



Client User Manual

Smart Video Replay, Inc.
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Before we start...

What we expect from a Smart Video Replay Client user:

- *You have an understanding of Football.*

Before you read this manual, here are a few things you should know:

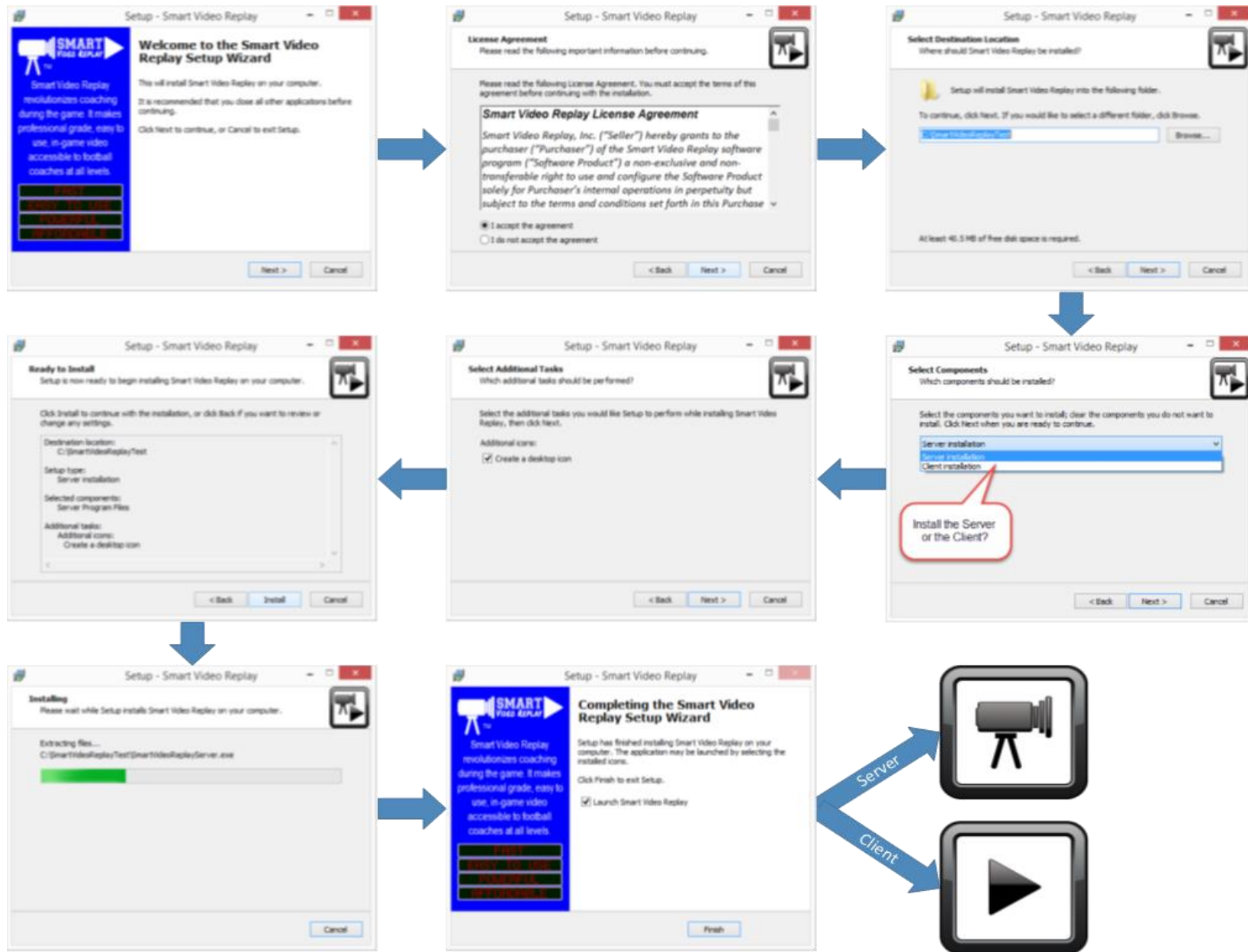
- *When you see a (1) or other number, we are more than likely referencing a red circle with the same number on a picture in the manual.*
- *We purposely insert page breaks (leaving lots of white space) where we feel it is necessary to keep text and graphics together on the same page.*
- *“Client” in this manual refers to the Smart Video Replay Client software program running on a computer or tablet.*
- *“Server” in this manual refers to the Smart Video Replay Server software program installed and running on a computer or tablet.*

