

Racing Displays
Concepts and Ideas
Version 1.1



Welcome!

This document is a discussion paper on the use of the Video Sub System to display the dividends and results for racing environment. Several prototype screens are also presented.

This package and documentation is only in the very early design and discussion phase and as such may not be entirely complete or there may be areas to be completed later.

At Rocktree we're dedicated to delivering working, functional software. This extends to our documentation. Should you find an error or inconsistency please let us know.

Peter J. Baum
Director, Rocktree Pty. Ltd.

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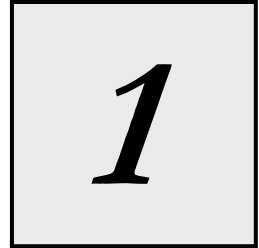
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Rocktree Pty. Ltd. • P.O. Box 1454 • Lane Cove, NSW 2066 • Australia
Phone: Int + 612 9420-2030, Fax: Int + 612 9420-2060
Web: www.videosubsystem.com, Email: info@videosubsystem.com

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INTRODUCTION

Rocktree Pty. Ltd. has been very successful in the development and supply of display systems for the game of Keno and stock market information. Rocktree is now exploring other applications of this easily configurable, multi monitor and proven software platform. This includes (but is not limited to) racing and sports odds, bingo, etc.

Rocktree is in the software business and specializes in graphical display systems. This document is presented as an introduction of what could be done and to demonstrate the capabilities of Rocktree and its associates.

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A FRESH APPROACH

Traditionally totalizator and racing display screens have all looked much the same. Venue name and time to race start at the top of the screen, then the details displayed down the page with an alternating background colour on each line to increase readability.

PICTON-RCE	Race 3	5 Min
Grey and Gold	Darryl McLellan	16
Consolidator	Justin Sheehan	8.5
Aquiver	Rod Quinn	26
Fashion News	James Innes	16
Bold Zapher (NZ)	Hugh Bowman(a)	71
LA Zoffany	Danny Beasley	31
Mabuz (NZ)	Brian York	5.0
D'Cash	Darren Beadman	8.0
I Realise	Larry Cassidy	2.4
Mr. Kabarla	Glen Boss	21
Gerastar	Eddie Cassar	301
		Win 987654

There may be a very good reason why the displays vary little and that is that this format works very well.

This document attempts to present ideas on how the screens could retain the same information but change the layout (some radically) to present a new and modern approach to the game.

Where should the important information go? Just what is important information?

There may a transitional phase where the old style, traditional screen is used for the odds and the new style for the information channel. This could occur for a period of time to gauge customer acceptance before slowly phasing in the new odds screens. During this time market research could also be performed.

Below are samples of different screen layouts.

No.	Name	Jockey	Weight	\$Win	\$Place
1	Beleura Storm (2)	H Bowman A	56	35.00	22.40
2	Crimewave (9)	G Eades	56	12.40	2.30
3	Dailosai (1)	C Brown	55.5	SCR	SCR
4	Doolin (5)	P Falvey	55.5	65.70	15.60
5	Gates (3)	D Beasley	55.5	5.20	1.90
6	Klocco (7)	C Brown	55.5	11.30	3.80
7	Mighty Mickey (14)	D Oliver	55.5	6.10	1.30
8	Serial Thriller (13)	M Newman A	55.5	112.70	32.60
9	Sphere (12)	L Beasley	55.5	3.00	2.10
10	Trafford (8)	G Buckley	55.5	13.30	2.90
11	My Lucinda (11)	C Munce	54	34.30	10.20
12	Longwood (10)	D Beadman	53.5	11.50	4.40
13	Sagitta (4)	D Spriggs	53.5	30.90	13.80
14	Sky Belle (6)	B Stanley	53.5	23.90	5.40
Pool Totals				921.00	626.00
Quinella Pool				124.00	
Trifecta Pool				238.00	

