The Automated ScoreBook® Serial Communications (Tas Comms 32[™])

TasComms32 is used to transmit data from Stat Crew Software game-scoring software to stats display terminals and/or scoreboard interface computers over a COM port (RS-232). You can also use TasComms32 to act as a "stats display" monitor, which can be useful for displaying game statistics on the VGA port of a computer.

The setup steps for TasComms32 and for each of the Stat Crew Software game-scoring product is described below. The setup steps for each product are similar:

- 1. Run the game-scoring software
- 2. Configure the game-scoring comms for "stats display" or "scoreboard"
- 3. Start (or "connect") the game-scoring comms
- 4. Run the TasComms32 serial communications software
- 5. Configure the TasComms32 for the selected sport
- 6. Start the TasComms32 output

The following pages describe how to setup the scoring software and TasComms32 software.

Setup game-scoring software for "stats display"

TAS For Baseball/Softball:

- 1. Run the Game scorebook program and select Remote display | Comms setup
- 2. In the Comm port field, enter 'NONE" (Tas 'Comms' will be setup to transmit to the data terminals)
- 3. In the Auto-send field, enter 'B' for box score, or 'P' for season-to-date profiles stats display format
- 4. The Baud rate and Terminal type parameters are not used in this setup -- leave them as is
- 5. Press Ctrl+Enter to complete your changes
- 6. Select "Send", press F4, or enter a play to create the "comfile" output that will be used by TasComms32

THE STAT CREW SYSTEM For Basketball:

- 1. From the STAT CREW SOFTWARE Control Panel, select GAME SCORING.
- 2. From the STAT CREW Menu, select UTILITIES (DOS); select File Maintenance | Edit a text file.
- 3. Type "\$COMFILE" in the **File name to edit** field and press Enter.
- 4. In the first line, type "c:\statcrew\comfile" (this is the name of the stats display file to be created/updated during game scoring and read by TasComms32).
- 5. Press Esc and answer "Y" to save the text file; exit to the STAT CREW Menu.
- 6. The "comfile" file is created/updated upon entering the Gametime Scoring screen and after each play is entered while scoring the game. This file is monitored by TasComms32.

TAS For Football, Volleyball, Ice Hockey, Soccer/Field Hockey, Lacrosse:

- 1. Run the In-game scoring program and select Game setup | Remote display | Comms setup
- 2. In the Comm port field, enter "NONE" (TasComms32 will be setup to transmit to the serial port)
- 3. Press Ctrl+Enter to complete your changes
- 4. Select Remote display | **Terminal type**; select the "PCTERM" terminal type
- 5. Select "Send", press F4, or enter a play to create the "comfile" output that will be used by TasComms32

Setup game-scoring software for "scoreboard data"

TAS For Baseball/Softball:

- 1. You must have the scoreboard version of the TAS Baseball/Softball scoring program installed; verify that the initial copyright screen has "DK" in the version, for example, "Version 5.3.0DK".
- 2. All other settings are the same as described above in "Setup scoring software for stats display".

STAT CREW SYSTEM For Basketball:

- 1. The scoring software automatically creates/updates a file named "c:\statcrew\comfile.sb" upon entering the Gametime Scoring screen and after each play is entered while scoring the game. No setup steps are required for the (DOS) Scoring software.
- 2. In TasComms32, change the Monitor file field under Data Source to "c:\statcrew\comfile.sb". Mark both the Incoming data format and Outgoing data format options as Scoreboard data.

TAS For Football, Volleyball, Ice Hockey, Soccer/Field Hockey, Lacrosse:

- 1. Run the In-game scoring program and select Game setup | Remote display | **Terminal type**; Select the "Scoreboard" or "Daktronics" terminal type -- consult your scoreboard vendor for which type to use.
- 2. All other settings are the same as described above in "Setup scoring software for stats display".

TasComms32 ''stats display'' output setup

Ready 📃 🔅	Start mon	itoring			
Data source and Main COM port	Second COM	port Mis	cellane	ous	
Data source	N <i>Click to select p</i> COM1	Main COM	l port -Outgo @ Sta	ing data ats displa	format
C Scoreboard data	Enable o	utput	C Sc	oreboard	data
Sport C Basketball C Baseball/Softball C Football C Ice Hockey C Soccer C Vollenball	Baud rate 1200 2400 4800 9600 14400	Data bits 0 5 0 6 0 7 ⊙ 8		ity None Even Odd Mark Space	Stop bit © 1 C 2
Volleyball C Lacrosse	 19200 38400 57600 	Terminal PCTE C VT10 C VT52	type RM D		ontrol S/CTS R/DSF
c:\tasfb\comfile	O 115200	0 1152			rce newlin

Select Start | Programs | TasComms32 | TasComms32 to start the program.

