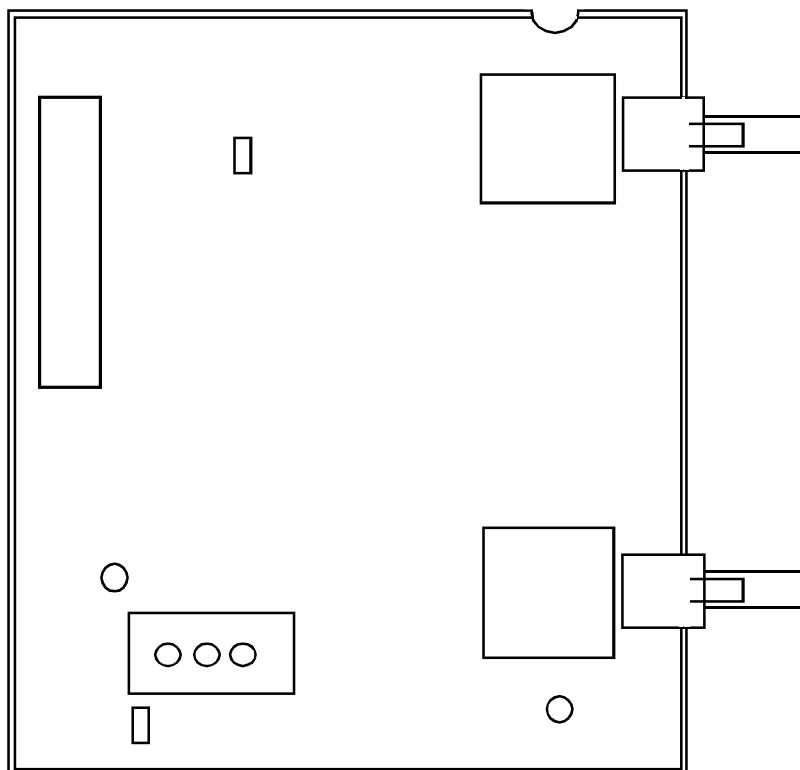


CHALLENGER RADIO PACKET INTERFACE KIT MODEL TS2052

SUPPLEMENTARY INSTALLATION GUIDE



The TS2052 DTMF Kit for Mobile Data Interface enables the TS2053 to connect to third party alarm panels and transmit their standard dialer Contact ID via the Telstra Digital Mobile Data Network.[™]

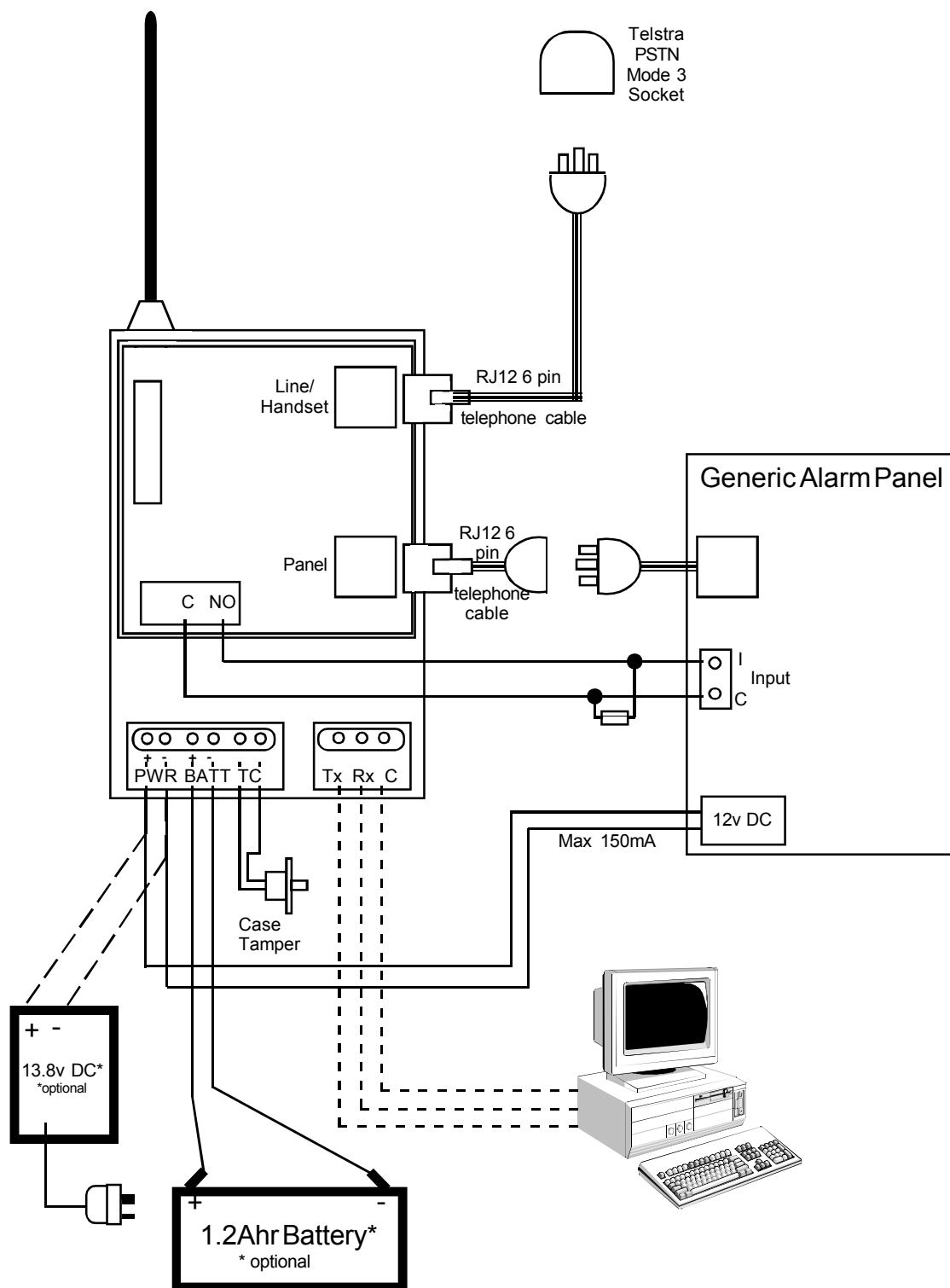
Features:

