

Products Brochures



Telephone Industries of Pakistan
Haripur KPK – 22630
Pakistan



SINGLE PHASE ENERGY METER **ALMEEZAN**

- Increased Load Capacity
- Low Power Loss (Better than IEC Geneva Standards)
- Transparent Ultra Violet Stabilized double Collar Cover
- Low Temperature Co-efficient
- Anti Reversing Provision
- Low Weight Rigid Design
- Register Readable to Decimal Place

...Precision and Quality !



Telephone Industries of Pakistan (Pvt) Ltd

Plot No. 181-186, I-9/2, Industrial Area, Islamabad. Ph: +92-51-4432996, Fax: +92-51-4432277, E-mail: marketing@tip.org.pk



VARIOUS PURPOSE CONTAINERS **10 ft, 11 ft & 20 ft**

- Fully Tropicalised
- Protected against storm and dust
- Protected against water splashes (rain and melting snow)
- Additional Detachable Projected Roof to protect from Extreme Weather Conditions
- Shielding and Fire Protection
- Provision for Separate Compartments
- Sealed Batteries
- Steel Cable Guides in the Floor for the Subscriber Cable
- Separate Power Socket; Separate Inlet for the Transmission Cable
- Two air conditioning units each of two tons capacity (24000 BTU)
- Window Type Reversible Cycle or Split Type A.C. Units (as per requirement)

...Our Strength is Our Success !



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802B BLACK DESK TELEPHONE WITH CLI

- Pulse & Tone Dialing, Digits 0 to 9 Through Rotary Dial
- * and # Digits Through Keypad
- Caller ID information with Time and Date
- Display of Calling Person's Name
- Information on Out-going Calls
- 8 - Digit Area Code
- 4 - Digit Electronic Lock
- Real Time Clock, Auto-Adjusting from CLI Information
- Special Function Keys: DEL, SET, UP, DN, DEL, MEM, REDIAL
- Two Dialing Keys * and # Available

...and a lot more to explore!



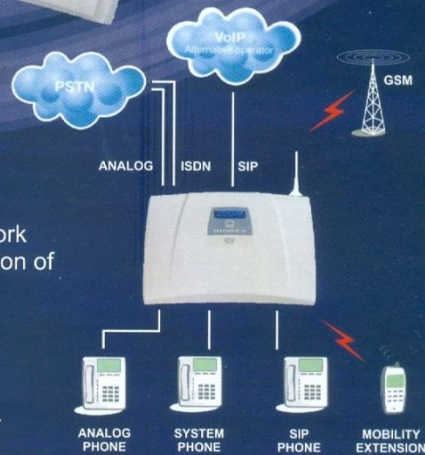
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OMEGA Series PABXs Communication Solutions for Small and Medium-sized Businesses

- Free inter-company calls
- Fully functional even without a connection to the landline network
- Mobility Extension – use a mobile phone as a standard extension of your PBX
- VoIP support – call over the internet
- Compact design (internal GSM gateway)
- Voice Mail
- Automated least cost routing for outgoing calls (LCR)
- Excellent flexibility – initial custom configuration allows for later expansion
- Direct connection to all landline and mobile public telephone networks (analog, ISDN, GSM & UMTS)



...venturing new frontiers!



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COMMUNICATION TOWERS

- Self Supporting - Free Standing
- Ideal for Microwave Antennas, Wireless Internet, Cellular Radio Antenna Platforms, Mobile or LPTV Antennas, PCS/GSM Radio Towers
- Heavy Duty Galvanized Steel with Zinc Coating
- All Bolted Construction with Angel Tube or Solid Rod Design
- Meet and Exceed all TIA/EIA Standards
- Easy Shipping and Installation

...From Root to TIP - It's All Strength!



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WIDE RANGE OF TELEPHONE SETS

Euro Set 210, 240, 802
CLI Phone, Mini Set 310
Steno Phone

Euro Sets

- Ideal for PABXs and PUBLIC Exchanges.
- Last Number Saved, Number Redial
- Dual Tone Multi Frequency (DTMF)

CLI Phone

- Display Callers Number
- Speed Dial, Date and Real Time Clock
- 90 Message Memory, Stop Watch

Mini Set

- Wall Mounting Kit
- Hand Set with Dial Pad

Steno Phone

- Complete Set of Steno and Executive Phones
- Intercommunication Facility
- Transferring Facility of Incoming/Outgoing Calls
- Privacy Assured of the Executive Set Usage

...Communication - It's Heart to Heart !



