

**NAME**

XcmsColor, XcmsRGB, XcmsRGBi, XcmsCIEXYZ, XcmsCIEuvY, XcmsCIExyY, XcmsCIELab, XcmsCIELuv, XcmsTekHVC, XcmsPad - Xcms color structure

**STRUCTURES**

The structure for **XcmsColor** contains:

```
typedef unsigned long XcmsColorFormat;          /* Color Specification Format */
```

```
typedef struct {
    union {
        XcmsRGB RGB;
        XcmsRGBi RGBi;
        XcmsCIEXYZ CIEXYZ;
        XcmsCIEuvY CIEuvY;
        XcmsCIExyY CIExyY;
        XcmsCIELab CIELab;
        XcmsCIELuv CIELuv;
        XcmsTekHVC TekHVC;
        XcmsPad Pad;
    } spec;
    unsigned long pixel;
    XcmsColorFormat format;
} XcmsColor;          /* Xcms Color Structure */
```

```
typedef double XcmsFloat;
```

```
typedef struct {
    unsigned short red;    /* 0x0000 to 0xffff */
    unsigned short green; /* 0x0000 to 0xffff */
    unsigned short blue;  /* 0x0000 to 0xffff */
} XcmsRGB;          /* RGB Device */
```

```
typedef struct {
    XcmsFloat red; /* 0.0 to 1.0 */
    XcmsFloat green; /* 0.0 to 1.0 */
    XcmsFloat blue; /* 0.0 to 1.0 */
} XcmsRGBi;        /* RGB Intensity */
```

```
typedef struct {
```

```

    XcmsFloat X;
    XcmsFloat Y; /* 0.0 to 1.0 */
    XcmsFloat Z;
} XcmsCIEXYZ;          /* CIE XYZ */

typedef struct {
    XcmsFloat u_prime; /* 0.0 to ~0.6 */
    XcmsFloat v_prime; /* 0.0 to ~0.6 */
    XcmsFloat Y; /* 0.0 to 1.0 */
} XcmsCIEuvY;          /* CIE u'v'Y */

typedef struct {
    XcmsFloat x; /* 0.0 to ~.75 */
    XcmsFloat y; /* 0.0 to ~.85 */
    XcmsFloat Y; /* 0.0 to 1.0 */
} XcmsCIExyY;          /* CIE xyY */

typedef struct {
    XcmsFloat L_star; /* 0.0 to 100.0 */
    XcmsFloat a_star;
    XcmsFloat b_star;
} XcmsCIELab;          /* CIE L*a*b* */

typedef struct {
    XcmsFloat L_star; /* 0.0 to 100.0 */
    XcmsFloat u_star;
    XcmsFloat v_star;
} XcmsCIELuv;          /* CIE L*u*v* */

typedef struct {
    XcmsFloat H; /* 0.0 to 360.0 */
    XcmsFloat V; /* 0.0 to 100.0 */
    XcmsFloat C; /* 0.0 to 100.0 */
} XcmsTekHVC;          /* TekHVC */

typedef struct {
    XcmsFloat pad0;
    XcmsFloat pad1;
    XcmsFloat pad2;
    XcmsFloat pad3;
}

```

```
} XcmsPad;          /* four doubles */
```

**DESCRIPTION**

The **XcmsColor** structure contains a union of substructures, each supporting color specification encoding for a particular color space.

**SEE ALSO**

XcmsAllocColor(3), XcmsStoreColor(3), XcmsConvertColors(3),

*Xlib - C Language X Interface*