Data source and Main COM port:

- 1. Select "Stats display" as the incoming data format
- 2. Select the appropriate "Sport" (Basketball, Football, and so on)
- 3. The "Monitor file" field is automatically set to monitor the "comfile" for the selected "Sport"
- 4. The COM port defaults to "COM1" -- click on the "COM" button to select another port if required
- 5. Verify the "Enable output" checkbox is enabled
- 6. Select the "Baud rate", "Data bits", "Parity", and "Stop bits" to match your stats display terminals; Select the "Terminal type" emulation to match your stats display terminals; Select the "Flow control" options to match your stats display terminals
- Click on the "Start monitoring" button at the top of the window to begin monitoring/transmitting; incoming stats will automatically be shown on the TasComms32 "Terminal Window" if you have the Miscellaneous | Auto-display terminal window option enabled

TasComms32 ''scoreboard'' output setup

Ready 🧕 🛄	Start monitorir	ng	
Data source and Main COM port	Second COM port	Miscellaneous	
Data source Incoming data format Stats display Scoreboard data Sport Basketball Baseball/Softball Football Cice Hockey Soccer	Main C Click to select port COM1 ✓ Enable output Baud rate Data I ○ 1200 ○ 5 ○ 4800 ○ 7 ○ 800 ○ 8	OM port Outgoing data for Stats display Scoreboard d bits Parity None C Even C Odd C Mark C Space	mat ata Stop bit ⊙ 1 ○ 2
O Volleyball O Lacrosse Monitor file: c:\tasfb\comfile	C 14400 © 19200 Termin C 38400 © VT C 57600 © VT C 115200 © TT	nal type Flow cor CTERM ☑ RTS/ 100 ☑ DTR/ 52 ☑ XON/ Y ☑ Force	itrol CTS DSF XOFF newlin

Select Start | Programs | TasComms32 | TasComms32 to start the program.

Data source and Main COM port:

- 1. Select "Scoreboard data" as the Incoming data format
- 2. Select the appropriate "Sport" (Basketball, Football, and so on)
- 3. The "Monitor file" field is automatically set to monitor the "comfile" for the selected "Sport"
- 4. The COM port defaults to "COM1" -- click on the "COM" button to select another port if required
- 5. Verify the "Enable output" checkbox is enabled
- 6. To transmit the scoreboard data as is, select "Scoreboard data" as the Outgoing data format; Or, to transmit in stats display format, select "Stats display" as the Outgoing data format
- Select the "Baud rate", "Data bits", "Parity", and "Stop bits" to match the communications parameters on the receiving scoreboard computer or stats display terminals; Select the "Terminal type" emulation (if using the Stats display output format); Select the "Flow control" options to match the scoreboard computer or stats display terminals
- 8. Click on the "Start monitoring" button at the top of the window to begin monitoring/transmitting; incoming stats will automatically be shown on the TasComms32 "Terminal Window" if you have the Miscellaneous | Auto-display terminal window option enabled

To send both "Scoreboard" and "Stats display" data:

- You need two separate COM ports to send both scoreboard and stats display data at the same time.
- If you have two COM ports on the same computer, you can setup the Main COM port to use "Scoreboard data" as the Outgoing data format, and setup the Second COM port to use "Stats display" as the Outgoing data format. Choose a different COM number for the Main and Second COM ports, and "Enable output" for both COM ports.
- Or, you can network another computer to gain access to its COM port. For this, setup the Main COM port on the scoring computer to use "Scoreboard data" as the Outgoing data format. Install TasComms32 on the "networked" computer and setup the Main COM port on this "networked" computer to use "Stats display" as the Outgoing data format. You will need to modify the "Monitor file" field in the Data source to monitor the "comfile" on the scoring computer over the network

Using TasComms32 as a ''stats display terminal'':

You can also use TasComms32 on a second computer to act as a "stats display terminal" -- showing the game stats on a display separate from the screen display on the scoring computer. The second computer can then be placed at a media viewing position, for example, or you could use the VGA output port on the second computer to feed the stats display information to a VGA-splitter device, or to an NTSC-converter to that supports a signal to a closed-circuit TV system. The second computer can be configured to receive the scoring data either: (1) over the network by monitoring the "comfile" on the scoring computer; or (2) receiving data sent by the scoring computer via a COM port.