In this manual, we will go over the Installation, configuration and operation of the Smart Video Replay Client. In some sections of the manual we reference the Smart Video Replay Server software application. The only thing you need to know about the Smart Video Replay Server is 1) it needs to be running and 2) your client tablet/computer (or whatever you are running the software on) needs to be connected to the same network either via Wi-Fi or a network cable.

Overview



Installing Smart Video Replay...



Starting the Client



After the successful installation of the Smart Video Replay Client, there will be an icon on your Windows Desktop. Double Click the Smart Video Replay Client icon to start the application. The Smart Video Replay Client screen will appear.

The image shows the Smart Video Replay Client application window. The window has a menu bar with "File" and "About". The main area is divided into two sections: "SideLine Camera" and "EndZone Camera". The "SideLine Camera" section contains a table with the following data:

PACE on		Data Tags
Down	To Go	From The
Gain/Loss	To The	
Qtr	PACE	MILTON

Below the table is a large black area labeled "Play List Record". At the bottom of the window, there is a status bar that says "<Filter Off>".

Callouts point to various controls:

- Exit the Program:** A red 'X' button in the top-left corner.
- Go to the first play:** A button with a square and an arrow pointing to the top-right.
- Configure, Set or Turn Off the Filter:** A button with a funnel icon and a red 'X', labeled "Off".
- Connect to the Server:** A button with a server rack icon, labeled "Server".
- Settings:** A button with a gear icon, labeled "Settings".
- Refresh:** A button with a circular arrow icon, labeled "Refresh".
- Go to the first play:** A button with a square and an arrow pointing to the top-right.
- Page up through the play list:** A button with a triangle pointing up.
- Move back one play:** A button with a triangle pointing up.
- Move forward one play:** A button with a triangle pointing down.
- Page down through the play list:** A button with a triangle pointing down.
- Go to the last play:** A button with a square and an arrow pointing to the bottom-right.

Configuring the Smart Video Replay Client

Pressing the Settings button brings up the Smart Video Replay Client Settings.

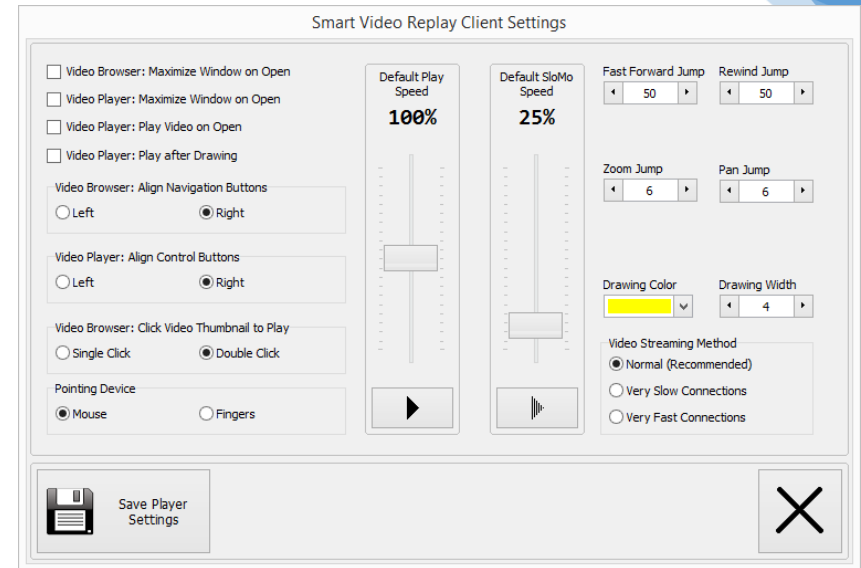
Video Browser: Maximize Window on Open. The client will be full screen when opened.

