

Using the Janam MSR product

The MSR reader for Janam is a serial port peripheral designed for the Janam Mobile Computer. Access to the smartcard from a Palm-OS hosted program is performed by Serial Resource Manager.

Step by step setup

For more information on accessing the serial port on the Janam device, and to obtain the development tools(SDK, IDE, compilers and documentation), you should register at pdn.palm.com and www.access-company.com. You may also consider obtaining the Metrowerks Palm development environment. Other development environments and languages besides the aforementioned products are available through other avenues, but may not be as standardized for this platform.

The basic steps are to open the serial port, and access the device. The device is a transmit only rs232 device that sends MSR data as reader to the serial port at 9600 baud.

To add support for serial data receipt to your program:

- 1) Include "SerialMgr.h"
- 2) Open the serial port

```
UInt16 portRef;
err = SrmOpen(0x8000, 9600, &portRef);
```
- 3) Set the serial port modes to their defaults:

```
UInt32 flagSettings;
UInt16 dataLen;
flagSettings = srmDefaultSettings;
dataLen = sizeof(flagSettings);
SrmControl(portRef, srmCtlSetFlags, &flagSettings, &dataLen);
```
- 4) Receive data

```
Char pRecvBuf[MAX_RECV_CONST];
Error err;
Int32 timeout=RECV_TIMEOUT_IN_TICKS;
SrmReceive(portRef, pRecvBuf, pRecvBufSize, timeout, &err);
```

For further examples, and a more extensive implementation that may be more suitable for implementation in a commercial application, you should consider using a periodic polling method based upon an OS timer, and querying the availability of data in the receive buffer (via `SrmReceiveCheck`) and perhaps add your own, larger receive buffer (via `SrmSetReceiveBuffer`).

Reader to Host TRACK DATA format

Track data is sent in the following order: SS, Card Data, and ES for track one, two, then three. The transmission is terminated by a carriage return and line feed (0x0D,0x0A).

The format in which ISO data is transmitted after a card is read successfully is as follows:

Track 1			Track 2			Track 3			Terminator
%	DATA	?	;	DATA	?	+	DATA	?	CR, LF