

# AMA TRANSLATOR LINE VERIFICATION TEST

## EQUIPMENT UNITS AND TEST SET

### EQUIPMENT DESIGN REQUIREMENTS

#### NO. 5 CROSSBAR SYSTEM

#### 1. GENERAL

##### Scope

**1.01** This specification together with the supplementary information listed herein covers the equipment design requirements for the framework, equipment, and circuits to be used in the engineering, manufacture, and installation of the AMA translator line verification (ATLV) test circuit. The test circuit is available as frame mounted units Fig. 1 and 2 intended for larger offices and a portable unit, Fig. 3 intended for smaller offices.

**1.02** This specification is reissued:

- (a) To bring the information into agreement with SD-27632-01, Issue 12D.
- (b) To relocate the AMA translator line verification test set connector from the trouble recorder bay J23252BB to the MTF auxiliary control bay J23252BW. Note 1.09 is revised and Notes A and B are added to J24759D.
- (c) To provide improved line link frames tens advancing.
  - (1) J24759A, Lists 6 and 7 are rated Mfr Disc. and Note A.1 is revised.
  - (2) J24759B, Lists 6 and 7 are rated Mfr Disc. and Note A.1 is revised.
  - (3) J24759C, Lists 3, 4, and 5 are rated Mfr Disc. List 3 was inadvertently omitted in Addendum Issue 1. List 6 is added and Note A.1 is revised.
- (d) To incorporate changes made per Addendum Issue 1.

##### Capacity

**1.03** The capacity of the AMA translator line verification test circuit is as follows:

##### Framed Mounted Unit

|                          |    |
|--------------------------|----|
| Marker Groups            | 4  |
| Number Matching Circuits | 10 |

##### Portable Unit

|                          |   |
|--------------------------|---|
| Marker Groups            | 1 |
| Number Matching Circuits | 4 |

##### Description

**1.04** The AMA translator line verification test equipment permits verification of all the cross-connections associated with line numbers on AMA translator frames. It provides a quick method of verifying those cross-connections on which AMA customer complaints have been received. Numbers to be verified are set on number match switches located on the switch panel unit. When a translated line number matches a directory number set on the number match switches, a feature is included which causes a trouble recorder card to be punched. In offices not equipped with the trouble recorder, a display of the matched line is indicated by lamps provided on the switch panel unit.

**1.05** The test equipment is provided with features which provide operation with offices equipped with 2-wire and/or 4-wire equipment. Optional features are available for offices in which the line link frame tens identification is on a 2-out-of-4 and/or 1-out-of-4 basis.

**1.06** Keys and switches are provided for manually controlling the test equipment, presetting to a desired line location, and controlling the number and size of line link frames within a marker group.

Once the equipment is started, progression through all the line locations in the office is from the lowest-numbered line location to the highest-numbered line location on a fully automatic basis, matching translator cross-connection against the directory numbers set on the switches. The first transverter in each marker group is used to obtain the directory number translations from the translators. The test equipment restores to normal at the completion of a test cycle. A resettable register is provided to indicate the number of matches which occur during a test cycle.

**1.07** The frame mounted unit is arranged for mounting on a 23-inch relay rack frame. The relay rack unit occupies the space of ten 2-inch mounting plates and the switch panel unit occupies the space of twelve 2-inch mounting plates.

**1.08** Provision has been made for mounting the switch panel unit remotely from the relay unit either on a relay rack frame, column or wall as required. When the switch panel unit is mounted on the relay rack with the relay unit, connections between these units are made by means of loose wire between the unit terminal strips. When the switch panel unit is not located on the relay rack frame, connection will be made with switchboard cable.

**1.09** The portable unit is 20-3/4 by 14-1/4 by 12-1/2 inches. Access to the transverter and associated circuits is via a test set connector unit located in the trouble recorder bay (A&M Only) or auxiliary control bay in those offices equipped with the MTF or the trouble indicator bay in those offices equipped with the OTF.

**1.10** The test set is connected to the test set connector by means of two multiconductor cords furnished as part of this equipment.

**1.11** The 48-volt battery and ground is furnished to the portable unit through the multiconductor cords.

## 2. SUPPLEMENTARY INFORMATION

819-000-000—Numerical Index—No. 5 Crossbar System—Equipment Design Requirements  
J29259—819-005-150—General Outline—No. 5 Crossbar System

## 3. DRAWINGS

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

SD-25760-01—No. 5 Crossbar System—Keysheet.  
SD-27632-01—AMA Translator Line Verification Test Circuit.  
J24759A-( )—AMA Translator Line Verification Test Relay Unit (Frame Mounted).  
J24759B-( )—AMA Translator Line Verification Test Switch Panel Unit (Frame Mounted).  
J24759C-( )—AMA Translator Line Verification Test Unit (Portable).  
J24759D-( )—AMA Translator Line Verification Test Set Connector Unit.