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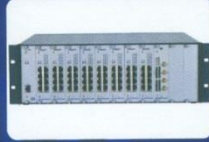
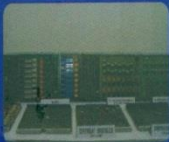
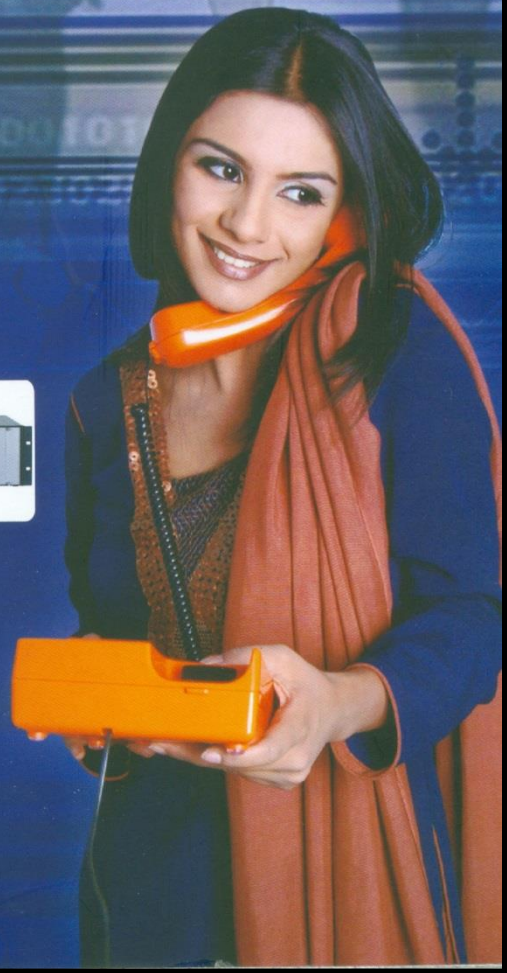
Establishment of 1954

ISO 9000

TIP

... of the Iceberg

Telephone Industries of PAKISTAN (Pvt) Ltd.



Telephone Industries of Pakistan (Pvt) Ltd

TIP Trusted Through Generations

Since 1954, Telephone Industries of Pakistan (TIP) have developed an open and flexible product platform from which it has expanded as a reliable supplier of the quality products and services.

Services

TIP is a complex of multitude of technologies and has capability to provide the following services:

- Plastic Moulding
- Surface Treatment & Heat Treatment (Electro Planting, Anodizing, Blackening, Painting, Screen Printing, Galvanizing etc.)
- Planning, Installation, Commissioning & Backup Support in Exchanges
- Tool Designing & Manufacturing
- Die Making.
- Pressure Casting, Pressing, Cutting, Turning & Milling Facilities
- Material Testing (Hardness Testing, Tensile Testing, other Physical & Chemical Tests).





Products

1. Telephone Exchanges/COW's

- Futuristic Hybrid PABX System
- Digital Public Exchanges
- Digital Mobile Exchanges
- Turnkey BTS site solutions

2. Telephone Sets

- CLI telephone sets (Euro Set 805, 802, 20 & 240
- Steno/Executive Telephone Sets

3. Communication Towers

- Self Supporting Towers
- Guyed Towers (3-45 meters)
- Monopole Towers (3-20 meters)

4. Telecom Batteries

- Supply, Installation, Testing & Commissioning of Telecom Batteries

5. Energy Meters

- "AI - MEEZAN" Single Phase Energy Meter designed by TIP on IEC Geneva Standards

6. Hybrids

- Thick Film Hybrid Circuits by using Surface Mount Technology (SMT)

7. Printed Circuit Boards

- Single sided
- Double sided
- Multi-layered (Upto 14 layers PCB's)

