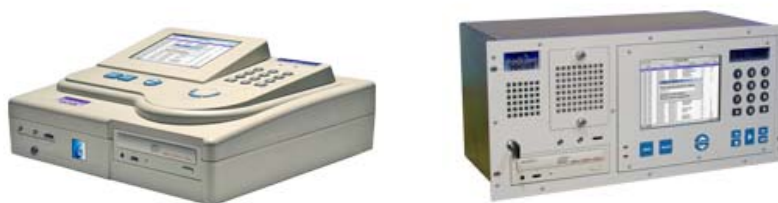




User Guide

TOTAL RECALL DESKTOP & RACK



Version 8.5.0

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About This Manual

1. Introduction

This User Guide is intended for **Total Recall** end-users who will be using the system to record and play back recorded data.



See the **Total Recall** *Installation and Administration Guide* for information about installation and system configuration.

We recommend that you keep a copy of this user guide handy for quick reference.

2. Conventions and Terminology

2.1. Conventions

2.1.1. References

References to other manuals or other parts of this manual are indented, formatted in blue text, and marked with a hand symbol:



Reference example

2.1.2. Notes

Notes are indented, formatted in blue text with light grey borders, and marked with a note symbol:



Note example

2.1.3. Warnings

Warnings are indented, formatted in blue text with light grey borders, and marked with a warning symbol:



Warning example

2.1.4. Procedures

Procedural lists describing tasks are marked with a 'cogs' icon, and the purpose of the procedure is formatted in bold italic text:



Procedure Start Example:

1. Procedure step example



2.2. Terminology

The following table lists some writing style conventions used in this manual and their associated meanings.

Example	Meaning
‘Select OK to save your settings’	Highlight (position the cursor over) the OK screen button, and press the [Select] key on the control panel
‘Select a date from the list...’	Highlight the relevant data field, and press the [Select] key repeatedly to cycle through the available options, until you reach the required value
‘Check the Recording Period check box’	Highlight the relevant check box, and press the [Select] key to populate it with a check mark
‘Enter the IP address...’	Highlight the relevant data field, and enter the IP address using the numeric keypad on the control panel



Total Recall

3. Overview of Total Recall

3.1. What is Total Recall?

Total Recall is a compact, cost-effective and self-contained digital voice logger and recorder that records and provides secure storage for your most recent 350,000 individual records or 60,000 hours of calls and/or other audio signals.

Total Recall is easily operated via a simple control panel and intuitive menu system, or remotely via a network using the **Remote Manager** Client software - included with unlimited licenses as part of your solution.

Record on Demand software (also supplied) may be installed onto users' PCs to allow limited control over what is recorded on their channel.

Depending on network type and configuration, **Total Recall** can also record the telephone numbers of incoming and outgoing calls, the time and date of the call, the duration of the call, and reference to a specific channel number. All of this information can be used to search and retrieve calls from the internal database or archived call data.

3.2. Standard Features

- Compact, self-contained, easy to install and operate.
- Record analogue telephone conversations.
- Record other analogue audio signals, such as two-way or broadcast radio.
- Onboard storage for the most recent 350,000 records/60,000 hours of calls.
- Archive recordings to DVD+RW, CD-R and/or CD-RW.
- Secure and tamper proof recording format.
- Export to MP3, WAV or secure TRC format.
- Policy based recording control.
- One-click real-time monitoring of calls.
- Email and copy calls directly from **Remote Manager** on your Windows 2000/XP/Vista 32/Vista 64 PC. Supplied free-of-charge and license free.
- Powerful search capability.
- Feature-rich call player.
- All remote access, monitoring and management software included.

3.3. Optional Features

- Blu-Ray (BD-RE) Archive Device (optional on both **Desktop** and **Rack** models).
- Dual Hot-Swap Power Supplies (optional on **Total Recall Rack** model only).



- Channel Upgrades: **Total Recall Desktop** can accommodate two Digital Signal Processor (DSP) cards, and **Total Recall Rack** can accommodate six DSP cards. Systems may be upgraded with 4, 8 or 12 channel cards.
- Software Upgrades (optional on **Total Recall Rack** model only)
 - TCP/IP Network Call Archiving.
 - Simple Network Messaging Protocol (SNMP) Alarm Interface Support.
 - Station Messaging Detail Record (SMDR) Support.



Contact your supplier for more information on obtaining upgrades for your **Total Recall** system, or see www.totalrecallvr.com

4. Getting to Know Total Recall

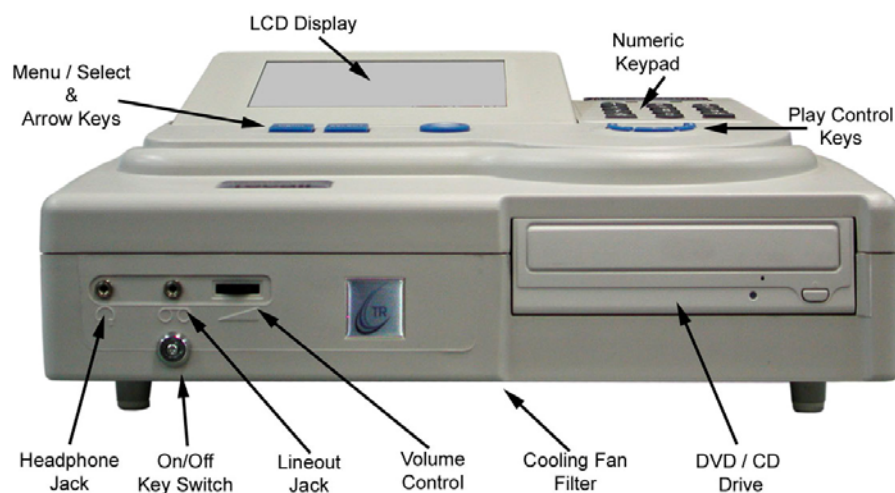
Total Recall is simple to operate, is fully self-contained and can be operated using the built-in controls and display panel.

It is not necessary to attach a PC and monitor as a management console for the recorder. However, you may configure and operate your **Total Recall** via a networked PC and the included **Remote Manager** software if you wish.

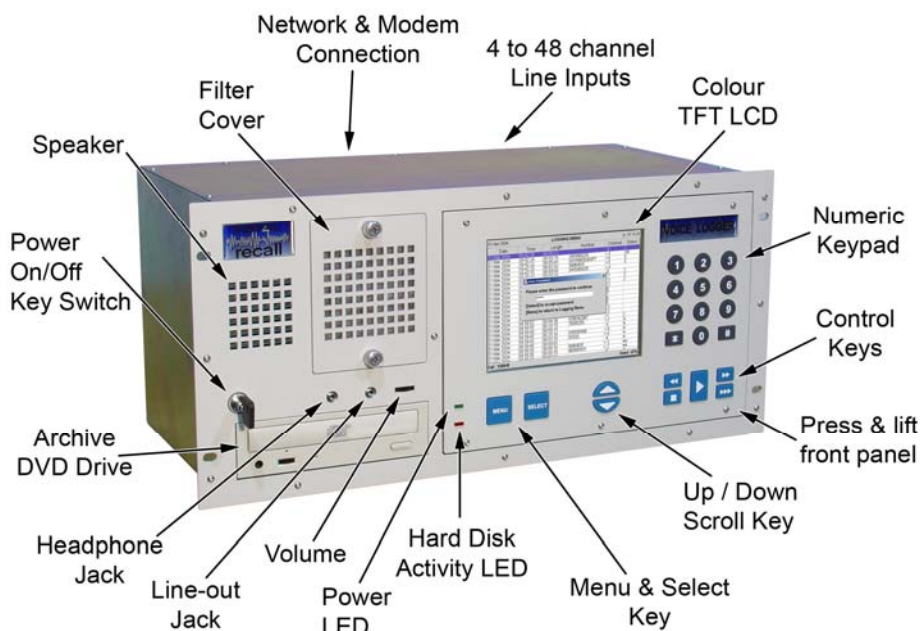


See *Total Recall Remote Manager* on page 28 for more information on using & configuring your **Total Recall** via a network or dialup connection.

4.1. Unit Layout – Front



Total Recall – Desktop Model



Total Recall – Rack Model

4.1.1. Headphone Jack

This is a standard 3.5mm three conductor stereo audio jack for connection of headphones or external speaker, volume controlled via the thumb wheel.

4.1.2. Line Output Jack

This is a standard 3.5mm three conductor stereo audio jack for connection to a tape recorder or the line input of a PC. This output is not volume controlled.

4.1.3. Volume Control Thumb Wheel

A thumb wheel to adjust internal speaker volume.

4.1.4. DVD/CD or optional BD Writer

A standard DVD/CD or optional BD read/write unit with standard DVD player/recorder controls.

4.1.5. Speaker Grill

This is a grill that is located on the left side of the unit. It protects the in-built speaker.

4.1.6. Cooling Fan Vent

This is an opening that is located at the base of the unit (Desktop unit), or the top left-hand corner of the front panel (Rack unit). It is protected by a grill, and acts as an air intake for the unit. The grill is removable to allow access to the filter media for cleaning or replacement.



4.1.7. Front Panel On/Off Switch

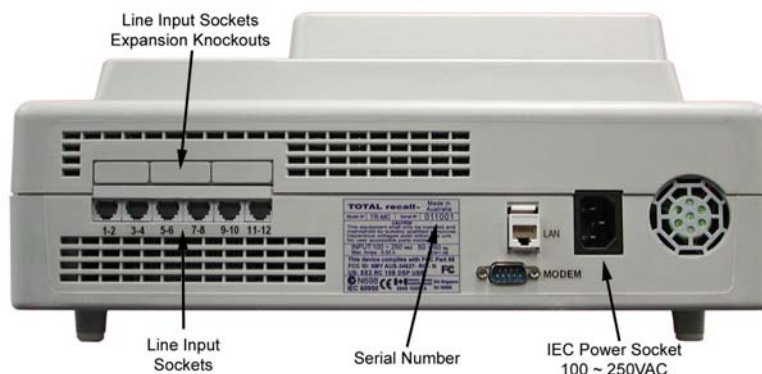
The Key Switch is located on the left side of the front panel for both **Desktop** and **Rack** units.

This is used to restart the unit after a Software Upgrade. For example, when the unit is mounted in a 19" rack the On/Off Switch that is located at the rear of the unit on the Power Supply may not be accessible.

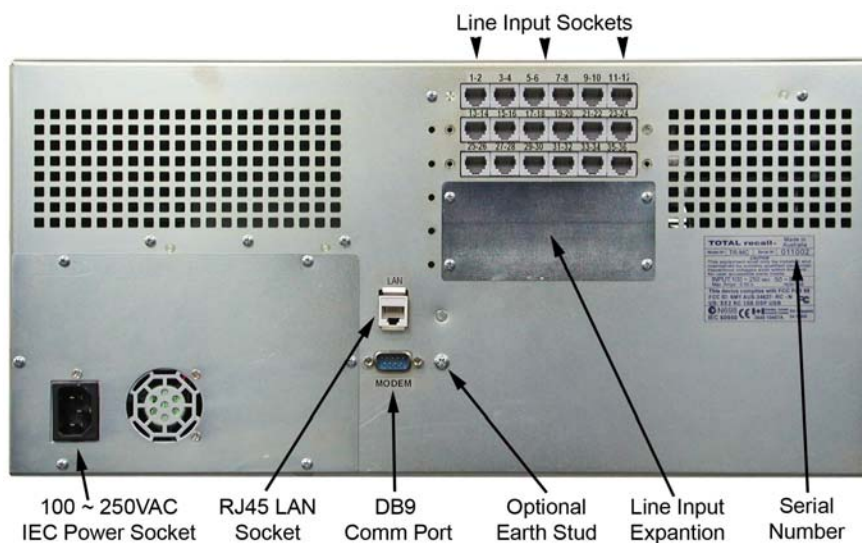


It is recommended that the On/Off Switch Key is not left in the switch to prevent accidental powering off the unit.

4.2. Rear Panel



Total Recall – Desktop Model



Total Recall – Rack Model

4.2.1. Remote Connection Ports

One standard RJ45 port (8P8C) is available for TCP/IP network connection.

The Modem (RS232) port is a standard male DB9 socket.



4.2.2. Line Interface Connectors

Total Recall has 4, 8, 12, 16, 20, or 24 channel inputs for the **Desktop** Unit, and 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68 or 72 channel inputs for the **Rack** Unit. The connectors for the telephone line interface are standard RJ11C/RJ12/RJ14 (6P4C plug).

4.2.3. Power Cable Socket

IEC 90-260 VAC power cable socket.

4.2.4. Power Supply (Standard: Desktop & Rack)

Total Recall Rack and **Desktop** are supplied as standard with a Mini-ATX auto sensing power supply, 100-240 VAC, 50-60Hz, 180 watts maximum.

