Fast Colour Coded Reference to Reg Bytes

```
Bytes:
 1  2  3  4  5  6  7
0a,00,00,00,04,00,29,\ ; [Clear]          - sends "escape"
0b,00,00,00,04,00,1d,\ ; [Enter]          - sends "Z"
0c,00,00,00,03,82,00,\ ; [Power]          - Sends PC to sleep Change to "S"
0d,00,00,00,04,03,1a,\ ; [Windows]        - sends "ctrl-shift-W"
0e,00,00,00,04,00,41,\ ; [Mute]           - was "04,00,05" sends B Now Sends "F8"
0f,00,00,00,04,01,07,\ ; [Info]           - sends "ctrl-D"
10,00,00,00,04,00,43,\ ; [Vol up]         - was "01,e9,00" sends "F10"
11,00,00,00,04,00,42,\ ; [Vol down]       - was "01,ea,00" sends "F9"
12,00,00,00,04,00,4b,\ ; [Channel up]     - was "01,9c,00" sends "PgUp"
13,00,00,00,04,00,4e,\ ; [Channel down]   - was "01,9d,00" sends "PgDn"
14,00,00,00,04,03,09,\ ; [FWD]            - was "01,b3,00" sends "ctrl-shift-F"
15,00,00,00,04,03,05,\ ; [RWD]            - was "01,b4,00" sends "ctrl-shift-B"
16,00,00,00,04,03,13,\ ; [Play]           - was "01,b0,00" sends "ctrl-shift-P"
17,00,00,00,04,01,15,\ ; [Record]         - was "01,b2,00" sends "ctrl-R"
18,00,00,00,04,01,13,\ ; [Pause]          - was "01,b1,00" sends "ctrl-P"
19,00,00,00,04,03,16,\ ; [Stop]           - was "01,b7,00" sends "ctrl-shift-S"
1a,00,00,00,04,01,09,\ ; [Next]           - was "01,b5,00" sends "ctrl-F"
1b,00,00,00,04,01,05,\ ; [Prev]           - was "01,b6,00" sends "ctrl-B"
1c,00,00,00,04,03,20,\ ; [#]              - sends "ctrl-shift-3"
1d,00,00,00,04,03,25,\ ; [*]              - sends "strl-shift-8"
```

So when we want to change a code that is sent by a specific button we will only have to look for the three bytes opposite to that specific button as high-lighted above. Obviously if we want to change what the “Power Button” does then we will only change bytes 03,82,00 to 04,00,16 which make the “Power Button” send Letter “S” instead of sending your PC to sleep. If you see XBMC keyboard.xml you will realise that “S” activates the shutdown Menu*.

- Each Remote Button has a number associated to it.
- Ignore “Always leave as Zero”.
- This byte used to emulate keyboard stroke which is “04” if you see “03 or 01” then it sends IR code*.
- Key Modifier allocation, if “00” then no moddifier and if “03” then sends “Control+Shift” ect*.
- Sends Keystrokes*.
- You can write any comments in here, I use it to know the button name and what key it sends.

*for further information see my Tutorial.

REMEBER: After each change you do need to apply the new registry file and restart windows to activate the new settings.

HOW-TO use MCE remote in XBMC under Windows 7 (x32 or x64) with a simple Registry MOD for N00bs

All I wanted to do is make any Windows MCE compatible remote work with XBMC without any modification to the Original Keyboard.xml that ships with XBMC, but unfortunately this is not 100% possible but achievable.

now All you have to do is download one of my attached .reg files then modify any key you want using this simple Tutorial.