Video Player: Maximize Window on Open. The video player will be full screen when opened.

Video Player: Play Video on Open. The video will start playing automatically.

Video Player: Rewind to Start after Play. The video will go back to the beginning after finished playing.

Video Player: Play after Drawing. Start playing the video automatically after finishing a drawing.



Video Browser: Align Navigation Buttons – what side of the screen should the video browser buttons be on?

Video Browser: Click Video to Play. Single Click or Double Click to play a video?

Pointing Device optimized for Mouse or Fingers. When fingers, you can change the video tags in a video and the scoreboard values with finger flicks. If you are using a tablet device without a keyboard, you want Fingers selected so you can “flick” your finger up or down to change the scoreboard values when editing the Scoreboard data for a play video.

Default Play Speed: In the player, there is a default play speed button. When you press it, what speed should the video be on?

Default SloMo (Slow Motion) Speed: In the player, there is a default slow motion button. When you press it, what speed should the video be on? Saves you from having to manually slow the video down to your preferred speed.

Fast Forward Jump – set how many frames to jump forward when you press the forward jump button in the player.

Rewind Jump – set how many frames to jump backwards when you press the rewind jump button in the player.

Zoom Jump – set how far should we zoom in on each zoom request? You can tweak so it meets your needs.

Pan Jump – set how far up, down, left, right should we move when you pan the video with the pan buttons.

Drawing Color – set the color of the drawing marker. **Drawing Width** – set how wide is the marker line.

Video Screaming Method – This sets the method for retrieving video from the server. If you have a very fast connection, select the Very Fast Connections as it streams the entire video from the server into the memory of the client and you can play the video from your client memory instead of over the wireless – which allows you full control of the video using the video track bar with no hesitation. The best way to know is simply to test each stream method to see what works best for your current setup (differs at each field). Try Very Fast, if it works, go for it... if not, try Normal, then Very Slow connections. Typically it will be Fast or Normal...

VERY IMPORTANT:

Codec Usage Recommendation for the Client: The Smart Video Replay Client is a 64bit application and for the video streaming method of Very Fast or Very Slow connections requires a 64 bit DirectShow (not required for Normal). For the client, we recommend you use the LAV Filters (a set of open-source Direct Show filters) that are free to download and use. For each client, install the LAV filters. Simply go to the website <https://github.com/Nevcairiel/LAVFilters/releases> and download and install the Latest Release. Once the LAV Filters are installed on your server computer, the Smart Video Replay Client will automatically select it for use when playing back in Very Fast or Very Slow video streaming method.