4.2.5. Power Supply (Optional Hot-Swap: Rack only)

Total Recall Rack is available with an optional **Dual Hot Swap** power supply auto-sensing 100-240 VAC, 50-60Hz, 400 watts total.



To remove a hot-swap power supply module, simultaneously push the two black tabs inwards and pull the flip-up handle. A power supply module can be removed while the unit is powered up and running, assuming the other module is operational. Removing a power supply module will cause an alarm to sound until it is replaced.

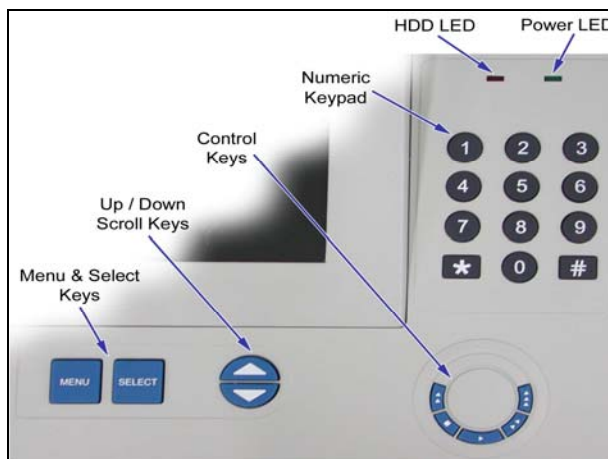
To replace a hot-swap power supply module, remove the faulty module according to the above instructions, and slide a new module into the vacant opening, pushing firmly until the module locks into place.



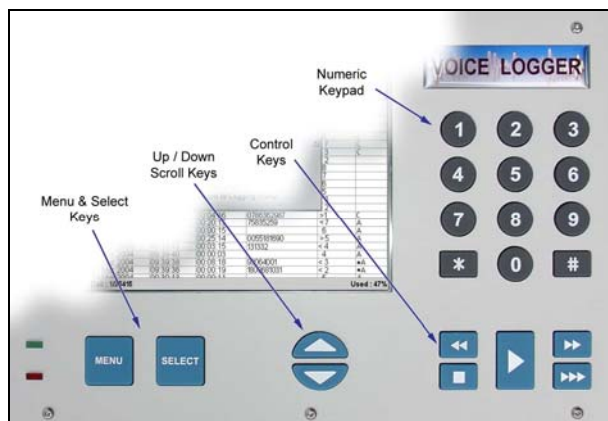
5. Total Recall – Onboard Controls

Total Recall is simple to operate, and features a built-in control and LCD display panel for convenient configuration and operation.

5.1. Control Panel



Total Recall – Desktop Control Panel



Total Recall – Rack Control Panel

The colour TFT LCD displays the various screens, menus and dialogs. After five minutes of keypad inactivity, the LCD backlight automatically switches off, to extend the life of the backlight (the recorder continues to function normally).

Pressing any key illuminates the LCD backlight.

5.1.1. Playback and Navigation Keys

The playback and navigation keys are used to control the playback of recorded calls, and to navigate the screen menus.



[Menu] Key

The [Menu] key is used to navigate between the three main menus, Logging, Search, and Options. When [Menu] is pressed with the cursor at the top of one of the three main menus, the cursor moves to the top of the next main menu. The system will “beep” each time the [Menu] key is pressed.

When [Menu] is pressed and the cursor is in the body of a main menu, the cursor will go straight to either the OK or Cancel button saving keystrokes.

[Select] Key

Use the [Select] key to start an operation associated with a highlighted button or item, and to confirm a request.

[Up] and [Down] Scroll Keys

The [Up] and [Down] arrow keys are used to navigate within a menu. With each [Up] or [Down] key press, the cursor highlights a different button or item within the menu. As you press the [Up] or [Down] arrow keys, the system will “beep”.

Use the [Down] key to highlight items across the screen from left to right as well as down. Use the [Up] arrow key to move in the reverse direction.

Call Playback Keys

During the playing of a call, the “Control Keys” can be used to navigate through the call. The “Control Keys” operate in the same way as the keys on a CD or tape player. They can be used to Stop, Play, Fast Forward and Fast Rewind through a call. Pressing the “Play” key during playback will cause the playback to Pause. Pressing the “Play” key again will continue the call.

Pressing the “Stop” key whilst not playing a call locks the User Interface (the padlock icon on the LCD ‘closes’) when in the *Options*, *Logging* and *Search* Menus. This negates the normal 120-second timeout required for the User Interface to lock.

5.1.2. Power and Hard Drive Activity LEDs

- Green is the ‘Power On’ indicator.
- Red indicates hard drive activity.

If the LCD backlight has switched off due to inactivity, the green LED flashes continuously every two seconds. Pressing any key illuminates the LCD backlight and the green LED stops flashing.



Your Total Recall system will continue to record normally while the LCD is turned off.



6. Main Screens

There are 3 main screens in the **Total Recall** GUI:

- The Options Menu (**Administrators Only**).
- The Logging Screen.
- The Search Screen.

Listed below are the user selectable/definable options on the **Total Recall** system, and their default values. Default values are listed in **bold**.



The Menu Site Map below only refers to system functions available via the **user password**. For the full menu site map, see the *Total Recall Installation and Administration Guide*.

6.1. Menu Site Map

Logging Menu

Search Menu

Recent Calls (On/Off)

Search

Date

Time

Number

Extension

Tag

Tagged Only

Untagged Only

Direction

Incoming

Outgoing

Internal

Unknown

Channel

Search Archive

Search DVD/CD

Search Network Archive (*Will only appear if optioned on TR Rack*)

Tag All

Untag All

Archive

All Calls

Found Calls

Unarchived Calls

Tagged Calls

Archive Device

CD/DVD

Network Share (*Will only appear if optioned on TR Rack*)



6.2. The Options Menu

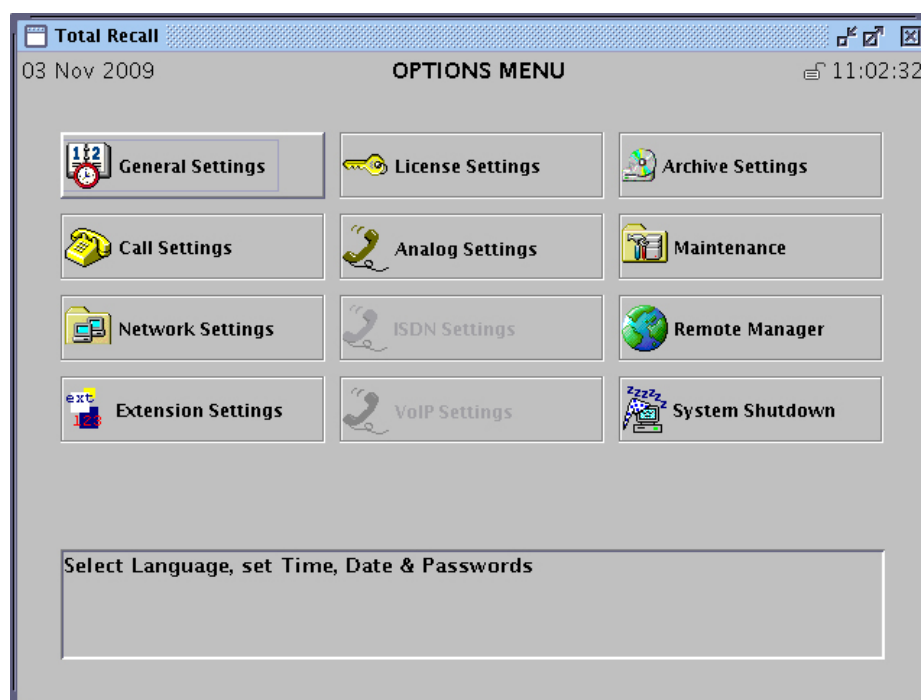


Figure 1 - The Options Menu (TR Rack Menu Shown)

The Options Menu allows access to various system configuration screens, plus the maintenance menu and system shutdown function.

Options that are not available on your recorder will be greyed out and cannot be selected.

Most options are set during installation by a system administrator, and following the initial installation, can generally be left alone – unless there are changes to recording requirements, the user base, or the network.

The Options Menu is only available to users with administrator privileges.

 See the **Total Recall** *Installation and Administration Guide* for information on using the Options Menu.



6.3. The Logging Screen

Total Recall						
03 Nov 2009			LOGGING			11:11:00
Date	Time	Length	From	To	Ch.	
03 Nov 2009	10:20:30	00:50:30	Head Office	0297482304	>1	
03 Nov 2009	10:30:58	00:40:02	Nicks Phone	0297462604	<3	
03 Nov 2009	10:31:50	00:39:12		Radio 1	?2	
03 Nov 2009	10:32:48	00:38:24	0413423201	Engineering 1	>8	
03 Nov 2009	10:33:36	00:37:10	エンジニアリング	Marketing	>9	
03 Nov 2009	10:35:40	00:36:30	97453114	Warehouse	>5	
03 Nov 2009	10:36:33	00:35:13	Dales Phone	00113842345..	<12	
03 Nov 2009	10:37:01	00:34:59		Radio 2	?16	
03 Nov 2009	10:38:17	00:34:43	Engineering 2	Engineering 3	^13	
03 Nov 2009	10:39:59	00:33:01	Telemarketing..	0432446422	>14	
03 Nov 2009	10:40:05	00:32:55	Telemarketing..	0432246423	>15	
03 Nov 2009	10:40:10	00:32:50	Telemarketing..	0432246424	>16	
03 Nov 2009	10:41:20	00:31:40	Telemarketing..	0432246425	>17	
03 Nov 2009	10:42:47	00:30:13	974625341	Reception 1	>23	
03 Nov 2009	10:43:25	00:29:35	Reception 2	Lisbon Office	<26	
03 Nov 2009	10:43:50	00:29:10	Telemarketing..	Sản Xuất Lớn	<31	
03 Nov 2009	10:45:18	00:26:42		Radio Monitori..	?32	
03 Nov 2009	10:46:37	00:25:23		Radio Monitori..	?33	
03 Nov 2009	10:47:45	00:23:15	Andrews Phone	Geoffs Phone	^37	
03 Nov 2009	10:48:00	00:17:00	大工場	Sales Office 1	>40	
03 Nov 2009	10:55:05	00:15:55	04543322556	Sales Office 2	>45	
03 Nov 2009	11:00:28	00:10:32	Board Room	Amsterdão	^46	
03 Nov 2009	11:10:59	00:00:01	96274821	Informática	<48	
03 Nov 2009	11:11:00	00:00:00	0204841731	0207482304	<47	
Call : 0/0/42015						Used : 5%

Figure 2 - The Logging Screen

The Logging screen is used to monitor calls that are currently in progress, and displays the calls that are currently being recorded, sorted by start date and time, with the most recent call at the top.



To play back calls that have already been completed, use the [Search Screen](#). See page 19 for further information.

The call number, plus the number of active calls, and the total number of calls (active calls plus calls in the database) is shown in the bottom left corner of the screen (in the format x/y/z – where x is the call number, y is the number of active calls, and z is the total number of calls).

The percentage used (the percentage of the hard disk that is currently taken up by calls) is shown in the bottom right corner of the screen.



Total Recall has a maximum internal capacity of 60,000 hours (100% disk space) or 350,000 records, whichever is reached first. **Total Recall** will automatically delete the oldest 50,000 calls when capacity is being approached to maintain sufficient space for new recordings.

Use the ▲ and ▼ keys to scroll through the call list in the Logging Screen.

6.3.1. Columns

The Logging Screen includes columns for:



Date: The date when the call started.

Time: The time when the call started.

Length: The current length of the call.

From: The originator of the call.

To: The recipient of the call.

Note that the value in the **From** and **To** fields may be:

- Empty (if there is no 'calling number' signalling on the line).
- The 'raw' calling number, taken directly from the call signalling, if present on the line.
- A 'mapped' value (alpha and/or numeric), if the calling number has been mapped to another value in the Signalling Mapping for the recorder.



See the **Total Recall Installation and Administration Guide** for further information about Signalling Mapping.

Channel (Ch.): A call direction indicator, plus the channel number upon which the recording is being made.

Call direction indicators are as follows:

- < indicates an incoming call
- > indicates an outgoing call
- ^ indicates an internal call
- ? indicates that the call direction could not be established



Extensions may be configured during installation by the system administrator, via the **Analog Settings** menu on the unit, or via Remote Manager. 'Extensions' are text or numeric values that are assigned to channels, which can be used for searching calls, or to use Record-on-Demand (see page 54). Please note that text-based extension values cannot be searched via the onboard control panel.



