

# **PTRobot API**

## **DLL-Based Application Programming Interface**



**Primera Technology Inc.**  
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1	PTRobot Description .....	5
1.1	Description .....	5
1.2	Usage .....	5
2	API Functions .....	7
2.1	PTRobot Setup Functions .....	7
2.1.1	PTRobot_Initialize .....	7
2.1.2	PTRobot_Destroy .....	7
2.1.3	PTRobot_SetupDebugging .....	7
2.1.4	PTRobot_EnumRobots .....	8
2.1.5	PTRobot_EnumDrives .....	9
2.1.6	PTRobot_EnumDrivesWithList .....	10
2.1.7	PTRobot_SetRoboticDrive .....	11
2.1.8	PTRobot_SetOpenCloseFunction .....	11
2.1.9	PTRobot_SetRobotOptions .....	12
2.1.10	PTRobot_GetRobotOptions .....	12
2.1.11	PTRobot_GetErrorString .....	13
2.1.12	PTRobot_SetApplicationID .....	14
2.2	PTRobot Info/Status Functions .....	14
2.2.1	PTRobot_GetDriveInfo .....	14
2.2.2	PTRobot_GetRobotInfo .....	14
2.2.3	PTRobot_GetRobotStatus .....	15
2.2.4	PTRobot_GetMediaInfo .....	15
2.2.5	PTRobot_GetRobotInfo2 .....	16
2.2.6	PTRobot_GetRobotStatus2 .....	16
2.2.7	PTRobot_GetManufactureInfo .....	17
2.3	PTRobot Robotic Functions .....	17
2.3.1	PTRobot_LoadDrive .....	17
2.3.2	PTRobot_LoadPrinter .....	18
2.3.3	PTRobot_LoadPrinterFromDrive .....	18
2.3.4	PTRobot_UnLoadDrive .....	19
2.3.5	PTRobot_UnLoadPrinter .....	19
2.3.6	PTRobot_MoveDiscBetweenLocations .....	20
2.3.7	PTRobot_PrintFile .....	21
2.3.8	PTRobot_PrintFileWithMerge .....	21
2.3.9	PTRobot_SetPrinterSettings .....	22
2.3.10	PTRobot_GetPrinterSettings .....	22
2.3.11	PTRobot_KillSystemError .....	23
2.3.12	PTRobot_SystemAction .....	23
2.3.13	PTRobot_OpenCloseDrive .....	24
2.3.14	PTRobot_PrintFileWithMerge2 .....	25
2.3.15	PTRobot_SetPrinterSettings2 .....	26
2.3.16	PTRobot_GetPrinterSettings2 .....	26
2.4	PTRobot Misc Functions .....	27
2.4.1	PTRobot_GetSureThingPreview .....	27
2.4.2	PTRobot_AddMergeFields .....	27
2.4.3	PTRobot_ClearMergeList .....	28

2.4.4	PTRobot_SetPrintCopies .....	28
3	Type Definitions .....	30
3.1	PTDriveInfo Structure .....	30
3.2	PTRobotInfo Structure.....	30
3.3	PTRobotInfo2 Structure.....	30
3.4	PTRobotStatus Structure.....	31
3.5	PTPrinterSettings Structure .....	31
3.6	PTPrinterSettings2 Structure .....	31
3.7	PTMediaInfo Structure .....	32
3.8	PTRobotInfo2 Structure.....	32
3.9	PTRoboStatus2 Structure.....	33
3.10	PTManufactureInfo Structure .....	33
3.11	CartridgeInfoType enum.....	34
4	Definitions.....	35
4.1	API Return Values .....	35
4.2	System Errors.....	35
4.3	System State.....	36
4.4	Robot Type.....	36
4.5	Bin Auto Use.....	37
4.6	Robot Options .....	37
4.7	Robot Actions .....	37
4.8	Print Quality.....	38
4.9	Drive Open Close.....	38
4.10	Locations.....	38
4.11	Bus Type .....	38
4.12	Clear Drive.....	38
4.13	Languages .....	38
4.14	Printer Tray Status .....	39
4.15	Disc Pick Switch Status .....	39
4.16	Cartridge Types.....	39
4.17	Cartridges Installed .....	39
5	Recommended System Error Strings .....	40
5.1	SYSERR_PTR_TRAY .....	40
5.2	SYSERR_CART_CODE.....	40
5.3	SYSERR_INPUT_EMPTY .....	40
5.4	SYSERR_PTR_COMM .....	40
5.5	SYSERR_CLR_EMPTY .....	40
5.6	SYSERR_BLK_EMPTY .....	41
5.7	SYSERR_BOTH_EMPTY .....	41
5.8	SYSERR_PICK .....	41
5.9	SYSERR_ARM_MOVE.....	41
5.10	SYSERR_CART_MOVE.....	42
5.11	SYSERR_INTERNAL_SW .....	42
5.12	SYSERR_NO_ROBODRIVES .....	42
5.13	SYSERR_OFFLINE.....	42
5.14	SYSERR_COVER_OPEN .....	42

5.15	SYSERR_PRINTER_PICK.....	42
5.16	SYSERR_MULTIPLE_PICK .....	42
5.17	SYSERR_MULTIPLEDISCS_IN_PRINTER .....	43
5.18	SYSERR_MULTIPLEDISCS_IN_RECORDER.....	43
5.19	SYSERR_DROPPED_DISC_RECORDER.....	43
5.20	SYSERR_DROPPED_DISC_BIN1 .....	43
5.21	SYSERR_DROPPED_DISC_BIN2 .....	43
5.22	SYSERR_DROPPED_DISC_PRINTER .....	44
5.23	SYSERR_DROPPED_DISC_REJECT.....	44
5.24	SYSERR_DROPPED_DISC_UNKNOWN .....	44
5.25	SYSERR_ALIGNNEEDED .....	44
5.26	SYSERR_COLOR_INVALID .....	45
5.27	SYSERR_BLACK_INVALID .....	45
5.28	SYSERR_BOTH_INVALID.....	45
5.29	SYSERR_NOCARTS.....	45
5.30	SYSERR_K_IN_CMY .....	45
5.31	SYSERR_CMY_IN_K .....	45
5.32	SYSERR_SWAPPED.....	45
5.33	SYSERR_PIGONPRO .....	46
5.34	SYSERR_ALIGNFAILED.....	46
5.35	SYSERR_DROPPED_DISC_PRINTER_FATAL.....	46
5.36	SYSERR_MULTIPLEDISCS_IN_RIGHTBIN .....	46
5.37	SYSERR_MULTIPLEDISCS_IN_LEFTBIN.....	46
5.38	SYSERR_CLR_EMPTY_FINAL .....	46
5.39	SYSERR_BLK_EMPTY_FINAL .....	47
5.40	SYSERR_BOTH_EMPTY_FINAL .....	47
5.41	SYSERR_WAITING_FOR_PRINTER .....	47
6	Revision History .....	48

# 1 PTRobot Description

## 1.1 Description

PTRobot is an API that allows developers to add robotic support for Primera duplicators to their own Windows applications. PTRobot consists of several Dynamic Link Libraries (DLLs) that application developers can utilize to move discs automatically (e.g. move a disc from an input bin into the recorder, etc.) and also provides the capability to print on the CD/DVD through the Surething CD Labeler application. PTRobot provides an easy method to create automated CD/DVD printing and/or recording applications (recording capability is not provided in PTRobot – for recording capability developers should use the PTBurn SDK from Primera). Currently, PTRobot provides support for the Disc Publisher II, Disc Publisher PRO, Disc Publisher XR, Disc Publisher XRP, and Disc Publisher SE, Disc Publisher Pro Xi-Series, and Disc Publisher 4100 Series .

**IMPORTANT NOTE: The PTRobot API functions use the WINAPI (which is \_stdcall) calling convention.**

## 1.2 Usage

*Below is PSUEDO-CODE example for how a calling application should use PTRobot to implement robotics into its application.*

### At program startup:

[PTRobot\\_Initialize\(...\)](#)

[PTRobot\\_EnumRobots\(...\)](#)

- if the number of robots is greater than 1 then the calling application will need to provide some logic/ui to determine which robot to use. The app can use [PTRobot\\_GetRobotInfo\(...\)](#) to get details about each robot.