- Dial Tone Generation
- Message Lost Relay
- Phone Line Tamper Monitor

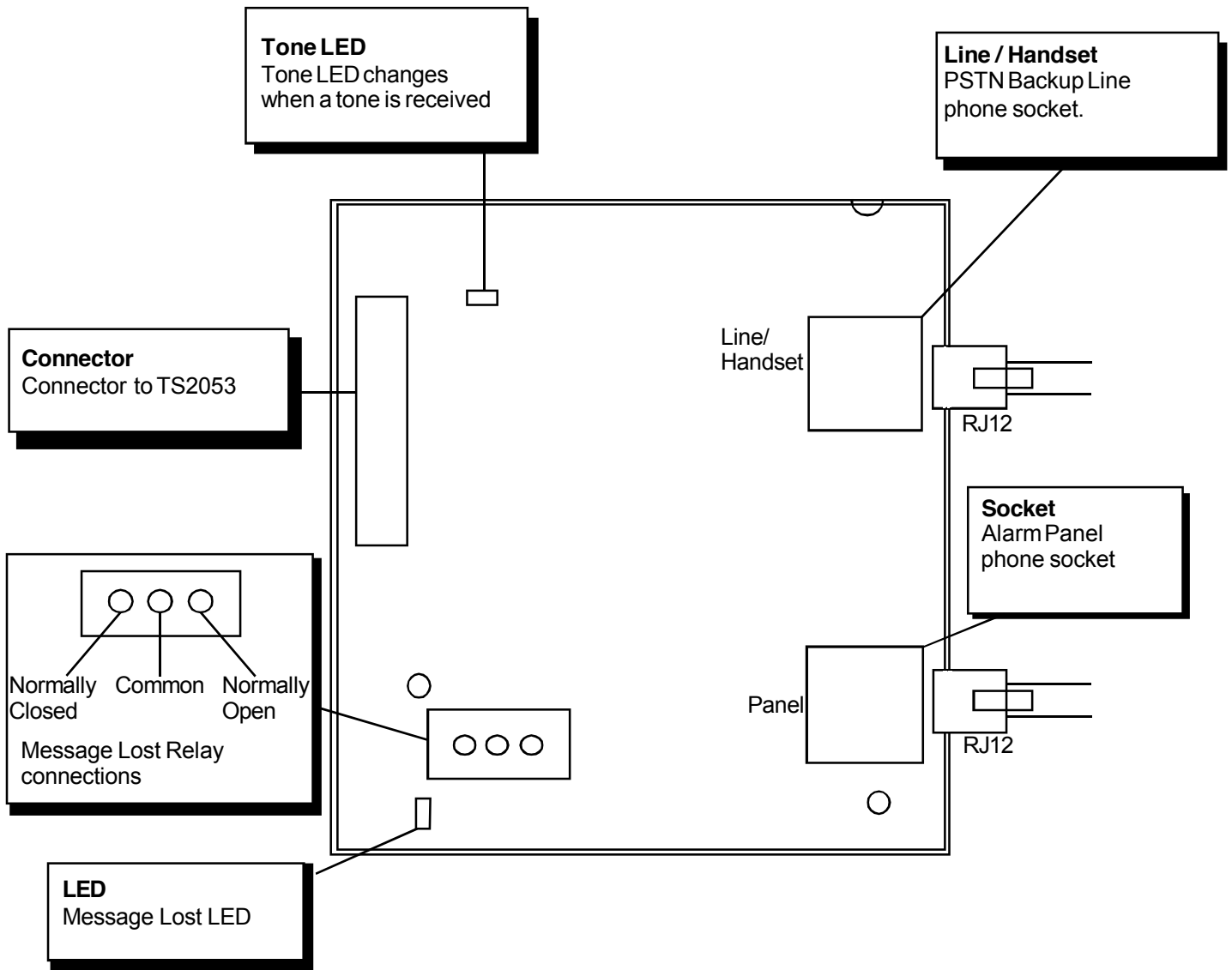


The Leader in Innovative Security Technology

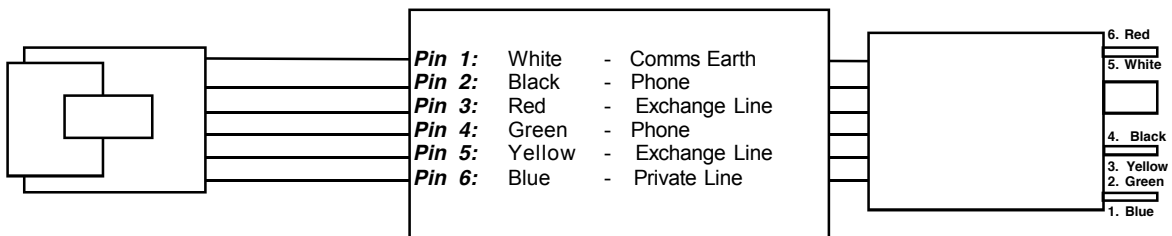
CHALLENGER RADIO PACKET INTERFACE KIT: MODEL TS2052



CHALLENGER RADIO PACKET INTERFACE KIT: MODEL TS2052



Cable Connection to Telephone Socket



CHALLENGER RADIO PACKET INTERFACE KIT: MODEL TS2052

Backup PSTN Line:

In the event that the radio is unable to make a proper connection to the monitoring station, all alarm messages can be redirected through a standard PSTN phone line if that option has been enabled by the configuration program. While the PSTN line takes the alarm messages, the radio constantly attempts reconnection to the monitoring station. When radio connection is lost, the Message Lost relay sets so that, if connected to an alarm panel input, the alarm panel is aware of a problem with the radio network.

If a PSTN line is installed, the alarm panel can pass a message through the land line to inform the monitoring station there is a connectivity problem. Likewise, when the radio connection is restored, the radio transmits a Restore message informing the monitoring station the radio is connected again (and turns the Message Lost relay off). When the radio does restore the connection, the alarm panel messages are automatically redirected back through the radio network.

Error Messages

The Tamper switch on the TS2053 generates the following contact ID message via the radio:

E145 C001 - Expansion Module Tamper 1

If the Alarm Panel line is disconnected from the TS2052 the following contact ID message is sent via radio:

E351 C001 - Phone Line #1

If the Panel is turned on the following contact ID message is sent via radio:

E305 C001 - Trouble - System Reset

If the Panel comes back on line the following contact ID message is sent via radio:

R357 C001 - Restore - D/L Panel Polling

Programming Mode: (using RS232 port of PC)

Connect RS232 cable to serial Tx/Rx/Gnd on radio module and the other end to a serial port on the PC. (see below for cable wiring instructions)

DIP Switches

1:	Program Enable:	ON	(Enabled /Disabled)
2:	Program Mode:	ON	(RS232 /Reserved)
3:	Radio Mode:	ON	(DTMF Daughter Board Mode /Passthrough Mode)
4:	Monitor Enable:	DON'T CARE	(Monitors Line Current from Alarm Panel on TS2052 board)

*** NOTE:** For programming, the radio **MUST** be in DTMF MODE

Using the Tecom TS2053 software program, configure the unit for stand alone operation.

