

# INTERMARKER GROUP AND INTERTRAIN TRUNKS

## EQUIPMENT UNITS

### EQUIPMENT DESIGN REQUIREMENTS

#### NO. 5 CROSSBAR SYSTEM

#### 1. GENERAL

##### Scope

1.01 This specification, together with the supplementary information listed herein, provides the equipment design requirements for the assembly, equipment, and circuits to be used in the manufacture and installation of various intermarker group and intertrain trunks to be used in the No. 5 crossbar system.

1.02 This section is reissued to incorporate previous appendix changes.

##### Description

1.03 Units listed under Subdivisions of Equipment and Detailed Index provide the

equipment for various intermarker group and intertrain trunks. These trunk units mount on relay rack bays as described in J23064. The subscriber-to-subscriber and trunk-to-subscriber units are mounted with their associated ringing selection switches on the relay rack with other units, such as incoming trunks, associated with the called marker group. Subscriber-to-trunk units are mounted on the relay rack with other units, such as outgoing trunks, associated with the calling marker group.

1.04 All wiring for these units shall be provided as surface wiring.

#### SUBDIVISIONS OF EQUIPMENT AND DETAILED INDEX

WECo J drawings should be ordered by referring to the prefix and base number and requesting the current dash (—) number.

| CIRCUIT<br>DRAWING     | EQUIPMENT<br>CODE | RATING<br>OF UNIT | TITLE                                                            | EQUIPMENT<br>DRAWING | CKTS<br>PER<br>UNIT | MTG PLATES<br>PER UNIT |
|------------------------|-------------------|-------------------|------------------------------------------------------------------|----------------------|---------------------|------------------------|
| SD-25821-01            | J23065D           | A&M Only          | IMG Trk — Trk to<br>Sub — Rev Bat.,<br>or SX Supv                | J23065D-( )          | 1                   | 2                      |
| SD-25836-01            | J23065G           | AT&TCo Std        | IMG Trk — Sub to<br>Trk — FR — MR —<br>Timing — Rev Bat.<br>Supv | J23065G-( )          | 2                   | 5                      |
| SD-25837-01            | J23065A           | A&M Only          | IMG Trk — Sub to<br>Sub — FR                                     | J23065A-( )          | 1                   | 2                      |
| SD-25837-01<br>and -02 | J23065F           | A&M Only          | IMG Trk — Sub to<br>Sub — FR — AMA                               | J23065F-( )          | 2                   | 5                      |
| SD-25838-01<br>and -02 | J23065B           | A&M Only          | IMG Trk — Sub to<br>Sub — Coin —<br>Timing                       | J23065B-( )          | 1                   | 3                      |

## SUBDIVISIONS OF EQUIPMENT AND DETAILED INDEX (Cont)

| CIRCUIT<br>DRAWING | EQUIPMENT<br>CODE | RATING<br>OF UNIT | TITLE                                                                | EQUIPMENT<br>DRAWING | CKTS<br>PER<br>UNIT | MTG PLATES<br>PER UNIT |
|--------------------|-------------------|-------------------|----------------------------------------------------------------------|----------------------|---------------------|------------------------|
| SD-25839-02        | J23065C           | AT&TCo Std        | IMG Trk — Sub to<br>Sub — FR — MR                                    | J23065C-( )          | 1                   | 3                      |
| SD-26140-01        | J23065H           | AT&TCo Std        | IMG Trk — Sub to<br>Sub — FR                                         | J23065H-( )          | 2                   | 3                      |
| SD-26141-01        | J23065J           | AT&TCo Std        | IMG Trk — Sub to<br>Sub — FR — AMA                                   | J23065J-( )          | 1                   | 2                      |
| SD-26142-01        | J23065K           | AT&TCo Std        | IMG Trk — Sub to<br>Sub — Coin —<br>Timing                           | J23065K-( )          | 1                   | 2 or 3                 |
| SD-26143-01        | J23065L           | AT&TCo Std        | IMG Trk — Trk to<br>Sub — SX Supv                                    | J23065L-( )          | 2                   | 3                      |
| SD-26143-01        | J23065P           | AT&TCo Std        | IMG Trk — Trk to<br>Sub — Rev Bat.<br>Supv                           | J23065P-( )          | 2                   | 3                      |
| SD-26145-01        | J23065M           | AT&TCo Std        | IMG Trk — Sub to<br>Trk — FR —<br>AMA — Rev Bat.<br>or SX Supv Out.  | J23065M-( )          | 1                   | 2 or 3                 |
| SD-26147-01        | J23065N           | AT&TCo Std        | IMG Trk — Sub to<br>Trk or Jtr —<br>Coin — Timing —<br>Rev Bat. Supv | J23065N-( )          | 1                   | 2 or 3                 |
| SD-27526-01        | J23065R           | AT&TCo Std        | Unit for One Inter-<br>train Trk — 2- to<br>4-Wire — Sub to<br>Trk   | J23065R-( )          | 1                   | 3                      |
| SD-27527-01        | J23065S           | AT&TCo Std        | Unit for Two Inter-<br>train Trk — 4- to<br>2-Wire — Trk to<br>Sub   | J23065S-( )          | 2                   | 5                      |