[PTRobot\\_EnumDrives\(...\)](#) or [PTRobot\\_EnumDrivesWithList\(...\)](#)

- This will cause PTRobot to determine which drives are robotically controlled by enumerating the drives themselves ([PTRobot\\_EnumDrives\(...\)](#)) or based off a list of drives passed in ([PTRobot\\_EnumDrivesWithList\(...\)](#))

[PTRobot\\_GetDriveInfo\(...\)](#) for all drives returned

- This will allow the calling app to know which drive is which

### Example a typical job:

[PTRobot\\_LoadDrive\(Robot, Drive, TRUE\)](#)

- This will load a disc into the drive from the input bin (should set parameter 3 to TRUE if first round of the job)

[PTRobot\\_GetRobotStatus\(...\)](#)

- This would be called in a loop until a system error occurred or the system is idle. (**NOTE:** do not call in too tight of a loop – e.g. every 500ms or 1 second).

...Client application will now perform operations on the disc in the drive (e.g. record on the disc).

```
if the operations are successful
    PTRobot_LoadPrinterFromDrive(Robo, Drive)
    PTRobot_GetRobotStatus(..) called in a loop
    PTRobot_PrintFile(szPrintFile) or PTRobot_PrintFileWithMerge(...)
    PTRobot_GetRobotStatus(..) called in a loop
    PTRobot_UnloadPrinter(Robot, 0)
    PTRobot_GetRobotStatus(..) called in a loop
else
    PTRobot_UnloadDrive(Robot, Drive, 100)
    PTRobot_GetRobotStatus(..) called in a loop
```

### Before program exit:

```
PTRobot_Destroy()
```

## 2 API Functions

### 2.1 PTRobot Setup Functions

#### 2.1.1 PTRobot\_Initialize

```

////////////////////////////////////
//
//  PTRobot_Initialize
//
//  Description:
//      Function to initialize internal data structures of
//      the PTRobot module.
//  Params:
//      None
//  Notes:
//  Return:
//      PTROBOT_OK if Successful
//      PTROBOT_INTERNAL if an internal error occurred.
//
////////////////////////////////////
DWORD WINAPI PTRobot_Initialize();

```

#### 2.1.2 PTRobot\_Destroy

```

////////////////////////////////////
//
//  PTRobot_Destroy
//
//  Description:
//      Function to destroy internal data structures of
//      the PTRobot module.
//  Params:
//      None
//  Notes:
//  Return:
//      PTROBOT_OK if Successful
//      PTROBOT_SEQUENCE if this command is called out of sequence
//      PTROBOT_INTERNAL if an internal error occurred
//
////////////////////////////////////
DWORD WINAPI PTRobot_Destroy();

```

#### 2.1.3 PTRobot\_SetupDebugging

```

////////////////////////////////////
//
//  PTRobot_SetupDebugging
//
//  Description:

```

### 2.1.4 PTRobot EnumRobots

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### 2.1.5 PTRobot\_EnumDrives

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### 2.1.6 PTRobot\_EnumDrivesWithList

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```
//          PTROBOT_INTERNAL if an internal error occurred
//          PTROBOT_INVALID_ROBOT if the robot handle is invalid
//          PTROBOT_OVERFLOW if the number of robotic drives found is > the value
//                          in pdwDrives
//          PTROBOT_MULTDRIVES if the module cannot determine which drives are
//                          robotically controlled.
//
////////////////////////////////////
DWORD WINAPI PTRobot_EnumDrivesWithList(HANDLE hRobot, HANDLE * phDrives,
                                         DWORD * pdwNumDrives, HANDLE * phRobotDrives, DWORD *
pdwNumRobotDrives);
```

## 2.1.7 PTRobot\_SetRoboticDrive

```
////////////////////////////////////
//
//      PTRobot_SetRoboticDrive
//
//      Description:
//          Function to set a drive's position within the duplicator when
//          the PTROBOT_MULTDRIVES error is returned from either of the
//          EnumDrives functions.
//
//      Params:
//          hRobots      Handle to the Robot.
//          hDrive        Handle to the Drive
//          dwColIndex   Index identifying the column that the drive is in.
//                      (0 based where 0 is the left-most column)
//          dwRowIndex   Index identifying the row that the drive is in.
//                      (0 based where 0 is the top row)
//
//      Notes:
//      Return:
//          PTROBOT_OK if Successful
//          PTROBOT_SEQUENCE if this command is called out of sequence
//          PTROBOT_INTERNAL if an internal error occurred
//          PTROBOT_INVALID_ROBOT if the robot handle is invalid
//          PTROBOT_INVALID_DRIVE if the drive handle is invalid
//          PTROBOT_INVALID_DRIVE_POSITION if column/row ids are invalid.
//
////////////////////////////////////
DWORD WINAPI PTRobot_SetRoboticDrive(HANDLE hRobot, HANDLE hDrive, DWORD dwColIndex,
                                     DWORD dwRowIndex);
```

## 2.1.8 PTRobot\_SetOpenCloseFunction

```
////////////////////////////////////
//
//      PTRobot_SetOpenCloseFunction
//
//      Description:
//          Function to set a calling application provided drive open/close
//          function.
//
//      Params:
```

### 2.1.9 PTRobot\_SetRobotOptions

### 2.1.10 PTRobot\_GetRobotOptions

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### 2.1.11 PTRobot\_GetErrorString

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### 2.1.12 PTRobot\_SetApplicationID

```

////////////////////////////////////
//
//    PTRobot_SetApplicationID
//
//    Description:
//        Function to set the Application ID.
//        The ID value is assigned for each application by Primera as needed.
//        Only applications that require special functionality will require this.
//        (note most applications will not need this).
//
//    Params:
//        dwAppID          Application ID specified by Primera
//
//    Notes:
//    Return:
//        PTROBOT_OK if Successful
//        PTROBOT_INTERNAL if an internal error occurred
//
////////////////////////////////////
DWORD WINAPI PTRobot_SetApplicationID( DWORD dwAppID );

```

## 2.2 PTRobot Info/Status Functions

### 2.2.1 PTRobot\_GetDriveInfo

```

////////////////////////////////////
//
//    PTRobot_GetDriveInfo
//
//    Description:
//        Function to get the drive info for a particular
//        drive handle.
//
//    Params:
//        hDrive          Handle to the drive (from EnumDrives)
//        pDrvInfo        points to a PTDriveInfo structure.
//
//    Notes:
//    Return:
//        PTROBOT_OK if Successful
//        PTROBOT_SEQUENCE if this command is called out of sequence
//        PTROBOT_INTERNAL if an internal error occurred
//        PTROBOT_INVALID_DRIVE if the drive handle is invalid
//
////////////////////////////////////
DWORD WINAPI PTRobot_GetDriveInfo(HANDLE hDrive, PTDriveInfo* pDrvInfo);

```

### 2.2.2 PTRobot\_GetRobotInfo

```

////////////////////////////////////
//
//    PTRobot_GetRobotInfo
//

```

### 2.2.3 PTRobot GetRobotStatus

### 2.2.4 PTRobot GetMediaInfo

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```
//
//      PTROBOT_OK if successful and media is found and the media is valid.
//      PTROBOT_INVALID_MEDIA if the media is not valid
//      PTROBOT_NO_MEDIA if no media is found
//      PTROBOT_INVALID_DRIVE if the drive is not valid
//      PTROBOT_INTERNAL some other error
//
////////////////////////////////////
DWORD WINAPI PTRobot_GetMediaInfo(HANDLE hDrive, PTMediaInfo * pDiscInfo );
```

## 2.2.5 PTRobot\_GetRobotInfo2

```
////////////////////////////////////
//
//      PTRobot_GetRobotInfo2
//
//      Description:
//          Function to get ADDITIONAL robot info for a particular
//          robot handle.
//
//      Params:
//          hRobot          Handle to the robot (from EnumRobots)
//          pRobotInfo2     points to a PTRobotInfo structure.
//
//      Notes:
//      Return:
//          PTROBOT_OK if Successful
//          PTROBOT_SEQUENCE if this command is called out of sequence
//          PTROBOT_INTERNAL if an internal error occurred
//          PTROBOT_INVALID_ROBOT if the robot handle is invalid
//
////////////////////////////////////
DWORD WINAPI PTRobot_GetRobotInfo2(HANDLE hRobot, PTRobotInfo2 *pRobotInfo2);
```