## 4. EQUIPMENT

**J24759A—AT&TCo Std—AMA Translator Line Verification Test Relay Unit (Frame Mounted)**

Equipment—J24759A-( )

**List 1**—Assembly, equipment, and wiring for one AMA translator line verification test equipment arranged for ten number matching circuits and four marker groups and equipped for four number matching circuits and one marker group.

### WIRE EQUIP NOTES

AMA Translator Line Verification Test Ckt,  
SD-27632-01:

|                            |   |   |   |
|----------------------------|---|---|---|
| Control Relay Ckt, Fig. 2, |   |   |   |
| Number Matching Ckt 0-3,   |   |   |   |
| and Z wiring               | 1 | 1 | A |
| Number Matching Ckt, 4     |   |   |   |
| to 9, Fig. 2, V and T      |   |   |   |
| Option                     | 1 | 0 |   |
| Marker Group Cut-In        |   |   |   |
| Relays, Bare Wire Multi    |   |   |   |
| for CT- and CTA- Relays,   |   |   |   |
| Fig. 4                     | 4 | 1 | B |

**List 3**—Equipment and wiring per SD-27632-01, Fig. 4 in addition to list 1 for each additional marker group. (See Note B.)

**List 4**—Equipment and wiring per SD-27632-01,

Fig. 2, V option, required in addition to list 1 to provide number matching circuits 4, 5, and 6.

**List 5**—Equipment and wiring per SD-27632-01, Fig. 2, T option, required in addition to list 1 and 4 to provide number matching circuits 7, 8, and 9.

#### Notes

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

1. Wiring as specified in Note 102 of SD-27632-01.

B. Provide one list 3 for each additional marker group up to a maximum of four marker groups.

#### **J24759B—AT&TCo Std—AMA Translator Line Verification Test Switch Panel Unit**

Equipment—J24759B-( )

**List 1**—Assembly, equipment, and wiring for one AMA translator line verification test switch panel unit arranged for ten number matching circuits and four marker groups and equipped for four number matching circuits and four marker groups.

#### WIRE EQUIP NOTES

AMA Translator Line Verification Test Switch Panel Ckt, SD-27632-01:

|                                                                |   |   |     |
|----------------------------------------------------------------|---|---|-----|
| Switch Panel Ckt, Fig. 1, Number Matching Ckt 0-3 and Z Wiring | 1 | 1 | B,C |
| Number Matching Ckt, 4 to 9, Fig. 1 V and T Options            | 1 | 0 |     |
| Marker Group Selection Keys, Fig. 5 and N Option               | 1 | 1 |     |

**List 2**—Equipment and wiring per SD-27632-01, Fig. 1, V option required in addition to list 1 to provide number matching circuits 4, 5, and 6.

**List 3**—Equipment and wiring per SD-27632-01, Fig. 1, T option required in addition to lists 1 and 2 to provide number matching circuits 7, 8, and 9.

**List 4**—Miscellaneous details and hardware required

in addition to list 1 to permit installation on a wall, column, or distributing frame.

#### Notes

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

1. Wiring as specified in Note 102 of SD-27632-01.

B. All lamp socket mountings shall be fully equipped with lamps and caps.

C. Lamp socket mountings shall be provided as specified in the stock list in J24759B.

#### **J24759C—AT&TCo Std—AMA Translator Line Verification Test Set (Portable)**

Equipment—J24759C-( )

**List 3**—Mfr Disc.—Frame, assembly, equipment, and wiring for one AMA translator line verification test set per SD-27632-01, Fig. 1, 2, 3, and Y option less K, S, and X options. (See Notes A and B.)

**List 4**—Mfr Disc.—Equipment and wiring per SD-27632-01, S and K option only, required in addition to list 1 when line link frame tens is identified on a 1-out-of-4 and 2-out-of-4 basis or a 2-out-of-4 basis only.

**List 5**—Mfr Disc.—Equipment and wiring per SD-27632-01, W and X options only, required in addition to list 1 when line link frame tens is identified on a 1-out-of-4 basis only.

**List 6**—Framework, assembly, equipment, and wiring for one AMA translator line verification test set per SD-27632-01, Fig. 1, 2, 3, and Y option. (See Notes A and B.)