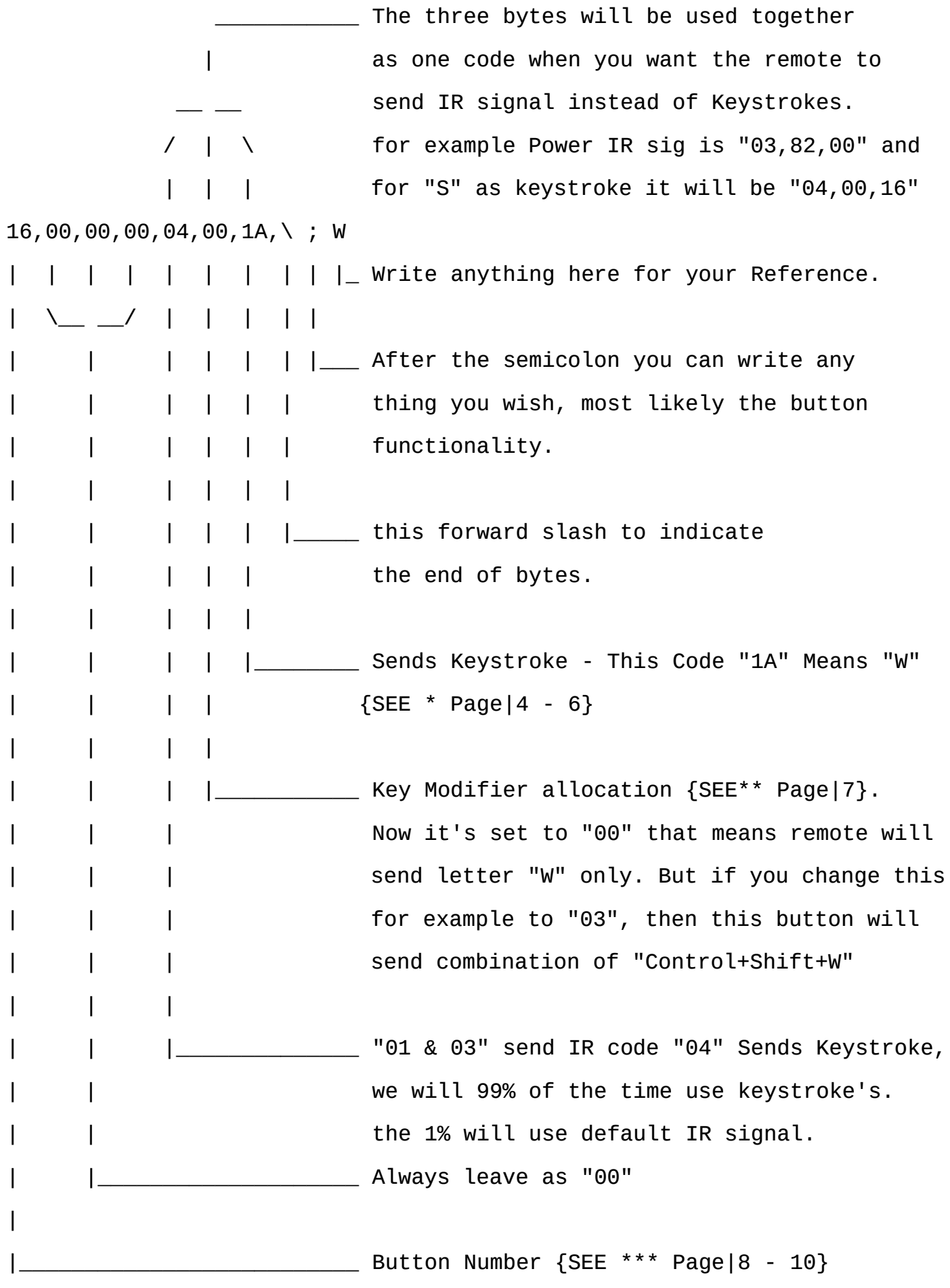
Hopefully I'll help explain how to modify the .reg file, If you check my .reg remote control setup you will see that I tried to keep similar setup to the Original XBOX remote, because I used it for many years and I know it by heart hence no need to learn what every key does ever again.