## 2.2.6 PTRobot\_GetRobotStatus2

```
////////////////////////////////////
//
//      PTRobot_GetRobotStatus2
//
//      Description:
//          Function to get the Additional current status for a particular
//          robot.
//
//      Notes: Do NOT call in too tight of a loop (e.g. do not call more often
//            than every 500ms or so).
//
//      Params:
//          hRobot          Handle to the robot (from EnumRobots)
//          pRobotStatus2   points to a PTRobotStatus2 structure.
//
//      Notes:
//      Return:
//          PTROBOT_OK if Successful
//          PTROBOT_SEQUENCE if this command is called out of sequence
//          PTROBOT_INTERNAL if an internal error occurred
//          PTROBOT_INVALID_ROBOT if the robot handle is invalid
//          PTROBOT_BUSY if no response from robot
```



### 2.2.7 PTRobot\_GetManufactureInfo

## 2.3 *PTRobot* Robotic Functions

### 2.3.1 PTRobot\_LoadDrive

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### 2.3.2 PTRobot\_LoadPrinter

### 2.3.3 PTRobot LoadPrinterFromDrive

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```
//      Notes:
//      Return:
//          PTROBOT_OK if Successful
//          PTROBOT_SEQUENCE if this command is called out of sequence
//          PTROBOT_INTERNAL if an internal error occurred
//          PTROBOT_INVALID_ROBOT if the robot handle is invalid
//          PTROBOT_INVALID_DRIVE if the drive handle is invalid
//          PTROBOT_NO_PRINTER if the robot doesn't have a printer
//
//////////
DWORD WINAPI PTRobot_LoadPrinterFromDrive(HANDLE hRobot, HANDLE hDrive);
```

### 2.3.4 PTRobot\_UnLoadDrive

```
//////////
//
//      PTRobot_UnLoadDrive
//
//      Description:
//          Function to unload the drive to an output position.
//      Params:
//          hRobot          Handle to the robot (from EnumRobots)
//          hDrive          Handle to the drive (from EnumDrives)
//          dwToLocation    DWORD containing the "to" location
//                          LOCATION_AUTO = Automatically choose the bin
//                          1 = Bin1 (right-most bin)
//                          2 = Bin2
//                          ...
//                          LOCATION_REJECT = Reject
//
//      Notes:
//      Return:
//          PTROBOT_OK if Successful
//          PTROBOT_SEQUENCE if this command is called out of sequence
//          PTROBOT_INTERNAL if an internal error occurred
//          PTROBOT_INVALID_ROBOT if the robot handle is invalid
//          PTROBOT_INVALID_DRIVE if the drive handle is invalid
//          PTROBOT_INVALID_LOCATION if the location is invalid
//
//////////
DWORD WINAPI PTRobot_UnLoadDrive(HANDLE hRobot, HANDLE hDrive, DWORD dwToLocation);
```

### 2.3.5 PTRobot\_UnLoadPrinter

```
//////////
//
//      PTRobot_UnLoadPrinter
//
//      Description:
//          Function to unload the printer to an output position.
//      Params:
//          hRobot          Handle to the robot (from EnumRobots)
//          dwToLocation    DWORD containing the "to" location
```

### 2.3.6 PTRobot\_MoveDiscBetweenLocations

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### 2.3.7 PTRobot\_PrintFile

```

////////////////////////////////////
//
//      PTRobot_PrintFile
//
//      Description:
//          Function to print a Surething image (.STD), raster image (.JPG, .BMP, .TIF,
//          etc.), or .PRN file to the printer.
//
//      Params:
//          hRobot          Handle to the robot (from EnumRobots)
//          tszFile         File to print (.STD, .PRN, .JPG, .BMP)
//          dwPrintIndex    Print index for multiple print jobs.
//
//      Notes:
//          The dwPrintIndex is used when printing an .STD file with merge fields. This
//          value represents which merge record to use for this print.
//
//      Return:
//          PTROBOT_OK if Successful
//          PTROBOT_SEQUENCE if this command is called out of sequence
//          PTROBOT_INTERNAL if an internal error occurred
//          PTROBOT_INVALID_ROBOT if the robot handle is invalid
//          PTROBOT_NO_PRINTER if the robot doesn't have a printer
//          PTROBOT_PRN_INVALID if the prn file is not valid for the printer
//          PTROBOT_PRINTFILE_NOT_FOUND if the file doesn't exist
//          PTROBOT_PRINTAPP_NOT_INSTALLED if the required print application is not
//          installed.
//
////////////////////////////////////
DWORD WINAPI PTRobot_PrintFile(HANDLE hRobot, TCHAR * tszFile, DWORD dwPrintIndex);

```

### 2.3.8 PTRobot\_PrintFileWithMerge

```

////////////////////////////////////
//
//      PTRobot_PrintFileWithMerge
//
//      Description:
//          Function to print a Surething .STD file that has Merge Text/Photos.
//          The Merge Text and/or Photos can be specified in a variable number of
//          arguments passed into this function. The Surething file should be designed
//          with the same number of merge strings passed in here.
//
//      Params:
//          hRobot          Handle to the robot (from EnumRobots)
//          tszFile         Surething (.STD) File to print.
//          dwNumMergeStrings Number of merge strings to follow
//          ...             Variable number of pointers to TCHAR strings
//                          These are the merge strings or photo names (including
//                          path) to be printed.
//                          NOTE: For the strings that follow dwMergeStrings to
//                          be used, the user must have "Set Merge File" within
//                          the .STD file
//                          ** Limit each string to 256 characters or less **
//
//      Return:

```

```
//      PTROBOT_OK if Successful
//      PTROBOT_SEQUENCE if this command is called out of sequence
//      PTROBOT_INTERNAL if an internal error occurred
//      PTROBOT_INVALID_ROBOT if the robot handle is invalid
//      PTROBOT_NO_PRINTER if the robot doesn't have a printer
//      PTROBOT_PRINTFILE_NOT_FOUND if the file doesn't exist
//      PTROBOT_PRINTAPP_NOT_INSTALLED if the required print application is not
//      installed.
//      PTROBOT_PRINTFILE_INVALID if the filename is not .STD
//
////////////////////////////////////
DWORD WINAPI PTRobot_PrintFileWithMerge(HANDLE hRobot,
                                         TCHAR * tszFile,
                                         DWORD dwNumMergeStrings,
                                         ...);
```

### 2.3.9 PTRobot\_SetPrinterSettings

```
////////////////////////////////////
//
//      PTRobot_SetPrinterSettings
//
//      Description:
//          Function to set some printer driver settings
//
//      Params:
//          hRobot          Handle to the robot (from EnumRobots)
//          pPrinterSettings points to a PTPrinterSettings structure.
//
//      Notes:
//          If this function is not called the default print settings will be used. This
//          function will change the system default print settings.
//          Starting with Version 1.2.0 the system default print settings will be
//          restored after calling PTRobot_PrintFile() or PTRobot_PrintFileWithMerge().
//
//      Return:
//          PTROBOT_OK if Successful
//          PTROBOT_SEQUENCE if this command is called out of sequence
//          PTROBOT_INTERNAL if an internal error occurred
//          PTROBOT_INVALID_ROBOT if the robot handle is invalid
//          PTROBOT_NO_PRINTER if the robot doesn't have a printer
//          PTROBOT_INVALID_PRINTER_SETTINGS if the printer settings are invalid
//
////////////////////////////////////
DWORD WINAPI PTRobot_SetPrinterSettings(HANDLE hRobot, PTPrinterSettings
*pPrinterSettings);
```

### 2.3.10 PTRobot\_GetPrinterSettings

```
////////////////////////////////////
//
//      PTRobot_GetPrinterSettings
//
//      Description:
//          Function to get some printer driver settings
//
//      Params:
//          hRobot          Handle to the robot (from EnumRobots)
```

```
//          pPrinterSettings          points to a PTPrinterSettings structure.
//
//  Notes:
//      If this function is not called the default print settings will be used.
//  Return:
//      PTROBOT_OK if Successful
//      PTROBOT_SEQUENCE if this command is called out of sequence
//      PTROBOT_INTERNAL if an internal error occurred
//      PTROBOT_INVALID_ROBOT if the robot handle is invalid
//      PTROBOT_NO_PRINTER if the robot doesn't have a printer
//
//////////
DWORD WINAPI PTRobot_GetPrinterSettings(HANDLE hRobot, PTPrinterSettings
*ppPrinterSettings);
```

### 2.3.11 **PTRobot\_KillSystemError**