See the **Total Recall Installation and Administration Guide** for information about how extensions are configured.

Marks (C / M)

- C indicates a current call.
- M indicates a call that is being currently monitored.



6.3.2. Live Monitoring

Total Recall						
03 Nov 2009			LOGGING			11:11:00
Date	Time	Length	From	To	Ch.	
03 Nov 2009	10:20:30	00:50:30	Head Office	0297482304	>1	CM
03 Nov 2009	10:30:58	00:40:02	Nicks Phone	0297462604	<3	C
03 Nov 2009	10:31:50	00:39:12		Radio 1	?2	C
03 Nov 2009	10:32:48	00:38:24	0413423201	Engineering 1	>8	C
03 Nov 2009	10:33:36	00:37:10	エンジニアリング	Marketing	>9	C
03 Nov 2009	10:35:40	00:36:30	97453114	Warehouse	>5	C
03 Nov 2009	10:36:33	00:35:13	Dales Phone	00113842345..	<12	C
03 Nov 2009	10:37:01	00:34:59		Radio 2	?16	C
03 Nov 2009	10:38:17	00:34:43	Engineering 2	Engineering 3	^13	C
03 Nov 2009	10:39:59	00:33:01	Telemarketing..	0432446422	>14	C
03 Nov 2009	10:40:05	00:32:55	Telemarketing..	0432246423	>15	C
03 Nov 2009	10:40:10	00:32:50	Telemarketing..	0432246424	>16	C
03 Nov 2009	10:41:20	00:31:40	Telemarketing..	0432246425	>17	C
03 Nov 2009	10:42:47	00:30:13	974625341	Reception 1	>23	C
03 Nov 2009	10:43:25	00:29:35	Reception 2	Lisbon Office	<26	C
03 Nov 2009	10:43:50	00:29:10	Telemarketing..	Sản Xuất Lớn	<31	C
03 Nov 2009	10:45:18	00:26:42		Radio Monitori..	?32	C
03 Nov 2009	10:46:37	00:25:23		Radio Monitori..	?33	C
03 Nov 2009	10:47:45	00:23:15	Andrews Phone	Geoffs Phone	^37	C
03 Nov 2009	10:48:00	00:17:00	大工場	Sales Office 1	>40	C
03 Nov 2009	10:55:05	00:15:55	04543322556	Sales Office 2	>45	C
03 Nov 2009	11:00:28	00:10:32	Board Room	Amsterdão	^46	C
03 Nov 2009	11:10:59	00:00:01	96274821	Informática	<48	C
Call : 0 / 0 / 42015			[Monitoring]			Used: 24%

Figure 3 - Live Monitoring from the Logging Screen

Live monitoring can be used to 'listen in' on current, active calls.



It is only possible to monitor calls if Monitoring has been enabled for that extension by an administrator.

To monitor a channel, highlight a current call in the **Logging Menu** by pressing the [Down] and [Up] arrow keys, then press [Select].

The audio on that channel is played through the loudspeaker or headphones.

The letter **M** is displayed in the **Status** column and the call is moved to the top of the call list.

To end monitoring, press [Select] again (This does not terminate the call).

Monitoring of a selected channel will continue until manually terminated, even if there is no current audio on the channel.



The **Total Recall** unit will remain unlocked until you manually terminate live monitoring.



For analog channels connected to phone lines, if 'Beep' is active for the channel that is being monitored, both parties hear a beep at regular intervals to indicate that the call is being monitored. Beep settings can only be edited by a user with administrator privileges.



6.4. The Search Menu

Date	Time	Length	From	To	Ch.
4 Oct 2009	07:30:15	00:04:30	0297482304	Reception	48
4 Oct 2009	07:35:00	00:10:21	Head Office	Nicks Phone	32
4 Oct 2009	08:14:43	00:11:54	0419234432	029748304	12
4 Oct 2009	08:59:12	00:01:32	0297482304	Dales Phone	1
4 Oct 2009	09:30:02	00:03:17	Nick (Cellular)	Reception	48
4 Oct 2009	09:34:33	00:08:43	0297482604	Warehouse	8
4 Oct 2009	09:48:24	00:15:59	00114372460..	0297482304	12
4 Oct 2009	09:59:59	00:07:12	Sud-Ouest Bu..	Dales Phone	1
4 Oct 2009	10:27:28	00:26:31	ワーキング携帯電	Almacén Teléf..	36
4 Oct 2009	11:11:52	00:00:31	Amsterdam Of..	Nicks Phone	32
4 Oct 2009	11:34:20	00:10:54	Head Office	0297482304	12
4 Oct 2009	12:43:15	00:05:42	Dale (Cellular)	Reception	48
4 Oct 2009	13:03:54	00:12:32	0297482304	Penerimaan	5
4 Oct 2009	13:30:38	00:04:01	Sydney Office	Reception	48
4 Oct 2009	14:02:03	00:20:45	0456531256	Dales Phone	1
4 Oct 2009	14:23:10	00:12:38	Agência de Lis..	0297482304	12
4 Oct 2009	15:00:48	00:35:58	오피스 텔레나야	Nicks Phone	48
4 Oct 2009	15:04:22	00:03:27	Servei de Corr..	Warehouse	8
4 Oct 2009	15:35:20	00:21:31	Geschäftstelle	Dales Phone	1

Call : 1/1000 Listed :1000

Figure 4 - the Search Screen, following a search

Use the Search Screen to locate calls according to a range of search criteria (date, time, channel, telephone number etc.) and to play back calls returned by the search.

6.4.1. Searching



To search for calls on the internal hard drive:

1. Press the [Down] arrow key to highlight the **Search** button. Press [Select] to open the **Search Options** dialog:

☒ **Date** ☐ **Number**

Date from : 27 AUG 2007 ☒ **Extension** 2139

Date to : 27 AUG 2007 ☐ **Tag** Tagged Only

☒ **Time** ☒ **Direction** < Incoming

Time from : 12:00 ☐ **Channel** 1

Time to : 12:39

Search Search Archive Cancel

2. Use the [Down] arrow to highlight check boxes for the available search criteria. Press [Select] to activate the highlighted criteria, and then configure your search parameters using the [Down] and [Select] keys.
3. When you have finished specifying your search criteria, use the arrow keys to highlight **Search** and press [Select].



An information window displays, summarising the search results. The results are listed in the Search Screen.



If more than 1000 results are returned, only the 1000 most recent calls are listed on the Search Screen. If you wish to see calls older than those that are initially listed, press the Rewind [◀] key while playback is not in progress to display the next oldest 1000 calls. Press Fast Forward [▶] to return to the more recent listings if required.



To search for calls on a DVD/CD/BD:

1. Insert the DVD, CD or (optional) BD that you wish to search into the **Total Recall** DVD/CD/BD drive. If you wish to search an archive on network storage (optional on **Total Recall Rack** only), continue to step 2.



Your **Total Recall** can search and replay archive DVD/CDs created by other **Total Recall** units, or even archive DVD/CDs from old generation **Total Recall** systems.

2. Arrow down to highlight **Search**, and press [Select].

The **Search Options** dialog displays:

<input checked="" type="checkbox"/> Date	<input type="checkbox"/> Number
Date from : 27 AUG 2007	<input checked="" type="checkbox"/> Extension 2139
Date to : 27 AUG 2007	<input type="checkbox"/> Tag Tagged Only
<input checked="" type="checkbox"/> Time	<input checked="" type="checkbox"/> Direction < Incoming
Time from : 12 : 00	<input type="checkbox"/> Channel 1
Time to : 12 : 39	
<input type="button" value="Search"/> <input type="button" value="Search Archive"/> <input type="button" value="Cancel"/>	

3. Use the [Down] arrow to highlight check boxes for the available search criteria. Press [Select] to activate the highlighted criteria, and then configure your search parameters using the [Down] arrow and [Select] keys.
4. When you have finished specifying your search criteria, arrow down and highlight **Search Archive**. Press [Select] to confirm that you wish to search an archive drive.

The **Archive Selection** dialog appears.

Archive Device:	DVD/CD
Type:	NFS
Path:	192.168.3.186:/var/archiver
User:	
Password:	
Archive:	-- none --
<input type="button" value="OK"/> <input type="button" value="Cancel"/>	



- The **Archive Device** to be searched will be the DVD/CD drive by default. If you wish to search a DVD/CD, arrow down to the **OK** button and press [Select].

An information window displays, summarising the search results. The results are listed in the Search Screen.



To search for calls on a Network Share (Optional on TR Rack only):

- Follow steps 2 to 5 as above.

The **Archive Selection** dialog appears.

Archive Device:	Network Share
Type:	NFS
Path:	192.168.3.186:/var/archiver/test
User:	
Password:	
Archive:	200708271400

Ok Cancel

- Set the **Archive Device** to Network Share by pressing the [Select] key while the archive device field is highlighted.

The **Type**, **Path**, **User** and **Password** parameters for the network share must be pre-configured via **Remote Manager**.



See the **Total Recall Installation and Administration Guide** for information on configuring Network Shares.

- Select the required **Archive**.

There may be more than one archive on the network share. Each archive can contain up to 250,000 recordings. The name of the archive is the date when it was created in the following format: `yyyymmddhhmm`, that is a 4 digit year, followed by two digit month, day of month, hour of day and minute.

- Select the **OK** button.

An information window displays, summarising the search results. The results are listed in the Search Screen.

6.4.2. Using Search Criteria

Various types of information (listed below) can be used as search criteria.

To search by each criteria type, select the appropriate check box in the **Add Calls to List** dialog, and enter or select the required value/s in the associated data field/s.

- Date**

Required data: **Date From** and **Date To**.

- Time**

Required data: **Time From** and **Time To**.



Time criteria can not span 00:00 (midnight). To search a time period that spans midnight, either search using date criteria only, or initially search up to 23:59 hours on Day 1, and then search from 00:00 hours on Day 2.

- **Number**

Required data: numeric.

The Number search returns any results *containing* the search string.

For example, with search criteria **2001** in the Number field, the search will return any calls to or from telephone number 2001, and also to or from numbers 20015, 32001, 620014, etc.

- **Extension**

Required data: numeric.

The Extension search only returns results that match the search string *exactly*.

For example, with search criteria **2001** in the Extension field, the search will return calls to or from extension 2001, and no other calls.

- **Tag**

Available options: Tagged Only | Untagged Only | Tagged & Untagged.

The data field defaults to **Tagged & Untagged** (all calls).



See [section 6.4.4](#) of this manual for a description of the ‘Tagging’ function.

- **Direction**

Available options: Incoming | Outgoing | Internal | Unknown.

The data field defaults to **Incoming**.

‘Unknown’ refers to calls that **Total Recall** is unable to resolve an origin and/or a destination for.

- **Channel**

Required data: numeric.



Performing a search with no search criteria entered will return all calls on the database or archive.

Multiple Criteria

Search criteria are cumulative – only calls that match *all* specified criteria are returned. The more criteria entered, the more specific the result.



For example, to search for tagged calls made between 6am and 11am from extension 2001, use the following search criteria:

- Time: 06:00 to 11:00.
- Extension: 2001.
- Tag: Tagged Only.

6.4.3. Call Playback

Date	Time	Length	From	To	Ch.
4 Oct 2009	07:30:15	00:04:30	0297482304	Reception	48
4 Oct 2009	07:35:00	00:10:21	Head Office	Nicks Phone	32
4 Oct 2009	08:14:43	00:11:54	0419234432	029748304	12
4 Oct 2009	08:59:12	00:01:32	0297482304	Dales Phone	1
4 Oct 2009	09:30:02	00:03:17	Nick (Cellular)	Reception	48
4 Oct 2009	09:34:33	00:08:43	0297482604	Warehouse	8
4 Oct 2009	09:48:24	00:15:59	00114372460..	0297482304	12
4 Oct 2009	09:59:59	00:07:12	Sud-Ouest Bu..	Dales Phone	1
4 Oct 2009	10:27:28	00:26:31	ワーキング携帯電	Almacén Teléf..	36
4 Oct 2009	11:11:52	00:00:31	Amsterdam Of..	Nicks Phone	32
4 Oct 2009	11:34:20	00:10:54	Head Office	0297482304	12
4 Oct 2009	12:43:15	00:05:42	Dale (Cellular)	Reception	48
4 Oct 2009	13:03:54	00:12:32	0297482304	Penerimaan	5
4 Oct 2009	13:30:38	00:04:01	Sydney Office	Reception	48
4 Oct 2009	14:02:03	00:20:45	0456531256	Dales Phone	1
4 Oct 2009	14:23:10	00:12:38	Agência de Lis..	0297482304	12
4 Oct 2009	15:00:48	00:35:58	오피스 빌레나야	Nicks Phone	48
4 Oct 2009	15:04:22	00:03:27	Servei de Corr..	Warehouse	8
4 Oct 2009	15:35:20	00:21:31	Geschäftsstelle	Dales Phone	1

Call 1/1000 |----->-----| Listed:1000

Figure 5 - Playing calls from the Search Screen

Following a search, the results are listed in the Search Screen, sorted by date and time, with the most recent call at the top.

