

Technovision Inc.

**TM18**



RS232 Reference Guide  
9600,8,N,1 protocol

[www.technovision.com](http://www.technovision.com)

**Technical Specifications**

|                             |   |
|-----------------------------|---|
| <b>Sound File Format:</b>   | Windows WAV<br>Uncompressed PCM<br>6/8/16/22 KHz sampling<br>8 bit resolution<br>monaural |
| <b>Memory Type:</b>         | <b>SD / SDHC</b>  |
| <b>Max. Memory Capacity</b> | 2 GB (SD FAT/FAT16)<br>32GB (SDHC FAT32)  |
| <b>Supply Voltage</b>       | 12 ~ 30 VDC   |
| <b>Standby Current</b>      | 60 mA   |
| <b>Max. Output</b>          | MONO: 15W (4 ohm load)  |
| <b>Serial Interface</b>     | RS-232  |
| <b>Parallel Interface</b>   | 8 inputs, CMOS level logic  |
| <b>Physical Dimensions</b>  | Case 4.6''x 3.25''x 1.25''  |

UPDATE: 01-2019

**Serial Interface (DB9F connector)**

On the DB9 connector, three pins are used for RS-232: pin 2 for RX (output), pin 3 for TX (input), and pin 5 for ground. The communications protocol is 9600-baud, eight data bits, no parity and one stop bit (9600, 8,N,1).

To enable the serial interface on the system, the configuration file (**MODE.TXT**) must contain the two-digit address "00".

The serial interface can be easily tested using a Windows utility program called "HyperTerminal" (usually found in Start/Programs/Accessories/Communications). HyperTerminal allows you to send and receive data through the PC's serial port.

**Before transmitting any commands, each session should begin with you sending an ASCII letter "A" and waiting for the TM18 to respond with "a" within 100ma. Otherwise the initial process has failed and should be restarted.**

**Serial Commands**

Play File

**F###** (### is the three-digit file number)

System Confirms: **f###** (### is the same file number as above)

If the file exists, it will be played once. If the file does not exist, the command will simply be ignored. If a file is already playing or pausing when receiving the "F" command, it will return the error code "e" instead of "f". Use the Stop Playback command to ensure the player is stopped.

Loop File

DTE Sends: **L###** (### is the three-digit file number)

System Confirms: **l###** (### is the same file number as above)

If the file exists, it will be played repeatedly. If the file does not exist, the command will simply be ignored. If the system is playing or pausing when receiving the "L" command, it will return the error code "e" instead of "l" (lower case L).

Stop Playback

DTE Sends: **S**

System Confirms: s

If the system is not playing at the time, it will simply ignore the command. If the system is playing or pausing at the time, it will terminate the playback.

Pause Playback

DTE Sends: **P**

System Confirms: p

If the system is not playing at the time, it will simply ignore the command.

Resume Playback

DTE Sends: **R**

System Confirms: r

If the system is not pausing at the time, it will simply ignore the command.

Busy?

DTE Sends: **B**

System Confirms: b (if busy, including pausing) or s (if not busy).

**Serial Example**

Typical RS232 session to play file23 on player:

If you are not sure if the TM18 is playing:

|                    |                             |
|--------------------|-----------------------------|
| DTE sends          | S                           |
| TM18 responds with | s (stops player if playing) |

|                    |   |
|--------------------|---|
| DTE sends          | A |
| TM18 responds with | a |
| DTE sends          | F |
| TM18 responds with | f |
| DTE sends          | 0 |
| TM18 responds with | 0 |
| DTE sends          | 2 |
| TM18 responds with | 2 |
| DTE sends          | 3 |
| TM18 responds with | 3 |

**(TM18 starts playing file 23).**