🛃 TasComms32 Vers	on 3.0.7 Nov 6 2001	
Ready	Start monitoring	
Data source and Ma	n COM port Second COM port	Miscellaneous
Select to display to your sta	start a stats test pattern ts monitors.	display test
Select to sh display win comp	ow the stats ow on your I Termin a Iter screen.	al display
A Change displ	y font You can also right-c to change the termin pewriter, Size 10	lick in the terminal window al display font settings.
Terminal window: [Full-screen 🔽 Auto-display	☑ Show date/time
Display title: Stats	isplay	
"Drop" input into fil	r: [
Тга	nsmit once Clear screen 1	Clear screen 2

Receiving data over the network:

- 1. On the "second" computer, setup the Incoming data format and Sport on the scoring computer
- 2. Set the "Monitor file" field to point to the "comfile" on the network drive (typically <u>not</u> the c: drive) of the scoring computer
- 3. If you only receiving data for stats display, disable the "Enable output" option for the Main COM port. Enable this option only if you are connecting to stats display terminals or a scoreboard computer from the "second" computer
- 4. Click on the "Start monitoring" button at the top of the window to begin monitoring the "comfile"; even if the COM output is disabled, the terminal display window will be updated whenever a change to the "comfile" specified in the "Monitor file" field is modified by the scoring program with new data
- 5. You can alter the font and full-screen attributes of the terminal display on the Miscellaneous settings window, or you can change display attributes by right-clicking on the terminal display window itself.

Receiving data via a COM port:

- 1. Setup TasComms32 on the "scoring" computer to transmit (as described above); Setup TasComms32 on the "second" computer to match the data source and comms parameters of the scoring computer
- 2. On the "second" computer, click on the "Terminal" icon (or select the Miscellaneous settings page, click on "Terminal display"); data transmitted to the "second" computer from the scoring computer
- 3. Data transmitted by the scoring computer will now be displayed on the stats display terminal window.
- 4. You can alter the font and full-screen attributes of the terminal display on the Miscellaneous settings window, or you can change display attributes by right-clicking on the terminal display window itself

Tailoring the terminal display window:

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<u>*Right-click*</u> inside the terminal display window to access the tailoring pop-up menu. Use this menu to tailor the font and colors used on the terminal display window.

🛃 Stats display	- 11/8/01 1	0:04:26 AM					X
Down: 1 ToGo: G	Qtr: 4 Drive: 1	14-79 Used	Team 1 04:04 WMU	Player WELSH, Jeff	AttCmpInt Yds 58-36- 2 374	TD Lg 2 40]
Ball: WMU35	5		MICH	Navarre, John	28-16- 0 240	2 47	7
<*> WMU	. 0 7	77-2	21 MICH	Gonzales, J.	2-2-0 44	0 34	ł
MICH	7 17 WMU 24	7 7 - 3 MICH	38 Western Min RUSHING REED Philin	Change font Settings	Michigan RUSHING #- w B 1 15-	Yds TD)
Rushes-Yds	25-13	39-188	WOODS Charles	Black on White	rwood Day 7-	27 1	
Pass Yds Passing	374 58-36-2	284 30-18-0	WELSH, Jeff	Black on Yellow <u>N</u> avy on White	y, Chris 6- s, Walter 7-	25 0 20 0	
Plays	83-387	69-472	RECEIVING	N <u>a</u> vy on Yellow	.rre, John 3-	5 0)
Avg/play	4.7	6.8	AFARIOGUN, Mo	Blac <u>k</u> on Silver	, Calvin 1-	-1 = 0)
Kick ret Punt ret	4-110 2-10	3-54 1-18	JENNINGS, D. BUSH, Josh	White on Black	ECEIVING #-	Yds TD)
Int ret	0-0	2-0	MOSLEY, K.	Yellow on Black	w, B.J. 5-	66 1	
Fumb ret	0-0	0-0	JOHNSON, B.	W <u>h</u> ite on Navy	, Calvin 4-	86 0)
Fumb-Lost	1-0	0-0	ZUHL, Micah	Y <u>e</u> llow on Navy	our, Bill 4-	53 0)
Penalties	9-76	13-111	WOLVERTON, M.	Silver on Black	.er, M. 3-	57 1	
Punts	5-33.4	5-34.6	THOMAS, Antoni		.rds, B. 1-	16 0)
Possession	31:33	28:27	KINER, Anthony	Ca <u>p</u> ture 🕨	amy, Ronal 1-	6 0)
3rd-Dn Eff 4th-Dn Eff	9/18 1/2	2/11 2/2					
		** End	of 2nd half, cl	ock 00:00. **			

Notes: The "Capture" functions are designed for diagnostic purposes. Typically, software support may want to "capture" the contents of data received via the serial port -- the data is captured into a file that can be sent to us for analysis.