## 2. SUPPLEMENTARY INFORMATION

819-000-000 — No. 5 Crossbar System Index

AA128.006 — List of General Equipment Re-  
quirements SectionsJ23064 (819-601-150) — Relay Rack Specifica-  
tion for Trunk Units and Relay  
EquipmentJ29259 (819-005-150) — General Outline — No. 5  
Crossbar System

## 3. DRAWINGS

For additional drawings forming a part of this  
specification, see listings under Subdivisions of  
Equipment and Detailed Index.

## Keysheet

SD-25760-01 — No. 5 Crossbar System — Key-  
sheet

**4. EQUIPMENT*****J23065A (A&M Only) — Unit for One Intermarker Group Trunk — Subscriber to Subscriber — Flat Rate***

Equipment — J23065A-( )

**List 1** — Assembly, equipment, and wiring for one trunk in accordance with SD-25837-01, Fig. 1 and "X" option.**List 3** — Equipment and wiring required in addition to list 1 for click-producing circuit for the first equipped of each group of ten trunks connected to the same interrupter in accordance with SD-25837-01, Fig. 3.***J23065B (A&M Only) — Unit for One Intermarker Group Trunk — Subscriber to Subscriber — Coin — With or Without Timing***

Equipment — J23065B-( )

**List 1** — Assembly, equipment, and wiring for one trunk in accordance with SD-25838-02, Fig. 1.**List 2** — Assembly, equipment, and wiring for one trunk with coin timing in accordance with SD-25838-01, Fig. 1, less options.**List 4** — Equipment and wiring required in addition to list 1 or 2 for click-producing circuit for the first equipped of each group of ten trunks connected to the same interrupter in accordance with SD-25838-01, or -02, Fig. 3.**Notes****A.** Reserved.**B.** The timer and timer drive equipped with cover in accordance with SD-25838-01, Figs. 4 and 5, shall be ordered separately and mounted in any convenient 23-inch relay rack space that has access to the required fuses.**C.** Job records need not be maintained for "Z" option.***J23065C (AT&TCo Std) — Unit for One Intermarker Group Trunk — Subscriber to Subscriber — Flat Rate and Message Register Operation***

Equipment — J23065C-( )

**List 1** — Assembly, equipment, and wiring for one trunk in accordance with SD-25839-02, Fig. 1, less all options.**List 2** — Reserved.**List 4** — Equipment and wiring required in addition to list 1 for click-producing circuit for first equipped of each group of ten trunks associated with the same interrupter in accordance with SD-25839-02, Fig. 3.**List 5** — Equipment and wiring required in addition to list 1 for individual and 2-party message register operation in accordance with SD-25839-02, Fig. B.**Note****A.** In addition there are options involving wiring only as follows:

1. Wiring required in addition to list 1 for individual message register operation only in accordance with SD-25839-02, Fig. A.

***J23065D (A&M Only) — Unit for One Intermarker Group Trunk — Trunk to Subscriber — Reverse Battery or SX Supervision***

Equipment — J23065D-( )

**List 1** — Assembly, equipment, and wiring for one trunk in accordance with SD-25821-01, Fig. 1, less all options.**List 4** — Equipment and wiring required in addition to list 1 for reverse battery supervision with type "B" talking battery supply in accordance with SD-25821-01, Fig. B.**List 5** — Equipment and wiring required in addition to list 1 for SX supervision in accordance with SD-25821-01, Fig. C and "Y" option.

**J23065F (A&M Only) — Unit for Two Intermarker Group Trunks — Subscriber to Subscriber — Flat Rate and AMA**

Equipment — J23065F-( )

**List 1** — Assembly, equipment, and wiring for two trunks arranged for conversion to AMA in accordance with SD-25837-01, two Figs. 1 and "Y" option.

**List 2** — Equipment and wiring required in addition to list 1 for AMA in accordance with SD-25837-01, Fig. 1.

**List 4** — Equipment and wiring required in addition to list 1 for click-producing circuit for first equipped of each group of ten trunks connected to the same interrupter in accordance with SD-25837-01, or -02, Fig. 3.