The diagram below help identify the seven bytes:

NOTE: to understand it easily go line by line "Horizontally" and always start from the left making your way to the right, at the end of the day you will realise that only 4 bytes you will be interested in! The first and the last three.

Every button has its associated key stored in the first byte, and the last three is the ones we'll be changing.

Bytes identity map



NOTE: alphabetic letters in each byte are not case sensitive.

{*} To Find the right code look under column "HID Usage ID" in the section below "Keyboard to reg codes, Page|5 & 6". I have simplified the file to contain only the information that we want, all others are removed. So from the table as you can see column 1 & 3 is what we want.

HINT: we do not care much about Column 2 "HID usage page", but to let you know that "01" means IR code and "07" Keystroke. do not confuse it with the registry 5th byte. in the Registry 5th byte we will always use "04" to send keystrokes.

SEE NEXT PAGE

Keyboard to reg codes

USB HID to PS/2 Scan Code Translation Table

Table 1

Key Name	HID Usage Page	HID Usage ID
System Power	01	81
System Sleep	01	82
System Wake	01	83
No Event	07	00
Overrun Error	07	01
POST Fail	07	02
ErrorUndefined	07	03
a A	07	04
b B	07	05
c C	07	06
d D	07	07
e E	07	08
f F	07	09
g G	07	0A
h H	07	0B
i I	07	0C
j J	07	0D
k K	07	0E
l L	07	0F
m M	07	10
n N	07	11
o O	07	12
p P	07	13
q Q	07	14
r R	07	15
s S	07	16
t T	07	17
u U	07	18
v V	07	19
w W	07	1A
x X	07	1B
y Y	07	1C
z Z	07	1D
1 !	07	1E
2 @	07	1F
3 #	07	20
4 $	07	21
5 %	07	22
6 ^	07	23
7 &	07	24
8 *	07	25
9 (	07	26
0)	07	27
Return	07	28
Escape	07	29
Backspace	07	2A
Tab	07	2B
Space	07	2C
- _	07	2D
= +	07	2E
[{	07	2F
] }	07	30
\ |	07	31
Europe 1 (Note 2)	07	32
; :	07	33
' "	07	34
` ~	07	35
, <	07	36
. >	07	37
/ ?	07	38
Caps Lock	07	39
F1	07	3A
F2	07	3B
F3	07	3C
F4	07	3D
F5	07	3E
F6	07	3F
F7	07	40
F8	07	41
F9	07	42
F10	07	43
F11	07	44
F12	07	45
Print Screen (Note 1)	07	46
Scroll Lock	07	47
Break (Ctrl-Pause)	07	48
Pause	07	48

Table 2

Key Name	HID Usage Page	HID Usage ID
Insert (Note 1)	07	49
Home (Note 1)	07	4A
Page Up (Note 1)	07	4B
Delete (Note 1)	07	4C
End (Note 1)	07	4D
Page Down (Note 1)	07	4E
Right Arrow (Note 1)	07	4F
Left Arrow (Note 1)	07	50
Down Arrow (Note 1)	07	51
Up Arrow (Note 1)	07	52
Num Lock	07	53
Keypad / (Note 1)	07	54
Keypad *	07	55
Keypad -	07	56
Keypad +	07	57
Keypad Enter	07	58
Keypad 1 End	07	59
Keypad 2 Down	07	5A
Keypad 3 PageDn	07	5B
Keypad 4 Left	07	5C
Keypad 5	07	5D
Keypad 6 Right	07	5E
Keypad 7 Home	07	5F
Keypad 8 Up	07	60
Keypad 9 PageUp	07	61
Keypad 0 Insert	07	62
Keypad . Delete	07	63
Europe 2 (Note 2)	07	64
App	07	65
Keyboard Power	07	66
Keypad =	07	67
F13	07	68
F14	07	69
F15	07	6A
F16	07	6B
F17	07	6C
F18	07	6D
F19	07	6E
F20	07	6F
F21	07	70
F22	07	71
F23	07	72
F24	07	73
Keyboard Execute	07	74
Keyboard Help	07	75
Keyboard Menu	07	76
Keyboard Select	07	77
Keyboard Stop	07	78
Keyboard Again	07	79
Keyboard Undo	07	7A
Keyboard Cut	07	7B
Keyboard Copy	07	7C
Keyboard Paste	07	7D
Keyboard Find	07	7E
Keyboard Mute	07	7F
Keyboard Volume Up	07	80
Keyboard Volume Dn	07	81
Keyboard Locking Caps Lock	07	82
Keyboard Locking Num Lock	07	83
Keyboard Locking Scroll Lock	07	84
Keypad , (Brazilian Keypad .)	07	85
Keyboard Equal Sign	07	86
Keyboard Int'l 1 ろ (Ro)	07	87
Keyboard Intl'2 かたかな ひらがな ローマ字 (Katakana/Hiragana)	07	88
Keyboard Int'l 2 ¥ (Yen)	07	89
Keyboard Int'l 4 前候補 変換 (次候補) 全候補 (Henkan)	07	8A
Keyboard Int'l 5 無変換 (Muhenkan)	07	8B