To play a call, highlight it and press [Select], or press the ► key on your control panel.

Press ► again to pause playback.

Press ►► to fast-forward.

Press ►►► to skip forward.

Press ◀◀ to rewind.

Press ■ to stop playback.

Use the thumb wheel on the front panel to adjust the playback volume.

Progress through the call is displayed as a progress bar at the bottom of the LCD display.



6.4.4. Tagging

Tagging calls is a way to mark them so that they can be selectively searched or archived using the **Manual Archive** function. To tag a call for manual archiving:

- Highlight the call in the Search or Logging Screen, and press ***** on your control panel.

To untag a tagged call:

- Highlight the tagged call and press ***** again on your control panel.

To tag all calls in the list on the Search Menu:

- After completing a search, highlight the **Tag All** button on the Search Screen and press [Select].

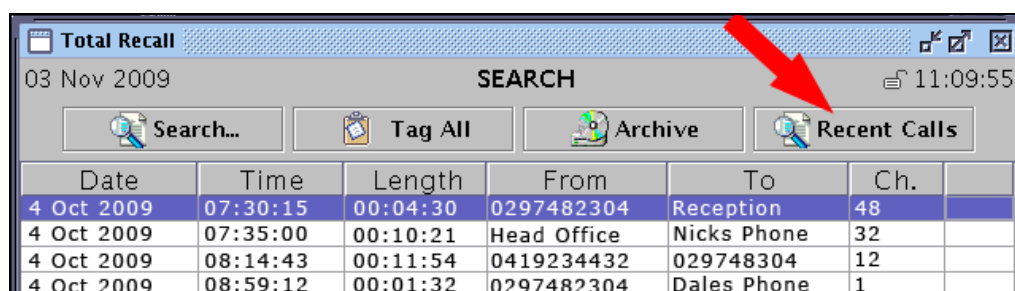
To untag all calls in the list on the Search Menu:

- After completing a search, highlight the **Untag All** button on the Search Screen and press [Select].



You can not tag search results from an archive.

6.4.5. Recent Calls (Automatic Recent Call Display)



Date	Time	Length	From	To	Ch.
4 Oct 2009	07:30:15	00:04:30	0297482304	Reception	48
4 Oct 2009	07:35:00	00:10:21	Head Office	Nicks Phone	32
4 Oct 2009	08:14:43	00:11:54	0419234432	029748304	12
4 Oct 2009	08:59:12	00:01:32	0297482304	Dales Phone	1

To display the most recent completed calls on the **Total Recall** database, highlight the **Recent Calls** button and press [Select]. The most recent calls will display in the search screen, and will be automatically refreshed according to your configuration in the **Options Menu > General Settings > Recent Calls** menu. The Recent Calls button will flash to indicate that it is active:



See the *Total Recall Installation and Administration Guide* for information on configuring Recent Calls.

Recent calls will continue to be automatically refreshed until a key is pressed on the system; for example if you change menus by pressing the [Menu] key, or press the [Down] arrow key to replay a call.

To restart automatic recent call refresh, re-highlight the **Recent Calls** button using the [Up] and [Down] arrow keys as required, then press [Select].



To Replay the Most Recent Completed Call:

1. Press the [Menu] key to enter the Search Menu (if required).
2. Activate Recent Call Refresh by highlighting the 'Recent Calls' button (if required) with the [Down] arrow key, and press [Select].
3. The **Recent Calls** button will flash to indicate that it is active, and the most recently completed calls on Total Recall's database will appear, and will be automatically refreshed according to your configuration in the Options > General Settings > Recent Calls menu.
4. The first call on the screen is the most recent completed call on the database, and this is highlighted by default in **Recent Calls** mode. If the call you wish to replay is further down the list, continue pressing the [Down] arrow key until your target call is highlighted. Please note that pressing the [Down] arrow key will deactivate **Recent Calls** mode, and the icon will stop flashing accordingly.
5. Press [Select] to replay the highlighted call.
6. To re-activate **Recent Calls** mode after replaying a call, navigate back to the Recent Calls button with the [Up] or [Down] arrow keys, and press [Select].

6.4.6. Archiving

Introduction

Total Recall stores call files internally on the hard disk drive. Call files can be archived to DVD, CD, or optionally to a Blu-Ray device (**Desktop** and **Rack**), or to network shared storage (**Rack** only). Archiving may be performed manually, or automatically, at scheduled intervals.



See the **Total Recall Installation and Administration Guide** for further information on Automatic Archiving.

Approximately 1,000 channel hours can be archived to a standard DVD and approximately 180 channel hours to a standard CD, depending on the call lengths and the number of sessions used.

The number of channel hours that can be stored on any given Network Share depends on the storage space of the network device. A standard single layer BD-RE disc can store approximately 6,000 hours of calls.

To ensure the security of your call data, it is recommended that calls are archived on a regular basis. Call recording continues during the archive process. Progress is displayed on the screen. Other recorder functions (except recording) are disabled during the archive process.



The CD/DVD drawer will open and close during the archive process. Remove any potential obstructions to the CD/DVD drawer opening and closing.

Archiving on DVD/CD/BD is performed in sessions. Each session updates the disk directory, writes the calls, and closes the archive with an 'end of session marker'. Therefore, archiving to disc media should be done thoughtfully, as each session marker uses approximately 10 MB of disc space. This is



equivalent to approximately three hours of calls. Therefore, to minimise wasted space, it is advisable to archive as many calls as possible each time you archive, rather than archiving smaller numbers of calls more often.

To maintain compatibility with various CD readers, a maximum of 25 sessions is permissible per CD.

Network Shares (optional on Total Recall Rack)

Total Recall Rack has an in-built NFS Client and SAMBA Client to access NFS and Windows Network Shares.

Each Network Share can contain more than one archive, each with up to 250,000 records. The name of each archive is the date and time when it was created in the following format: `yyyymmddhhmm` (that is a 4 digit year, followed by two digit month, day of month, hour of day and minute).

6.4.7. Performing a Manual Archive



To archive manually to DVD/CD/BD:

1. Cycle to the Search Menu by pressing [Select].
2. Select calls to archive by performing a search and/or tagging the relevant calls (see section **6.4.1.** to **6.4.4.** of this manual) if required (see point 5 below).
3. Insert the DVD, CD or (optional) BD media into the **Total Recall** DVD/CD/BD drive.
4. Arrow down and highlight the **Archive** button. Press [Select].

The **Archive Calls** dialog displays.

Archive Calls :	Found Calls
Number of Calls:	16
Call Size (MB) :	31.123 MB
Archive Device :	DVD/CD
Type:	NFS
Path:	192.168.3.186:/var/archiver/test
User:	
Password:	

OK Cancel

5. In the **Archive Calls** field, scroll through the available archive options by pressing the [Select] key. The following 4 options will be available:
 - **All Calls** (all calls currently on the hard disk).
 - **Found Calls** (all calls that are currently listed in the Search Screen).
 - **Unarchived Calls** (all calls that have not been archived in the past).
 - **Tagged Calls** (all tagged calls on the hard disk).

As archive options are selected, **Total Recall** displays the number of calls and the collective size of the calls (in MB).



6. Press the [Down] arrow key to select the appropriate **Archive Device**. For DVD/CD or (optional) BD archiving, select DVD/CD. If you have optional Network Archiving on your **Total Recall Rack**, press the [Select] key in the archive device field to select Network Share as the archive device.
7. Arrow down and highlight **OK**. Press [Select] to begin archiving.



If you have administrator privileges, a confirmation dialog displays asking if you would like to remove the calls that are archived from the hard disk. Select **Yes** to remove archived calls from the hard disk, or **No** to leave them in place.

The archive process begins.

A progress dialog displays while archiving is taking place. When archiving is complete, a message displays indicating that the process has finished.

If there is insufficient space on the DVD, CD or BD to complete the archive, **Total Recall** will archive as much as it can, and then prompt you to insert a new disc to complete the archive.

If the DVD, CD or BD is damaged and the archive fails, a message displays prompting you to insert another disc.

If there are problems with access to the Network Share, a message displays with information on the problem. If this is the case, the archive process fails until the problems are corrected.

Automatic Archiving

Automatic Archiving is configured via the **Options Menu** by a user with administrator privileges.

With Auto Archive active, **Total Recall** archives all unarchived calls on the hard disk at the frequency specified in the Archive settings.



The **Auto Archive** function archives all calls that have not been archived to a DVD/CD/BD or a Network Share. Calls that have previously been manually archived will not be included in the **Auto Archive**.

Total Recall can also be configured by administrators to display a message reminding the user to manually archive when the hard disk reaches a specified percentage of capacity.



If your **Total Recall** system is unlocked, AND a menu other than the main **Logging**, **Search** or **Options** screens is open at the scheduled auto-archive time, the Total Recall system will assume that you are currently using the unit. Auto-Archive will be delayed until you navigate back to one of the main screens.



6.4.8. Deleting Calls

Administrators may choose to delete calls from the hard disk during manual archiving.

Also, calls are automatically deleted when:

- A set period of time has passed since they were recorded (for example, 3 months). This option (**Max. Call Lifetime**) can only be activated by a user with administrator privileges.
- The number of calls on the hard disk reaches 350,000, or 60,000 recording hours. When this happens, the oldest 50,000 calls are automatically deleted, until the number of calls on the hard drive is reduced to 300,000.



Auto-deletion occurs according to the 3 conditions above, in the priority that they are listed. To avoid losing unarchived calls as a result of automatic deletion, it is important to be aware of recorder capacity and to ensure important calls are archived or saved regularly.



Remote Manager

7. Overview

Remote Manager is Microsoft Windows® compatible software that allows remote access from a PC to one or more **Total Recall** units, via LAN or dialup. Remote Manager is supplied on CD free-of-charge with all Total Recall systems, for installation and use on as many PCs as required.

Remote Manager can be used to:

- Configure the recorder (Administrator Users Only).
- Play recorded calls from the system or archive media – including archive media from older generation **Total Recall** systems.
- Monitor current calls in real-time.
- Search the call database.
- Archive recorded calls to CD/DVD or optional BD/Network storage.
- Tag and notate calls on the database.
- Download calls to the local hard drive.
- Email downloaded calls.
- Play and save calls from Total Recall archive discs.
- Generate reports.
- Export calls to .wav, .mp3 or secure .trc formats.

8. Installation and Initial Configuration

Remote Manager should only be installed and configured by a system administrator.



See the **Total Recall** *Installation and Administration Guide* for further information.

9. User Interface

Remote Manager is a ‘tabbed’ application, including a Main Menu bar, a Button bar, and 4 tabs:

- Monitor.
- Playback Calls.
- TR Configuration.
- Event Log.



Please note that you will only be able to see the tabs that have been authorised for your specific user account by the System Administrator.

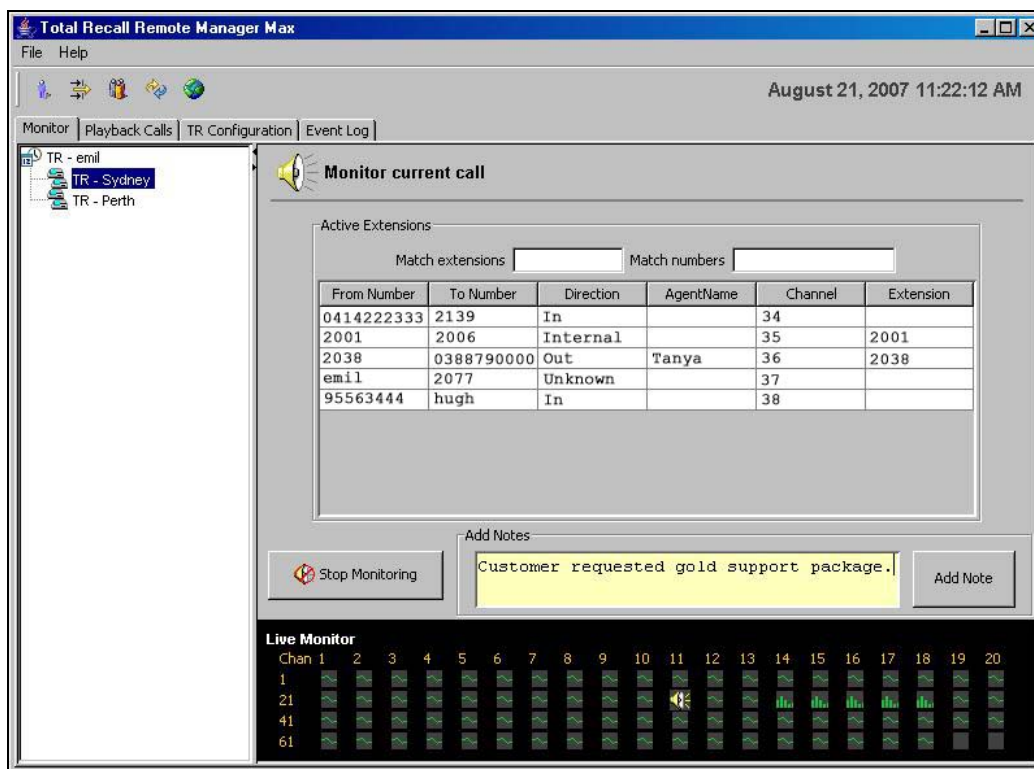
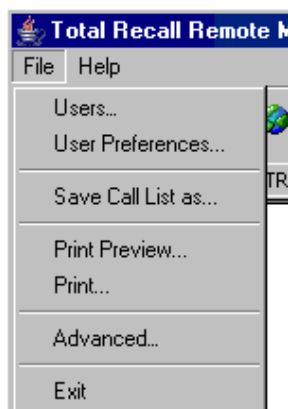


Figure 6 - the Remote Manager User Interface

10. Main Menu Bar

The **Remote Manager** main menu bar includes 2 menus – the **File** menu and the **Help** menu.