8. Container Shells/SHelters/Canopies

- Containers for Mobile Exchanges
- Site Office/Accommodation Units
- Air Conditioned Equipment Shelters

9. Fire Alarm System

- FIRE ALERT - 9 System that may be installed in Hospitals, Hotels, Industrial & Office Buildings. It may be expanded upto six zones

10. Drop Wire

- Telephone Drop Wire for connections between Distribution Box (DP) & Terminal Box





Your
Communication
Future

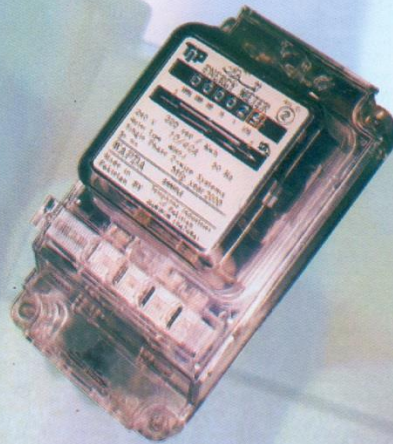
TIP

Telephone Industries of Pakistan

PRODUCT RANGE

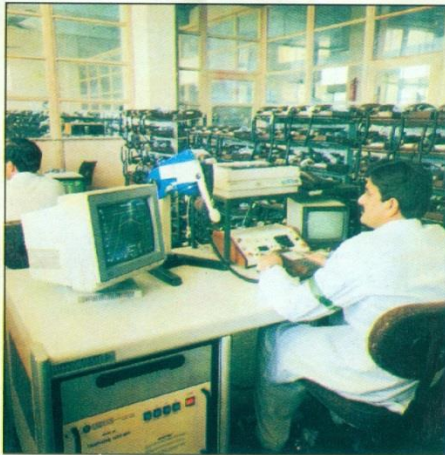


- DIGITAL PUBLIC EXCHANGES EWSD
- DIGITAL MOBILES EXCHANGES.
- TELEPHONES
 - EURO SET 805
 - EURO SET 210/802
 - EURO SET 240
 - CLI TELEPHONE SET
 - STENO/EXECUTIVE TELEPHONE SET
- SINGLE PHASE ENERGY METER
- CONTAINER SHELLS
- DIVISIONAL CABINETS.
- FIRE ALARM SYSTEM.
- DROP WIRE



A COMPLEX OF MULTITUDE OF TECHNOLOGIES

- DESIGNS and MANUFACTURES complete PROGRESSIVE CUTTING TOOLS, PLASTIC and PRESSURE CASTING MOULDS. JIGS, FIXTURES and PRECISION GAUGES etc.
- It has all types of facilities for HEATTREATMENT of all kinds of metals.
- equipped with manufacturing workshops of PRESS CUTTING, TURNING, MILLING, PLASTIC MOULDING and PRESSURE CASTING, CARPENTER
- ELECTRO PLATING PLANT for COPPER, NICKEL, GOLD, SILVER, CHROMIUM, TIN, ZINC and SPRAY PAINTING.
- PRECISION MEASURING LABORATORY is equipped with sophisticated measuring instruments like TOOL MAKERS MICROSCOPE, MILITRONE, DIGITAL LIGHT GAUGE, OPTICAL MASTER DIVIDING HEAD, etc.
- MATERIAL TESTING LABORATORY is facilitated to test and analyze all kinds of materials it has the provisions of CHEMICAL as well as PHYSICAL tests like HARDNESS, TENSILE TESTERS, HUMIDITY CHAMBER, etc.
- manufactures sophisticated TEST SETS for quality assurance.
- DESIGNS communication equipment in its own RESEARCH & DEVELOPMENT department.
- DESIGNS and prepares PRODUCTION and TESTING DOCUMENTS for all equipment
- TIP TRAINS highly skilled staff, TOOL DESIGNERS, TOOL MAKERS. MACHINISTS, ELECTRO MECHANICS, FITTERS AND ELECTRONIC TECHNICIANS.





ELECTRONIC DIGITAL SWITCHING SYSTEM

EWSD is a modern electronic Digital Switching System introduced by TIP to build public telecommunication network in Pakistan. In large cities of the country it became impossible to expand the existing electro-mechanical switching network due to shortage of space. By volume, EWSD System is more compact, requiring much less space, can be accommodated easily in the present exchange buildings.