USB HID to PS/2 Scan Code Translation Table

Table 3

Key Name	HID Usage Page	HID Usage ID
Keyboard Int'l 6 (PC9800 Keypad ,)	07	8C
Keyboard Int'l 7	07	8D
Keyboard Int'l 8	07	8E
Keyboard Int'l 9	07	8F
Keyboard Lang 1 한/영 (Hanguel/English)	07	90
Keyboard Lang 2 한자 (Hanja)	07	91
Keyboard Lang 3 かたかな (Katakana)	07	92
Keyboard Lang 4 ひらがな (Hiragana)	07	93
Keyboard Lang 5 半角/全角 (Zenkaku/Hankaku)	07	94
Keyboard Lang 6	07	95
Keyboard Lang 7	07	96
Keyboard Lang 8	07	97
Keyboard Lang 9	07	98
Keyboard Alternate Erase	07	99
Keyboard SysReq/Attention	07	9A
Keyboard Cancel	07	9B
Keyboard Clear	07	9C
Keyboard Prior	07	9D
Keyboard Return	07	9E
Keyboard Separator	07	9F
Keyboard Out	07	A0
Keyboard Oper	07	A1
Keyboard Clear/Again	07	A2
Keyboard CrSel/Props	07	A3
Keyboard ExSel	07	A4
RESERVED	07	A5-DF
Left Control	07	E0
Left Shift	07	E1
Left Alt	07	E2
Left GUI	07	E3
Right Control	07	E4
Right Shift	07	E5
Right Alt	07	E6
Right GUI	07	E7
RESERVED	07	E8-FFFF
Scan Next Track	0C	00B5
Scan Previous Track	0C	00B6
Stop	0C	00B7
Play/ Pause	0C	00CD
Mute	0C	00E2
Bass Boost	0C	00E5
Loudness	0C	00E7
Volume Up	0C	00E9
Volume Down	0C	00EA
Bass Up	0C	0152
Bass Down	0C	0153
Treble Up	0C	0154
Treble Down	0C	0155
Media Select	0C	0183
Mail	0C	018A
Calculator	0C	0192
My Computer	0C	0194
WWW Search	0C	0221
WWW Home	0C	0223
WWW Back	0C	0224
WWW Forward	0C	0225
WWW Stop	0C	0226
WWW Refresh	0C	0227
WWW Favorites	0C	022A

Note 1	In PS/2 mode, Scan Set 1, these keys have special codes prepended or appended depending upon the state of one or more modifier keys. These codes are documented in WHQLKEYS.DOC, available from Microsoft.
Note 2	These keys have various legends depending upon the locale for which the keyboard is manufactured. Europe 1 is typically in AT-101 Key Position 42 next to the Enter key. Europe 2 is typically in AT-101 Key Position 45, between the Left Shift and Z keys.
*	Under all Microsoft operating systems, all PS/2 keyboards actually transmit Scan Code Set 2 values down the wire from the keyboard to the keyboard port. These values are translated to Scan Code Set 1 by the i8042 port chip. The rest of the operating system, and all applications that handle scan codes expect the values to be from Scan Code Set 1.