10.1. File Menu



The File menu includes the following options:



- **Users**
Opens the Users dialog (administrators only).
- **User Preferences**
Opens the User Preferences dialog.

 See *Changing your Password or Display Language* on page 32 for more information on altering Users and User Preferences.
- **Save Call List as**
Saves the call list displayed in the Playback Calls tab as a .txt or .csv file. The data included reflects the current call list column configuration.
- **Print Preview**
Opens a print preview of the Call Report.
The Call Report is a print-formatted version of the call list displayed in the Playback Calls tab. The data included reflects the current call list column configuration.
- **Print**
Prints the Call Report via the standard Windows print dialog.
- **Advanced**
Opens the Advanced Settings dialog.
Use the Advanced Settings dialog to set the local IP address for the PC, and the Manager Base Port.
- **Exit**
Closes **Remote Manager**.

10.2. Help Menu



The Help Menu provides access to:

- The **Total Recall** website (www.totalrecallvr.com)
- **Total Recall** FAQs on the web
- 'About' information (including the **Remote Manager** version number)








11. Button Bar



The button bar provides access to most of the **Remote Manager** administrative dialogs and functions.

The table below lists the buttons and their uses.

Button		Use
	User Preferences	Opens the User Preferences dialog. Use the User Preferences dialog to edit general user preferences and Total Recall connections* for the current user.
	Add TR (administrator users only)	Opens the Add Total Recall dialog. Use the Add Total Recall dialog to ‘add’* Total Recall recorders to the Remote Manager settings for the current user.
	Update Users (administrator users only)	Opens the Update Users dialog. Use the Update Users dialog to add and remove users*, and to modify user preferences for all users in the user list.
	Refresh Views	Refreshes the Device Tree and the Local Folders pane to reflect the latest changes.
	Change Language Settings	Opens the Choose Language Settings dialog. Use the Choose Language Settings Dialog to specify the Remote Manager UI display language.

* Administrator function



See the **Total Recall Installation and Administration Guide** for further information about administrative functionality available from the Button Bar.

11.1. Changing your Password or Display Language

To change your **Remote Manager** Password or display language:

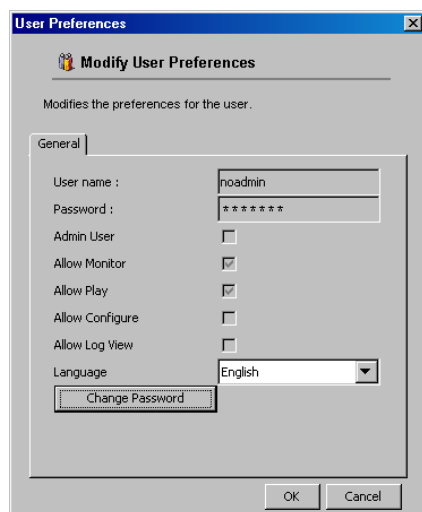
- Click the User Preferences button: 

Or:

- Select **File > User Preferences**.



The **Modify User Preferences** menu will display. Your User name, and your current access permissions are displayed as read-only fields for reference.



To change your Remote Manager display language:

1. Click the drop-down arrow to the right of the **Language** field and select your preferred language.
2. Click **OK**.



To change your password:

1. Click **Change Password**.
2. Enter the new password in the **Password** field.
3. Re-enter the password in the **Confirm Password** field.
4. Click **OK**.


12. TR Tree



The **TR Tree** is an expandable/collapsible tree showing the connected **Total Recall** recorders for the current user.

Click on a recorder to select it. Functionality and information to the right of the **TR Tree** applies to the selected recorder.



To update the **TR Tree** to reflect changes made to recorder connections, click the Refresh Views button: 

If **Remote Manager** can not connect to a recorder, then it shows a cross on top of the icon next to the recorder name as shown on the subsequent screen capture.



13. Monitor Tab

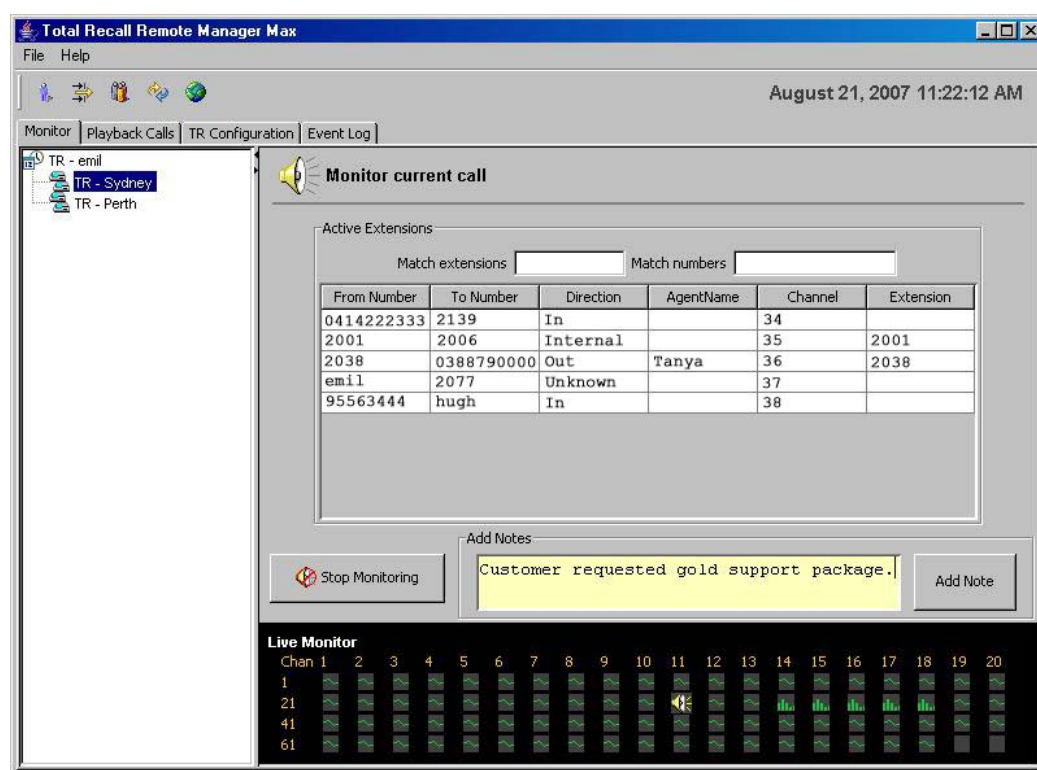


Figure 7 - the Monitoring Tab

Use the **Monitor** tab to monitor current calls, and to add notes to calls.

Monitoring is only possible on extensions for which monitoring has been enabled.



See the **Total Recall Installation and Administration Guide** for further information on enabling and disabling live monitoring.



There are 2 ways to select calls for monitoring – by channel, and by extension.

As analog signal sources are physically connected to individual channel inputs on the recorder, a particular source will always come into the recorder on the same channel. For example, if PSTN telephone extension 2002 is connected to channel 1 on the recorder, calls to and from extension 2002 will always be recorded on channel 1.



No additional configuration is required to monitor calls by channel.

It is also possible to monitor analog PSTN signals by extension, if the analog channels have been assigned extension values in the **Analog Settings** menu, or if DTMF/CLI (called/calling) number data is present in the signalling, and this number data has been configured on the **Total Recall Internal Dial Plan**.



Extensions must be configured by a Total Recall Administrator.

13.1. Monitoring Calls by Channel



The **Live Monitor** panel displays a range of icons to indicate the status of each channel on the selected recorder.

The icons are defined in the table below.

Icon	Channel Status
	Live call in progress.
	Monitoring in progress.
	Channel is active, but there is no activity on it.
	Monitoring is disabled - channel cannot be monitored.
	Channel is unauthorised for the current user.
	Monitoring is unavailable – insufficient network bandwidth

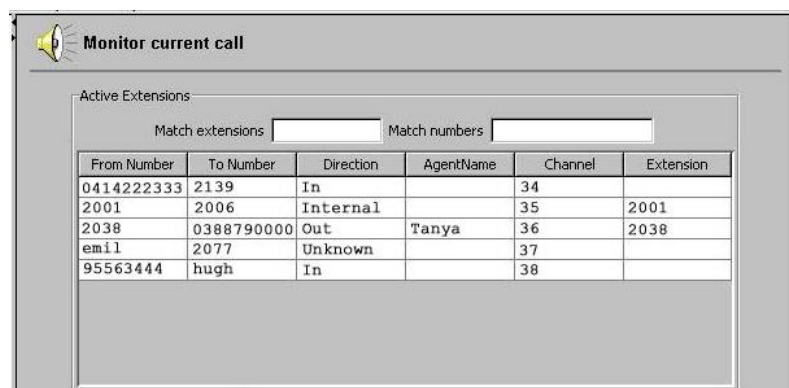
The panel is automatically updated as and when each channel's status changes.



To monitor a call by channel:

1. In the **TR Tree**, click on the recorder containing the channel that you want to monitor.
2. In the black **Live Monitor** panel at the base of the monitoring screen, click the channel icon for the channel that you want to monitor. The call audio on that channel should now be heard on the headphones / speakers.
3. To stop monitoring, click the **Stop Monitoring** button.

13.2. Monitoring Calls by Extension



The screenshot shows a window titled "Monitor current call" with a speaker icon. Inside, there's a section "Active Extensions" with two input fields: "Match extensions" and "Match numbers". Below these is a table with the following data:

From Number	To Number	Direction	AgentName	Channel	Extension
0414222333	2139	In		34	
2001	2006	Internal		35	2001
2038	0388790000	Out	Tanya	36	2038
emil	2077	Unknown		37	
95563444	hugh	In		38	

The **Active Extensions** panel displays a list of all current calls on the selected recorder that can be resolved to an extension. Extensions need to be configured by a **Total Recall Administrator**, via the **Analog Settings** menu, or via the **Internal Dial Plan**.



See the **Total Recall Installation and Administration Guide** for further information on configuring extensions.

The call list is updated dynamically when new calls start and current calls finish.

If a call comes in and cannot be immediately resolved to an extension, it will appear in the **Live Monitor** panel (see **Section 13.1** above), and then also appear in the **Active Extensions** panel if and when the extension information becomes available.

The **Active Extension** panel includes columns for:

- From number.
- To number.
- Direction (incoming / outgoing).
- Agent Name (if a **ROD** agent is logged in on the called or calling extension).
- Channel.
- Extension.



To select calls for monitoring by extension:

1. In the **TR Tree**, select the recorder that contains the extension that you want to monitor.

The call list in the white **Active Extensions** panel at the top of the monitoring tab is populated with all current calls that can be resolved to an extension.

2. In the **Active Extensions** panel, click on the call that you want to monitor.

The call can be heard on the headphones/speakers.

The channel on which the call is being recorded is highlighted in the **Live Monitor** panel.

3. To stop monitoring, click the **Stop Monitoring** button, or select another call.

13.2.1. Filtering the Call List

You can filter the call list to show only calls that either match exactly, or begin with, the entered values. This is especially useful for finding the right extension to monitor on installations with a large number of active extensions.



To filter the calls listed in the Active Extensions panel:

- Enter alphanumeric values in the **Match extensions** or **Match numbers** field.

The call list is updated dynamically as values are entered.

For example, to filter the call list to show only calls to or from extension 2006, enter **2006** in the **Match extension** field.