```
//////////
//
//  PTRobot_KillSystemError
//
//  Description:
//      Function to kill a system error.
//  Params:
//      hRobot          Handle to the robot (from EnumRobots)
//      dwResetPrinter  DWORD to notify if the printer should be reset.
//                      1 = Reset the printer
//                      0 = do not reset the printer
//
//  Notes:
//      If there is no system error and dwResetPrinter is set to 1 the
//      printer will be reset. Otherwise if there is a system error, that error
//      will be cleared (if possible) and the printer will be reset if the
//      dwResetPrinter is set to 1.
//  Return:
//      PTROBOT_OK if Successful
//      PTROBOT_SEQUENCE if this command is called out of sequence
//      PTROBOT_INTERNAL if an internal error occurred
//      PTROBOT_INVALID_ROBOT if the robot handle is invalid
//
//////////
DWORD WINAPI PTRobot_KillSystemError(HANDLE hRobot, DWORD dwResetPrinter);
```

### 2.3.12 **PTRobot\_SystemAction**

```
//////////
//
//  PTRobot_SystemAction
//
//  Description:
//      Function to instruct the system to perform a specific action.
//  Params:
//      hRobot          Handle to the robot (from EnumRobots)
//      dwAction        Action to perform
```

```
DWORD WINAPI PTRobot_SystemAction(HANDLE hRobot, DWORD dwAction);
```

////////////////////

```
//          hDrive      Handle to the drive (from EnumDrives)
```



```
DWORD WINAPI PTRobot_OpenCloseDrive(HANDLE hDrive, DWORD dwOpen );
```

////////////////////

[illegible]

### 2.3.15 PTRobot\_SetPrinterSettings2

```

////////////////////////////////////
//
//  PTRobot_SetPrinterSettings2
//
//  Description:
//      Function to set additional printer driver settings
//  Params:
//      hRobot          Handle to the robot (from EnumRobots)
//      pPrinterSettings2 points to a PTPrinterSettings2 structure.
//
//  Notes:
//      If this function is not called the default print settings will be used. This
//      function will change the system default print settings.
//      As of Version 1.2.0 the system default print settings will be restored after a
//      print
//      is sent via PTRobot_PrintFile() or PTRobot_PrintFileWithMerge().
//
//  Return:
//      PTROBOT_OK if Successful
//      PTROBOT_SEQUENCE if this command is called out of sequence
//      PTROBOT_INTERNAL if an internal error occurred
//      PTROBOT_INVALID_ROBOT if the robot handle is invalid
//      PTROBOT_NO_PRINTER if the robot doesn't have a printer
//      PTROBOT_INVALID_PRINTER_SETTINGS if the printer settings are invalid
//
////////////////////////////////////
DWORD WINAPI PTRobot_SetPrinterSettings2(HANDLE hRobot, PTPrinterSettings2
                                         *pPrinterSettings2);

```

### 2.3.16 PTRobot\_GetPrinterSettings2

```

////////////////////////////////////
//
//  PTRobot_GetPrinterSettings2
//
//  Description:
//      Function to get some additional printer driver settings
//  Params:
//      hRobot          Handle to the robot (from EnumRobots)
//      pPrinterSettings2 points to a PTPrinterSettings2 structure.
//
//  Notes:
//      If this function is not called the default print settings will be used.
//  Return:
//      PTROBOT_OK if Successful
//      PTROBOT_SEQUENCE if this command is called out of sequence
//      PTROBOT_INTERNAL if an internal error occurred
//      PTROBOT_INVALID_ROBOT if the robot handle is invalid
//      PTROBOT_NO_PRINTER if the robot doesn't have a printer
//
////////////////////////////////////
DWORD WINAPI PTRobot_GetPrinterSettings2(HANDLE hRobot, PTPrinterSettings2
                                         *pPrinterSettings2);

```

## 2.4 PTRobot Misc Functions

### 2.4.1 PTRobot\_GetSureThingPreview

```

////////////////////////////////////
//
//    PTRobot_GetSureThingPreview
//
//    Description:
//        Function to get a preview of a SureThing file
//
//    Params:
//        tszSureThingFile    The SureThing file to get a preview of
//        tszOutputFile       The file name (including path) of desired output file
//                             (NOTE: must have extension of .JPG, .BMP, or .PNG)
//        dwResolution        Resolution (in DPI) of output file (Valid values: 50-600)
//
//    Notes:
//        1)This function returns immediately, but the output file may take several
//           seconds to generate. Caller should keep trying to get exclusive read access
//           to the output file.
//        2)The output file is NOT deleted. Caller is responsible for deleting,
//           if desired.
//
//    Return:
//        PTROBOT_OK if Successful
//        PTROBOT_PRINTFILE_INVALID if fails to generate preview
//        PTROBOT_INVALID_EXTENSION if not valid output file extension(.JPG,.BMP,.PNG)
//
////////////////////////////////////
DWORD WINAPI PTRobot_GetSureThingPreview(TCHAR * tszSureThingFile,
                                         TCHAR * tszOutputFile,
                                         DWORD dwResolution);

```

### 2.4.2 PTRobot\_AddMergeFields

```

////////////////////////////////////
//
//    PTRobot_AddMergeFields
//
//    Description:
//        This function is used in conjunction with PTRobot_PrintMergeFile2()
//        to print a SureThing file with merge/replaceable text fields (or photos).
//
//    DESIGN TIME:
//        User first designs a SureThing (.STD) file with replaceable Text and/or
//        photos and then sets the Merge file (using Tools/Set Merge File).
//
//    RUN TIME:
//        This function is called repeatedly, passing in the text you want printed
//        (and/or the name & path of the photo you want printed).

```

### 2.4.3 PTRobot\_ClearMergeList

#### 2.4.4 PTRobot\_SetPrintCopies

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```
//      This function is used for a multiple auto-print job.
//      This function is called each time prior to calling one of the print functions
//      (e.g. PTRobot_PrintFile() ). The number of copies is set back to 1 after printing
//      Not all robots support this feature (PTACT_AUTOPRINTER_MODE specifies support)
//      e.g. Bravo 4100 prints multiple copies faster with this method.
//
//
//      Params:
//
//      Notes:
//      Return:
//          PTRobot_OK if Successful
//
//
//
////////////////////////////////////
DWORD WINAPI PTRobot_SetPrintCopies(HANDLE hRobot, DWORD dwCopies );
```

## 3 Type Definitions

NOTE: As of version 1.3.0 there are two different versions of PTRobot:

### Multibyte character set (MCBS/ANSI) and Unicode.

In the Unicode version, a TCHAR is a 2-byte wide character. This is needed for 2-byte languages such as Chinese, Japanese, Korean, etc.

In the MCBS version, a TCHAR is a 1-byte character.

### 3.1 PTDriveInfo Structure

**typedef struct**

```
{
    HANDLE hDrive;                //Drive Handle.
    TCHAR tszDriveName[132];      //Drive String (reported from drive)
    TCHAR tszFirmwareVer[40];     //Drive FW version
    TCHAR tszSerialNum[40];       //Drive Serial Number
    HANDLE hRobot;
    DWORD dwDriveColumn;         //Drive Column (0 based - 0 is leftmost column)
    DWORD dwDriveRow;            //Drive Row (0 based - 0 is the top row)
}PTDriveInfo, *pPTDriveInfo;
```

### 3.2 PTRobotInfo Structure

**typedef struct**

```
{
    HANDLE hRobot;                //Robot Handle
    TCHAR tszRobotDesc[100];      //Robot Description
    DWORD dwRobotType;            //See "Robot Type" section 4.4
    DWORD dwNumDrives;            //Number of Recorders on this robot
    DWORD dwNumPrinters;          //Number of Printers on this robot (0 or 1)
    DWORD dwNumBins;              //Number of Bins on this robot
    DWORD dwDriveColumns;         //Number of Drive Columns
    DWORD dwDriveRows;            //Number of Drive Rows
    TCHAR tszRobotFirmware[20];   //String Containing the FW Version of the Robot
    DWORD dwOptions;              //See "Robot Options" section 4.6
    DWORD dwAction;               //See "Robot Actions" section 4.7
    HANDLE hDrives[10];
    DWORD dwDriveBusType;         //BusType of the Drives
}PTRobotInfo, *pPTRobotInfo;
```