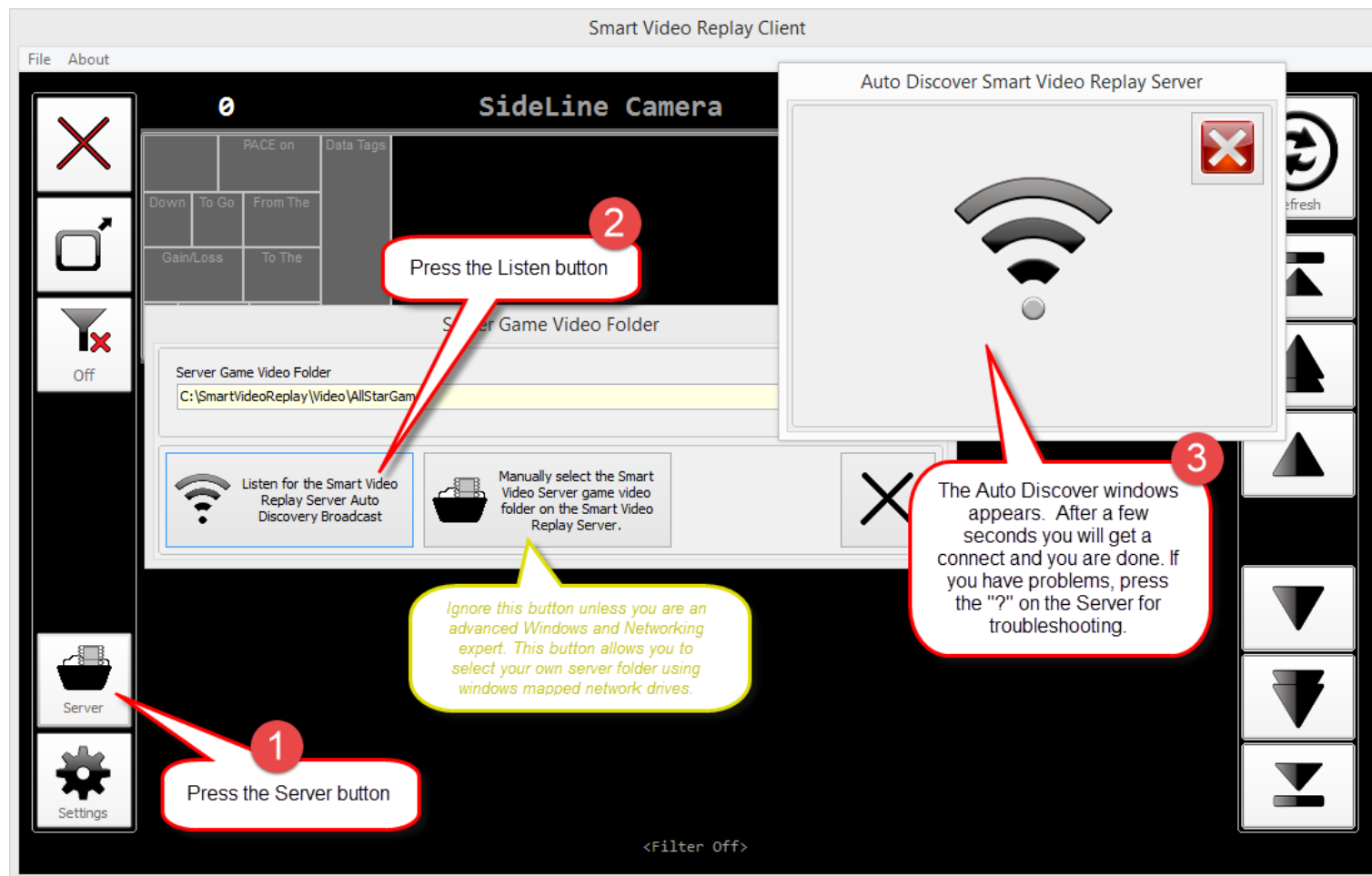
Connecting a Smart Video Replay Client to the Smart Video Replay Server is easy. First, make sure you connect the client to the wireless network that the Smart Video Replay Server computer is connected to (*and remember, you want to connect the Smart Video Replay Server to the wireless router with a network cable and not by Wi-Fi if possible – this ensures the video does not have to get transmitted over the wireless network twice – but you can if you are ok with the performance – we do that sometimes*).



On the Smart Video Replay Server, set the Game Video Folder, the Server Login and then Broadcast that information to the Clients.

Typically once you set up the Login name and Server, then the only change between games is the Game Video Folder.

On the Smart Video Replay Client, follow steps 1, 2 and 3. After a few seconds you should get the connect button. If you have problems, make sure the Client is connected to the wireless network (wireless or network cable) and your Server is connected with a network cable. Also, make sure your Login and Password are correctly entered on the Server. Still having problems, make sure your Server Game Video Folder actually exists (nobody deleted, renamed, etc.). If you cannot connect you have either 1) network issues or 2) incorrect configuration data. If you feel over your head, find someone with some computer & networking knowledge and ask them for help.



The Play List Browser Once you have connected to the server successfully, you can press the Refresh Button and any videos on the server will be listed in chronological order and assigned a sequence number. If the screen does not refresh and you get a message that you cannot connect to the server, you are either disconnected from the wireless network, out of range or you do not have a Smart Video Replay Server game video folder defined. Otherwise, you will see video. Remember, there may not be any video yet and if so you will see none. Here is an image of the screen you will see. In this case we have 199 plays (398 Videos!) in our play list. We can scroll between them or select any one of them to view. We can also filter the plays, but more on that later...