To filter the call list to show only calls from all extensions in the range 2100-2199, enter **21** in the **Match number** field.



Calls from *all* extensions that begin with 21 will be shown – for example, if your dial plan supports 3 and 4-digit extensions, calls from extensions 210-219 *and* calls from extensions 2100-2199 will be shown.

To filter the call list to show only calls to or from extension John Smith, enter **John Smith** in the **Match extension** field.

To filter the call list to show only calls to or from number 0210 456 789, enter 0210 456 789 in the **Match number** field.

To filter the call list to show only calls to or from all numbers beginning 0210, enter 0210 in the **Match number** field.



This is a particularly useful function if you want to filter calls by area code.



To sort the call list:

- Click the relevant column header.



13.3. Adding Notes

Adding notes to calls is a useful way to record information about the call, such as an important request or the ID number of the client involved.

Notes can later be used as search criteria in the Playback Calls tab.

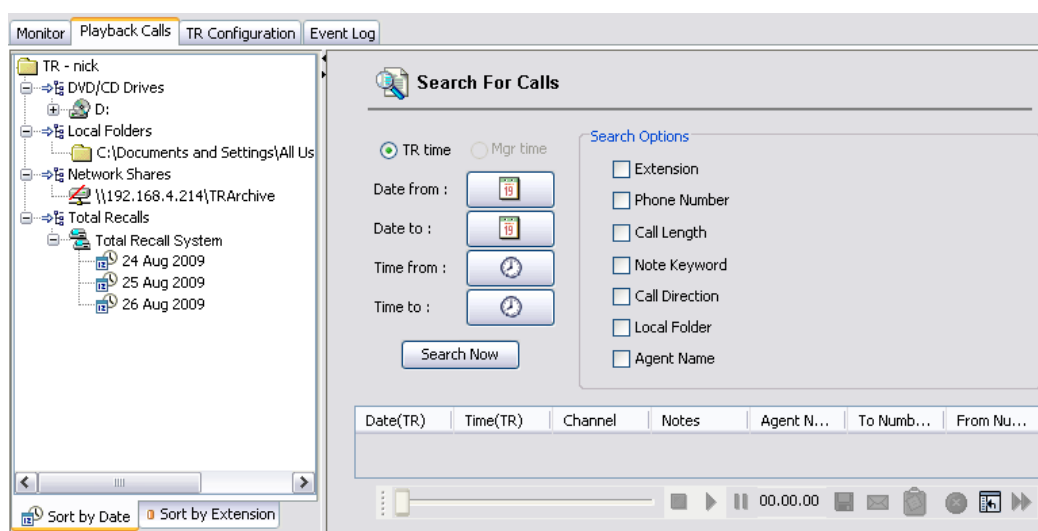


To add a note to a call:

1. Select the call in the Active Extensions panel, or an active channel in the Live Monitor panel.
2. Type the note in the **Add Notes** text field. The field supports up to 80 characters.
3. Click **Add Note**.

The note is added to the call.

14. Playback Calls Tab

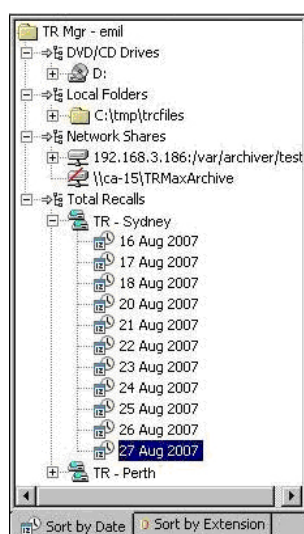


Use the **Playback Calls** tab to search for and play recorded calls, from:

- Connected **Total Recall** recorders.
- **Total Recall** archives on DVD/CD (or optional BD). Calls from archive CDs from any **Total Recall** system may be replayed, copied to local folders or emailed, including those from superseded or old-generation units.
- **Total Recall** archives on a Network Share (optional on **TR Rack** only).
- Local Folders (configured folders on local or network hard drives).




14.1. The Device Tree




The **Device Tree** is an expandable/collapsible tree showing the currently available devices that may contain **Total Recall** call records to search. These may be:

1. The local DVD/CD drive on your PC (if configured).
2. Local Folders on your PC (if configured).
3. Network Shares (optional on **TR Rack** only, if configured).
4. Any connected **Total Recall** recorders.

Click on a device in the Device Tree to select it for searching. Functionality and information to the right of the **Device Tree** applies to the selected device only.

Click the  icon for a device to reveal further information about the calls stored on that device, which can be either the dates of the archives, or the extensions involved.

To view the **Device Tree** sorted by date, select the **Sort by Date** tab at the base of the tree. Alternatively, to view the **Device Tree** sorted by extension, select the **Sort by Extension** tab.

To update the **Device Tree** to reflect changes made to recorder connections, click the Refresh Views button: 

14.1.1. DVD/CD Drives

Any DVD/CD Drives configured on your PC can be added to the **Device Tree**, where they can be selected for searching.

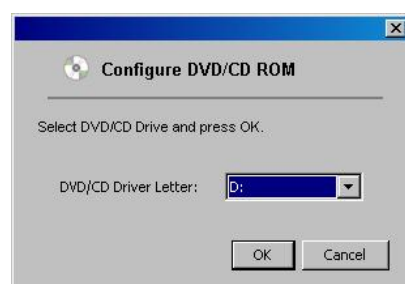




To add a DVD/CD drive :

1. In the **Device Tree**, right click on 'DVD/CD Drives'.
2. Click **Select Drive**.

The **Configure DVD/CD ROM** dialog appears.



3. Select the **DVD/CD Drive Letter** of the DVD/CD drive on your local machine.
4. Click **OK**.

The drive will now appear in the **Device Tree**, and may be used to search archive discs from **Total Recall**.

14.1.2. Local Folders

Local Folders are specially configured folders on a local or network hard drive, into which calls can be saved (individually or in groups), which can later be searched from within **Remote Manager**.



Local Folders appear in the **Device Tree**, where they can be selected for searching, and where calls can be saved via drag and drop from another location.



To add local folders:

1. In the **Device Tree**, right click on 'Local Folders'.
2. Click **Add Folder**.
3. Specify the file path by navigating to an existing folder or by creating a new folder. This can be a folder on your local drive, or on another (networked) machine.
4. Click **Open**.

The new local folder will now appear in the **Device Tree**.



To remove existing local folders:

1. In the device tree, expand the list of Local Folders.



2. Right click on the local folder that you want to remove.
3. Click **Remove Folder** in the drop down menu.



To refresh local folders:

- On the button bar, click the Refresh Views button



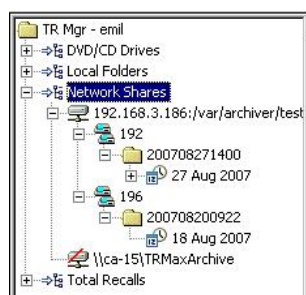
Or:

- Right click on the Local Folder in the **Device Tree**, and click **Refresh Folder** in the drop down menu.

Refreshing local folders updates the device tree with any changes made to Local Folders outside of **Remote Manager**.

14.1.3. Network Shares (Optional on TR Rack only)

Network Shares are specifically configured folders on local or network locations. They are set up in order to allow for the automatic or manual archiving of calls from your **Total Recall Rack** recorder to network storage. Calls on a Network Share may be searched via **Remote Manager** or from your **Total Recall Rack** recorder.



Network Shares appear in the **Device Tree** where they can be selected for searching.



To add network shares:

1. Right click on 'Network Shares' in the device tree.
2. Click **Add Shares** in the dropdown menu.
3. Select the appropriate network share type and file path, as well as providing the username and password for the network share location (where applicable). Your system administrator will supply these details.
4. Click **OK** to confirm settings.

To minimise unnecessary use of your network bandwidth, network share location(s) are not automatically connected for immediate search and replay. To access archives on a network share location, you must first 'attach' the location manually.



To attach/detach existing network shares:

1. In the device tree, expand the list of 'Network Shares' to view currently installed Network Share locations.
2. Right click on the specific Network Share location that you wish to attach or detach.
3. Click **Attach Share** or **Detach Share** in the drop down menu.

An attached network share will remain attached and available for immediate searching while you remain in the 'Playback Calls' tab. Selecting another tab will cause the network share to automatically detach.



The network share device tree follows the structure of *Network Share Location > Unit ID > Date of Archive > Date of Calls/Extensions (setting dependant)*.

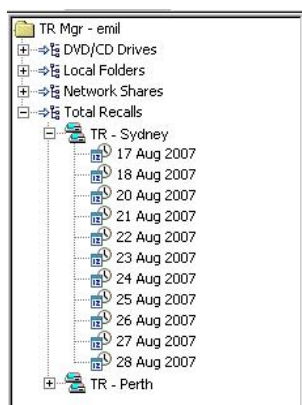


To remove a network share:

1. In the device tree, expand the list of network shares to view currently installed Network Share locations.
2. Right click on the specific Network Share location that you wish to remove.
3. Click **Remove Share** in the dropdown menu.

14.1.4. Total Recall Systems

The **Device Tree** also shows the connected **Total Recall** recorders for the current user.



Total Recall recorders appear in the **Device Tree** where they can be selected for remote searching.



14.2. Searching for Calls




To search for calls:

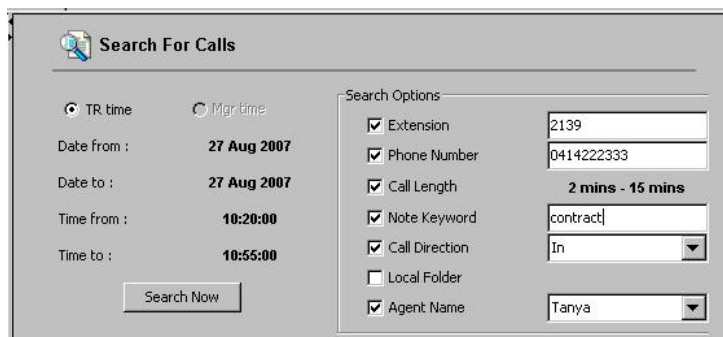
1. In the **Device Tree**, select a DVD/CD/BD Drive, Local Folder, Network Share or a **Total Recall** recorder that you want to search.
2. Enter any appropriate search criteria (see below for more information).
3. Click **Search Now**.

The matched calls (up to a maximum of 1000 calls) are displayed in the call list.

If no search criteria are entered, all calls on the selected device/s are returned.

- To see more results (if over 1000 calls are returned) click .
- To return to the first 1000 results, click **Search Now** again.

14.2.1. Using Search Criteria



Search For Calls

☒ TR time ☐ My time

Date from : 27 Aug 2007
 Date to : 27 Aug 2007
 Time from : 10:20:00
 Time to : 10:55:00

Search Options

☒ Extension 2139
☒ Phone Number 0414222333
☒ Call Length 2 mins - 15 mins
☒ Note Keyword contract
☒ Call Direction In
☐ Local Folder
☒ Agent Name Tanya

The following types of information can be used as search criteria:

- Date.
- Time.
- Extension.
- Phone Number.
- Call Length.
- Note Keyword.
- Call Direction.
- Local Folder.
- Agent Name.



Search criteria are cumulative – only calls that match *all* specified criteria are returned. The more criteria entered, the more specific the result.

Date

To search for calls that were recorded after a certain date, click the **Date from** button and select a date from the calendar.



To search for calls that were recorded before a certain date, click the **Date to** button and select a date from the calendar.

If you click on an archive sorted by date in the **Device Tree**, the **Date from** and **Date to** fields are automatically populated with the appropriate date value.

Time


To search for calls that fall within a certain time range, click either of the **Time from** or **Time to** buttons, and set a time range using the sliders.

To set a time interval that spans midnight, set the **to** value to be less than the **From** value. The **to** value is then considered to be that time the next day.

Extension

To search for calls by extension, select **Extension** and enter an extension value in the text field (alpha and/or numeric).

If an archive sorted by extension is selected in the **Device Tree**, the **Extension** checkbox is automatically selected, and the text field is populated with the appropriate extension value.


 Extension values must first be configured by an Administrator. See the [Total Recall Installation and Administration Guide](#) for further information on configuring extensions.

Phone Number

To search for calls by phone number, select **Phone Number** and enter a numeric value in the text field.

Calls to or from the entered number are returned.

Call Length

To search for calls by call length, select **Call Length** and click the associated button: . Set the call length range using the sliders.

If the minimum value is not set, all calls shorter than the maximum setting are returned.

If the maximum value is not set, all calls longer than the minimum value are returned.

Note Keyword

To search for calls by a keyword within a previously added note, select **Note Keyword** and enter the keyword/s in the text field.

Calls matching all the specified keywords are returned.

