

HMI Address: - {Link3}1@W40001

Arduino Address: - modbus_construct(actualSpeedHMI, 3, PRESET_MULTIPLE_REGISTERS, 0, 1, readActualSpeedVSD);

This corresponds to button address W40001 on the Delta HMI.
The arduino is zero-indexed, the HMI is not. Hence the offset.

5999

HMI Address: - {Link3}1@W40001

Arduino Address: - 0



HMI Address: - {Link3}1@W40011

Arduino Address: - 10

6000

HMI Address: - {Link3}1@W40011

Arduino Address: - 10

5.2

HMI Address: - {Link3}1@W40021

Arduino Address: - 20

Disabled

HMI Address: - {Link3}1@W40051

Arduino Address: - 50

RUN
FWD

HMI Address: - {Link3}1@W40061

Arduino Address: - 60

RUN
REV

HMI Address: - {Link3}1@W40071

Arduino Address: - 70

RESET

HMI Address: - {Link3}1@W40081

Arduino Address: - 80

E-STOP

HMI Address: - {Link3}1@W40091

Arduino Address: - 90



HMI Address: - {Link3}1@W40101

Arduino Address: - 100



HMI Address: - {Link3}1@W40111

Arduino Address: - 110

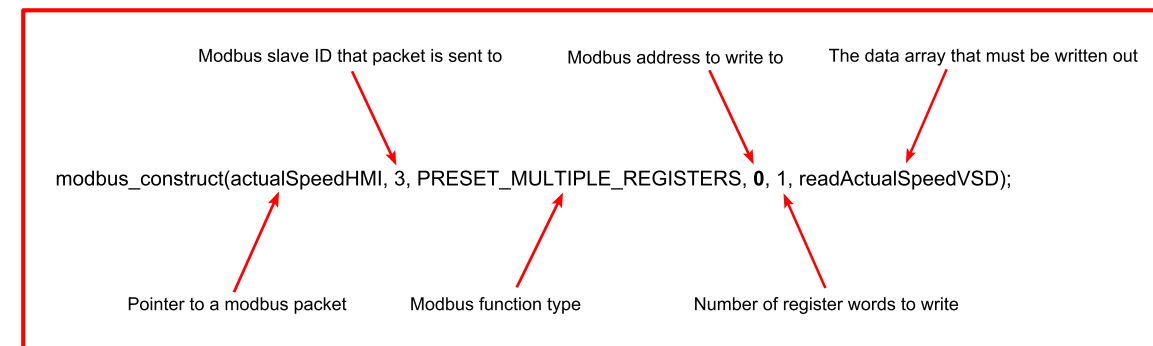


HMI Address: - {Link3}1@W40121

Arduino Address: - 120



"modbus_construct" is the function from the SimpleModbusMaster library that assembles each modbus packet to be sent out. You need one of these lines for each object on the HMI display. All of these packets are stored in an array which is sent out serially over RS485 each time the "modbus_update" function is called in the main loop.



Software Required for this system setup:

1. DELTA DOPsoft for HMI screen design, programming and register and communication setup.
2. Arduino IDE with the AET SimpleModbusMater library loaded. (see <https://github.com/aetcmc/RS485-Shield>)
3. Sample program from the above GITHUB repository which grabs key press information from the HMI modbus registers and turns them into a "BUTTONSTATE" variable so the user can tell which button has been pressed.

Make sure to check on our YouTube page for videos of the HMI DOPSoft setup. It shows how to build up the screen shown on this page and you will quickly learn how to go about making your own custom HMI.

www.youtube.com/aetcmc

DELTA DOP-B07E515
Prepared By: GHJ Date: 12/12/2013



Delta HMI with Arduino - Sheet 2/3
- HMI Implementation Guide