#### Notes

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

1. Wiring as specified in Note 102 of SD-27632-01.

B. Two multiconductor patching cords coded P50C and P75A shall be furnished with this unit.

#### **J24759D—AT&TCo Std—AMA Translator Line Verification Test Set Connector Unit**

Equipment—J24759D-( )

**List 1**—Assembly, equipment, and wiring for one AMA translator line verification test set connector unit per SD-27632-01, Fig. 6, required for each marker group where portable test unit J24759C-( ) is required.

### Notes

- A. Reserved.
- B. Adapter per P40D993 is required when unit is mounted on MTF recorder bay or auxiliary control bay.

### 5. GENERAL NOTES

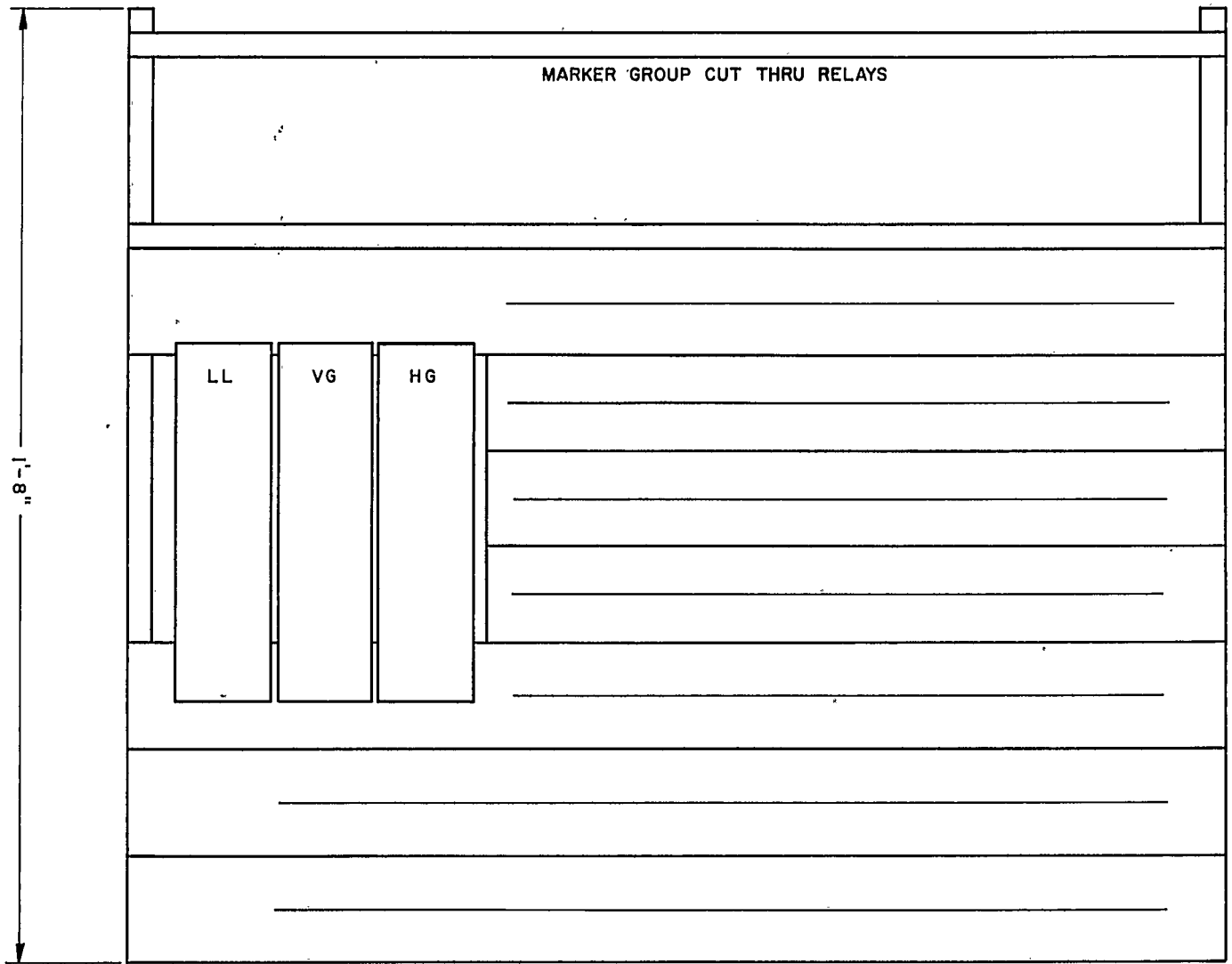
**5.01** The equipment listed herein shall be wired with a local cable following the paths shown on the equipment drawings. All wiring, unless otherwise specified, shall be 24-gauge-type BU.