Using the "stats display test" function:

You can use the stats display test function to have TasComms32 continuously send a test pattern to your stats display terminals. This can be useful when checking out equipment prior to game start -- saving you the time of returning to the scoring computer to cause a data transmit to occur.

After verifying your Main COM port settings, select the Miscellaneous settings page, and click on the "Start stats display test" button.

2	0
leady	Start monitoring
)ata source and	Main COM port Second COM port Miscellaneous
Selec disp to you	t to start a stats lay test pattern stats monitors.
Select to display	show the stats
ćc	mputer screen.
CC ∡A Change o Lucida Sans	isplay font You can also right-click in the terminal win to change the terminal display font setting
CC AA Change o Lucida Sans Terminal window	mputer screen. Solution is play font You can also right-click in the terminal win to change the terminal display font setting Typewriter, Size 10 r: Full-screen I Auto-display I Show date/time
AA Change o Lucida Sans Terminal window Display title: Sta	isplay font You can also right-click in the terminal win to change the terminal display font setting Typewriter, Size 10 r: I Full-screen I Auto-display I Show date/time ats display

The display test function will transmit a continuously changing screen to the data terminals so you can visually confirm your setup is working properly.

🛃 Stats display - 10/17/01 7:01	:51 AM			
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	1	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	2	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	3	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	4	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	5	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	6	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	7	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	8	
XXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	9	
******	Transmit 19	Line	10	
XXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	11	
***************	Transmit 19	Line	12	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	13	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	14	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	15	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	16	
X000000XXXXX0000000X	Transmit 19	Line	17	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	18	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	19	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	20	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	21	
***************	Transmit 19	Line	22	
******	Transmit 19	Line	23	
XXXXXXXXXXXXXXXXXXXXXXXX	Transmit 19	Line	24	

Click on the "Stop stats display test" button to terminate the test. Later you can click on the "Start monitoring" button when you are ready to start game operations.

Data source and Main COM port settings

		Start monitoring				
Data source and Main CO	M port	Second COM	port	Miscellan	eous	
Data source		N Click to select p COM1	Main C ant	OM port	oing data ats displ	i format ay
C Scoreboard data		Enable o	 utput	C Se	coreboar	d data
Sport Sport Saseball/Softball Saseball/Softball Socoal Soccer Volleyball Monitor file: Chattageneoconfile		Baud rate C 1200 C 2400 C 4800 C 9600 C 14400 C 19200 C 38400 C 5300	Data ○ 5 ○ 6 ○ 7 ⓒ 8 Termi ⓒ Pt ○ V	hits Pa C C C C C C C C C C C C C C C C C C	rity None Even Odd Mark Space	Control COLONICI

The following describes the functions on the Data source and Main COM port settings page.

<u>Incoming data format</u>: Select the format that corresponds with the output created by the scoring software <u>Sport</u>: Select the sport to monitor; automatically remembers the "Monitor file" setting for that sport

Monitor file: Specifies the "comfile" to monitor -- this is the file that is updated by the scoring program <u>COM#</u>: Select the COM port number to use for output

Enable output: Determines whether to enable this port to transmit outgoing data.

<u>Outgoing data format</u>: Select the format of the data transmitted out the COM port; this option only available when the Incoming data format is "Scoreboard data".

Baud rate: Set this to match the communications parameters for your stats terminals or scoreboard computer.

Data bits: Set this to match the communications parameters for your stats terminals or scoreboard computer.

Parity: Set this to match the communications parameters for your stats terminals or scoreboard computer.

Stop bits: Set this to match the communications parameters for your stats terminals or scoreboard computer.

<u>Terminal type</u>: Set this to match the communications parameters for your stats terminals; this option is only available when the Outgoing data format is "Stats display".

<u>Flow control</u>: Set this to match the communications parameters for your stats terminals or scoreboard computer; normally RTS/CTS is sufficient -- it is recommended that you do not use the DTR/DSR or XON/XOFF options unless you are certain they are needed.

Force newline: Normally leave this enabled; if you are seeing "double line-spacing" on your stats display terminals you might try disabling this option.

<u>Start monitoring</u>: Click on this button to start monitoring the "comfile" -- each time an update to the "comfile" is detected, the terminal display is updated, and data is transmitted out the Main COM port and/or Second COM port if they are "Enabled for output".

