Future Logic GEN2 Ticket Printers
Troubleshooting and Repair
Presented by
Serial # Info

Breaking down the serial number into 4 digit segments helps to decipher configuration, date code of the printer and individual unit number.

The first 4 digits in the serial number tell us the configuration of the printer:

- **0035** 200708060071 represents Netplex
- **0183** 200708060071 also represents Netplex
- **0037** 200708060071 represents RS232
- **0187** 200708060071 also represents RS232
Serial # Info Cont’d

- The next 2 segments give us the year, month and day of manufacture for warranty purposes:
- The second set of 4 digits indicates the year of manufacture

So 0035200708060071 would be made in ‘07
The third set of 4 digits represent the month/day of Manufacture: So 0035200708060071 would be a build date of August 6.

The fourth set of 4 digits represent the individual unit number: 0035200708060071.
Warranty Info

- The Warranty is 24 months from the date of manufacture.

So this printer's warranty would expire when?

0035200708060071
RS232 Printer

- All manufacturers other than IGT
- Uses 12 pin and 14 pin coiled cable
- Dipswitch 2 in ON position to obtain 38,400 baud rate, Dips 1 & 2 on for 9600 baud rate
- Model #PSA-66-ST2R

**NOTE**: Williams Bluebird uses Netplex firmware in an RS232 printer.
IGT Netplex Printer

- Used only in IGT
- Uses 8 pin coiled cable
- Everything else is the same. The only differences are the jumper configuration, coiled cable and the firmware installed.
- Model #: PSA-66-ST2N
- IGT baud rate is 19,200
Configurations – RS232/Netplex

- Jumpers on motherboard switch the communications (next to 12 pin Molex connector)
- Open pins – front: Netplex protocol
- Open pins – back: RS232 protocol
- Coiled Cables:
  1. 8 pin – Netplex
  2. 12 pin – Standard RS232
  3. 14 pin – RS232 (most OEM’s)
Configuration settings

- Jumper settings will determine configuration of RS232 or Netplex communication
Configuration settings Cont.

- Dip switch settings allows you to change the Baud Rate
- Communication speed
Motherboards

- Jumpers change communication type
- Dip switches, low paper and door open sensors are now located on motherboard
Motherboard Cont.

- All motherboards come from FLI with RS232 firmware loaded, even if the Netplex configuration is ordered (must always update firmware)
- Some printing issues can be fixed by re-downloading firmware
  - Corrupted SLF file
Motherboard Cont.

- Communication lockup: 2 stages
  - Corrupted VFX file
- Soft Lock—all LED’s w/comm.
- Hard Lock—all LED’s w/o comm.
- Lockup is referred as “flushed state” in Ops and Tech manual
- Use FLI download program to test for comm.
Overview of Keypad L.E.D.s Status Reporting

- Refer to tables 2-1 and 2-4 on pages 3 and 4 of GEN2 OPS and Tech manual for error codes and description/Remedy

- Print head error is a communication problem
Sensors

- **Door Open Sensor:** On back end of motherboard – flag is on the base

- **Low Paper Sensor:** In paper tray (doesn’t stop the game from working)
Sensors Cont.

Paper Present Sensor: in the top of the print head, looks for index mark on the ticket, it allows the paper to stop in the proper position.
Sensors Cont’d

Paper Chute Sensor (AKA Paper Taken Sensor):
Located in the front
(will sound if the customer doesn’t take the ticket out)
Sensors Cont.

Head Up Switch: in the print mech. housing. This is a hard tilt. If the switch goes bad or is not activated it does not allow the ticket to print.
Preventive Maintenance

- Wipe print element and roller with 99.9% Isopropyl alcohol and cotton swab
- Blow out printer w/compressed air
- Use cleaning card for p.m., if spillage occurs, if excessive dirt is present, also if print regions appear to look faded
Diagnostics

- A Diagnostic Ticket provides three main pieces of information:
  - Model: either RS232 or Netplex
  - Firmware: ‘VFX File’
  - Library Inventory: ‘SLF File’

The firmware that is loaded

All of the templates, fonts and regions
Library Inventories and Firmware

- If pieces of information are missing, the unit requires a flash download.
- Different firmware's are applicable to different jurisdictions.
- Techs need to know their own jurisdiction, it’s helpful to recognize others too.
Download/Diagnostic Testing

- For download and testing: dipswitch 2 on, all other dipswitches off
- If downloading to RS232 with 9600 baud rate dipswitch 1 must be turned off, after completed download turn dipswitch 1 back on for game communication
- Dipswitch 2 is the standard setting for communications and testing
Download/Diagnostic Testing

- Laptop Computer/PC
- 24VDC power supply
- Connections (harnessing)
  - Evaluation cable for RS232
    - 12 pin or 14 pin
  - RS232 to Netplex converter box
    - Used for Netplex printers
- Status Viewer program
Diagnostic Testing

- QUESTION: Do you remember baud rates for RS232, Netplex?
- Status Viewer is very easy to use, changes in status are ‘real time’
- Testing of printer takes just a few seconds
THE END