

**ADDENDUM 2**  
**to**  
**DIGITAL CLOCK DISTRIBUTOR**  
**500 SERIES**  
**INPUT/OUTPUT REFERENCE GUIDE**  
**RELEASE 5.02.xx**

**1. GENERAL**

**1.001** This is an addendum to Issue 2 of Telecom Solutions' Digital Clock Distributor 500 Series Input/Output Reference Guide Release 5.02.xx (part number 097-45018-10) which is part of the TL1 User's Guide (997-45018-06). Place this addendum in front of Issue 2 of the Input/Output Reference Guide, Release 5.02.xx.

**1.002** Whenever this addendum is reissued, the reason for reissue will be given in this paragraph.

**2. CHANGES**

**2.001** The changes listed below were made. Changed areas are marked by change bars.

- On Page 29, a caution was added to the trouble-code parameter for TO cards in the ED-EQPT command.

- On Page 73, a caution was added to the trouble-code parameter for TO cards in the RTRV-EQPT command
- On Page 83, the RTRV-PM-PORT command format was modified.
- On Page 98, the SET-ATTR-PORT command format was modified.

**2.002** To implement the changes in the previous paragraph, do the following:

- Replace pages 29/30 of Issue 2 of 097-45018-10 with the attached pages 29/30.
- Replace pages 73/74 of Issue 2 of 097-45018-10 with the attached pages 75/76.
- Replace pages 83/84 of Issue 2 of 097-45018-10 with the attached pages 85/86.
- Replace pages 97/98 of Issue 2 of 097-45018-10 with the attached pages 101/102.



COMMAND CODE: ED-EQPT (Contd)

INPUT FORMAT (Contd)

aid	parameter	value	meaning
MRC-a	framing	(null)	(not applicable)
	troublecode		
	portseverity		
	osc1	RB	oscillator 1 (OSCA) is rubidium clock
		QTZ	oscillator 1 (OSCA) is quartz clock
		NONE	oscillator 1 (OSCA) is not equipped
	osc2	RB	oscillator 2 (OSCB) is rubidium clock
		QTZ	oscillator 2 (OSCB) is quartz clock
		NONE	oscillator 2 (OSCB) is not equipped
	integration	(null)	(not applicable)
TO-b	framing	CAS	channel assigned sequence
		CAS4	channel assigned sequence with frame aligned sequence with cyclic redundancy check 4
		CRC4	frame alignment sequence framing with cyclic redundancy check 4
		D4	D4 framing format
		ESF	ESF framing format
		FAS	frame alignment sequence framing
	troublecode	INH	all outputs are squelched upon card failure
		ALW	AIS is sent on all outputs upon card failure  <b>Caution: If any port on the card is set for ANALOG, the trouble-code must be set to INH.</b>
	portseverity	MJ	port failure causes major alarm
		MN	port failure causes minor alarm
	osc1	(null)	(not applicable)
	osc2		
	integration		

COMMAND CODE: ED-EQPT (Contd)

EXAMPLE

Input:

```
ED-EQPT::GTI-2:134::FAS,ALW,,RB,RB,1;
```

Response:

```
SANJOSE-114 1997-12-08 15:04:13  
M 134 COMPLD  
;
```

This example, tagged as command 134, changes the parameters for GTI-2 as follows:

- framing = FAS
- trouble code = outputs AIS during major alarm
- oscillator types are both rubidium
- alarm integration time is 4 hours for a minor alarm and 24 hours for a major alarm

COMMAND CODE: RTRV-EQPT (Contd)

RESPONSE FORMAT (Contd)

aid	parameter	value	meaning
MRC-a	framing	(null)	(not applicable)
	troublecode		
	portseverity		
	osc1	RB	oscillator 1 (OSCA) is rubidium clock
		QTZ	oscillator 1 (OSCA) is quartz clock
		NONE	oscillator 1 (OSCA) is not equipped
	osc2	RB	oscillator 2 (OSCB) is rubidium clock
		QTZ	oscillator 2 (OSCB) is quartz clock
		NONE	oscillator 2 (OSCB) is not equipped
	integration	(null)	(not applicable)
PSM -b	framing	(null)	(not applicable)
	troublecode		
	portseverity		
	osc1		
	osc2		
	integration		
TO-c	framing	CAS	channel assigned sequence
		CAS4	channel assigned sequence with frame aligned sequence with cyclic redundancy check 4
		CRC4	frame alignment sequence framing with cyclic redundancy check 4
		D4	D4 framing format
		ESF	ESF framing format
		FAS	frame alignment sequence framing
	troublecode	INH	all outputs are squelched upon card failure
		ALW	AIS is sent on all outputs upon card failure  <b>Caution: If any port on the card is set for ANALOG, the trouble-code must be set to INH.</b>
	portseverity	MJ	port failure causes major alarm
		MN	port failure causes minor alarm
	osc1	(null)	(not applicable)
	osc2		
	integration		

COMMAND CODE: RTRV-EQPT (Contd)

EXAMPLE

Input:

```
RTRV-EQPT::TO-5:134;
```

Response:

```
SANJOSE-114 1997-12-08 15:04:13  
M 134 COMPLD  
"TO-5:FAS,INH,MN,,,;
```

This example, tagged as command 134, displays port 5 of timing output card 5 as: framing = FAS, all outputs will be squelched upon card failure, and a minor alarm will be generated upon port failure.