EWSD System of Electronic Switching offers broad range of services features to the subscriber:

- Detailed Billing i.e., the subscriber is provided with details of all calls made by him.
- Abbreviated Dialing.
- Out going Calls Code barring for international and national calls.
- Provision to install call-charging meter at subscriber premises.
- Malicious call identification.

DEPTH OF EWSD PRODUCTION

Locally Produced (90%)

The local production process includes:

- Manufacture of Printed Circuit Boards (PCB).
- Hybrid shell coils and ferrite
- Core-transformer
- Manufacture of metal, plastic and die casting parts.
- Assembly and testing of modules, back planes, frames, racks and plug-in cables.
- Manufacture of MDF ., DDF ., horizontal/vertical mini distributor and other Installation materials.
- Quality assurance with system and RUN IN TEST .

Imported (10%)

- Peripheral equipment i.e., MDD., MTD., DAS., ZAG., OMT ., etc.



TELEPHONES

TIP has on its production range, Telephones for different usages. Telephone production has in house production facilities for printed circuit boards, Plastic moulding form high impact dust repellent ABS, testing accordingly to international standards are available.

Presently TIP has a capacity of 500,000 telephones. All Telephones are manufactured according to CCITT and CEPT specifications.

All the telephones manufactured by TIP have the following salient features:

- Dual Tone Multi frequency (DTMF)
- Dial Pulsing (DP)
- Last Number Redial Key
- Desk and Wall Mounting
- Electronic Lock Function with Pin Code

EUROSET 802

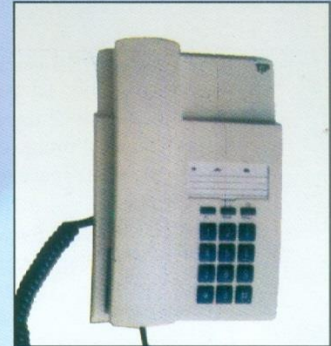
Small set widely liked for office use.

EUROSET 805

New arrival in family with 13 memories.
elegant shape having special features
3-repitory keys
10-speed dialing numbers
Manual Pause
Mute
Last Number redial

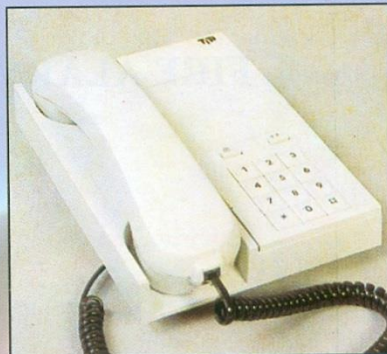
CLI TELEPHON

Tilted Display
Displays Caller's Number
Date & real time clock
call attended display
90-messages memory



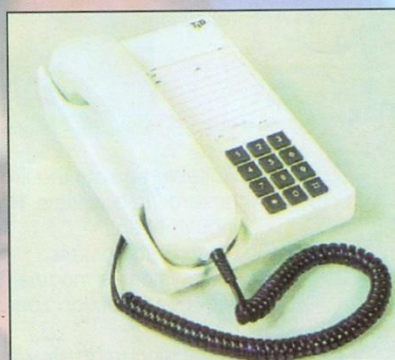
EUROSET 240

With special facility of
index card flap cover



EUROST 210

Available in different
attractive colours.



TELEPHONE 802M

Locally developed set with 13 manual
3-reperatory keys
10-speed dialing numbers
Manual Pause
Last Numb redial



FIRE ALARM SYSTEM

MODEL FIRE ALERT -9

TIP had to equip the Exchanges with Fire Alarm System To Protect against fire hazards, therefore, keeping in view this requirement TIP has developed its own FIRE ALERT-9 system with following features.

FEATURES

- Suitable against the fire hazards in hospitals, hotels industrial and office Buildings, etc.
- The system is modular in design with two detection zones of module.
- Expansion up to six zones according to customer requirement.
- LEDS on front panel for indication of faults in respective area.
- Self faults detection and indication on front panel for maintenance.