The screenshot shows the Smart Video Replay Client interface. The title bar reads "Smart Video Replay Client". The main area displays a list of plays, each with a sequence number and associated data. The interface is divided into two main columns: "SideLine Camera" and "EndZone Camera".

Callouts and UI Elements:

- Current Play Sequence Number:** Points to "191 / 199" at the top left.
- Total Plays:** Points to "199" at the top left.
- Filter Button:** Points to a button with a funnel icon and "Off" text.
- Play Sequence Number:** Points to "191" in the third row.
- Scoreboard Data for Play:** Points to the "191" in the third row.
- Video Tags assigned to Play:** Points to "PASS, LEFT, INCOMPLETE, BLITZ, SACK" in the third row.
- Video from Camera 1. Click (or Double Click) to View:** Points to the "SideLine Camera" video feed in the third row.
- Tap the space between both videos to view them at the same time:** Points to the space between the "SideLine Camera" and "EndZone Camera" video feeds in the third row.
- Video from Camera 2. Click (or Double Click) to View:** Points to the "EndZone Camera" video feed in the third row.
- Refresh the list of videos from the server:** Points to a circular arrow icon labeled "Refresh".
- Play Browser Navigation Buttons:** Points to a vertical stack of four arrow buttons (up, down, left, right).

Play List Data:

Sequence	Down	To Go	From The	Gain/Loss	To The	Qtr	PACE	MILTON	Data Tags
189	2	G	+10M	0	+10R	4	27	34	Blitz
190	1	G	+10R	1	+ 9R	4	27	34	RUN, PASS, LEFT
191	1	G	+ 9R	4	+ 5M	4	27	34	PASS, LEFT, INCOMPLETE, BLITZ, SACK

The Video Player

The screenshot shows the Smart Video Replay Player interface. At the top, a blue header bar displays the Play Sequence Number (191), SideLine Camera, Qtr (4), PACE on (OFFENSE), Down (1), To Go (6), From The (+ 9R), Gain/Loss (4), and To The (+ 5M). The main video frame shows a football game in progress. Below the video frame, there are several controls and annotations:

- Play Sequence Number:** 191
- SideLine Camera:** Qtr 4, PACE on OFFENSE, Down 1, To Go 6, From The + 9R, Gain/Loss 4, To The + 5M
- Go to end of video:** Button with a right arrow and a vertical bar.
- Jump forward (configure in settings):** Button with two right arrows.
- Start or Pause the video playback:** Button with a right arrow.
- Jump backwards (configure in settings):** Button with two left arrows.
- Go to start of video:** Button with a left arrow and a vertical bar.
- Exit:** Button with a red X.
- Minimize or Maximize Window:** Button with a square and an arrow.
- Current playback speed:** Slider set to 100%.
- Manually adjust the play back speed:** Slider bar.
- Set the video player speed for normal play set in Settings:** Button with a right arrow and the text "Normal".
- Set the video player to the default Slo Mo speed set in Settings:** Button with a right arrow and the text "Slow Mo".
- Previously saved video drawings for this play (button has count of videos saved):** Button with a drawing icon and the number 2.
- Video playback progress... you can move this around too:** Slider bar.
- Draw on the current video frame:** Button with a drawing icon.
- View / Modify Scoreboard data and Video Tags for play:** Button with a tag icon.
- Pan (move) around zoomed screen:** Button with a four-way arrow.
- Zoom In & Zoom Out (you can also touch video screen):** Buttons with minus and plus signs.
- Zoom to normal view:** Button with a square and an arrow.
- Video total time, playback progress and size:** Display showing 1.97MB and 00:08.

Playing Both Videos at the Same Time

Smart Video Replay Client

File About

191 / 199

SideLine Camera EndZone Camera

189 OFFENSE Blitz

Down	To Go	From The
2	G	+10M
Gain/Loss	To The	
0	+10R	
Qtr	PACE	MILTON
4	27	34

190 OFFENSE RUN, PASS, LEFT

Down	To Go	From The
1	G	+10R
Gain/Loss	To The	
1	+ 9R	
Qtr	PACE	MILTON
4	27	34

191 OFFENSE PASS, LEFT, INCOMPLETE, BLITZ, SACK

Down	To Go	From The
1	G	+ 9R
Gain/Loss	To The	
4	+ 5M	
Qtr	PACE	MILTON
4	27	34

Click or Tap between the videos to play them both at the same time.