**COMMAND CODE: RTRV-PM-PORT**

**PURPOSE**

**RETRIEVE PERFORMANCE MONITORING PORT**

This command displays the current set of PM data for one or more facilities. The PM data may be used to examine events that are not reported by automatic messages, or to evaluate the system after maintenance operations. PM data is retrieved from the specified time period to the current time period.

**INPUT FORMAT**

RTRV-PM-PORT: [<tid>]:<aid>:<ctag>::<montype>,,,,, [<mondatt>],  
 [<montm1> | <montm2>];

The output parameter values in the table below are as follows:

a = 1-2                      b = 1-4                      c = 1-11

aid	parameter	value	meaning
MRC-a-b	montype	ALL	all montypes for this <aid>
		BPV	bipolar violations
		CRC	cyclic redundancy check errors
	mondatt	(null)	current day
	montm1	(null)	current time

COMMAND CODE: RTRV-PM-PORT (Contd)

INPUT FORMAT (Contd)

aid	parameter	value	meaning
PSM-c-b	montype	SLIPS	number of slips since the previous midnight (use with mondat and montm1 = null)
		BPV	15-minute bipolar violation counts (used with montm2)
		CRC	15-minute cyclic redundancy check error counts (used with montm2)
		MTIE	900-second MTIE accumulated between monitor time 2 and 1 hour after montm2 (units of measure for MTIE are nanoseconds)
		TDEV	128-second TDEV accumulated between monitor time 2 and 1 hour after montm2 (units of measure for TDEV are nanoseconds)
		PHASE1M	1-minute average phase accumulated between monitor time 2 and 1 hour after montm2 (units of measure for PHASE1M are nanoseconds)
	mondat	(null)	current day
		mm-dd	month-day (mm = 1-12, dd = 1-31)
	montm1	(null)	current time
	montm2	hh-00	hh = 00-23 (hour of the day)
		hh-15	15 minutes past hour hh
		hh-30	30 minutes past hour hh
		hh-45	45 minutes past hour hh

Notes:

1. BPVs and CRCs are reported in 15-minute bins and can be retrieved for the past 24 hours. Each 15-minute bin is reinitialized to zero counts at the start of each 15-minute bin.
2. The time specified in montm2 is the start of a 15-minute period.
3. If the start time to the present time is less than 1 hour, only full 15-minute periods will be displayed.

RESPONSE FORMAT

For SLIPS and PHASE1M:

```

<sid> <date> <time>
M <ctag> COMPLD
  "<aid>:<montype>,<monval>,,,,,<mondat>,<montm>"...
;

```

For BPV and CRC:

```

<sid> <date> <time>
M <ctag> COMPLD
  "<aid>:<montype>,<monval>,<vldty>,,,,,<mondat>,<montm>"...
;

```



COMMAND CODE: SET-ATTR-CONT (Contd)

INPUT FORMAT

SET-ATTR-CONT:[<tid>]:<aid>:<ctag>::<conttype>;

The parameter values in the table below are as follows:

a = 1-12

**Note:** When configuring cards for 1-for-1 or 1-plus-1, both the odd and even slots must be configured identically. The SET-ATTR-CONT command must be issued to each card of the pair, otherwise a data-base mismatch will occur. The 1-for-1 or 1-plus-1 pairing is shelf dependent as follows:

- DCD-519 Master: 2 and 3, 4 and 5, 11 and 12
- DCD-519 Expansion: 1 and 2, 3 and 4, 5 and 6, 7 and 8, 9 and 10, 11 and 12
- DCD-521 Master or Expansion: 1 and 2, 3 and 4, 5 and 6, 7 and 8
- DCD-523 Master or Expansion: 1 and 2, 3 and 4, 5 and 6, 7 and 8, 9 and 10, 11 and 12

aid	conttype	meaning
TO-a	NO	no protection
	1-1	1-for-1 protection
	1+1	1-plus-1 protection
SHELF	RVRT	revertive
	NRVRT	nonrevertive

EXAMPLE

Input:

SET-ATTR-CONT::SHELF:140::1-1;

Response:

SANJOSE-114 1997-12-08 15:04:13  
 M 140 COMPLD  
 ;

This example, tagged as command 140, sets the timing output cards for 1-for-1 protection.

**COMMAND CODE: SET-ATTR-PORT**

**PURPOSE**

SET ATTRIBUTE PORT

This command sets the notification code associated with the specified event. This attribute governs whether the event is reported automatically. Alarmed events are reported automatically by the REPORT ALARM message. Non-alarmed events are reported automatically by the REPORT EVT message.

**INPUT FORMAT**

SET-ATTR-PORT: [<tid>]:<aid>:<ctag>::<ntfcncde>,<condtype>;

If a parameter is not entered (field left blank), that parameter remains with factory settings. The parameter values in the table below are as follows:

a = 1-2                      b = 1-4 or ALL                      c = 2-4 (c > b)                      d = 1-11

aid	ntfcncde	condtype	meaning
MRC-a-b[&&-c]	CR, MJ, MN, NA, or NR	AIS	alarm indication signal
		BPV	bipolar violations
		CRC	cyclic redundancy check errors
		FFREQ	fractional frequency threshold exceeded
		LOS	loss of signal
		OOF	out of frame errors
		ALL	all condtypes