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TTL Serial connected to a USB to Serial.

Uses TTL serial from a USB to 5 volt TTL serial converter to interface a joystick
 with buttons and LEDs.
Packet serial is used to give each device a unique address.

Communication:
38,400 baud, 8 data, 1 stop, no parity.
To connect multiple Serial Devices to a single connection add a 4.7KΩ resistor to the
 Rx line of the USB to serial converter, a.k.a. the common Tx line of the Serial Servos.

Packet Serial:
All packets are 6 bytes w/o optional sync bytes and checksum:
Source Address, Destination Address and 4 data bytes
or
0xDD,0xDD,Source Address, Destination Address and 4 data bytes, Checksum
(XOR of Source Addr, Dest Addr, 4 Data bytes)

Default master address is 1
Default slave address is 2

All commands return something.
Some return a data packet (Slave,Master,Data0,Data1,Data2,Data3,CSum),
others return only a single byte (0xFF) as an acknowledgment.

Commands:
================================================================================
kCmd_SetMode(0x81)     +1 data (SysMode), return ACK
kCmd_GetMode(0x01)
kCmd_GetJoy(0x82)      Return X,Y,Btn,HBtn
kCmd_SetLEDs(0x83)     +1 data (JoyLEDs), return ACK

kCmd_SaveParams(0x94)  Save all eeprom params, return ACK
kCmd_RestoreParams(0x95) Copy to ram, return ACK
kCmd_ReBoot(0x99)      ReBoot the controller
kCmd_RunBootloader(0x9A) Set EEPROM (0xFF) = 0xFF and reboot

; these commands save params and return a 0,0,0,0 packet with the new address
kCmd_SetMasterAddr(0xA1) +1 data, return a zero packet
kCmd_SetSlaveAddr(0xA2) +1 data, return a zero packet
;
;Special packet (0xDD, 0xDD, 0x01, 0x02, 0xAA, 0x00, 0x00, 0x00, checksum)
kCmd_SendIDString(0xAA) returns "DMFE T-Joy\n"

;---JoyLEDs bits---
JoyLEDsD4R             EQU                    0
JoyLEDsD4G             EQU                    1
JoyLEDsD5R             EQU                    2
JoyLEDsD5G             EQU                    3
JoyLEDsD2              EQU                    4
JoyLEDsD3              EQU                    5
JoyLEDsD6              EQU                    6

; Currently Active
#Define               SW1_Flag               SwitchFlags,0
#Define               SW2_Flag               SwitchFlags,1
#Define               SW3_Flag               SwitchFlags,2
#Define               SW4_Flag               SwitchFlags,3
#Define               JoySW_Flag             SwitchFlags,4
;
; History Flags, cleared by reading
#Define               SW1_HFlag              SwitchHFlags,0
#Define               SW2_HFlag              SwitchHFlags,1
#Define               SW3_HFlag              SwitchHFlags,2
#Define               SW4_HFlag              SwitchHFlags,3
#Define               JoySW_HFlag            SwitchHFlags,4
```