Rosehill Race 5 in 12:43

No.	Runner	Jockey	Odds
1	Grey and Gold	Darryl McLellan	16
2	Consolidator	Justin Sheehan	8.5
3	Aquiver	Rod Quinn	26
4	Fashion News	James Innes	16
5	Bold Zapher (NZ)	Hugh Bowman(a)	71
6	LA Zoffany	Danny Beasley	31
7	Mabuz (NZ)	Brian York	5.0
8	D'Cash	Darren Beadman	8.0
9	I Realise	Larry Cassidy	2.4
10	Mr. Kabarla	Glen Boss	21
11	Gerastar	Eddie Cassar	301
12	KingWin	Corey Brown	41
13	Kitusa	Jim Cassidy	31
14	Proud Harvest	Chris Munce	101
15	Uncle Nugget(NZ)	Kerrin McEvoy	301

Total Win \$9,876,543 Total Place \$1,234,567

NEWCASTLE		RACE 1	IN 3:52	
No.	Name	Jockey	Win	Place
1.	Beleura Storm	H Bowman A		
2.	Crimewave	G Eades		
3.	Dailosai	C Brown		
4.	Doolin	P Falvey		

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SAMPLE SCREENS

The following screens have been created as a showcase of what could be achieved by removing any preconceived ideas and historical shackles when designing this new system.

General

The main information would be 'framed'. That is the header lines, meeting name, race number would be resident in the surrounding graphic.

The frames would be colour coded and all screens containing information for that meeting would use the same colour frame.

By colour coding the frames, a suitable choice of background and text colours can be used for the lines to display the horse name and odd information.

	Runner	Jockey	odds
MELBOURNE	Grey and Gold	Darryl McLellan	16
	Consolidator	Justin Sheehan	8.5
	Aquiver	Rod Quinn	26
	Fashion News	James Innes	16
	Bold Zapher (NZ)	Hugh Bowman(a)	71
	LA Zoffany	Danny Beasley	31
	Mabuz (NZ)	Brian York	5.0
	D'Cash	Darren Beadman	8.0
	I Realise	Larry Cassidy	2.4
	Mr. Kabarla	Glen Boss	21
	Gerastar	Eddie Cassar	301
	KingWin	Corey Brown	41
	Kitusa	Jim Cassidy	31
	Proud Harvest	Chris Munce	101
Uncle Nugget(NZ)	Kerrin McEvoy	301	

0:41 total Price \$9,876,543 total Price \$1,234,567

	Runner	Jockey	odds
SYDNEY	Grey and Gold	Darryl McLellan	16
	Consolidator	Justin Sheehan	8.5
	Aquiver	Rod Quinn	26
	Fashion News	James Innes	16
	Bold Zapher (NZ)	Hugh Bowman(a)	71
	LA Zoffany	Danny Beasley	31
	Mabuz (NZ)	Brian York	5.0
	D'Cash	Darren Beadman	8.0
	I Realise	Larry Cassidy	2.4
	Mr. Kabarla	Glen Boss	21
	Gerastar	Eddie Cassar	301
	KingWin	Corey Brown	41
	Kitusa	Jim Cassidy	31
	Proud Harvest	Chris Munce	101
Uncle Nugget(NZ)	Kerrin McEvoy	301	

0:41 total Price \$9,876,543 total Price \$1,234,567

	Runner	Jockey	odds
ADELAIDE	Grey and Gold	Darryl McLellan	16
	Consolidator	Justin Sheehan	8.5
	Aquiver	Rod Quinn	26
	Fashion News	James Innes	16
	Bold Zapher (NZ)	Hugh Bowman(a)	71
	LA Zoffany	Danny Beasley	31
	Mabuz (NZ)	Brian York	5.0
	D'Cash	Darren Beadman	8.0
	I Realise	Larry Cassidy	2.4
	Mr. Kabarla	Glen Boss	21
	Gerastar	Eddie Cassar	301
	KingWin	Corey Brown	41
	Kitusa	Jim Cassidy	31
	Proud Harvest	Chris Munce	101
Uncle Nugget(NZ)	Kerrin McEvoy	301	

0:41 total Price \$9,876,543 total Price \$1,234,567

Header Lines

Header information would be created in a non-confronting colour as they are secondary in nature and once the punters are familiar with the screens, this information is generally not referred to.



Totals

The win and place pool totals could also be placed into framework. These could be made to odometer providing additional customer entertainment.