### 3.3 PTRobotInfo2 Structure

**typedef struct**

```
{
    DWORD dwNumCartridges;        //Max Number of cartridges robot can hold
    DWORD dwCartridgeType[8];     // First element is left-most cartridge and last
                                   // element is right-most cartridge (from the user's
```

```

// viewpoint). see "Cartridge Types" above
DWORD dwFirmware2Code;
DWORD dwPGA;
DWORD dwModel;
DWORD dwUSBSerialNum;
DWORD dwMaxDiscsPerBin;
DWORD dwReserved[9]; // reserved for future data
}PTRobotInfo2, *pPTRobotInfo2;

```

### 3.4 PTRobotStatus Structure

```

typedef struct
{
    DWORD dwSystemState; //See "System State" section 4.3
    DWORD dwSystemError; //See "System Error" section 4.2
    DWORD dwCurrColorSpits;
    DWORD dwCurrBlackSpits;
    DWORD dwFullColorSpits;
    DWORD dwFullBlackSpits;
}PTRobotStatus, *pPTRobotStatus;

```

### 3.5 PTPrinterSettings Structure

```

typedef struct
{
    DWORD dwPrintQuality; //See "Print Quality" section 4.9
    DWORD dwInnerDiam; //units in .1mm increments (150 - 500)
    DWORD dwOuterMargin; //units in .1mm increments (0 - 20)
}PTPrinterSettings, *pPTPrinterSettings;

```

### 3.6 PTPrinterSettings2 Structure

```

typedef struct
{
    // NOTE: 0xffff is a special value depending on Get or Set--
    // Get: 0xffff means that the setting is not supported
    // Set: 0xffff means to use the current driver setting
    DWORD dwPrintQuality; //See "Print Quality" section above
    DWORD dwInnerDiam; //units in .1mm increments (150 - 500)
    DWORD dwOuterMargin; //units in .1mm increments (0 - 20)
    DWORD dwCartridge; // Cartridge type to use. 1=Black 2=Color 3=Color+Black
    DWORD dwColorMatchType; // Color Rendering. 0=Best for Graphics 1=Best for Photos
    DWORD dwColorTable; // Color Table number to use. Valid values: 1-6
    DWORD dwSaturation; // Amount of saturation. 0-100 where 100 is full saturation
    DWORD dwPrintBidi; // Print bi-directionally or not. 0=No 1=Yes
    DWORD dwRotate180; // Rotate the image 180 degrees or not. 0=No 1=Yes

```

```
    DWORD dwKioskPrintOnly; // Kiosk mode when doing print-only.  0=No  1=Yes
    DWORD dwReserved[9];
}PTPrinterSettings2, *pPTPrinterSettings2;
```

### 3.7 PTMediaInfo Structure

```
typedef struct
{
    TCHAR tszMediaID[20];
    TCHAR tszMediaType[20];
} PTMediaInfo, *pPTMediaInfo;
```

### 3.8 PTRobotInfo2 Structure

```
typedef struct
{
    DWORD dwNumCartridges; //Max Number of cartridges robot can hold
    DWORD dwCartridgeType[8]; // First element is left-most cartridge and last
                                // element is right-most cartridge (from the user's
                                // viewpoint) see "Cartridge Types" section 4.16

    DWORD dwFirmware2Code;
    DWORD dwPGA;
    DWORD dwModel;
    DWORD dwUSBSerialNum;
    DWORD dwMaxDiscsPerBin;
    DWORD dwReserved[9]; // reserved for future data
}PTRobotInfo2, *pPTRobotInfo2;
```



### 3.9 *PTRoboStatus2 Structure*

```
#define UNKNOWN_NUM_DISCS 255
```

```
typedef struct
{
    DWORD dwCartridgeTypes;           // see "Cartridges Installed" section 4.17
    DWORD dwNumDiscsInBins[5];       // 0th element is left-most bin (values are
                                     // 255 if unknown)
    DWORD dwTotalPrints;              // Total # of prints
    DWORD dwTotalPicks;               // Total # of picks from input bin
    DWORD dwVerticalOffset;           // Vertical print offset (300dpi units)
    DWORD dwHorizontalOffset;         // Horizontal print offset (300dpi units)
    DWORD dwPrinterTrayStatus;        // See "Printer Tray Status" section 4.14
    DWORD dwDiscPickSwitchStatus;     // See "Disc Pick Switch Status" section 4.15
    DWORD dwCoverBeenOpenedFlag;      // set to 1 if cover has been opened
    DWORD dwCartridgeInstalled[8];    // 0=not installed. 1=valid cartridge.
                                     // 2=invalid cartridge
    DWORD dwCartridgeNeedsAlign[8];   // 1 if cartridge needs alignment
    DWORD dwSystemStateHW;            // actual system state as reported directly
                                     // from the printer (may be different than
                                     // dwSystemState in PTRobotStatus)
    long lYellowInkRemaining;         // Yellow % remaining (in ten thousandths of a
                                     // percent). e.g. 891723 = 89.1723%
    long lMagentaInkRemaining;        // Magenta % remaining (in ten thousandths of a
                                     // percent). e.g. 891723 = 89.1723%
    long lCyanInkRemaining;           // Cyan % remaining (in ten thousandths of a
                                     // percent). e.g. 891723 = 89.1723%
    long lBlackInkRemaining;          // Black % remaining (in ten thousandths of a
                                     // percent). e.g. 891723 = 89.1723%
                                     // -BELOW ONLY VALID FOR DISC PUBLISHER 4100-
    BYTE bCartridgeStatusYellow;      // See CartridgeInfoType below for valid values
    BYTE bCartridgeStatusMagenta;     // See CartridgeInfoType below for valid values
    BYTE bCartridgeStatusCyan;        // See CartridgeInfoType below for valid values
    BYTE bCartridgeStatusBlack;       // See CartridgeInfoType below for valid values
    DWORD dwReserved[6];              // reserved for future data
}PTRobotStatus2, *pPTRobotStatus2;
```

### 3.10 *PTManufactureInfo Structure*

```
typedef struct
{
    TCHAR tszSerialNum[11];
    TCHAR tszManufactureDate[12];
    DWORD dwFiller[20];
}PTManufactureInfo, *pPTManufactureInfo;
```

### 3.11 CartridgeInfoType enum

```
// Cartridge Status Information Values for bCartridgeStatus[] in PTRobotStatus2 above
// (for Bravo 4100)
typedef enum
{
    CARTRIDGE_INFO_STILL_READING,
    CARTRIDGE_INFO_UNUSED,
    CARTRIDGE_INFO_MISSING,
    CARTRIDGE_INFO_INVALID,
    CARTRIDGE_INFO_COMM_ERROR,
    CARTRIDGE_INFO_BAD_POSITION,
    CARTRIDGE_INFO_BAD_INSTALL,
    CARTRIDGE_INFO_INVALID2,
    CARTRIDGE_INFO_EMPTY,
    CARTRIDGE_INFO_EMPTY2,
    CARTRIDGE_INFO_EMPTY3,
    CARTRIDGE_INFO_OK // Valid cartridge
} CartridgeInfoType;
```

## 4 Definitions

### 4.1 API Return Values

#define PTROBOT_OK	0
#define PTROBOT_INTERNAL	500
#define PTROBOT_SEQUENCE	501
#define PTROBOT_INVALID_ROBOT	502
#define PTROBOT_INVALID_DRIVE	503
#define PTROBOT_INVALID_BIN	504
#define PTROBOT_NODRIVES	505
#define PTROBOT_OPENCLOSE_FAILED	506
#define PTROBOT_OVERFLOW	507
#define PTROBOT_NO_PRINTER	508
#define PTROBOT_PRINTFILE_INVALID	509
#define PTROBOT_PRINTAPP_NOT_INSTALLED	510
#define PTROBOT_PRINTFILE_NOT_FOUND	511
#define PTROBOT_PRN_INVALID	512
#define PTROBOT_UNSUPPORTED_OPTION	513
#define PTROBOT_DIRNOTFOUND	514
#define PTROBOT_INVALID_LOCATION	515
#define PTROBOT_MULTDRIVES	516
#define PTROBOT_INVALID_PRINTER_SETTINGS	517
#define PTROBOT_INVALID_DRIVE_POSITION	518
#define PTROBOT_INVALID_ACTION	519
#define PTROBOT_FEATURE_NOT_IMPLEMENTED	520
#define PTROBOT_PRINTAPP_OPEN	521
#define PTROBOT_MISSING_DLL	522
#define PTROBOT_DRIVE_NOT_READY	523
#define PTROBOT_INVALID_MEDIA	524
#define PTROBOT_NO_MEDIA	525
#define PTROBOT_INVALID_LANG	526
#define PTROBOT_INVALID_ERROR	527
#define PTROBOT_BUSY	528
#define PTROBOT_INVALID_EXTENSION	529