 The **Note Keyword** function is case sensitive.




Call Direction

To search for calls by call direction, select **Call Direction** and choose an option from the drop-down list.

Options are to search by:

- In (incoming calls), i.e. a call coming from an outside number to an extension inside your company.
- Out (outgoing calls), i.e. calls originating from within your company to outside numbers.
- Internal (calls between internal extensions).
- Unknown (**Total Recall** cannot determine whether the call is coming into or going out of your company).

 See *Total Recall Installation and Admin Guide > Internal Dial Plan* for more information on how to specify extensions as internal.

Local Folder

To search for calls by local folder, select **Local Folder** and click the folder from the **Device Tree** to auto-fill the system path. Alternatively you can copy/paste full system path for the local folder into the text field.

If a local folder is selected in the **Device Tree** at any time, the **Local Folder** checkbox is automatically selected, and the text field is populated with the appropriate system path.

Agent Name

To search for calls made by a **ROD** agent, check the **Agent Name** box, and then select the agent's name from the drop down box.

14.3. Playing Calls

When a search is complete, the results are displayed in the **Call List**.

Date(TR)	Time(TR)	Length	Channel	To Number (...)	From Numbe...
27 Aug 2..	15:49:34	00:07:58	63	2139	04142223..
27 Aug 2..	15:48:16	00:09:13	27	2001	2006
27 Aug 2..	15:46:58	00:00:34	49	emil	2077



To play a call from the call list:

- Select the call in the **Call List**, and click ►

Or:

- Double-click the call in the call list.

The call will then be played through the headphones/speakers.



The progress through the call is displayed in hours:minutes:seconds for reference, and can also be tracked by the ‘slider bar’ at the base of the playback screen.

To pause playback, click .

To stop playback, click .

To begin playback part-way through a call, drag the time slider to the required point, and click .

14.4. Saving Recordings

14.4.1. Saving Single Calls from the Call List

You can save single calls individually as .mp3, .wav or .trc (**Total Recall** proprietary format) files.



To save individual calls:

1. Select the call in the call list.
2. Click .
3. Navigate to the appropriate save location.
4. Enter a filename and select the required file format.
5. Click **Save**.

14.4.2. Saving Multiple Calls to Local Folders

You can save groups of calls (as .trc files only) to Local Folders.



To save groups of calls:

1. Select the calls in the call list.
Use Ctrl + click to select multiple non-consecutive calls, and Shift + click to select multiple consecutive calls.
2. Drag the calls to the appropriate Local Folder in the **Device Tree**.



See *Local Folders* on page 40 for information about setting up Local Folders.



Calls that are dragged and dropped into Local Folders are not deleted from the recorder.

14.5. Emailing Recordings


You can email calls as .mp3, .wav or .trc files.



To email calls:

1. Select the required calls in the call list.



2. Click .
3. Select the required audio format.
4. Click **OK**.


A blank email is created (using the system default email client) with the calls already attached.

14.6. Deleting Recordings

You can only delete calls from local folders.



To delete calls from a local folder:


1. Select the call/s in the call list.
2. Click .

14.7. Notes

You can add or edit notes to calls on remote **Total Recall** recorders, in Local Folders, and in Network Share.




To add or edit a note to a call:

1. Select the note in the call list.
 2. Click .
- The **Add Note** dialog displays.
3. Type the note in the **Add Notes** text field. The field supports up to 80 characters.
 4. Click **OK**.



To delete a note from a call:

1. Select the relevant call in the call list.
 2. Click .
- The **Add Note** dialog displays.
3. Click **Clear**.
 4. Click **OK**.

14.8. Customising the Call List

The call list is customisable. The available columns are:


- Date (**Total Recall**).
- Time (**Total Recall**).
- Date (Local).
- Time (Local).



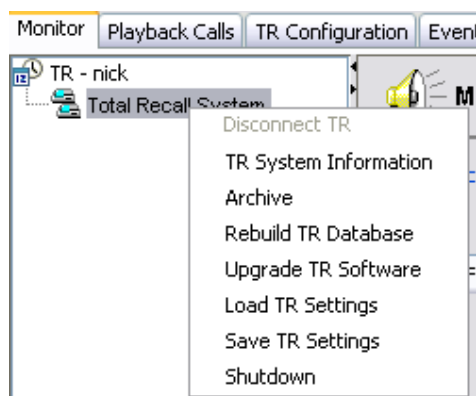
- Length.
- Number.
- Direction.
- Status.
- Channel.
- Notes.
- Recorder ID.
- Agent Name.
- To Extension.
- From Extension.
- To Number (Mapped).
- From Number (Mapped).
- DTMF Digits.



To customise the call list:

1. Click .
2. Select the columns you want to include in the call list.
3. Click **OK**.

14.9. System Maintenance Options



Right clicking on a connected unit in the TR Tree will open a menu allowing you to view important information about the unit, as well to perform authorised system functions.



System Maintenance Options are only available when logged in to **Remote Manager** with an Administrator account.



In order to perform archive functions, compatible CD/DVD media must first be loaded into the Total Recall system, or (optionally on **TR Rack**) network share storage must be configured.



14.9.1. System Information

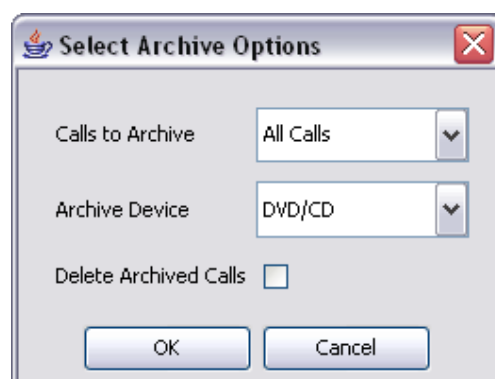


The **System Information** screen displays useful system information:

- **Software Revision** – The current software revision on the **Total Recall** unit.
- **Analog Channels** – The number of analog channels currently installed on the **Total Recall** unit.
- **VoIP & ISDN Channels** – This is not relevant to your **Total Recall Desktop** or **Rack** unit.
- **Recorder ID** – The currently assigned Recorder ID.
- **Stored Calls** – the number of individual calls currently on the call database.
- **Disk Space Used** – the percentage of **Total Recalls** onboard storage that is currently used.
- **Archive Device** – The current default archive device.

None of this information is user editable.

14.9.2. Archive



‘Archiving’ copies call files from the onboard system storage to another storage media, such as DVD/CD or (optionally on **TR Rack**) to a network location, for greater portability or long-term storage.

Calls may be archived according to certain parameters. These parameters are:



- **All Calls** – Every call on the internal database.
- **Found Calls** – The calls found in the most recent database search.
- **Unarchived Calls** – Calls that have not yet been archived to a location other than Total Recall's onboard storage.
- **Tagged** – Calls that have been manually 'tagged' by users.



Please note that manually archived calls will not be included in any scheduled **Automatic Archives**.



To archive calls:

1. Select **Archive Calls** by right clicking on a current Total Recall unit in the left hand menu.
2. Select which calls to archive via the drop down menu. Choose to archive **All Calls**, **Found Calls**, **Unarchived Calls** or **Tagged Calls**.
3. Choose which location you would like to archive to. Select from **DVD/CD** media or **Network Location** (optional on **TR Rack**, if configured).
4. Select **OK**.

14.9.3. Rebuild TR Database

This option allows you to rebuild the call database on your **Total Recall** unit. A database rebuild is recommended where the system has been subjected to an improper shutdown.



Please note that recording will stop while the system is rebuilding the database.

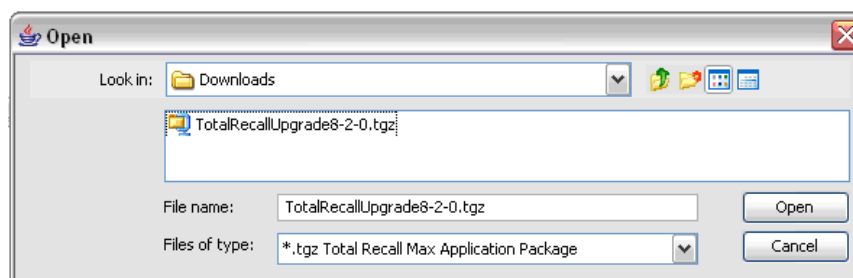
14.9.4. Update TR Software

This option allows you to install an updated version of **Total Recall** software on your system. You need a Total Recall Application CD to upgrade the software on the system.



To upgrade your Total Recall Software:

1. Insert the Total Recall Application CD in the CD/DVD drive on the PC which runs Remote Manager.
2. Select **Upgrade TR Software** via right clicking on a current Total Recall unit in the left hand menu.
3. Select the Total Recall Application package (**.tgz** format) on the application CD as shown on the following screen capture:



- Click on the **Open** button, then follow the screen prompts to complete the upgrade.

Note that the **Total Recall** system will automatically reboot itself during the upgrade process. Recording does not continue during the upgrade process and while the system is rebooting, which may take up to 5 minutes to complete.



The upgrade function only affects application and operating system files. However, as an extra precaution it is recommended that you back up all important calls from the call database before you perform an upgrade.



Your passwords and system settings are not affected by updating the system software.

14.9.5. Load TR Settings

This option allows you to restore the **Total Recall** system configuration from a file that is stored on the hard drive of your **Remote Manager** PC.



To load TR Settings from a saved configuration file

- Select **Load TR Settings** by right clicking the **Total Recall** unit in the Device Tree.
- Navigate to a previously saved configuration file on your hard drive. Click on the file, and then click **Open**.
- Follow the on-screen prompts to load the new settings.

14.9.6. Save TR Settings

This option allows you to backup the current system configuration to a file that can be stored on your PC hard drive. This saved configuration can be used to restore your system to a previous configuration if required.



To save TR Settings in a configuration file

- Select **Save TR Settings** by right clicking the **Total Recall** unit in the Device Tree.
- Navigate to the folder on your hard drive where you would like to save the configuration file. Define a name for your saved configuration, then click **Save**.



14.9.7. Shutdown

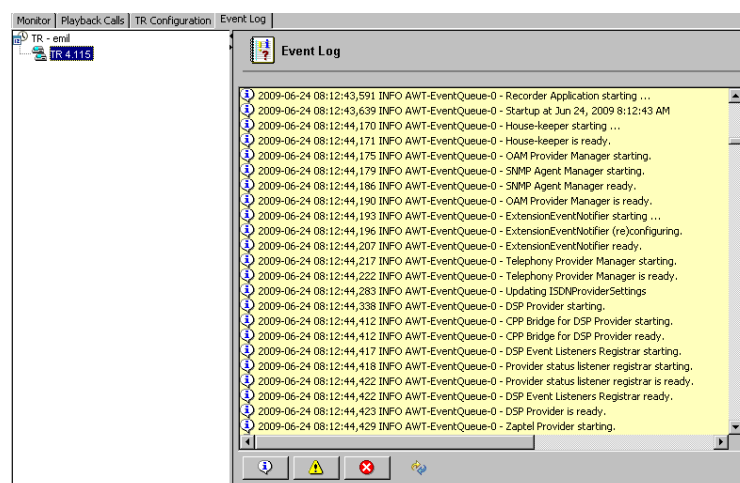
This option allows you to remotely shutdown the system.



Note that the system will power off and recording will not continue until you restore power to the system.

15. Event Log Tab

Use the **Event Log** tab to view a record of system events for the selected recorder.



15.1. Event Types

The Event Log may contain 3 types of event:



Information

Information events are standard system events and do not require any further action.



Warnings

Warnings are events that may indicate possible future problems, and should be investigated – for example, failed database searches and power failures.




Errors

Errors are events that must be investigated immediately, such as database rebuild failures, auto-archive failures, and DSP card issues.

15.2. Using the Event Log

To filter the displayed entries in the Event Log, click the button for the event type that you wish to view.

To refresh the Event Log, click .



The Event Log can hold approximately 100,000 entries. When the Event Log is full, new entries automatically overwrite old entries.

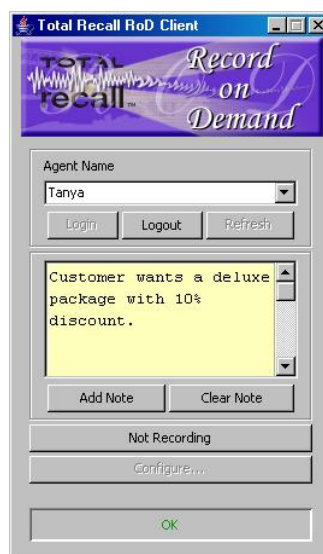
The contents of the Event Log can be selected and copied out into a text editor to allow keyword searches.



