

## Recovering HOBOb® U30-WIF from 'Factory Defaults'



**Before** beginning, please have a printed copy of this document on-hand if possible.

**Applies to:** U30-WIF

**Problem:** The U30-WIF (Wi-Fi version) has accidentally been restored to 'Factory Defaults,' which are **not** the Onset factory defaults. Instead, this causes the Lantronix Wi-Fi module contained in the U30 to be restored to *its* factory defaults, which are not compatible with the U30.

**Background information:** The main issue is the Lantronix module's factory default serial protocol is 9600 baud with no flow control as compared to 115200 baud with hardware flow control.

**Solution:** Use the HOBOb NetSetup utility to reconfigure the U30 as instructed below.


**Materials needed:** PC, Type A to mini-B USB cable, 'HOBOb NetSetup' utility (downloaded from Onset web site to PC)



*If you make a mistake in entering any of the information, simply repeat that step when presented with the main menu again.*

*There should be no need to power down the device or terminate the program prematurely.*

**Procedure:**

1. Power down the U30. **Important:** Unplug any solar panel or AC adapter *before* unplugging the battery, to prevent possible damage to the U30.
2. Connect the U30 to PC via USB cable (type A to mini-B).
3. Run the '**HOBOb NetSetup**' utility (do not click 'Begin' on startup window until step 5).
4. Power up the U30 and wait for PC to detect device. You will hear this sound once detected (click this icon ).
5. Now click '**Begin**' on the '**HOBOb NetSetup**' utility startup window. Wait for the text to stop scrolling and the '**Change Setup**' menu to appear (see figure 1).
6. Type '**1**' and press '**Enter**' to bring up the Channel 1 settings screen (see figure 2).
7. Starting with '**Baudrate**', key in and press '**Enter**' for each value shown in parentheses in figure 2. **NOTE:** For all screens in this procedure, any value shown in **boldface** is particularly critical. After the last value has been entered, the '**Change Setup**' menu will reappear.
8. Type '**2**' and press '**Enter**' to bring up the Channel 2 settings screen (see figure 3).
9. Key in and press '**Enter**' for the one value shown in figure 3. Again, you will be returned to the '**Change Setup**' menu.
10. Type '**5**' and press '**Enter**' to bring up the Expert settings screen (see figure 4).
11. Again key in and press '**Enter**' for each value shown in parentheses.
12. At this point, the device has been reconfigured to an operational state. To save the changes in the device, enter '**9**' at the '**Change Setup**' menu to 'Save and exit.' The '**HOBOb NetSetup**' utility will automatically terminate.
13. From here, the device still needs to be configured to be able to attach to your network. Again run the '**HOBOb NetSetup**' utility and navigate through options '**0**' and '**4**' to configure your server and WLAN as necessary. The options can be seen in figures 5 and 6; although your resulting configuration may differ depending on DHCP settings and network parameters.

Change Setup:

```
0 Server
1 Channel 1
2 Channel 2
3 E-mail
4 WLAN
5 Expert
6 Security
7 Defaults
8 Exit without save
9 Save and exit      Your choice ?
```

**Figure 1: 'Change Setup' Options Menu**

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**Baudrate (115200) ?**  
**I/F Mode (4C) ?**  
**Flow (02) ?**  
 Port No (10001) ?  
**ConnectMode (14) ?**  
**Send '+++' in Modem Mode (N) ?**  
**Show IP addr after 'RING' (N) ?**  
 Auto increment source port (N) ?  
 Remote IP Address : (000) .(000) .(000) .(000)  
 Remote Port (0) ?  
 DisConnMode (00) ?  
**FlushMode (04) ?**  
**DisConnTime (03:00) ?:**  
 SendChar 1 (00) ?  
 SendChar 2 (00) ?

Figure 2: Channel 1 Settings

Baudrate (00) ?

Figure 3: Channel 2 Settings

TCP Keepalive time in s (1s - 65s; 0s=disable): (45) ?  
 ARP Cache timeout in s (1s - 600s) : (600) ?  
**CPU performance (0=Regular, 1=Low, 2=High): (1) ?**  
 Disable Monitor Mode @ bootup (N) ?  
 HTTP Port Number : (80) ?  
 SMTP Port Number : (25) ?  
 MTU Size (512 - 1400): (1400) ?  
 Enable alternate MAC (N) ?  
 Ethernet connection type: (0) ?

Figure 4: Expert Settings

**Network mode: 0=Wired Only, 1=Wireless Only, 2=Bridging(One Host) (1) ?**  
 IP Address : (000) .(000) .(000) .(000)  
 Set Gateway IP Address (N) ?  
 Netmask: Number of Bits for Host Part (0=default) (0)  
 Change telnet config password (N) ?  
 Change DHCP device name (not set) ? (N) ?

Figure 5: Server Settings

Topology: 0=Infrastructure, 1=Ad-Hoc (0) ?  
 Network name (SSID) (U30Testing) ?  
 Security suite: 0=none, 1=WEP, 2=WPA, 3=WPA2/802.11i (2) ?  
 Display current key (N) ?  
 Change Key (N) ?  
 Encryption: 0=TKIP, 1=TKIP+WEP (0) ?  
 TX Data rate: 0=fixed, 1=auto fallback (1) ?  
 TX Data rate: 0=1, 1=2, 2=5.5, 3=11, 4=18, 5=24, 6=36, 7=54 Mbps (7) ?  
**Enable power management (Y) ?**

Figure 6: WLAN Settings