



## RBR 2600 Series Recorder Features

### General

Feature	Yes/No/Comment	Description
Available in a variety of Chassis.	Yes	Available as a 2U rack-mount VoIP-only recorder (RBR2620 voiplog) or a 6U rack-mount VoIP and other telephony recorder (RBR2630). These chassis are proven reliable Industrial PCs and come complete with all software and are ready-configured to plug and play in customer's premises.
Available as Software-Only.	Yes	Available to our resellers as Software-only (The RBR2600 CD Edition) for integration onto their own servers. This significantly reduces the cost giving competitive advantage.
All recording features available in one box.	Yes	The Call Storage, Database, Web Server and removable archives are all fitted in a single server. There is no need for separate Database Server or Web Server. This gives a high-density solution which is further enhanced by our high channel count per box – see below.
Operating System	Microsoft Windows 2000 Professional.	Can also run on Windows XP Professional, Windows 2000 Server and Windows 2003 Server all on the NTFS file system.
Database	Embedded database	The recorder uses a high performance, very resilient, embedded database called Faircom CTree. Using this database allows the database to exist on the same platform as the rest of the recorder and also store virtually unlimited numbers of calls and search them in seconds.
Maintenance requirements	None	The recorder requires no maintenance – the database does not require periodic compaction, like some SQL Server databases, and the call store is designed in such a way that it never requires defragmentation and does not degrade in performance with time unlike recorders that store calls as WAV files.
Small footprint	Yes	The recorder requires only COTS hardware. The call store can be based on ATAPI (IDE) hard drives, the memory requirements are low (we can run with as little as 256MB of RAM) and we only require a single CPU even at the top of our capacity requirements. Compare this to the requirements of one of our competitors who require Quad Xeon processors and 4GB of RAM to record just 100 VoIP calls.
Scalability	1 to 512 channels	The recorder software can be used for anything from a single channel VoIP recorder to a 512 channel PCM32 recorder. As a VoIP recorder it can scale from 1 to 200 simultaneously recording channels without the need to add or change the hardware, just adding licenses is all that is required.



## RBR 2600 Series Recorder Features

### Connectivity and Recording

Feature	Yes/No/Comment	Description
VoIP	Yes	<p>On our standard chassis we record up to 200 channels of VoIP. We support Cisco, 3Com, Mitel, Avaya, Siemens and Alcatel as well as SIP. Subject to suitable hardware VoIP recording can occur concurrently with non-VoIP recording on the same recorder allowing for migration to VoIP with a minimum of re-training and future investment.</p> <p>The platforms supplied by Red Box Recorders have 4 Network Interfaces to ease integration into customer's networks.</p>
ISDN	Yes	We record E1, T1 and BRI ISDN. Up to 480 channels of E1 can be recorded on one RBR2630 recorder giving a high density 6U solution.
Digital extensions	Yes	Almost all makes of digital extensions can be recorded – from 8 to 192 in a single RBR2630 recorder.
Analogue	Yes	We record analogue using high impedance taps – from 4 to 192 in a single RBR2630 recorder.
VoIP Radio	Yes	We record up to 200 simultaneous VoIP radio channels and offer our MURAL range of Search and Replay applications to find and sensibly replay these calls.
Cisco VoIP	Yes	We record both SKINNY and SIP Cisco handsets. When using Cisco XML capable handsets we can also support control of Recording, Live Monitoring and Replay to Phone controlled by the handset. We support Cisco Extension Mobility, DHCP configuration and shared lines.
3Com VoIP	Yes	All 3Com handsets are supported both using 3Com proprietary protocols and SIP. We can record all types of 3Com handset on both NBX and VCX platforms using Ethernet, IP-on-the-fly and IP settings. Handset detection and registration is as simple as toggling the hook switch.
Record On Demand	Yes	<p>Using a small desktop application the users can turn recording on or off or use a “push to keep” or “push to discard” method. Each call that is kept contains the whole call from start to end and the discarded calls are discarded in their entirety.</p> <p>Users of Cisco XML capable handsets can control recording from the handset.</p>
Aged Call Deletion	Yes	The recorder can be configured to delete calls that were recorded more than n days ago. This feature might be used to limit the liability of a site.



## RBR 2600 Series Recorder Features

### Monitoring & Maintenance Features

Feature	Yes/No/Comment	Description
SNMP	Yes	We support SNMP both to have some Key Performance Indicators monitored and also to generate TRAP events. A MIB file is available.
Remote Monitoring	Yes	As an alternative to SNMP we have an application that runs in the service tray of a System Administrators PC and alerts whenever the recorder requires attention.
Event logging	Yes	All configuration events, logins and login attempts, replay and monitoring operations and alerts / alarms are logged.
Diagnostics	Yes	It is possible to export a full set of diagnostics from the recorder which can be sent to Red Box Recorders for analysis.
Configuration logging	Yes	A full set of configuration data can be exported from the recorder which can be used to produce an identically configured recorder for supplication or recovery purposes.
Statistics	Yes	A number of statistics can be generated by the recorder including number of calls recorded and VoIP packets processed. These can be displayed as an historic trail by the minute, hour, day or week.
Upgrading	Yes	The recorder can be upgraded using a browser without the need to access the recorders desktop. Simply browsing to the upgrade file and submitting the upgrade is all that is required.