**J23065G (AT&TCo Std) — Unit for Two Intermarker Group Trunks — Subscriber to Trunk — Flat Rate and Message Register Operation — With or Without Timing — Reverse Battery Supervision**

Equipment — J23065G-( )

**List 1** — Assembly, equipment, and wiring for two trunks in accordance with SD-25836-01, two Figs. 1, less all options.

**List 3** — Equipment and wiring required in addition to list 1 for reverse battery supervision with type "B" talking battery supply in accordance with SD-25836-01, Fig. B.

**List 4** — Equipment and wiring required in addition to list 1 for individual and 2-party message register operation in accordance with SD-25836-01, Fig. F.

**List 5** — Equipment and wiring required in addition to list 1 for message register operation with timing in accordance with SD-25836-01, Fig. C.

**Notes**

A. In addition there are options involving wiring only as follows:

1. Wiring required in addition to list 1 for message register operation without timing in accordance with SD-25836-01, Fig. D.

2. Wiring required in addition to list 1 for individual message register operation only in accordance with SD-25836-01, Fig. E.

B. The timer and timer drive equipped with cover in accordance with SD-25836-01, Figs. 2 and 3, should be ordered separately and mounted in any convenient 23-inch relay rack space that has access to the required fuses.

**J23065H (AT&TCo Std) — Unit for Two Intermarker Group Trunks — Subscriber to Subscriber — Flat Rate**

Equipment — J23065H-( )

**List 1** — Assembly, equipment, and wiring for two trunks in accordance with SD-26140-01, two apparatus Fig. 1.

**List 2** — Equipment and wiring required in addition to list 1 when office serves 4-party semiselective, 8-party, or 10-party lines in accordance with SD-26140-01, apparatus Fig. 2.

**J23065J (AT&TCo Std) — Unit for One Intermarker Group Trunk — Subscriber to Subscriber — Flat Rate and AMA**

Equipment — J23065J-( )

**List 1** — Assembly, equipment, and wiring for one trunk in accordance with SD-26141-01, apparatus Fig. 1.

**List 2** — Equipment and wiring required in addition to list 1 when office serves 4-party semiselective, 8-party, or 10-party lines in accordance with SD-26141-01, apparatus Fig. 2.

**Notes**

A. Reserved.

B. Reserved.

**J23065K (AT&TCo Std) — Unit for One Intermarker Group Trunk — Subscriber to Subscriber — Coin — With or Without Timing**

Equipment — J23065K-( )

**List 1** — Assembly, equipment, and wiring for one trunk in accordance with SD-26142-01, apparatus Fig. 1.

**List 2** — Equipment and wiring required in addition to list 1 for timing in accordance with SD-26142-01, apparatus Fig. 2.

**List 3** — Equipment and wiring required in addition to list 1 when office serves 4-party semiselective, 8-party, or 10-party lines in accordance with SD-26142-01, apparatus Fig. 3.

#### Notes

A. In addition there are options involving wiring only as follows:

1. Wiring required in addition to list 1 when timing is not provided in accordance with SD-26142-01, "Z" option.

B. Job records need not be maintained for "G," "H," "J," "K," "M," "N," "Q," "R," "S," "T," "V," "W," "X," and "Y" options.

C. "ZE" option must be used where "ZD" option (furnished on issue 4-D of SD-26142-01 for use with coin timing) is used.

#### **J23065L (AT&TCo Std) — Unit for Two Intermarker Group Trunks — Trunk to Subscriber — SX Supervision**

Equipment — J23065L-( )

**List 1** — Assembly, equipment, and wiring for two trunks arranged for SX supervision in accordance with SD-26143-01, two apparatus Fig. 1 and 2.

**List 2** — Equipment and wiring required in addition to list 1 when office serves 4-party semiselective, 8-party, or 10-party lines in accordance with SD-26143-01, apparatus Fig. 4.

**List 3** — Equipment and wiring required in addition to list 1 for 2DB pad in accordance with SD-26143-01, "W" option.

#### Note

A. In addition there are options involving wiring only as follows.

1. Wiring required in addition to list 1 when 2-db pad is not provided in accordance with SD-26143-01, "X" option.

#### **J23065M (AT&TCo Std) — Unit for One Intermarker Group Trunk — Subscriber to Trunk — Flat Rate With or Without AMA — Reverse Battery or SX Supervision Outgoing**

Equipment — J23065M-( )

**List 1** — Assembly, common equipment, and wiring for one trunk in accordance with SD-26145-01, apparatus Fig. 1.

**List 2** — Equipment and wiring required in addition to list 1 for AMA operation in accordance with SD-26145-01, apparatus Fig. 2.