CONTAINER EXCHANGE

TIP has developed a container Exchange that needs no building. It is easily transferable to any required location and is extremely quick to install. And, no matter what the climate, it is protected against it.

The Container exchanges are specially designed to serve the far flung areas and to meet the emergency telecommunication requirements.

TIP produces a variety of container Exchanges. It began with a 400 line unit Electro-mechanical exchange (EMD). Now TIP produces a variety of electronic digital containerized exchanges.

The 2000 line exchange comprises of Main Switching unit, has facilities of Message Transfer, computerized billing and subscriber position testing facility.

Containers are delivered with connopy for Generator sets and step ladders. Modular type fence is also provided to cordon off the installation area.

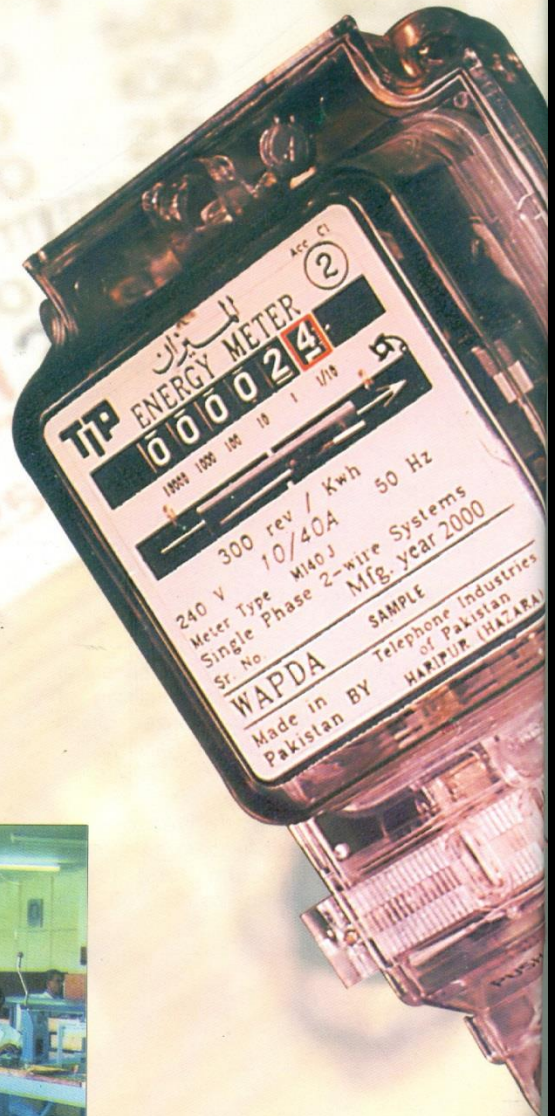


CONTAINER EXCHANGE

ENERGY METER

ENERGY METER

TIP has own designed Electricity Energy meter as a step to self reliance. The single phase meter "AL MEEZAN" is a masterpiece of Tip's technical skill and precision engineering capability. Its non-reversible revolving disc prevents possibilities of pilferage. Ninety five percent of its parts are locally made. As a result the supply of spares can be frequent and easily accessible for maintenance of the product. Passed by WAPDA central Laboratories the meter is highly accurate, built on IEC Geneva standards.



ASSEMBLY LINE

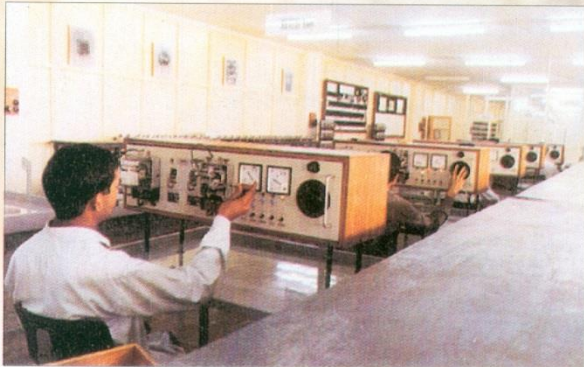




FINAL TEST



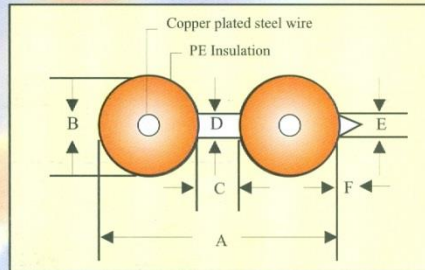
METER ASSMBLY



UNIT TESTING

DROP WIRE

TIP also manufactures Telephones Drop Wire as per PTCL'S specifications for outdoor use for the connections between distribution box (DP) and the terminal box in the customer's premises as self supporting overhead installation as per following specifications