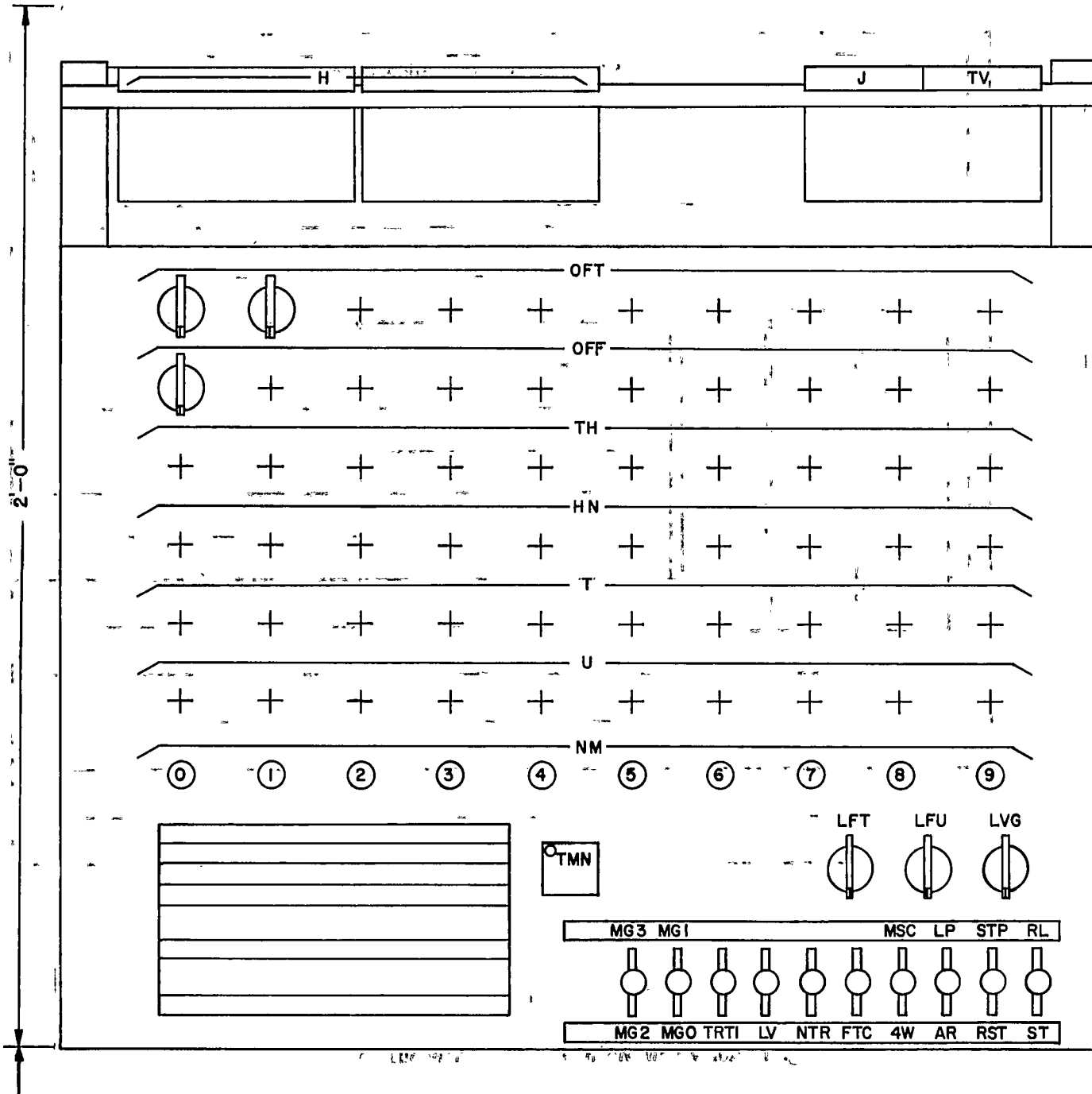
**5.02** The -48 volt battery is obtained at the PRTD frame. Ground is furnished at the relay rack ground bar.