### 4.2 System Errors

#define SYSERR_NONE	0
#define SYSERR_PTR_TRAY	1
#define SYSERR_CART_CODE	2
#define SYSERR_INPUT_EMPTY	3
#define SYSERR_PTR_COMM	4
#define SYSERR_CLR_EMPTY	5
#define SYSERR_BLK_EMPTY	6
#define SYSERR_BOTH_EMPTY	7
#define SYSERR_PICK	8
#define SYSERR_ARM_MOVE	9

```

#define SYSERR_CART_MOVE 10
#define SYSERR_INTERNAL_SW 12
#define SYSERR_NO_ROBODRIVES 13
#define SYSERR_OFFLINE 14
#define SYSERR_COVER_OPEN 15
#define SYSERR_PRINTER_PICK 16
#define SYSERR_MULTIPLE_PICK 17
#define SYSERR_MULTIPLEDISCS_IN_PRINTER 18
#define SYSERR_MULTIPLEDISCS_IN_RECORDER 19
#define SYSERR_DROPPED_DISC_RECORDER 20
#define SYSERR_DROPPED_DISC_BIN1 28
#define SYSERR_DROPPED_DISC_BIN2 29
#define SYSERR_DROPPED_DISC_PRINTER 33
#define SYSERR_DROPPED_DISC_REJECT 34
#define SYSERR_DROPPED_DISC_UNKNOWN 35
#define SYSERR_ALIGNNEEDED 36
#define SYSERR_COLOR_INVALID 37
#define SYSERR_BLACK_INVALID 38
#define SYSERR_BOTH_INVALID 39
#define SYSERR_NOCARTS 40
#define SYSERR_K_IN_CMY 41
#define SYSERR_CMY_IN_K 42
#define SYSERR_SWAPPED 43
#define SYSERR_PIGONPRO 44
#define SYSERR_ALIGNFAILED 45
#define SYSERR_DROPPED_DISC_PRINTER_FATAL 46
#define SYSERR_MULTIPLEDISCS_IN_RIGHTBIN 47
#define SYSERR_MULTIPLEDISCS_IN_LEFTBIN 48
#define SYSERR_CLR_EMPTY_FINAL 49
#define SYSERR_BLK_EMPTY_FINAL 50
#define SYSERR_BOTH_EMPTY_FINAL 51
#define SYSERR_WAITING_FOR_PRINTER 52
#define SYSERR_NO_DISC_IN_PRINTER 53
#define SYSERR_BUSY 54
#define SYSERR_PURGE 55
#define SYSERR_DOCK_SENSOR 56
#define SYSERR_ALREADY_PRINTED 57
#define SYSERR_UNKNOWN_HARDWARE 58

```

### 4.3 System State

```

#define SYSSTATE_IDLE 0
#define SYSSTATE_BUSY 1
#define SYSSTATE_ERROR 2

```

### 4.4 Robot Type

```

#define ROBOT_DISCPUBLISHER 0 // Disc Publisher I
#define ROBOT_DISCPUBLISHERII 1 // Disc Publisher II
#define ROBOT_DISCPUBLISHERPRO 2 // Disc Publisher PRO
#define ROBOT_COMPOSERMAX 3 // ComposerMAX
#define ROBOT_RACKMOUNT_DPII 4 // Disc Publisher XR
#define ROBOT_DISCPUBLISHER_XRP 5 // Disc Publisher XRP
#define ROBOT_DISCPUBLISHER_SE 6 // Disc Publisher SE

```

```
#define ROBOT_DISCPUBLISHERPRO_XI 7 // Disc Publisher Xi Series
#define ROBOT_DISCPUBLISHER_4100 8 // Disc Publisher 4100 Series
```

## 4.5 Bin Auto Use

```
#define BIN_INPUT 0
#define BIN_OUTPUT 1
```

## 4.6 Robot Options

```
#define PTOPT_KIOSKMODE 0x00000001
```

## 4.7 Robot Actions

```
#define PTACT_ALIGNPRINTER 0x00000001
#define PTACT_IGNOREINKLOW 0x00000002
#define PTACT_DISABLEPWRBUTTON 0x00000004
#define PTACT_REINIT_DRIVES 0x00000008
#define PTACT_IDENTIFY 0x00000010
#define PTACT_CANCELCMD 0x00000020
#define PTACT_ENABLEPWRBUTTON 0x00000040
#define PTACT_RESETSYSTEM 0x00000080
#define PTACT_CHECKDISCS 0x00000100 // Check number of discs in bins
#define PTACT_CLEANCARTRIDGES 0x00000200 // Clean the cartridges
#define PTACT_CALIBRATE_ONE_DISC 0x00000400 // SE, II, Pro: Calibrate for one disc
// (user must put one disc in each bin).
#define PTACT_CHANGE_CARTRIDGE 0x00000800 // SE, II, Pro: Start the cartridge
// change procedure
#define PTACT_END_CARTRIDGE_CHANGE 0x00001000 // SE: End the cartridge change (can
// close lid also)
#define PTACT_SHIP_POSITION 0x00002000 // SE, II, Pro: Move the picker to the
// shipping position
#define PTACT_RESET_LEFT_INK_LEVELS 0x00004000 // II: Clears the ink spits for the LEFT
// cartridge
#define PTACT_RESET_RIGHT_INK_LEVELS 0x00008000 // II: Clears the ink spits for the
// RIGHT cartridge
#define PTACT_ALLOW_NO_CARTRIDGES 0x00010000 // SE, II, Pro: Allows unit to operate
non-printing robotics without a cartridge
#define PTACT_XI_LIGHT_OFF 0x00020000
#define PTACT_XI_LIGHT_ON 0x00040000
#define PTACT_XI_LIGHT_FLASH 0x00080000
#define PTACT_UNHOOK_PICKER 0x00100000
#define PTACT_AUTOPRINTER_MODE 0x00200000 // DP4100: can perform a faster multiple
copy print-only job by calling
PTRobot_SetPrintCopies() prior to calling
the print function (e.g.
PTRobot_PrintFile()).
#define PTACT_FAN_ON 0x00400000 // DP4100: turn on system fan
#define PTACT_FAN_OFF 0x00800000 // DP4100: turn off system fan
```

## 4.8 Print Quality

```
#define PQ_LOW          0
#define PQ_MED          1
#define PQ_BETTER       2
#define PQ_HIGH         3
#define PQ_BEST         4
```

## 4.9 Drive Open Close

```
#define DRIVE_OPEN      0
#define DRIVE_CLOSE     1
```

## 4.10 Locations

```
#define LOCATION_AUTO    0
#define LOCATION_PRINTER 100
#define LOCATION_REJECT  200
```

## 4.11 Bus Type

```
#define BUSTYPE_USB      0
#define BUSTYPE_1394     1
```

## 4.12 Clear Drive

```
#define CLEARDRIVE_NO    0
#define CLEARDRIVE_YES   1
```

## 4.13 Languages

```
#define ENGLISH          0
#define JAPANESE         1
#define GERMAN           2
#define FRENCH           3
#define SPANISH          4
#define ITALIAN          5
#define CHINESE          6    // Simplified
#define KOREAN           7
#define POLISH           8
#define CHINESE_TRAD     9    // Traditional
#define CZECH           10
```

#### 4.14 Printer Tray Status

```
#define PRINT_TRAY_IN_WITH_DISC      'D'
#define PRINT_TRAY_IN_NO_DISC        'I'
#define PRINT_TRAY_OUT                'O'
```

#### 4.15 Disc Pick Switch Status

```
#define DISC_PICKER_NO_DISC          'X'
#define DISC_PICKER_HAS_DISC         'O'
```

#### 4.16 Cartridge Types

```
#define CARTRIDGE_NONE                0
#define CARTRIDGE_COLOR               1
#define CARTRIDGE_BLACK               2
#define CARTRIDGE_YELLOW              3
#define CARTRIDGE_CYAN                4
#define CARTRIDGE_MAGENTA             5
```

#### 4.17 Cartridges Installed

```
#define CARTRIDGE_INSTALLED_NONE      0
#define CARTRIDGE_INSTALLED_COLOR     1
#define CARTRIDGE_INSTALLED_BLACK     2
#define CARTRIDGE_INSTALLED_COLOR_AND_BLACK 3
#define CARTRIDGE_INSTALLED_COLOR_AND_COLOR 4
```

## 5 Recommended System Error Strings

Most applications will use `PTRobot_GetErrorString` to display system error messages. However, if you want to use your own error strings instead, below are some suggested error strings for various system errors. Some errors strings will vary depending on the robot type, and not all errors are reported from all robot types. You can determine what robot is connected from `dwRobotType` in `PTRobotInfo` structure (section 4.4 defines the types)

### 5.1 ***SYSERR\_PTR\_TRAY***

**DiscPublisherI/II:**

“Tray movement error. Press the left button on the unit to try again.”