Refresh

Settings

Server

<Filter Off>

Smart Video Replay Player

OFFENSE Down 1 To Go G From The + 9R Gain/Loss 4 To The + 5M

Player Speed 100%

Videos are synchronized and operated by the single

Draw 3 Tag

1.97MB

00:02

00:08

Normal

Slow Mo

Drawing on the Video

Smart Video Replay Player

191 SideLine Camera Qtr 4 PACE on OFFENSE Down 1 To Go 6 From The + 9A Gain/Loss 4 To The + 5M

Save your drawing (if you want to) by pressing the Save Button

During video playback, press the Draw button to pause playback and draw on the video.

The interface displays a football game in progress. The top status bar shows the score (191), camera (SideLine Camera), quarter (4), pace (OFFENSE), down (1), to go (6), from the (+ 9A), gain/loss (4), and to the (+ 5M). The central video player shows a wide shot of the field with several players. Yellow arrows are drawn on the field, indicating player movement. The bottom control bar includes buttons for Draw, Tag, and other playback controls. A red callout box points to the Draw button, stating: "During video playback, press the Draw button to pause playback and draw on the video." Another red callout box points to the Save button, stating: "Save your drawing (if you want to) by pressing the Save Button." The Save button is located in the top left corner of the video player area.

Viewing Saved Drawings

Saved Images

191 SideLine

Save

Draw some more on your saved drawing...

Click the Drawings button to view saved drawings... the button indicates 3 of them.

Scroll through the saved drawings

Delete a saved drawing

Maximize or Minimize the Screen

Close the Window

Viewing the 3rd drawing of a total of 3 saved.

Draw

3 / 3

Delete

Draw

3

Tag

00:08

Slow Mo

Viewing / Editing Video Scoreboard Data & Video Tags

Smart Video Replay Player

191

4 PACE on OFFENSE Down 1 To Go G From The + 9R Gain/Loss 4 To The + 5M

Video Tags

Quarter	PACE	On Field Unit	Down	To Go	Field Position	PACE	MILTON
4	OFFENSE	1	G	+ 9R	L M R	27	34

- ☐ RUN
- ☒ PASS
- ☒ LEFT
- ☐ RIGHT
- ☐ MIDDLE
- ☐ INTERCEPTION
- ☒ INCOMPLETE
- ☒ BLITZ
- ☐ DOG
- ☒ SACK
- ☐ TRIPS
- ☐ POWER
- ☐ WILDCAT
- ☐ SPREAD
- ☐ TEE
- ☐ STRONG
- ☐ PENALTY US
- ☐ PENALTY THEM

Save & Close

Close (No Save)

Tap on any tags to check or uncheck them

Press the Tag button to view and / or modify the Scoreboard data and Video Tags

Draw 3 Tag

1.97MB Normal 00:08 Slow Mo

If you change your On Field Unit, the tags will change to show the configured tags for that On Field Unit.

If settings is Mouse Mode, just left click or right click to change any scoreboard value.

if settings is Finger mode, just flick your finger up or down to change any scoreboard value

Save Changes?

Close (No Save)

Setting a Filter

The screenshot shows the 'Video Browser Filter' window. The interface includes a 'Set Filter On' button (top left), a 'Set Filter Off' button (top left), and a 'Filter' button (bottom left). The main area displays various filter settings: 'PACE on OFFENSE', 'Gain/Loss of greater or equal 10', 'To Go filter off.', 'Field Position filter off.', 'Down filter off.', and 'Quarter filter off.'. The 'Tags' section on the right lists various play types: BLITZ, DOG, INCOMPLETE, INTERCEPTION, LEFT, MIDDLE, PASS, PENALTY THEM, PENALTY US, POWER, RIGHT, RUN, SACK, SPREAD, STRONG, TEE, TRIPS, and WILDCAT. The 'Filter Off' button is at the bottom right. The 'Server' button is at the bottom left. The 'Settings' button is at the bottom left. The 'Filter Off' button is at the bottom right.