**List 3** — Equipment and wiring required in addition to list 1 for completion to trunks having reverse battery supervision only in accordance with SD-26145-01, apparatus Fig. 3.

**List 4** — Equipment and wiring required in addition to list 1 for completion to trunks having SX supervision incoming only in accordance with SD-26145-01, apparatus Fig. 4.

**List 5** — Equipment and wiring required in addition to list 1 for 2-db pad in accordance with SD-26145-01, "Y" option.

#### Notes

A. In addition there are options involving wiring only as follows:

1. Wiring required in addition to list 1 when 2-db pad is not provided in accordance with SD-26145-01, "X" option.

B. Job records need not be maintained for "Z" option.

#### **J23065N (AT&TCo Std) — Unit for One Intermarker Group Trunk — Subscriber to Trunk — or Unit for One Junctor — Coin — With or Without Timing — Reverse Battery Supervision**

Equipment — J23065N-( )

**List 1** — Assembly, equipment, and wiring for one trunk or junctor in accordance with SD-26147-01, apparatus Fig. 1.

**List 2** — Equipment and wiring required in addition to list 1 for timing in accordance with SD-26147-01, apparatus Fig. 2.

#### Notes

A. In addition there are options involving wiring only as follows:

1. Wiring required in addition to list 1 when timing is not provided in accordance with SD-26147-01, "Z" option.

B. Job records need not be maintained for "F," "G," "H," "J," "K," "M," "N," "Q," "R," "S," "T," "V," "W," "X," and "Y" options.

C. "ZC" option must be used where "ZB" option (furnished on issue 5-D of SD-26147-01 for use with coin timing) is used.

#### **J23065P (AT&TCo Std) — Unit for Two Intermarker Group Trunks — Trunk to Subscriber — Reverse Battery Supervision**

Equipment — J23065P-( )

**List 1** — Assembly, equipment, and wiring for two trunks arranged for reverse battery supervision in accordance with SD-26143-01, two apparatus Fig. 1 and 2.

**List 2** — Equipment and wiring required in addition to list 1 when office serves 4-party semiselective, 8-party, or 10-party lines in accordance with SD-26143-01, apparatus Fig. 4.

#### **J23065R (AT&TCo Std) — Unit for One Intertrain Trunk — 2- to 4-Wire — Subscriber to Trunk**

Equipment — J23065R-( )

**List 1** — Assembly, equipment, and wiring for one trunk in accordance with SD-27526-01, Fig. 1.

#### Notes

A. Reserved.

B. Job records need not be maintained for "V," "W," "X," "Y," and "Z" options.

#### **J23065S (AT&TCo Std) — Unit for Two Intertrain Trunks — 4- to 2-Wire — Trunk to Subscriber**

Equipment — J23065S-( )

**List 1** — Assembly, equipment, and wiring for two trunks per SD-27527-01, two Fig. 1.

#### 5. GENERAL NOTES

**5.01** Nonrecord option involving straps on the switchboard cable side of trunk unit terminal strips shall be wired by the installer after the switchboard cable has been connected in order to make the straps accessible for possible changes. These options are not included as lists in this specification since job records need not be maintained for them.

#### List of "A&M Only" and "Mfr Disc." Equipment

The following equipment has been replaced as indicated. Where "A&M Only" items appear, the issue numbers shown are those of the issue in which the rating was first applied.

| EQUIPMENT  | RATING    | DETAILS<br>LAST SHOWN<br>IN ISSUE | REPLACING<br>EQUIPMENT |
|------------|-----------|-----------------------------------|------------------------|
| J23065A    | A&M Only  | 5                                 | J23065H                |
| L2         | Mfr Disc. | 1                                 | —                      |
| J23065B    | A&M Only  | 5                                 | J23065K                |
| L3         | Mfr Disc. | 1                                 | —                      |
| J23065C,L3 | Mfr Disc. | 1                                 | —                      |
| J23065D    | A&M Only  | 5                                 | J23065L &<br>J23065P   |
| J23065D,L2 | Mfr Disc. | 1                                 | —                      |
| L3         |           |                                   |                        |
| & L6       | Mfr Disc. | 4                                 | —                      |
| J23065E    | Mfr Disc. | 4                                 | J23065M                |
| L2         | Mfr Disc. | 1                                 | —                      |
| J23065F    | A&M Only  | 5                                 | —                      |
| J23065G,L2 | Mfr Disc. | 4                                 | —                      |

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