Record on Demand

16. Overview

Record on Demand (ROD) is an optional Windows®-compatible client application that provides additional real-time recording control to **Total Recall** end users (usually agents). **Record on Demand** is supplied on CD free-of-charge with all Total Recall systems, for installation and use on as many PCs as required.



Utilising an existing LAN connection, users can start and stop the recording of current calls, control which calls on their line are recorded and which aren't, and add notes to current calls – all from a simple taskbar application on the user's PC.

If a user requires **ROD** functionality but does not have immediate access to a PC, recording can also be controlled by the use of configurable DTMF codes entered on a user's phone.

ROD functionality is configured (either as a 'global' setting across all extensions, or on an individual extension basis) on the **Total Recall** unit itself, or in **Remote Manager**.

16.1. Installation and Initial Configuration

ROD should only be installed and configured by a system administrator.



See the **Total Recall Installation and Administration Guide** for information about installing **ROD**.



17. Using ROD

17.1. Logging In



To log in to ROD:

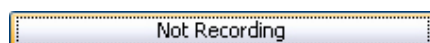
1. Start the **ROD** application (double-click the desktop icon, or select **TR Record on Demand** from the Windows Start menu).
2. Select your **Agent Name** from the drop-down list.
3. Click **Login**.
4. Enter your password.
5. Click **OK**.

ROD can now be used to control recording (and/or add notes to calls) on the configured extension.

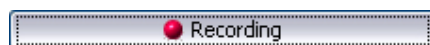
17.2. Recording

To toggle recording on and off, click the recording button.

When the recorder is not recording, the record button is labelled 'Not Recording' and appears in the 'up' state:



When the recorder is recording, the record button is labelled 'Recording' and appears in the 'down' state, with a flashing red LED icon:



17.3. Logout and Refresh

To log out, click **Logout**.



As a security measure, it is advisable to log out whenever you leave your PC.

If new agents have been added whilst **ROD** is open, click **Refresh** to update the agent list.

17.4. Adding Notes



To add a note to a current call:

1. Type the note into the text box. The text box supports up to 256 characters.
2. Click **Add Note**.



17.5. Configuration

The **Configure** button allows access to the **Total Recall** connection details and the recorded extension setting.

Only users with administrator privileges can access the Configuration dialog.



See the **Total Recall** *Installation and Administration Guide* for information about configuring **ROD**.



Glossary

CLI: Calling Line Identification

A telephony intelligent network service that transmits the caller's telephone number and in some places the caller's name to the called party's telephone equipment during the ringing signal or when the call is being set up but before the call is answered.

CDR: Call Detail Record

Also called Call Detail Recording or SMDR (Station Message Detail Recording), CDR is a record containing information about recent system usage, including the identities of sources (points of origin), the identities of destinations (endpoints), and the duration of each call.

D/A: Digital to Analog

A digital-to-analog converter (DAC or D-to-A) is a device for converting a digital (usually binary) code to an analog signal (current, voltage or electric charge).

DSP: Digital Signal Processor

A specialized microprocessor designed specifically for digital signal processing, generally in real-time computing.

DTMF: Dual-Tone Multi-Frequency

Used for telephone signalling over the line in the voice-frequency band to the call switching centre. The version of DTMF used for telephone tone dialling is known by the trademarked term Touch-Tone, and is standardised by ITU-T Recommendation Q.23. Other multi-frequency systems are used for signalling internal to the telephone network.

FTP: File Transfer Protocol

A commonly used protocol for exchanging files over any network that supports the TCP/IP protocol (such as the Internet or an intranet).

IDF: Intermediate Distribution Frame

A frame that (a) cross-connects the user cable media to individual user line circuits and (b) may serve as a distribution point for multi-pair cables from the main distribution frame (MDF) or combined distribution frame (CDF) to individual cables connected to equipment in areas remote from these frames.

IP: Internet Protocol

A data-oriented protocol used for communicating data across a packet-switched internetwork.

IP is a network layer protocol in the internet protocol suite and is encapsulated in a data link layer protocol (e.g., Ethernet). As a lower layer protocol, IP provides the service of communicable unique global addressing amongst computers.

***LAN: Local Area Network***

A computer network covering a small geographic area, like a home, office, or group of buildings.

LCD: Liquid Crystal Display

A thin, flat display device made up of any number of colour or monochrome pixels arrayed in front of a light source or reflector.

MDF: Main Distribution Frame

A signal distribution frame for connecting equipment (inside plant) to cables and subscriber carrier equipment (outside plant).

NTP: Network Time Protocol

A protocol for synchronizing the clocks of computer systems over packet-switched, variable-latency data networks. NTP uses UDP port 123 as its transport layer. It is designed particularly to resist the effects of variable latency (Jitter).

PBX: Private Branch Exchange

Also called Private Business eXchange, or PABX (Private Automatic Branch eXchange), a PBX is a telephone exchange that serves a particular business or office, as opposed to one a common carrier or telephone company operates for many businesses or for the general public.

PSTN: Public Switched Telephone Network

The network of the world's public circuit-switched telephone networks.

QoS: Quality of Service

Control mechanisms that can provide different priority to different users or data flows, or guarantee a certain level of performance to a data flow in accordance with requests from the application program.

RTP: Real-time Transport Protocol

The Real-time Transport Protocol (or RTP) defines a standardized packet format for delivering audio and video over the Internet.

SMDR: Station Message Detail Record

SMDR is a record containing information about recent system usage, including the identities of sources (points of origin), the identities of destinations (endpoints), and the duration of each call.

TCP: Transmission Control Protocol

One of the core protocols of the Internet protocol suite, often simply referred to as TCP/IP. Using TCP, applications on networked hosts can create connections to one another, over which they can exchange streams of data using Stream Sockets.

**UDP: User Datagram Protocol**

The User Datagram Protocol (UDP) is one of the core protocols of the Internet protocol suite. Using UDP, programs on networked computers can send short messages sometimes known as datagrams (using Datagram Sockets) to one another. UDP is sometimes called the Universal Datagram Protocol.

UPS: Uninterruptible Power Supply

A device which maintains a continuous supply of electric power to connected equipment by supplying power from a separate source when utility power is not available.

VLAN: Virtual LAN

A method of creating independent logical networks within a physical network.

VOX: Voice Operated Switch

A vox or voice operated switch is a switch that operates when sound over a certain threshold is detected.

WAN: Wide Area Network

A computer network that covers a broad area (i.e., any network whose communications links cross metropolitan, regional, or national boundaries). Or, less formally, a network that uses routers and public communications links.



Definitions courtesy of Wikipedia



Specifications

Physical Specifications

6 Kg, 175 (H) x 370 (W) x 365 (D) mm (**Desktop**).

10 Kg, 220 (H) x 450 (W) x 230 (D) mm, 5 RU (**Rack**).

0 °C - 60 °C Operating & storage temperature, non-condensing.

Power

Single auto-sensing 100-240 VAC, 60-50 Hz, 180W Max PSU (**Desktop & Rack**).

Optional Dual Hot-Swap 110-240VAC, 50-60Hz 300W Max PSU (**Rack**).

Maximum power draw for **Total Recall Desktop & Rack** is 80W.

Telephony Interface

Analog 2-Wire POTS, FSKR, DTMF.

Voice Processing

HQVQ (8:1) Compression. WAV (16 bit, 8 KHz) & MP3 Export.

Onboard Storage Capacity

Most recent 350,000 calls or 60,000 recording hours, whichever is reached first.

Channel Capacity

24 Simultaneous Channels (**Desktop**).

72 Simultaneous Channels (**Rack**).

Recording Trigger

Off-Hook (6 different voltage levels), VOX (6 different volume levels), On-Demand (via DTMF code or PC Software).

Call Monitoring

Real-time monitoring via onboard speaker & control panel, or via Remote Manager and LAN/WAN/VPN/56k Dialup connection.

Search & Replay Controls

Via onboard speaker & control panel, or via Remote Manager embedded player & PC speakers. Start, stop, fast-forward, rewind & pause controls.

Archive Media

CD-R, DVD+RW standard. Optional Blu-Ray (BD-RE) archiving on **TR Desktop** and **TR Rack**.

Network Attached Storage (NFS v2/3, CIFS/SMB) optional on **TR Rack** only.

Networking

One 100Mb Ethernet port, Single RS232 port (for modem connection). Network Time Synchronization via NTP.

Optional TCP/IP Alarms via SNMP, and Call Detail Record interface (**TR Rack**).



Limited Products Warranty

18. ComsecTR Limited Products Warranty

18.1. Our Standard Limited Warranty Period

ComsecTR warrants that Total Recall (the “Products”) conforms in all material respects to the end user documentation provided with the Products, and that the hardware components of the Products will be free from defects in materials and workmanship for a period of **13 months after the system has been shipped from the ComsecTR manufacturing facility.**

18.2. Exception For Sales Arising From Stock-Carrying Distributors/Dealers

On average, Total Recall systems are installed within 1 month of being shipped from the factory, providing end users with a minimum of 12 months warranty coverage. However, as some ComsecTR resellers carry stock this may not always be the case.

In situations where a Total Recall system has been purchased from a stock-carrying Reseller or Distributor, ComsecTR warrants that Total Recall (the “Products”) conforms in all material respects to the end user documentation provided with the Products, and that the hardware components of the Products will be free from defects in materials and workmanship for a period of **12 months after the system has been shipped from the stock-carrying Reseller or Distributor.**

Please confirm your applicable limited warranty period with the company from which you purchased the Total Recall system. ComsecTR will assume that the period set out in **section 18.1** of this limited product warranty applies unless demonstrated otherwise.

18.3. Limitations of This Warranty

This limited warranty does not cover the results of accidents (including unusual physical or electrical stress), abuse, neglect, vandalism, acts of God, usage contrary to handling or operating instructions supplied by ComsecTR or repair or modification by anyone other than ComsecTR or an expressly authorized Total Recall service agent.

18.4. Handling of Faulty Parts

Please note that any faulty components replaced under the terms of this product warranty must be kept by the authorized servicing agent for verification, up to a maximum period of 12 months. If the servicing agent is unable to provide the faulty parts for which warranty replacements have been



provided, then the servicing agent will be required to pay to ComsecTR the value of the replacement parts, as determined by ComsecTR.

18.5. ComsecTR Record Keeping

Please note that all Total Recall serial numbers, and the serial numbers of internal components will be logged by ComsecTR, effective the date of shipment. The serial numbers of any replacement parts will also be logged by ComsecTR.

19. Warranty Claims and Procedure

19.1. Who to Contact

If there is reason to believe that Products do not conform to the warranty set forth in Section 18.1, the affected party should notify **the company from which the Product was purchased**¹ in writing of such non-conformance, no later than ten (10) days after the end of the Warranty Period for those Products, and shall provide the following details:

1. The serial number of the affected unit(s), and;
2. Details of the non-conformance, with as much specific detail as possible.

Additional details of the non-conformance may be required as the authorized service agent or ComsecTR reasonably requests.

19.2. What Procedure Will Be Followed?

The company that you purchased the system from will, if authorized, provide the required service and/or organize the required replacement parts. If not authorized to provide this service, the company that you purchased the system from will elevate your service request to an authorized service agent. The authorized service agent may elect to further elevate the problem to ComsecTR if required. This will occur in accordance with ComsecTR's standard procedures.

The user will be required to pay for the freight to an authorized servicing agent or ComsecTR if the Products need to be returned for servicing. The authorized servicing agent or ComsecTR will pay for the freight back to the customer if the goods are deemed to fail to conform to this warranty.

19.3. What Services Will Be Performed?

If Products are deemed to **fail to conform** to this warranty by an authorized servicing agent or ComsecTR, the sole remedy shall be, at the authorized servicing agent's or ComsecTR's option and expense:

1. The repair or replacement of the faulty component(s), and;
2. Return of the Products within fourteen (14) days after the authorized servicing agent receives the non-conforming Total Recall system. If

¹ If the product(s) were purchased from ComsecTR directly, then ComsecTR would be the first point of contact. However, if the product(s) were purchased via an intermediary company, then your first point of contact would be that intermediary company.



the system needs to be returned to ComsecTR, an additional period of 14 days from the receipt of the unit at ComsecTR will be applicable.

*Please Note: If ComsecTR or the Authorized Servicing Agent determines that returned Products **do** conform to this warranty, then the Products will be returned at the requesting party's expense and risk.*

19.4. Important Notice: Sole & Exclusive Remedy

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19.5. Disclaimer of Warranties

19.5.1. Important Notice: Disclaimer of Warranties

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Should you have any questions concerning this CSLA, or if you desire to contact ComsecTR for any reason, please contact the ComsecTR reseller serving your country, or write to:

ComsecTR Pty Ltd
PO Box 572
Milsons Point, NSW 1565
Australia



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Version 3, 29 June 2007

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