Callouts provide the following instructions:

- Press the Set Filter On button to set your filter...
- Select your On Field Unit to filter for... or leave blank to ignore.
- Select any Video Tag to filter on. This will get any plays that have one or more of the tags you set...
- To cancel your filter press the Set Filter Off button
- Press the Filter button to bring up the Video Browser Filter screen
- Filter by 1 or more Downs
- Filter by 1 or more Quarters
- Filter by Gain/Loss. Use the > or < to get plays with a Gain/Loss greater/equal or less than/equal to the value you specify
- Filter by To Go distance. Use the > or < to get plays with a To Go distance greater/equal or less than/equal to the value you specify
- Filter by Field Position. Use the > or < to get plays with a Field Position greater/equal or less than/equal to the value you specify
- IMPORTANT NOTE: Any filter setting that is cleared (nothing selected) will simply be ignored by the Filter Engine. For instance, if you don't care what quarter it was, leave them all unselected.
- The X buttons clear any filter settings for that type of setting...

Filter set for all plays on OFFENSE with a Gain/Loss that is Greater Than or Equal to +10

Smart Video Replay Client

File About

1 / 17

SideLine Camera EndZone Camera

33 OFFENSE

Down	To Go	From The
1	10	-40M
Gain/Loss	To The	
13	+47M	
Qtr	PACE	MILTON
7	7	

34 OFFENSE

Down	To Go	From The
		+47M
Gain/Loss	To The	
14	+33M	
Qtr	PACE	MILTON
7	7	

69 OFFENSE

Down	To Go	From The
2	11	-37M
Gain/Loss	To The	
12	-49M	
Qtr	PACE	MILTON
14	17	

On

Refresh

Server

Settings

(PACE on OFFENSE) & (Gain/Loss of greater or equal 10)

This is the results of the filter set to show all plays on Offense where the Gain/Loss is Greater Than or Equal to 10 Yards. Out of 199 plays, there are 17 that meet this criteria. The filter setting is instantaneous. Why? Don't read if you do not like tech talk -- but we use a SQL data base structure with indexing and record keys. This is one reason you want a powerful tablet like the Microsoft Surface Pro 3 in your hands when the game is on and you need information.

Another Sample Filter Setting – All Offensive 2nd Downs with a Blitz.

Smart Video Replay Client

File About

1 / 2 SideLine Camera

182 PACE on OFFENSE Data Tags BLITZ, DOG

Down	To Go	From The
2	10	-16M
Gain/Loss	To The	
0	-16M	
Qtr	PACE	MILTON
4	27	34

189 PACE on OFFENSE Data Tags BLITZ

Down	To Go	From The
2	G	+10M
Gain/Loss	To The	
0	+10R	
Qtr	PACE	MILTON
4	27	34

On

Server

Settings

Video Browser Filter

Set Filter On

Set Filter Off

PACE on OFFENSE

Gain/Loss of filter off.

To Go filter off.

Field Position filter off.

Down equal 2

Quarter filter off.

Tags

- ☒ BLITZ
- ☐ DOG
- ☐ INCOMPLETE
- ☐ INTERCEPTION
- ☐ LEFT
- ☐ MIDDLE
- ☐ PASS
- ☐ PENALTY THEM
- ☐ PENALTY US
- ☐ POWER
- ☐ RIGHT
- ☐ RUN
- ☐ SACK
- ☐ SPREAD
- ☐ STRONG
- ☐ TEE
- ☐ TRIPS
- ☐ WILDCAT

This is the results of the filter set to show all plays on Offense for 2nd Down with a BLITZ video tag Out of 199 plays, there are 2 that meet this criteria.

(PACE on OFFENSE) & (Down equal 2) & Tags: (BLITZ)

While Smart Video Replay does some very powerful things with video yet it is simple to understand and use. Most persons become Power Users in just 30 minutes or less.

Thank you for purchasing this product.