600-DIO Installation QRG

For Digital I/O Board - PN 20-0117-20 Rev. E (or older Rev. C)

CONTENTS

1.0 Installing a 600-DIO Board on the I2C Data Bus

This section describes installing a 600-DIO board on the I2C Data Bus (ribbon cable) for standard operation.

DO NOT INTERRUPT FLASHING. Do not interrupt the power source, I2C Bus, or SW1 Reset on the CPU or DRM board during flashing process. Interrupting flash will damage board memory and require factory repair.

- **NEW INSTALLS:** install the CPU and verify it is correctly flashed to agree with the software you are installing found in SG (Help>About screen). If needed, flash the CPU before you connect the DIO board to the data bus.
- **UPGRADES/REPAIRS**: connect the DIO board to the data bus when the CPU is online.

1. Install the DIO Board with the mounting bracket under the standoffs and flush to back wall of the cabinet.
2. Tighten standoffs on top of the DIO mounting bracket.
3. Connect the DIO to the data bus after the CPU is completed flashing and connect power to the DIO board. At this point if you open the Panel Status page (or issue the Boards command) you should see #34.
4. Place the **DIO Config Switch** (sw2) in the **OFF** position and press **Reset** (sw1) on the DIO Board. The DIO Board ID will become #33. You are now able to configure the DIO Board.

   NOTE: if you have a Rev. C DIO, insert a 3.5mm audio jack in the plug and press **Reset** to enter Config mode.

5. **You must configure the DIO Board ID to a valid, unused number** (1-16 is valid; no duplicates allowed):

Using the embedded webpage:	Using a Terminal Emulator (Putty, TeraTerm):
a) Enter the 635-CPU IP Address into the browser URL field to open the CPU Panel Status page. b) Set the DIO Board ID by clicking the DIO Serial Number in the Boards Table. c) Change the Board ID from *#33* (default ID) to a valid ID number that is unused on the data bus. d) Click the **Update Config button** to save the new Board ID number.	a) At the command line, enter the "**config**" command followed by the correlating *reference number* that matches your DIO #33. b) Enter a valid ID number that is unused on the data bus. c) When prompted, enter **"yes"** to save the new Board ID number.

6. Move the **DIO Config Switch** (sw2) to the **ON** position and press **Reset** (sw1) to exit Config mode.

   NOTE if you have a Rev. C DIO Board, remove the 3.5mm audio jack and press **Reset** (sw1).

7. Confirm the DIO Board ID displays on the I2C bus.
   - **From the Panel Status page:** confirm the new DIO Board ID displays in the Boards table.
   - **From a Terminal Emulator:** confirm the new DIO Board ID displays by issuing the **"boards"** command.
8. The **DIO flash version** must match the **CPU flash** for proper operation. Update as follows …
   - **From the Panel Status page:** click the '**Clear Auto-Update Timers**' button to update DIO flash.
   - **From a Terminal Emulator:** issue the **"clear auto"** command to update DIO flash.
9. After the DIO Board has finished updating flash and has returned to "Normal" status on the Boards table, you can exit the configuration screen and proceed with the installation.

ALSO SEE: Galaxy Hardware Manual (avail. PDF www.galaxysys.com)

2.0 Configuring DIO Supervision or Hypervision

This section describes how to configure Supervision or Hypervision features.

1. **Install supervision resistor(s) at the device-end (not at the DIO end).** Resistors can be installed in series, or parallel, or combined series & parallel. *The system preset resistor values are 1k, 2k, 2.2k, 4.7k.*
2. **Configure the Inputs in System Galaxy Software to match the resister values and configuration** of install (series, parallel, combined)**.**
3. **Supervision Thresholds are automatically populated for preset resistor values.**
4. **Configure the Hypervision option only if Hypervision is also desired**.

NOTE: the Inputs can be individually supervised on a point-by-point basis.

NOTE: the Inputs can be individually wired on a point-by-point basis for closed loop (NC) or open loop (NO).

>>> See other side for IMPORTANT INSTALLATION Instructions. <<<