

ADSLF6 Filter  
(Part No. 100-009)

# ADSL Broadband & Telephone Line Interference

## PROBLEMS and SOLUTIONS

### WHAT IS ADSL?

ADSL (Asymmetric Digital Subscriber Line) is a service that uses your existing telephone line to provide a broadband service that allows the telephone line and a high-speed internet connection to be used simultaneously.

### ADSL INTERFERENCE

There have been a number of reported symptoms of the interference to telephone lines caused by the ADSL modem.

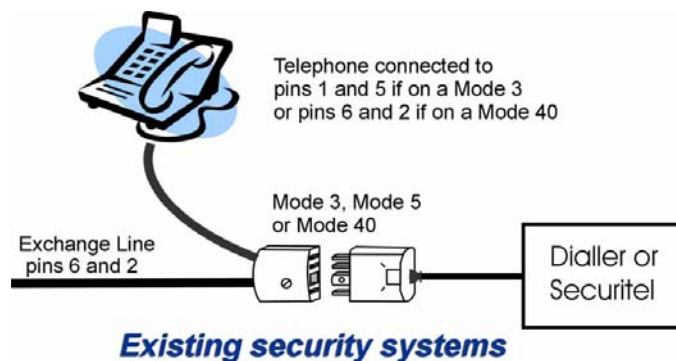
### PROBLEMS OR SYMPTOMS

- ADSL connected to a neighbour's phone line causing interference on your phone line.
- Diallers failing to send test reports or test reports not being received at the Central Station.
- Increased phone bill - dialler continues to dial and doesn't shut down until max attempts reached.
- Multiple reports of the same event are being received in the Central Station.
- Alarms or Events not being received by the Central Station.
- Alarm panel seizing the line and not returning it for long periods.
- With no filter Securitel STU would go "NON Responding".
- We have not had any reports about adjacent line inference to a STU but it is possible.

### ADSLF6 (Part No. 100-009)

Unlike existing 2 wire ADSL micro filters, the ADSLF6 In-Line Micro Filter/Splitter is a four wire device. It connects all four wires used in the Mode 3 connection thus giving an effective central filter to all of the phones connected on return wires (1 and 5) of the Mode 3 connection.

An ADSL in-line micro filter separates the telephone service from the ADSL data. Without ADSL in-line micro filters, your voice calls will receive interference when ADSL is being transmitted.



### PROBLEMS WITH EXISTING FILTERS

Multiple ADSL filters can be added (one on each phone/device) or a central filter can be used depending on the existing wiring. The limit on the number of older micro filters could be 2 to 3 before they affect (unbalance) the line which would then affect the performance of the ADSL modem.

The range limit of ADSL is approximately 3.6kms from exchange.

ADSL does not operate over pair gains system.

If a "standard" micro filter is used on an alarm system, the filter being only a 2 wire device, does not allow for connection of the 4 wires required for the mode 3 or mode 5. Hence the return connection of the line to the phone is not possible.

With the introduction of "do it yourself installation" there is more chance of incorrect configuration of the ADSL modem/alarm panel/phone combination.

## ADSL MODEM INSTALLATION

Unless your ADSL Modem/Router has been supplied with a combined SPLITTER/FILTER, it must be connected directly to the telephone line without an ADSL in-line micro filter. Please refer to instructions supplied with the ADSL Modem/Router and/or your ADSL service provider.

DSL or Broadband is a new modem technology which operates at a higher voltage and a higher frequency levels than older modems. In the range of 10 kHz to 1MHz.

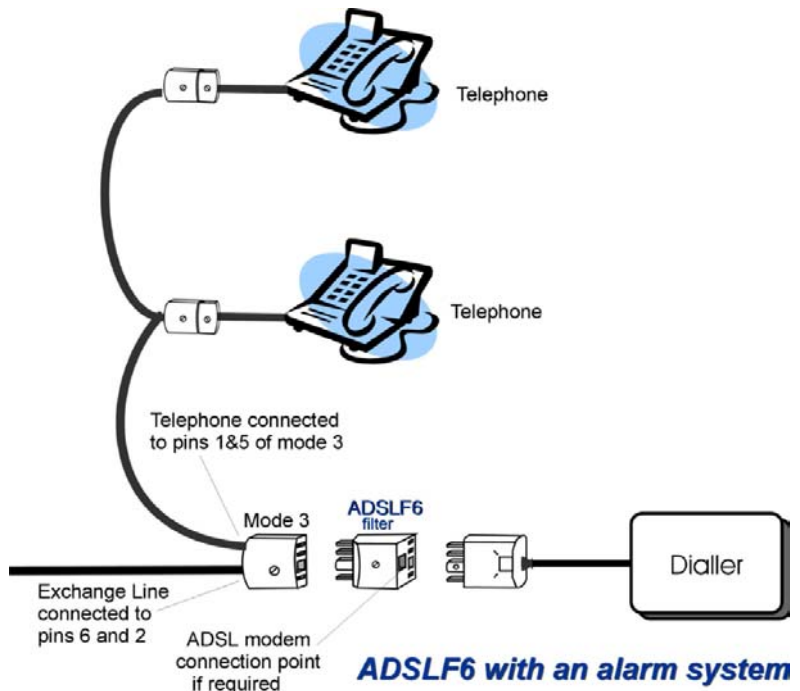
This high frequency signalling is used on standard telephone lines because the signal is at a high level and a wide frequency band, the ADSL signal can interfere with the normal phone service unless a filter is installed. This installation between the ADSL modem and the phone (whether it is a phone, dialler, modem, fax or Securitel STU).

## INSTALLATION

### ADSLF6 IN-LINE MICRO FILTER INSTALLATION

1. Unplug the device's plug (modular 604/605) at the mode 3 socket.
2. Plug the in line micro filter Mode3 socket in place of the dialler.
3. Plug the dialler into the ADSLF6 socket.

- If required the ADSL modem can be plugged into the RJ11 connector on the ADSLF6.



### NOTE

All telephones on the line being protected must be correctly wired via a Mode 3 socket.

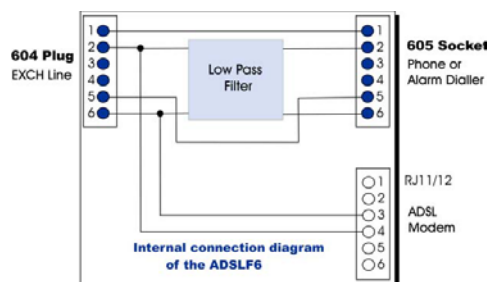
Any phone devices, (telephones, faxes etc), that are not correctly wired via the Mode 3 socket may either:

a/ Hear noise induced by the ADSL modem.

b/ ... or there may not be any noise heard but the ADSL modem may be knocked off line.

Therefore, each phone device not wired via the Mode 3 socket will need a separate ADSL Filter.

### ADSLF6 Internal Diagram



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