Meeting Name

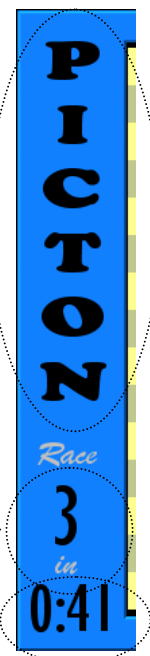
The meeting name would be in a fixed position on the screen and be related to the screen (e.g. Sydney = Blue, Melbourne = Green, etc. An established convention must already exist for such a scheme.

Race Number

The race number would be large and in the same position on each screen.

Countdown Clock

The time to the next race would be available on all screens and count down. This area could also reflect the status of the race as it changed (e.g. "Closed", "Results", "Correct Weight", etc).



Win Odds

It is envisaged for every race meeting would have at least one channel dedicated to display this information. It is designed such that it will display the approximate odds for the next race to jump.

Once the race has been run and won, this same screen can be used to display the finish order and dividend information, however it would be better to have a second channel for the meeting and have the results shown there so the main channel can continue to display approximate odds for the next race to jump.

The actual odds amount can be displayed in the format currently known to your punters.

P I C T U R E		<i>No.</i>	<i>Runner</i>	<i>Jockey</i>	<i>Odds</i>
		<i>Race</i>	3		
	<i>in</i>				
	1:24				
		1	Grey and Gold	Darryl McLellan	16
		2	Consolidator	Justin Sheehan	8.5
		3	Aquiver	Rod Quinn	26
		4	Fashion News	James Innes	16
		5	Bold Zapher (NZ)	Hugh Bowman(a)	71
		6	LA Zoffany	Danny Beasley	31
		7	Mabuz (NZ)	Brian York	5.0
		8	D'Cash	Darren Beadman	8.0
		9	I Realise	Larry Cassidy	2.4
		10	Mr. Kabarla	Glen Boss	21
		11	Gerastar	Eddie Cassar	301
		12	KingWin	Corey Brown	41
		13	Kitusa	Jim Cassidy	31
		14	Proud Harvest	Chris Munce	101
		15	Uncle Nugget(NZ)	Kerrin McEvoy	301
		<i>Total Win</i> \$4,334,098			<i>Total Place</i> \$334,164

Results

As well as providing the results in a clear and easy to read format, these screens could be further enhanced by the addition of a picture of the finish line or even better, a video of the horses as they cross the line.

	Win	Place
1st (7) Mabuz	4.80	2.00
2nd (8) D'Cash		2.30
3rd (4) Fashion News		4.40
Quinella	19.60	
Special Div	4.00	
Exacta	37.70	
Trifecta	475.10	

PITCHON
Race 3
Results

Information Channel

It is proposed that a second channel be setup for each meeting. This would become the information and promotion channel for race and other related information.

Many any screens described below could be cycled through in the time between races. As one race finishes the main channel could revert to displaying approximate dividends for the next race and the secondary channel could be used to display the unofficial results and then dividends.

Race Replay

If made available, the footage of the just completed could be sent to these screens as part of the normal cycle. This would only have any real relevance just after the race has been run.

Jockey's Names and Colours

A very visual screen could be used to display the horse name, jockey name, horse colouration, saddle cloth colour, and jockeys colours.

Only about four (4) runners could be displayed at one time and it is envisaged that the details would be displayed for a period of time, scroll upwards and display the next horse.



Jackpot bet types

A screen could be created that displayed that pools using an odometer effect.

Tipsters picks

A screen could be constructed that displays the tipsters picks for the next or a featured race.

P I C T O N <i>Race</i> 3 <i>in</i> 1:24	 Ray Thomas	1. Fashion News 2. Kingwin 3. D'Cash
	 Eden Harrington	1. D'Cash 2. I Realise 3. Fashion News
	 Melissa Hoyer	1. D'Cash 2. Fashion News 3. Mabuz
	 Ron Dufficy	1. Mabuz 2. Fashion News 3. D'Cash
		<i>Total Win \$4,333,252 Total Place \$333,236</i>

Latest News

Headlines and general racing news could be broadcast to the screens.

Community Service announcements

The system can also be used to broadcast general and community service announcements (“Bet with your head and not over it”).