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

| EQUIPMENT  | RATING    | DETAIL<br>LAST<br>SHOWN<br>IN ISSUE | REPLACING<br>EQUIPMENT |
|------------|-----------|-------------------------------------|------------------------|
| J24759A,L2 | Mfr Disc. | 3                                   | J24759A,L6             |
| L6,L7      | Mfr Disc. | 4                                   | —                      |
| J24759B,L5 | Mfr Disc. | 3                                   | J24759B,L6             |
| L6,L7      | Mfr Disc. | 4                                   | —                      |
| J24759C,L2 | Mfr Disc. | 3                                   | J24759C,L3             |
| L1,3,4,5   | Mfr Disc. | 4                                   | J24759C,L6             |

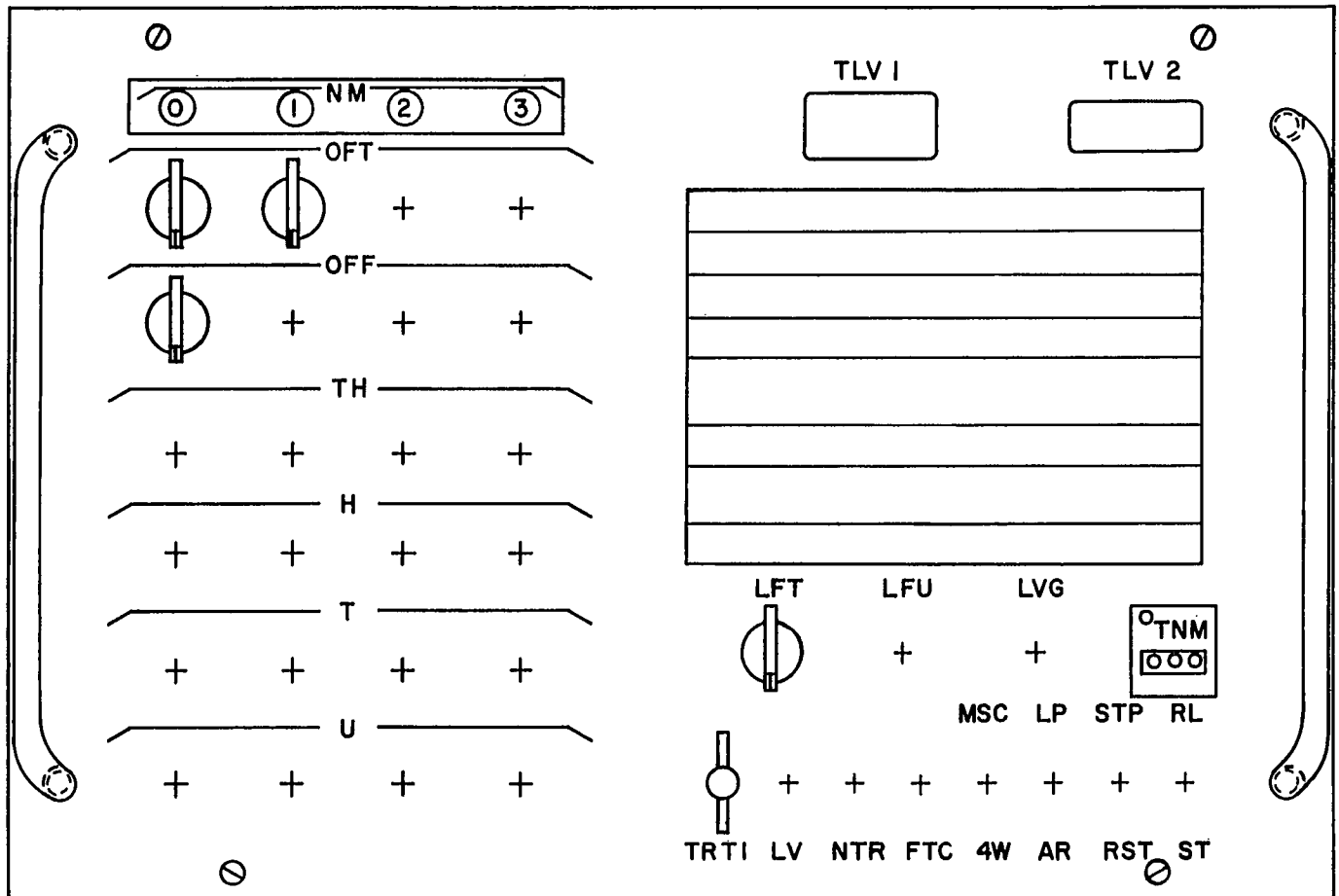
The above equipment has been replaced as indicated. Where A&M Only items appear, the issue numbers shown are those of the issue in which the rating was first applied.

**FRONT VIEW****Fig. 1—Relay Unit Mounted on Miscellaneous Relay Rack**



FRONT VIEW

Fig. 2—Switch Panel Unit Mounted on Miscellaneous Relay Rack, Wall or Column



## TOP VIEW

Fig. 3—Portable Unit

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