect aspect of TripleCheck™. Custom modification is required to increase line gain. To check, ring answering machine, speak loudly and no re-direction should occur, speak softly and it should.

Installation Problems . . .

A phone does not answer the call or does answer but communication is not possible.

The phone is not drawing enough current to trip the PhoneMaster to switch the call. Custom modification is required.

After hanging up fax machine starts.

Fifth aspect of TripleCheck is being implemented. This is normal. Cancel if required by programming # # 2 # 0

Intermittent Faults

Phone and In Use lights on, all lights on, no dial tone, continuously buzzy noise.

This indicates lock up and is corrected by disconnecting from the power for 30 seconds and then programming reset – # # 0 # 9 and then your user set codes.

Rings fax straight away all the time.

Loss of memory on rollover count (surge related) or Nightwatch on. Turn off Nightwatch.

Does not pick up faxes automatically any longer.

Has reverted to SmartMode. Again a surge related problem.

These faults are usually caused by a specific event causing power surges or other severe electrical interference. If these instances regularly occur it is advised that a surge guard be fitted before the supply to the unit. Consult your distributor for details. Some suggested products are:

Button Surge Guard – Hamer Electrical (Christchurch)
Critec Surge Guard – GTS Nielson Instruments (Wellington)
South Western Bell RF Chokes – Pacific Telephones (ChCh)

Specifications

Dimensions:
178 wide X 204 long X 38 high

Weight:
380 gms

Power Requirements:
13.5 V ac 1Amp nominal

Power Consumption
Idle: 3 watts
Ringing: 12 Watts

Ringer Equivalence:
0.3 A

Ringing Signal:
70 V rms 25 - 33 Hz Switched

R.A.L.
0.7

Approvals:
FCC part 68
FCC part 15
UL, CSA, DOC
N.Z. Telepermit PTC 210/91/001
AUSTEL telepermit pending

Reg No:
IC52ND-601 37-OT-N

System Reset

Remove Power, wait 30 seconds, Re-power

Program # # 0 # 9

- **Push buttons slowly**
- **Wait for Hum Tone**
- **Pay no attention to funny beeps from the exchange**

See page 5 for programming technique

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