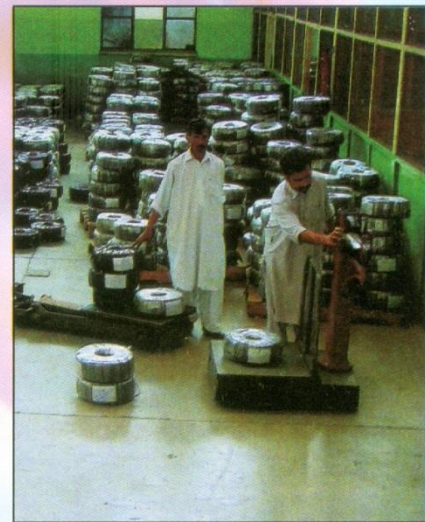


DIMENSIONS

Conductor dia (mm)	A Approx (mm)	B Approx (mm)	C Approx (mm)	D Approx (mm)	E Approx (mm)	F Approx (mm)
1.0	6.8 / 6.4	3.2 / 3.0	0.4	0.4	0.5	0.5
1.8	6.4	3.0	0.4	0.4	0.5	0.5

SPECIFICATIONS

	Conductor conductivity (%)	Tensile strength of conductor (Kg / mm ²)	Conductor resistance (ohm / Km)	Insulation resistance (mega ohm / Km)	Test voltage (AC)	Twist (times)
1.0	40	98	54.23	5000	2000	20
1.0	30	106	72.33	5000	2000	20



HYBRID PROCESSING

Thick Film is a branch of high technology microelectronics. Resistors are produced with very high precision of tolerances. For Hybrid Production Surface Mounted Technology (SMT) is used.

CIRCUITS are used in all branches of Electronics. Most common uses are in Telecommunication, Defense, Automobiles and Home Appliances.

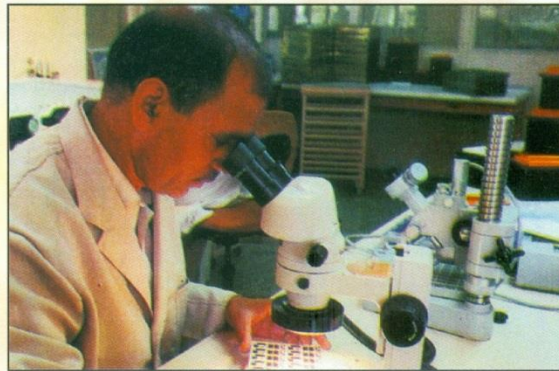
In TIP Hybrid Circuits are produced for Digital exchanges common examples are uses in Line Impedance Matching, Short Circuit Protection, Filtering 16 KHz high frequency generator, Power Supply Regulators.

High Precision Machines like laser Trimming, laser Scribing, very precisely controlled High Temperature programmable Furnaces of 850 Degree Celsius with ± 3 degree accuracy are used in production.

TIP is the only set-up in Pakistan processing Thick Film Technology. More than 500,000 Thick Film circuits are produced by TIP each year