{**}

Byte	Action
00	No modifier
01	Control
02	Shift
03	Control+Shift
04	Alt
05	Control+Alt
06	Shift+Alt
07	Control+Shift+Alt
08	Windows
09	Control+Windows
0a	Shift+Windows
0b	Control+Shift+Windows
0c	Alt+Windows
0d	Control+Alt+Windows
0e	Shift+Alt+Windows
0f	Control+Shift+Alt+Windows

NOTE: If you see anything other than the bytes listed above that means it's part of an IR combination code.

so basically if you want one button to send Key stroke "W" only then you will have this combination 16,00,00,00,04,**00**,1A,\ ; W

If you want "Control+W" then it will be 16,00,00,00,04,**01**,1A,\ ; CTRL+W

If you want "Shift+W" then it will be 16,00,00,00,04,**02**,1A,\ ; SHFT+W

If you want "Control+Shift+W" then it will be 16,00,00,00,04,**03**,1A,\ ; CTRL+SHFT+W

and so on etc...

{***} Note: only for reference there is no need to change anything here.

The button's numbered as follows:

00	[0]
01	[1]
02	[2]
03	[3]
04	[4]
05	[5]
06	[6]
07	[7]
08	[8]
09	[9]
0a	[Clear]
0b	[Enter]
0c	[Power]
0d	[Windows]
0e	[Mute]
0f	[Info]
10	[Volume up]
11	[Volume down]
12	[Channel up]
13	[Channel down]
14	[FWD]
15	[RWD]
16	[Play]
17	[Record]
18	[Pause]
19	[Stop]
1a	[Next]
1b	[Prev]
1c	[#]

1d	[*]
1e	[Up]
1f	[Down]
20	[Left]
21	[Right]
22	[OK "Return"]
23	[Back]
24	[DVD Menu]
25	[Live TV]
26	[Guide]
27	[Zoom]
47	[Music]
48	[Recorded TV]
49	[Pictures]
50	[Radio]
4A	[Videos]
5a	[Teletext]
5B	[Red]
5C	[Green]
5D	[Yellow]
5E	[Blue]

see coded picture next page.


0c
49
50
4a
47
PICTURES
RADIO
VIDEOS
MUSIC
REC
17
PAUSE
18
SKIP BACK
1b
STOP
19
PLAY
16
RWD
15
SKIP FWD
1a
START
BACK
23
0d
FWD
14
MORE
0f
10
1e
20
VOL
OK
22
12
11
1f
21
CH
13
MUTE
0e
REC TV
48
GUIDE
26
LIVE TV
25
DVD MENU
24
1 01
ABC
2 02
DEF
3 03
GHI
4 04
JKL
5 05
MNO
6 06
PQRS
7 07
TUV
8 08
WXYZ
9 09
* 1d
0 00
clear 0a
Teletext
5a
1c
enter 0b
5b
5c
5d
5e

When it comes to Modifying reg files for the MCE remotes, I hope that I made it like a walk in the park for you!

Credits:

Thanks to John Rennie as I have used and collected most of the information in my tutorial from his site http://xbmcmce.sourceforge.net/. Without the info he collected/created and made available in one place I would have not known from where to start or what to do.

Thanks to XBMC dev team for creating this awesome software, thanks for all the guys who's working hard day and night to make XBMC as good as it is today. Thanks to all the guys working hard on the XBMC Skinning and for making it an eye candy that we can never live without.

Finally thanks to all and everyone who contributed and still contributing to the scene. We have come a long way since the first XBOX days and hope that all continue their great work.

Kind Regards,

EG.