**DiscPublisher XR/XRP:**

“Tray movement error. Open and close the cover to try again.”

### 5.2 ***SYSERR\_CART\_CODE***

**DiscPublisherI/II/ DiscPublisher XR/XRP:**

“There was a problem finding the ink cartridges. Open the cover and press the left button. Make sure the color cartridge is installed on the left and the black is on the right. Then close the cover.”

### 5.3 ***SYSERR\_INPUT\_EMPTY***

**DiscPublisherI/II/PRO:**

“The input bin is empty. Open the cover and add more discs. Then close the cover and push the left button on the unit.”

**DiscPublisher XR/XRP:**

“The input bin is empty. Open the cover, add more discs, and close the cover to continue.”

### 5.4 ***SYSERR\_PTR\_COMM***

**DiscPublisherI/II/PRO:**

“There was an internal printer communications error. Press the left button on the unit to try again.”

**DiscPublisher XR/XRP:**

“There was an internal printer communications error. Open and close the cover to try again.”

### 5.5 ***SYSERR\_CLR\_EMPTY***

**DiscPublisherI/II/PRO:**

“WARNING: The color cartridge is LOW on ink. To replace the cartridge, open the cover on the unit and press the left button. Then install the new cartridge and close the cover. To ignore the warning, press the left button.”



**DiscPublisher XR/XRP:**

“WARNING: The color cartridge is LOW on ink. To replace the cartridge, open the cover on the unit and press the left button. Then install the new cartridge and close the cover. To ignore the warning, open and close the cover.”

**5.6 SYSERR\_BLK\_EMPTY****DiscPublisherI/II/PRO:**

“WARNING: The black cartridge is LOW on ink. To replace the cartridge, open the cover on the unit and press the left button. Then install the new cartridge and close the cover. To ignore the warning, press the left button.”

**DiscPublisher XR/XRP:**

“WARNING: The black cartridge is LOW on ink. To replace the cartridge, open the cover on the unit and press the left button. Then install the new cartridge and close the cover. To ignore the warning, open and close the cover.”

**5.7 SYSERR\_BOTH\_EMPTY****DiscPublisherI/II/PRO:**

“WARNING: Both ink cartridges are LOW on ink. To replace the cartridges, open the cover on the unit and press the left button. Then install the new cartridges and close the cover. To ignore the warning, press the left button.”

**DiscPublisher XR/XRP:**

“WARNING: Both ink cartridges are LOW on ink. To replace the cartridge, open the cover on the unit and press the left button. Then install the new cartridges and close the cover. To ignore the warning, open and close the cover.”

**5.8 SYSERR\_PICK****DiscPublisherI/II/PRO:**

“The disc was not picked. Press the left button on the unit to try again.”

**DiscPublisher XR/XRP:**

“The disc was not picked. Open and close the cover to try again.”

**5.9 SYSERR\_ARM\_MOVE****DiscPublisher I:**

“There was an arm movement error. Press the left button on the unit to try again.”

## **5.10 SYSERR\_CART\_MOVE**

### **DiscPublisherI/II/PRO:**

“Arm picker error. Press the left button on the unit to try again.”

### **DiscPublisher XR/XRP:**

“Arm picker error. Open and close the cover to try again.”

## **5.11 SYSERR\_INTERNAL\_SW**

“There was an internal software error. Please re-start the software.”

## **5.12 SYSERR\_NO\_ROBODRIVES**

“No external recorder drives were found. Re-power the computer and unit, and then re-start the software.”

## **5.13 SYSERR\_OFFLINE**

“The unit is offline. Please ensure the unit is connected and powered on. You may need to shut down and restart the software.”

## **5.14 SYSERR\_COVER\_OPEN**

“The unit’s cover is open. Please close the cover.”

## **5.15 SYSERR\_PRINTER\_PICK**

### **DiscPublisherI/II/PRO:**

“The disc was not picked from the printer. Press the left button to retry.”

### **DiscPublisher XR/XRP:**

“The disc was not picked from the printer. Open and close the cover to try again.”

## **5.16 SYSERR\_MULTIPLE\_PICK**

### **DiscPublisherII/PRO:**

“Multiple discs were picked up and moved. Please manually remove any extra discs that were moved, keeping a single disc in place. Then close the cover and press the left button.”

### **DiscPublisher XR/XRP:**

“Multiple discs were picked up and moved. Please open the cover and manually remove any extra discs that were moved, keeping a single disc in place. Then close the cover to continue.”

### **5.17 *SYSERR\_MULTIPLEDISCS\_IN\_PRINTER***

**DiscPublisherII/PRO:**

“Multiple discs were placed in the printer. Please manually remove any extra discs from the printer, keeping a single disc in place. Then close the cover and press the left button.”

**DiscPublisher XR/XRP:**

“Multiple discs were placed in the printer. Please open the cover and manually remove any extra discs from the printer, keeping a single disc in place. Then close the cover to continue.”

### **5.18 *SYSERR\_MULTIPLEDISCS\_IN\_RECORDER***

**DiscPublisherII/PRO:**

“Multiple discs were placed in the recorder. Please manually remove any extra discs from the recorder, keeping a single disc in place. Then close the cover and press the left button.”

**DiscPublisher XR/XRP:**

“Multiple discs were placed in the recorder. Please open the cover and manually remove any extra discs from the printer, keeping a single disc in place. Then close the cover to continue.”

### **5.19 *SYSERR\_DROPPED\_DISC\_RECORDER***

**DiscPublisherII/PRO:**

“The disc was dropped while moving into the recorder. Please manually place the disc into the recorder tray. Then close the cover and press the left button.”

**DiscPublisher XR/XRP:**

“The disc was dropped while moving into the recorder. Please open the cover and manually place the disc into the recorder tray. Then close the cover to continue.”

### **5.20 *SYSERR\_DROPPED\_DISC\_BIN1***

**DiscPublisherII/PRO:**

“The disc was dropped while moving into the right bin. Please manually place the disc into the right bin. Then close the cover and press the left button.”

**DiscPublisher XR/XRP:**

“The disc was dropped while moving into the right bin. Please open the cover and manually place the disc into the right bin. Then close the cover to continue.”

### **5.21 *SYSERR\_DROPPED\_DISC\_BIN2***

**DiscPublisherII/PRO:**

“The disc was dropped while moving into the left bin. Please manually place

the disc into the left bin. Then close the cover and press the left button.”

**DiscPublisher XR/XRP:**

“The disc was dropped while moving into the left bin. Please open the cover and manually place the disc into the left bin. Then close the cover to continue.”

## **5.22 *SYSERR\_DROPPED\_DISC\_PRINTER***

**DiscPublisherII/PRO:**

“The disc was dropped while moving into the printer. Please manually place the disc into the printer tray. Then close the cover and press the left button.”

**DiscPublisher XR/XRP:**

“The disc was dropped while moving into the printer. Please open the cover and manually place the disc into the printer tray. Then close the cover to continue.”

## **5.23 *SYSERR\_DROPPED\_DISC\_REJECT***

**DiscPublisherII/PRO:**

“The disc was dropped while moving to the reject area. Please remove the dropped disc. Then close the cover and press the left button.”

**DiscPublisher XR/XRP:**

“The disc was dropped while moving to the reject area. Please open the cover and remove the dropped disc. Then close the cover to continue.”

## **5.24 *SYSERR\_DROPPED\_DISC\_UNKNOWN***

**DiscPublisherII/PRO:**

“The disc was dropped. Please remove the dropped disc. Then close the cover and press the left button.”

**DiscPublisher XR/XRP:**

“The disc was dropped. Please open the cover and remove the dropped disc. Then close the cover to continue.”