*** NOTE:** For correct base station monitoring, the Tecom Systems TS2021 Line Card must be fitted with software version "NM-LCX25.034" or greater.

The CPU Card needs to have "NM-CPU-S.525" for surface mounted card and "NM-CPU.525" for non surface mounted card.

CHALLENGER RADIO PACKET INTERFACE KIT: MODEL TS2052

Programming

When the radio is connected to an alarm panel via the TS2052 DTMF Interface, a TS2054 installation program and cable is required to configure each unit from a PC via the serial port.

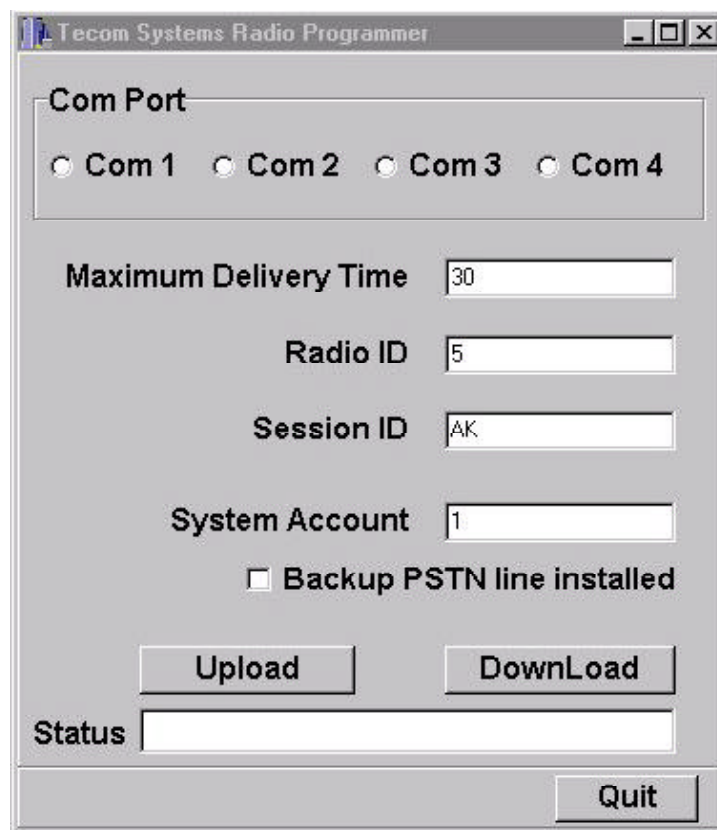
When programming the radio, the DIP Switches must be set to Programming Mode. These settings are described on page 2 of the TS2052 installation guide.

The wiring diagram for this cable is included in this installation manual on page 8.

The programming parameters are the same as those configured for a TECOM Challenger Alarm panel if it were operating in PASSTHROUGH Mode.

There are 2 additional settings to the standard Challenger configuration.

- Whether a Backup PSTN Line is installed
- The choice of serial port from the PC that the Configuration Program is run from.



(COM Port selection screen)

Com Port Selection

At the top of the program is a choice of 4 Serial COM Ports; the standard COM1, COM2, COM3, COM4. The connection to the Radio is made at 9600,N,8,1 from one of these ports.

Selection of the COM Port is made by choosing a Radio Button. When the button is selected, the program will attempt to get a dedicated connection to that COM port. If the connection is made, a success message is displayed in the status box. If the program cannot make a connection to the port, an error message will be displayed.

CHALLENGER RADIO PACKET INTERFACE KIT: MODEL TS2052

*** NOTE:** *The success or fail of the COM port connection is tested from the program to the COM port on the PC, NOT to the radio. Successful COM port connection does not mean that the radio is successfully connected.*

MAXIMUM DELIVERY TIME

Records the period in minutes before the message lost relay will be activated to report loss of Radio network in the event of a radio communication failure.

Selecting "0" minutes will disable radio network detection.

RADIO ID

Records the ID number which identifies the Radio Interface to the Remote Monitoring Company. The ID number to be entered here will be supplied by the Remote Monitoring Company.