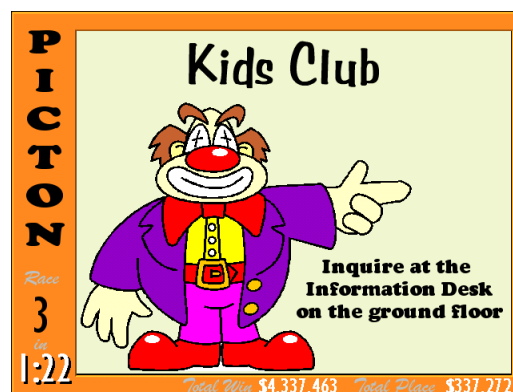
Track layout, details & Animation

The track condition, weather and distance of the next race can be displayed on the secondary channel. This could include a map of the track detailing the starting position and an animation of the race coverage.



Promotion of track facilities

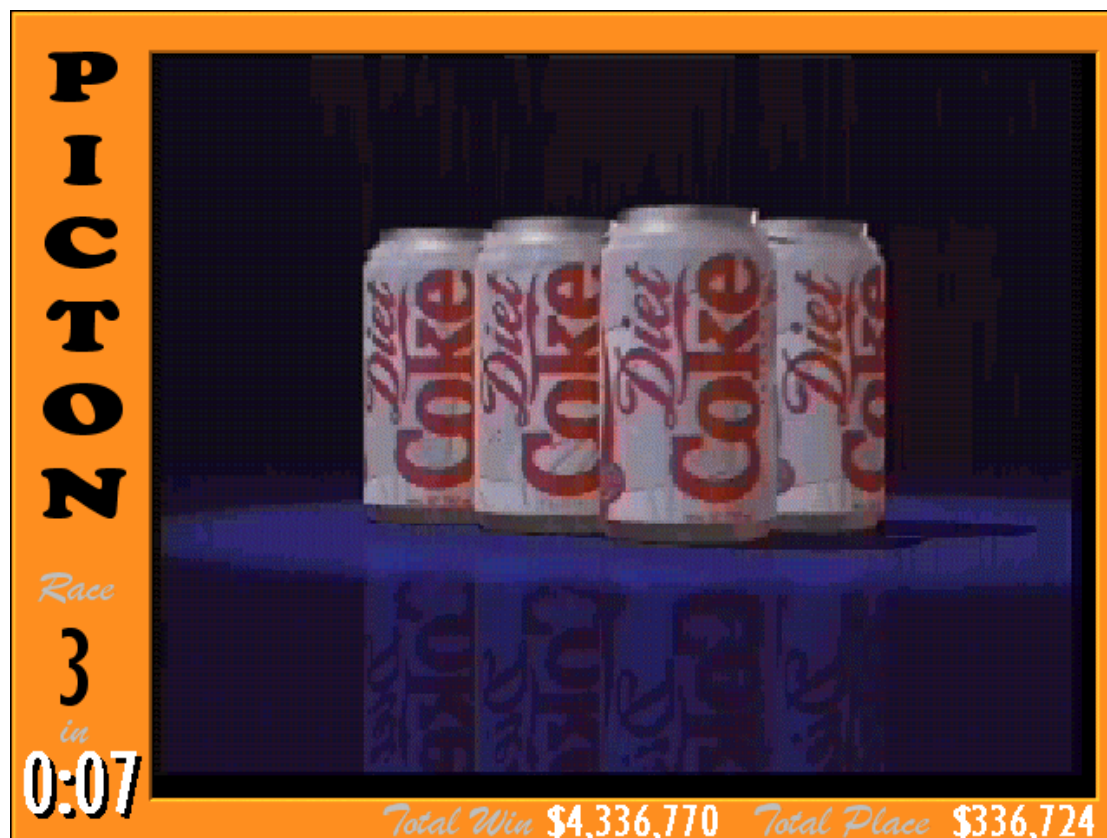
The information channel can also be used to promote the facilities at the track such as bars and restaurants and other facilities such as children's group, wheelchair access, site map, etc.



Advertising

The time between races can also be used to run advertisements. The system has the capability of playing full screen video and any commercial may be digitised and played.

This feature also has the capability of providing a second source of revenue for the track or advertising for major sponsors or the sponsor of the next race.



Favorites

The first few favorites (in order of odds) could be displayed on the secondary channel.

Scratching's

A list of the days scratching's could be displayed on the secondary channel.

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DESIGN CONCEPTS

The current on track displays generally use a scheme of two alternating colours and a different colour (generally a solid colour like white) for the header and details lines.