## **5.25 *SYSERR\_ALIGNNEEDED***

**DiscPublisherPRO:**

“The printer cartridges need to be aligned.”

NOTE: Your application can require the user to go to the Printing Preferences in the Printers and Faxes folder to perform this function. Or, you can use the PTRobot\_SystemAction call to help the user perform an alignment.

### **5.26 SYSERR\_COLOR\_INVALID**

**DiscPublisherPRO:**

“The color cartridge is invalid. Open the cover and press the left button. Change the cartridge and close the cover.”

### **5.27 SYSERR\_BLACK\_INVALID**

**DiscPublisherPRO:**

“The black cartridge is invalid. Open the cover and press the left button. Change the cartridge and close the cover.”

### **5.28 SYSERR\_BOTH\_INVALID**

**DiscPublisherPRO:**

“Both cartridges are invalid. Open the cover and press the left button. Change the cartridges and close the cover.”

### **5.29 SYSERR\_NOCARTS**

**DiscPublisherPRO:**

“No cartridges are installed. Open the cover and press the left button. Install the cartridges and close the cover.”

### **5.30 SYSERR\_K\_IN\_CMY**

**DiscPublisherPRO:**

“The black cartridge is installed in the color position. Open the cover and press the left button. Change the cartridge and close the cover.”

### **5.31 SYSERR\_CMY\_IN\_K**

**DiscPublisherPRO:**

“The color cartridge is installed in the black position. Open the cover and press the left button. Change the cartridge and close the cover.”

### **5.32 SYSERR\_SWAPPED**

**DiscPublisherPRO:**

“The black and color cartridges are swapped. Open the cover and press the left button. Swap the cartridges and close the cover.”

### **5.33 *SYSERR\_PIGONPRO***

**DiscPublisherPRO:**

“This printer is not compatible with a pigment-based black cartridge. Open the cover and press the left button. Install a dye-based black cartridge and close the cover.”

### **5.34 *SYSERR\_ALIGNFAILED***

**DiscPublisherPRO:**

“The alignment print failed.”

NOTE: Your application can either require the user to go to the Printing Preferences in the Printers and Faxes folder to re-do this function. Or, you can use the PTRobot\_SystemAction call to help the user perform another alignment.

### **5.35 *SYSERR\_DROPPED\_DISC\_PRINTER\_FATAL***

**DiscPublisherII/PRO:**

“The disc was dropped while moving to/from the printer. Please open the cover and manually remove and discard the disc. Then place a new disc in the recorder, close the cover and press the left button.”

**DiscPublisher XR/XRP:**

“The disc was dropped while moving to/from the printer. Please open the cover and manually remove and discard the disc. Then place a new disc in the recorder and close the cover to continue.”

### **5.36 *SYSERR\_MULTIPLEDISCS\_IN\_RIGHTBIN***

**DiscPublisherII/PRO:**

“Multiple discs were placed in the right bin. Please manually move any extra discs to the left bin, keeping a single disc in place. Then close the cover and press the left button.”

**DiscPublisher XR/XRP:**

“Multiple discs were placed in the right bin. Please open the cover and manually move any extra discs to the left bin, keeping a single disc in place. Then close the cover to continue.”

### **5.37 *SYSERR\_MULTIPLEDISCS\_IN\_LEFTBIN***

**DiscPublisherII/PRO:**

“Multiple discs were placed in the left bin. Please manually move any extra discs to the right bin, keeping a single disc in place. Then close the cover and press the left button.”

**DiscPublisher XR/XRP:**

“Multiple discs were placed in the left bin. Please open the cover and manually move any extra discs to the right bin, keeping a single disc in place. Then close the cover to continue.”

### **5.38 *SYSERR\_CLR\_EMPTY\_FINAL***

**DiscPublisherPRO:**

“WARNING: The color cartridge is Empty. To replace the cartridge, open the cover on the unit and press the left button. Then install the new cartridge and close the cover. To ignore the warning, press the left button.”

### **5.39 *SYSERR\_BLK\_EMPTY\_FINAL***

**DiscPublisherPRO:**

“WARNING: The black cartridge is Empty. To replace the cartridge, open the cover on the unit and press the left button. Then install the new cartridge and close the cover. To ignore the warning, press the left button.”

### **5.40 *SYSERR\_BOTH\_EMPTY\_FINAL***

**DiscPublisherPRO:**

“WARNING: Both cartridges are Empty. To replace the cartridge, open the cover on the unit and press the left button. Then install the new cartridge and close the cover. To ignore the warning, press the left button.”

### **5.41 *SYSERR\_WAITING\_FOR\_PRINTER***

“The system timed out waiting for the printer to finish. The disc may not have been printed on.”

## 6 Revision History

### 3/8/11 – document version 2.4

- Updated section 2.1.6 Cartridge Types for individual color ink types and added section 2.1.7 for Cartridges Installed. Added several sections in 3. Updated sections 4.2, 4.4, and 4.7. Added few missing API calls.

### 11/15/07 – document version 2.3

- Added a note about Unicode vs. MCBS versions. (Section 3)

### 10/26/07 – document version 2.2

- Added new API call: PTRobot\_PrintFileWithMerge2(). (Section 2.3.14)
- Added new API call: PTRobot\_AddMergeFields(). (Section 2.4.2)
- Added new API call: PTRobot\_ClearMergeList(). (Section 2.4.3)
- Added several System Actions (Section 4.7).

### 7/27/07 – document version 2.1

- Document the fact that PTRobot now supports Disc Publisher SE
- Added two new API calls: PTRobot\_GetSureThingPreview() and PTRobot\_GetManufactureInfo() Section 2.2.7 and 2.4.1
- Added new structure PTManufactureInfo (Section 3.8)
- Added some new defines

### 5/16/06 – document version 2.0

- Document the fact that PTRobot now supports Disc Publisher XRP
- Added new API calls PTRobot\_GetRobotInfo2() and PTRobot\_GetRobotStatus2 (Sections 2.25 and 2.26)
- Added new structures PTRobotInfo2 and PTRobotStatus2 (Sections 3.6 and 3.7)
- Added new defines (Section 4.14 to 4.16)

### 10/14/05 – document version 1.9

- Document the fact that PTRobot now supports Disc Publisher XR  
Note: ROBOT\_RACKMOUNT\_DPII is for the Disc Publisher XR

### 9/14/05 – document version 1.8

- Added new System Errors 46-52 (Section 4.2).
- Added new string descriptions for the newly added system errors (Section 5.35 to 5.41).

### 7/13/05 – document version 1.7

- Added hRobot parameter to PTRobot\_GetErrorString (Section 2.1.11)
- Fixed documentation error for robotic functions (Section 2.3) where the reject position was given as 100 instead of 200.
- Added PTACT\_CANCEL\_CMD (Section 4.7)



- Added members to PTRobotStatus structure (Section 3.3)

#### 6/18/05 – document version 1.6

- Updated PTRobot API return values (Section 4.1)
- Updated PTRobot\_GetErrorString to also return PTRobot API errors (Section 2.1.11)

#### 6/17/05 - document version 1.5

- Added tszMediaType to the PTMediaInfo structure (Section 3.5)
- Updated recommended system error strings (Section 5)

#### 6/14/05 - document version 1.4

- Added new PTRobot return values (Section 4.1)
- Added PTRobot\_SetApplicationID (Section 2.1.12)
- Added PTRobot\_GetMediaInfo (Section 2.2.4)
- Added PTRobot\_GetErrorString (Section 2.1.11)
- Removed “Cmd Completion Flags” (Previously Section 4.8)
- Removed dwCommandComplete member of PTRobotStatus. (Section 3.3)
- Added PTMediaInfo structure (Section 3.5)
- Added Language definitions (Section 4.13)

#### 6/3/05 - document version 1.3

- Updated notes in PTRobot\_EnumRobots

#### 5/23/05 - document version 1.2

- Added links within the document.

#### 5/20/05 - document version 1.1

- Added PrintFileWithMerge() – section 2.3.8
- Added sections 5 “Recommended System Error Strings.”
- Changed BYTE bDriveBusType to DWORD dwDriveBusType in PTRobotInfo structure – section 3.2
- Added ROBOT\_RACKMOUNT\_DPII Robot Type for the RackMount Disc Publisher II – section 4.4
- Changed all char to TCHAR
- Added PTROBOT\_PRINTAPP\_OPEN return value