movtoCPos

Move the Herkulex motor to a desired position

Contents

Syntax

```
movtoCPos(sObject,pID,CVal,varargin)
```

Description

movtoCPos(sObject,pID,val) moves the motor to the desired position. Note that the position moved is the calibrated position.

- This function is intended for single motor control only.
- Default playtime value: 60 (60*11.2ms = 672ms)
- greenLED is on during process to show non-error status.

Input Arguments

- sObject - serial port object
- pID - integer
- CVal - integer
- varargin - integer

Function Codes

```
function movtoCPos(sObject, pID, CVal, varargin)



    % Setting default playtime

    if nargin == 3

        playtime = 672/11.2;     % Default playtime value 672ms/11.2ms = 60

        pTime = dec2hex(int64(playtime),2); % Convert value to hex for packet
```

```
    elseif nargin == 4

        V = cell2mat(varargin);  % Convert varargin into number

        playtime = V/11.2;  % Convert into value

        pTime = dec2hex(int64(playtime),2);

    else

        error('Please input only 3 to 4 arguments!');

    end



    % Check input value

    checkCVal(sObject,pID,CVal);



    % Convert values into hex for packet

    % Byte in reverse order by Little Endian Order

    pos = dec2hex(CVal,4);

    pos = strcat(pos(3:4),pos(1:2));



    % Construct packet

    data = strcat([pTime,pos,'04',dec2hex(pID,2)]); % 0x04 for green LED

    packet = pkGen(pID,06,data);    % CMD = 0x06 (S_Jog)

    inHkx(sObject, packet);



    % Wait for the operation to complete
```

```
    pause(1);



    % Confirm end position

    CPos = getCPos(sObject,pID);

    fprintf('Motor %d at calibrated position %d\n', pID, CPos);

end
```

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