## RBR 2600 Series Recorder Features

### Storage

Feature	Yes/No/Comment	Description
Call Store	Local Hard Drive	The recorder Call Store is held on a local Hard Drive for speed. This can be considered to be the Rapid Access Store. The Call Store can be any size, limited only by the size of the disk partition. In the standard RBR2630, the Call Store is around 105GB giving over 27,000 hours of recording available for instant replay. An optional 450GB Call Store can give close to 120,000 hours of on-line recordings. <i>A full matrix of capacities at various supported compression codecs is available from Red Box Recorders.</i>
Removable Archives	Yes, DVD-RAM and Tape	If calls are required to be archived, we offer two forms of removable archive; both with an archive life of up to 30 years. DVD-RAM is suitable for low-end recorders and VXA-2 Tape is ideally suitable for large channel count / high duty cycle recorders where unattended operation of the archives is required for longer periods. Both have good price per Gigabyte performance. Our archiving method out-performs most of our competitors who use backup methods because our call retrieval times are considerably less and we can offer more resilience to failure by writing to the archives very near to the time that the recordings are made and also being able to recover data records as well as voice from incomplete or partially corrupt archives.
Networked Storage	Yes	In order to extend the near-line capacity of the recorder, offer greater system resilience and disaster recovery functionality we support the use of Networked Storage devices. Writing to the Networked Storage can be near real-time or scheduled to occur at specific times as needed. In the event of total recorder loss, a recorder's call store and database can be recovered from the Networked Storage.
Label Printing	Yes	This option is used to print labels for the removable archives.
Media Library	Yes	The recorder retains a list of all the removable media that it has used and the calls that were put on them so that historic media can be easily located.

### Search and Replay

Feature	Yes/No/Comment	Description
Browser-based search	Yes	Searches can be configured and performed using a web browser. The user can create searches and save them. The search results can be configured to display data in a form



## RBR 2600 Series Recorder Features

		and order preferred by the user. Calls and details of the calls can be exported directly from the search results table.
Web Replay	Yes	<p>Replay can be initiated by selecting a call in the search results display. The Web Replay application has the following features:</p> <ul style="list-style-type: none"> <li>• Loop Replay</li> <li>• Pitch Corrected Variable Speed Replay</li> <li>• Skip Over Silence</li> <li>• Skip forwards / backwards / pause (VCR controls)</li> <li>• Stereo Replay (VoIP Calls Only)</li> <li>• Individual Channel Mute (VoIP Only)</li> <li>• Spoken Time Replay</li> <li>• Automatic Volume Control</li> <li>• Super Boost for very quiet calls</li> <li>• Export as a WAV file</li> <li>• Email call and call details</li> <li>• Call Annotation – adding notes to a call.</li> <li>• Call Authentication (R7 or later)</li> </ul>
MURAL Visualizer	MURAL family member	<p>This application has the same full search and replay capabilities as the Browser search and Web Replay but also:</p> <ul style="list-style-type: none"> <li>• Performs replay of up to 8 calls simultaneously</li> <li>• Shows calls as a graphical timeline or list view</li> <li>• Create and save complete scenarios</li> <li>• Transparently search across multiple recorders</li> <li>• Create very complicated searches</li> </ul> <p>It is ideal for sites with many recorders or sites recording VOX or radio traffic where the call duration is short and frequency of calls is high.</p>
MURAL Monitor	MURAL family member	The MURAL Monitor allows for the creation of groups of record channels and displays the live status of them, keeping Call Details for each call. With a single mouse click a call can be listened to live or a Last Call Search initiated.
Live Acquire	Yes	Our name for Input Monitoring, this feature allows the near real time listening in to calls that are in progress and being recorded. This can be initiated from the browser or using the MURAL Monitor application.
Replay to Phone	Yes	Using a separate application running off the recorder it is possible to configure the recorder to make a call and replay to a phone. Replay can be controlled either using the



## RBR 2600 Series Recorder Features

		browser or directly from the phone keypad.
--	--	--

### API

Feature	Yes/No/Comment	Description
Call Annotation / Tagging	Yes	Calls can be labelled with user supplied data. This can be up to 260 characters in length.
Event feed	Yes	The recorder can provide an event feed optionally containing Recording Start and Stop events, Channel Naming and Call Archiving events. This can be used to synchronise or populate an external database or drive a monitoring application.
General		The API can perform almost any operation possible using the Browser User Interface and so can be used to create user applications or integrations

### Security

Feature	Yes/No/Comment	Description
Login	Yes	All features of the recorder require that the user is logged in.
User privilege	Yes	Users can be created that have limited privilege, for example ones that can only replay calls and not change the recorders configuration and further restrictions can be placed upon which calls they are allowed to find and replay.
Logging	Yes	Most operations are logged, such as configuration changes and replay or Live Acquire operations.
Operating System	Can work through firewall.	The recorder does not require that sharing access is enabled and to use the recorder for basic search and replay only Port 80 (http) is used.
Voice data security	Yes	All voice data, whether in the Call Store or on an Archive is obfuscated such that it cannot simply be copied and replayed. We do not store each call as a WAV file.

Red Box Recorders Limited  
 The Coach House  
 Tollerton Hall  
 Tollerton,  
 Nottingham  
 NG12 4GQ, UK

 +44 (0) 115 937 7100  
 +44 (0) 115 937 7494  
 info@redboxrecorders.com  
 www.redboxrecorders.com



## RBR 2600 Series Recorder Features

All information contained herein is Copyright © Red Box Recorders Limited 2005 E&OE