



# **Allen-Bradley I/O Scanner-Communication Adapter Module (Cat. No. 1775-S5, -SR5)**

## **Use This Document With**

PLC-3 Family I/O Scanner Communication-Adapter Module User's Manual, publication 1775-6.5.5 - December 1987. This documentation update amends and supplements the above publication and applies to series A, revision D scanners. Keep this update with your manual.

## **Using a Data Highway Plus**

You can use the 1775-S5, -SR5 scanners to connect a PLC-3 or PLC-3/10 controller to a Data Highway Plus communication link. The user's manual refers to the Data Highway Plus communication link as the Peer-Communication-Link (PCL).

## **DH/DH+ Status Indicators**

On page 2-4 replace the last line of the last table on the page with this:

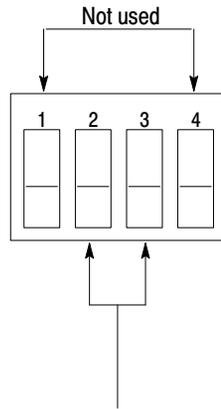
<b>LED</b>	<b>Color</b>	<b>Meaning when on</b>
DIS	yellow	DH/DH+ connectors are disabled or duplicate DH+ station address

## **Setting the Thumbwheel and Dip Switches**

On page 2-7 remove (LSB) and (MSB) from the first paragraph on the page.

On page 2-8 replace figure 2.5 with this figure:

**Figure 2.5  
Setting Backup System Functions**



Switch Positions:  
DOWN = Switch is toward board  
UP = Switch is away from board

If you are operating a backup system, then set these switches to set up the type of switchover.

Switchover Type	Switch		System (primary) or backup
	2	3	
Auto with controllable switchback	down	up	both
Auto with no switchback	down up	up up	primary backup
Manual	up	down	both

If you are not operating a backup system, then set switches 2 and 3 to the UP position

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### Inserting the Scanner

On page 2-9 replace the **CAUTION** at the bottom of the page with this:

**CAUTION:** You can replace a 1775-S4A, -SR scanner with a 1775-S5, -SR5 scanner; however, you must first clear memory before replacing one scanner with another. You must also select auto configure for each 1775-S5, -SR5 scanner communication channel in LIST. Failure to observe this caution could result in equipment damage and/or undesired machine operation.

## **Connecting to a Backup System**

On page 2-10 replace the first bullet of the **CAUTION** with this:

- Do not connect a 1775-S5, -SR5 scanner to a 1775-S4A, -S4B, or -SR scanner.

On page 2-14 remove the **CAUTION**.

## **I/O Scan Configuration**

On page 3-7 replace the **WARNING** at the bottom of the page with this:

**WARNING:** Do not assign the same I/O rack number and I/O group number to two chassis on the same I/O communication channel. Failure to observe this warning could result in equipment damage and/or undesired operation with personal injury.

## **Data Highway or DH+ Configuration**

On page 3-10 replace the eight bulleted items after the first paragraph with this:

- node mode
- station number
- timeout
- communication channel back up
- send unprotected
- accept upload/download
- accept writes
- input file list
- privileges
- DH/DH+ switch settings
- DH+ active node list

## **Connecting to the I/O Channel Terminal Arm**

When configuring channel four for a communication protocol, the menu contains these selections:

```
S5    1-CHAN 4
      1 NODE MODE      *ON-LINE    OFF-LINE
      2 STATION NUMBER:    23 SELECTED  255 ACTUAL
      3 DH/DH+ TIMEOUTS
      4 *COMMUNICATION CHANNEL BACKED UP
      5 *SEND UNPROTECTED
      6 *ACCEPT UPLOAD/DOWNLOAD
      7 *ACCEPT WRITES
      8 INPUT FILE LIST
      9 PRIVILEGES
     10 DH/DH+ SWITCH SETTINGS
     11 DH+ ACTIVE NODE LIST
      ENTER NEXT>
```

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### **Station Number**

On page 3-10 add this at the end of the page:

This line may show two values for the station number: selected and actual. Both numbers display if they are different and during these two situations:

- You changed the station number in line 2 but have not executed a reconfigure to change the actual station number to the new number.
  - The scanner in a backed up system assumes an address different from the primary scanner until switchover occurs.
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### **Timeouts**

On page 3-11 add this immediately before the first paragraph of text:

By selecting option three, you can set these timeout values in seconds:

- outgoing message
- LIST channel
- remote program

The three paragraphs in the manual describe the timeout for outgoing messages.

On page 3-11 add this immediately before the Send Unprotected section:

**List Channel**

This timeout detects a DH/DH+ station going off the link while still having an allocated LIST channel. Set this value high enough to prevent a timeout while running LIST but not so high that taking a station off the link keeps the LIST channel allocated unnecessarily.

**Important:** This timer clears when any link activity is detected from the station holding the edit resource.

On page 3-11 add this immediately before the Send Unprotected section:

**Communication Channel Back Up**

You should select option four if you have a scanner in a backup system that backs up the communication channel on the scanner in the primary system. Upon making this selection, an asterisk displays next to the selection. Both scanners should have the same station number.

On page 3-15 add this at the end of the page:

**DH/DH+ Switch Settings**

By selecting option 10, this information displays:

DH/DH+ SET-UP SWITCH SETTINGS								(VIEW FROM TOP OF MODULE)				
S1								S2				MODULE FRONT
DOWN/ON												
UP/OFF	X	X	X	X	X	X	X	X	X	X	X	
SWITCH #	8	7	6	5	4	3	2	4	3	2	1	
	MSD				LSD							
	STATION NUMBER IN OCTAL								MODE		BAUD	

CURRENT SELECTION	377	SOFT	INVALID
1 EXIT THIS MENU	NOTE:	SWITCH CHANGES ARE ONLY READ AFTER POWER UP	
ENTER NEXT >			

### DH+ Active Node List

If you are using channel four for Data Highway Plus communication, then by selecting option 11, a list of active nodes on the local link displays:

- An X next to a node number indicates a node present on the link.
- A US next to a node number indicates the station number of the scanner.

LIST OF ACTIVE STATIONS ON THE LOCAL DH+ LINK

TOTAL NUMBER OS STATIONS ON LOCAL LINK      7

0	X	10	20	30	40	50	60	70
1	X	11	21	31	41	51	61	71
2	X	12	22	32	42	52	62	72
3	X	13	23	33	43	53	63	73
4	X	14	24	34	44	54	64	74
5	X	15	25	35	45	55	65	75
6	US	16	26	36	46	56	66	76
7		17	27	37	47	57	67	77

1 EXIT THIS MENU

2 REDISPLAY MENU

### Operating a Backup System on a Data Highway Plus

On page 5-13 add this at the end of the page:

Data Highway Plus backup has been enhanced to operate similarly to Data Highway backup. Assign the same station number to both scanners. Once you do this, the scanner in the backup system assumes a different address:

<b>If the address is between</b>	<b>Then the scanner in the backup system assumes an address that is</b>
000 <sub>8</sub> and 037 <sub>8</sub>	040 <sub>8</sub> higher than the scanner in the primary system
040 <sub>8</sub> and 077 <sub>8</sub>	040 <sub>8</sub> lower than the scanner in the primary system

When switchover occurs, the address for the scanner in the backup system returns to the value that you assigned since it is now in the primary system.

Refer to chapter 5 in the user's manual for detailed information on backup operation.