SESSION ID

Records an ID which identifies the Remote Monitoring Receiver.
This ID is supplied by Telstra when your host Receiver is allocated.

SYSTEM ACCOUNT

The unique number/s which identify your system to the monitoring company. The number/s will be provided by that monitoring company.

Refer to Installer Menu Option 9: - Communication Options (DTMF Dialer Formats) for details on how the Account number/s are programmed.

PROGRAM OPTIONS:

- **UPLOAD-**
 Reads the current configuration from the radio

- **DOWNLOAD-**
 Programs the radio with the values that have been entered in each field. During the process of downloading the information the programmer can verify the new values with the read values in the Status Box indicating whether the DOWNLOAD was successful.

RADIO STATUS

Allows the status of the Radio System to be displayed.

RADIO COMMUNICATIONS

(Refer to: Installer menu option 36)

(Default)

Enable Radio: YES/NO

(No)

Radio ID: _____

Session ID: _____

Account (Cct) Number/s: Area Account No. (4 Digits)

System _____
1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
10 _____
11 _____
12 _____
13 _____
14 _____
15 _____
16 _____

Use Backup Dialer After: Minutes _____

(0)

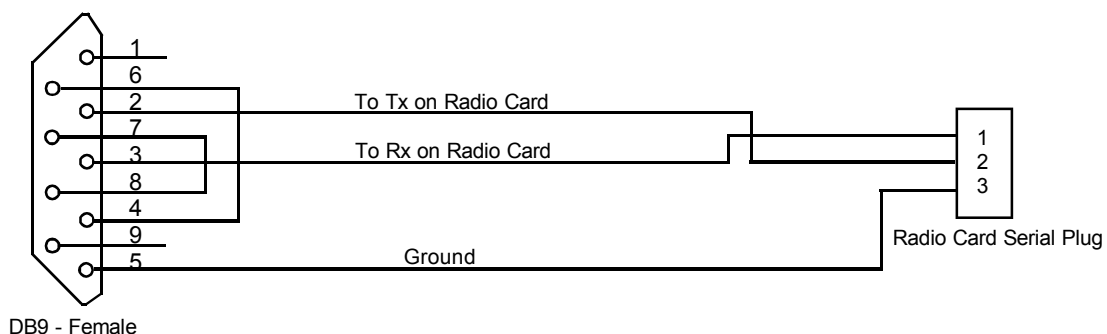
Programming Mode: (using TS2054 via RS232 port of PC)

Connect RS232 cable to serial Tx/Rx/Gnd on radio module and the other end of a serial port on the PC.
(see page 7 for cable wiring diagram)

DIP Switches

- | | | | |
|----|-----------------|------------|--|
| 1: | Program Enable: | ON | (Enabled/Disabled) |
| 2: | Program Mode: | ON | (RS232/Reserved) |
| 3: | Radio Mode: | ON | (DTMF Daughter Board Mode/Passthrough Mode) |
| 4: | Monitor Enable: | DON'T CARE | (Monitors Line Current from Alarm Panel on TS2052 board) |

Serial Cable Connection



CHALLENGER RADIO PACKET INTERFACE KIT: MODEL TS2052

To maintain safety compliance when connecting the equipment to other equipment, interconnection circuits shall be selected to provide continued conformance with the requirements for SELV and TNV circuits after making connections between equipments.

NOTE: This is normally achieved by connecting SELV CIRCUITS to SELV CIRCUITS and TNV CIRCUITS to TNV CIRCUITS.

e.g.

- 1) Power terminals connected to approved power adaptor.
- 2) Data terminals of Tx, Rx and C connected to SELV circuit of Challenger or PC.
- 3) Panel terminal connected to approved TNV circuit of Generic Alarm Panel.

The safety status (SELV CIRCUIT, TNV CIRCUIT, LIMITED CURRENT CIRCUIT, ELV CIRCUIT and EXCESSIVE VOLTAGE) of interconnection points for connection of the other equipment shall be stated in the Installation manual supplied with the equipment.



N4131

Please note, this product conforms to the standards set by Standards Australia on behalf of the Australian Telecommunications Authority (AUSTEL) and the Spectrum Management Agency (SMA).

WARNING:

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

The Challenger is Designed and Manufactured by:

Tecom Systems

646 Whitehorse Rd
MITCHAM VIC 3132

Telephone: 03 9259 4700
Facsimile: 03 9259 4799

© Tecom Systems 1998