It is planned to differentiate the new system by starting from scratch without any preconceived notions of what a display should look like.

The result is a fresh approach that could radically modernize the style and type of information displayed to the betting public.

There are several questions and factors that must be taken into account when designing a new system. These are:

Target Audience

Target Audience, what is it? The demographic and age group.

Screen Layout

As a new screen layout is being proposed we need to define what is the essential elements and where they go. Such a the what belongs in the Header (Race Number, Time to next race, Track Name, Bet type, etc).

Where should the pool totals go?

Can any information (Track Name) be offloaded to fixed screen surrounds?

What are maximum field lengths for such things as track name, horse name, jockey name, etc.?

Where should the important information go? Just what is important information?

How are the screens viewed? Generally looking up? And if so how to make best use of this fact.

Fonts

What are the best fonts to use? Which fonts are more easily readable at a distance?

Field Attributes

Flashing? What fields flash? When and for how long? Used to indicate such things as favorites, scratching, fast movers, etc.

Colours

What colour combinations to use? Alternate lines, text colour.

There must already be established rules for colour coding venue information.

Type of information

The use of a new display system allows for new types of information to be displays such as Pull through messages and odometers for pool totals for jackpot amounts.

Use of Animation

Screen real estate is at a premium although there is scope to add a little bit of excitement by the judicious use of animation. This could include:

- A image of a horse occasionally running across the header area of the screen
- An image of a horse (in correct colour?) running across the line as a horse becomes the favourite.
- When a horse is scratched late, an animation could be played.

Sounds

The system will also have the ability to generate sounds. These can be scheduled to play when certain events occur such as:

- Race Close
- Late Scratching
- Correct Weight
- Final Dividends
- News Broadcast, etc.

The use of this feature may not be adopted due to the large amount of noise already on-course but could be selectively turned on for off track or high value room use.

Next Race Details

Consideration to be given to dedicate one screen to display the information for the next race to jump at a venue. This would remain until the results are finalised or a set period of time after the running of the race.

Previous Race Results

Clear and large. Room for all bet types decided on that race. Possibility to include a picture of the photo finish.

Screen Allocation

Assume four (4) channels per box.

The use of a character

A character (leprechaun, talking horse, jockey, etc) could be created and used throughout the information screens to add some animation and a sense of fun to the system.

Multilingual

Any software and systems should be designed such that they can be easily converted to another language.

HARDWARE CONSIDERATIONS

The system will run on a standard PC but there are a few other areas to be considered. These are:

Screen Resolution

Tests will have to be performed to find the option screen resolution prior to conversion to PAL format. This will either be

- 640 x 480
- 800 x 600

What method of video distribution will be used? Can the video distribution system accept a VGA or RGB input (ideal)?

The method for VGA to TV conversion will need to be investigated. There are many PC video cards now on the market that offers a video out port that provide a high quality signal.

Number of Channels

The PC mother board should be chosen wisely. Many models now offer built in Sound, Ethernet, AGP and six (6) PCI slots.



<http://asia.aopen.com.tw/products/mb/AX4CMaxII.htm>

An alternative is to use a PCI expansion boxes to house the video cards. With the availability of the motherboards (as shown above) this should not be necessary.



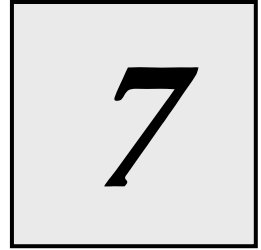


HOST CONSIDERATIONS

There is a large amount and variety of the information capable of being displayed but there is a dependence of the host system to supply the information and to support such things as

- Screen Control
- Channel Assignment
- Colour Control
- Down Line Load
- Message format and content

If a video replay of the race is to be shown or still images of such things as the photo finish are to be combined with the result screen, then these will need to be made available of a server somewhere (not necessary the host system).



REFERENCES

<http://graphicdesign.about.com/library/color/blcolor.htm>

<http://www.sajc.com.au/> (track details)

<http://www.betting-ring.com/australia.html> Links to all TAB's and others

<http://www.racenet.com.au/flinks/betting.asp>

<http://www.futuretech.vuurwerk.nl/resvid.html>

<http://www.aopen.com>