Stop monitoring: Click on this button to stop the monitoring function.

Second COM port settings

The following describes the functions on the Second COM port settings page. Normally you won't be using the Second COM port -- just using the Main COM port is all you'll need. However, if you do have a computer with two COM ports installed, you can take advantage of that configuration by, for example, using the Main COM port settings to send "Stats display" data out one COM port, and use the Second COM port settings to send "Scoreboard data" out the second COM port.

TasComms Version 3.0).3 Oct 1	7 2001				_ 🗆 ×
Ready	Start	monitor	ing			
Data source and Main C	OM port	Second COM	l port	Miscellane	ous	
Data source (uses same input as "Ma Use the second port when sending both stats display and scoreboard outputs to separate COM ports on the same computer.	in")	Se Click to select p COM1 Enable ou Baud rate 1200 2400 4800 9600 14400 9600 14400 9600 14400 957600 115200	tput Data C 5 C 6 C 7 C 8 F C 7 C 8	COM port Outgo Sta Sc bits Pair C C C C C C C C C C C C C C C C C C C	ing data ats displa oreboard ity None Even Odd Mark Space Flow of P R1 D1 D1 XC Fo	format ay I data Stop bits © 1 C 2 Control S/CTS R/DSF IN/XOFF rce newline

Data source: Uses the same Incoming data format, Sport, and Monitor file settings from the Main data source *COM#*: Select the COM port number to use for output on the second COM port

Enable output: Determines whether to enable this port to transmit outgoing data.

<u>Outgoing data format</u>: Select the format of the data transmitted out the second COM port; this option only available when the Incoming data format is "Scoreboard data".

Baud rate: Set this to match the communications parameters for your stats terminals or scoreboard computer.

Data bits: Set this to match the communications parameters for your stats terminals or scoreboard computer.

Parity: Set this to match the communications parameters for your stats terminals or scoreboard computer.

Stop bits: Set this to match the communications parameters for your stats terminals or scoreboard computer.

<u>*Terminal type*</u>: Set this to match the communications parameters for your stats terminals; this option is only available when the Outgoing data format is "Stats display".

<u>Flow control</u>: Set this to match the communications parameters for your stats terminals or scoreboard computer; normally RTS/CTS is sufficient -- it is recommended that you do not use the DTR/DSR or XON/XOFF options unless you are certain they are needed.

Force newline: Normally leave this enabled; if you are seeing "double line-spacing" on your stats display terminals you might try disabling this option.

Start/stop monitoring: Same as described above.

<u>Miscellaneous settings</u>

🛿 TasComms32	Version 3.0.7 Nov 6	2001	
Ready	Start m	onitoring	
)ata source an	l Main COM port Se	econd COM port	Miscellaneous
Sele dis to you	ct to start a stats play test pattern r stats monitors.	Start stats	s display test
Select display c	o show the stats window on your omputer screen.	🖳 Termin	al display
AA Change	display font You to c	i can also right-c hange the termir	lick in the terminal window nal display font settings.
Terminal windo Display title: Si	w: □ Full-screen ats display	✓ Auto-display	☑ Show date/time
"Drop" input in	to file:		
1	Transmit once	Clear screen 1	Clear screen 2

Several functions are available on the Miscellaneous settings page.

Start stats display test: Starts the stats display test output (described above).

<u>Stop stats display test</u>: Stops the stats display test output (described above).

Terminal display: Displays the stats display terminal window. This can be useful when using TasComms32 as a separate stats display terminal (described above), or if you just want to bring up the stats display screen after you closed it earlier.

<u>Change display font</u>: Click on this to change the font face or size to use on the stats display terminal window. You can also access this function by right-clicking on the stats display terminal window itself.

Terminal window:

Full-screen: Enable this option if you want the stats display terminal window to default to a full-screen display.

<u>Auto-display</u>: Enable this option if you want the stats display terminal window to be displayed on your computer screen each time new data is received. If you disable this option, you can still always click on the "Terminal display" button to bring the stats display window back up on-screen.

Show date/time: Enable this option if you want to include the date/time on the title of the terminal window.

Display title: Use this to customize the title bar on the stats display terminal window.

"Drop input into file": This field can be used to "replicate" the data received by TC32 into another file (typically on the local network) for special uses.

Transmit once: Forces a transmit to the Main COM port -- might be useful for testing purposes.

<u>Clear screen 1</u>: Sends 24 blank lines to the Main COM port -- might be useful for testing purposes.

<u>Clear screen 2</u>: Sends 24 blank lines to the Second COM port -- might be useful for testing purposes.