



International Currency Technologies Inc.

ICT Protocol For RS232

Communication Specification

Change History

Title		ICT Protocol For Forth			
Published		ICT, Department of Software Development			
Item	Version	Date	History	Modify	Comments
1	0.1	2004.07.30	First Edition	D.C	
2	0.2	2011.01.24	Add cmd 0x5A, Escrow Hold	Niki	
3	0.3	2014.01.15	Remove 0x26 response	ACQUA	

Table of Contents

1. General Information	4
2. Communication Format.....	4
3. Commands.....	5
3.1 Power Up.....	5
3.2 Escrow	5
3.3 Controller Polling Bill Acceptor Status	6
3.4 Enable/Disable	7
3.5 Reset.....	7

1. General Information

This specification describes the operation of ICT Interface Protocol.
It is regarding to the data for the interface between Controller and ICT product.

2. Communication Format

Transmission Method	Full Duplex Transmission	
Transmission Speed	9600 Baud Rate	
Synchronizing Method	Asynchronous Mode	
Connection Control Method	Request Method	
Data Format	Start bit	1
	Data bit	8
	Parity bit	Even
	Stop bit	1
	X parameter	None

3. Commands

3.1 Power Up

Bill Acceptor			Controller	
Category	Command	Direction	Command	Description
Power Supply ON	80H (128) 8FH (143)	➔		
1. Received 02H in 2 seconds		➔	02H (02)	Within 2 seconds

* Bill Acceptor will be Enable status until receive 0x02 from Controller.

3.2 Escrow

Bill Acceptor			Controller	
Category	Command	Direction	Command	Description
Send bill validated	81H (129)	➔		Bill validated
Send bill value	40H ~ 44H	➔		40H : First Bill Type 41H : Second Bill Type 42H : Third Bill Type 43H : Fourth Bill Type 44H : Fifth Bill Type
	Wait for Request (5 Seconds)	➔	02H (02) Or 0FH (15) Or 18H(24) Or	a. Request to Accept Or b. Request to Reject Or c. *Request to Hold in Escrow d. *No response (5 seconds)
Stacking (for a.) Or Reject (for b)	10H (16) 11H (17)	➔		Controller do not need to respond

*Note 1: 18H will hold the bill in Escrow until receive Accept (0x02h) or Reject (0x0fh).

*Note 2: If no any response after 5 mins Escrow Timeout, Bill Acceptor will Reject Bill automatically. If it continue 3 Times Escrow Timeout, Bill Acceptor Response Communication Failure.

3.3 Controller Polling Bill Acceptor Status

Bill Acceptor			Controller	
Category	Command	Direction	Command	Description
Controller Polling Bill Acceptor Status				
		←	0CH (12)	Request Bill Acceptor Status
Restart BA				
	20H (32) 21H (33) 22H (34) 23H (35) 24H (36) 25H (37) 27H (39) 28H (40) 29H (41) 2AH (42) • • 2EH(46) 2FH(47) 3EH (62) 5EH (94)			Motor Failure Checksum Error Bill Jam Bill Remove Stacker Open Sensor Problem Bill Fish Stacker Problem Bill Reject Invalid Command • • Reserved Response when Error Status is Exclusion Bill Acceptor Enable Status Bill Acceptor Inhibit Status

3.4 Enable/Disable

Bill Acceptor			Controller	
Category	Command	Direction	Command	Description
		←	3EH (62)	Controller Enable Bill Acceptor
		←	5EH (62)	Controller Disable Bill Acceptor

3.5 Reset

Bill Acceptor			Controller	
Category	Command	Direction	Command	Description
Command Bill Acceptor Reset		←	30H (48)	
Power Supply ON	80H (128) 8FH (143)	→		
1. Received 02H in 2 seconds		←	02H (02)	

* Bill Acceptor will be Enable status until receive 0x02 from Controller.



International Currency Technologies Corp.

No.24,Alley 38,Lane 91,Sec. 1,Nei Hu Road,Taipei,Taiwan,R.O.C.

TEL : +886-2-2797-1236

FAX: +886-2-2797-1634

Web: www.ictgroup.com.tw

ICT-HQ, Department of Software Development

Author: ACQUA Version: V0.3