LASER SCRIBING

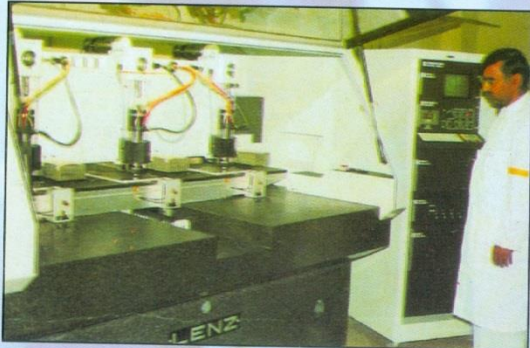


OPTICAL TESTING



SCREEN PRINTING

PRINTED



CNC DRILLING

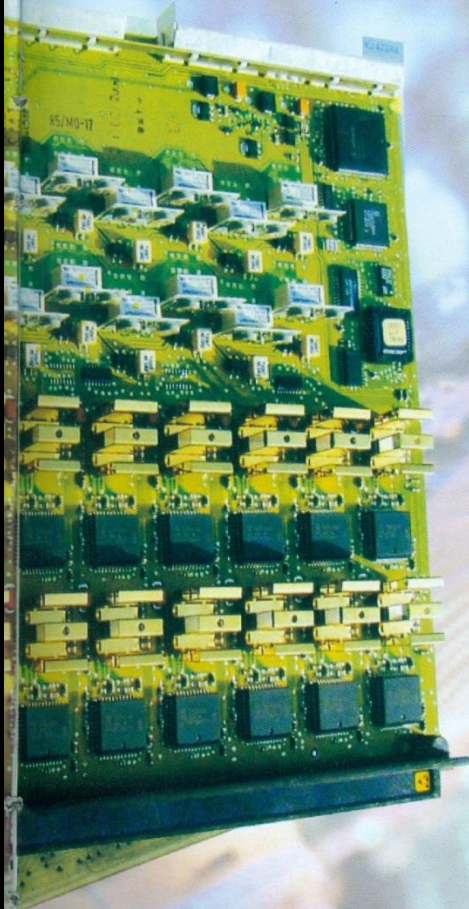
The Printed Circuit Board Plant caters for all the requirements of TIP in this field. Each type of PCB for telephones EWSD exchanges or for any other need is manufactured in TIP.

Yet TIP has got capacity to undertake and handle private work of high quality. The processes through which the double sided PCB production goes is CNC Programmed Drilling , Deburring, Through hole Plating, Cleaning, Photosensitive polymer film laminating, stripping Etching, Fusing CNC milling & Cutting and Solder Masking. TIP is also producing a single sided PCB. for Telephones.

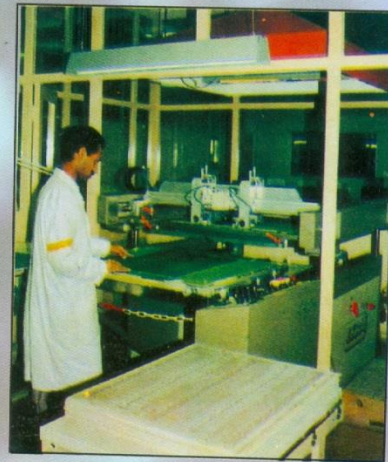
The types of PCB produced are of exquisitely high quality, for working panel sizes 650 x 440 mm. These are tested and passed according to International Standards. All the processes are carried out by TIP itself with utmost care to achieve and maintain the required degree of excellence.



CIRCUIT BOARDS



THROUGH HOLE PLATING



SCREEN PRINTING

PROCESSING



MILLING SHOP

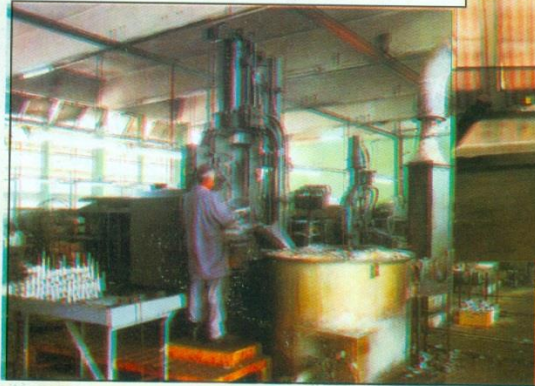
For the manufacturing of intricate profiles, cutting of worm shaft gears Universal milling/Gear hobbling and internal gear cutting machines are being used.

High Precision CNC operated Plastic moulding machines ensure extremely high accuracy of parts produced by TIP for its Telephones, Telephones Exchanges, Enregy Meters and other products.



PLASTIC MOULDING SHOP

All type of Pressure Castings required for different products like, EWSD, Energy Meter etc. are produced in Die Casting Shop.

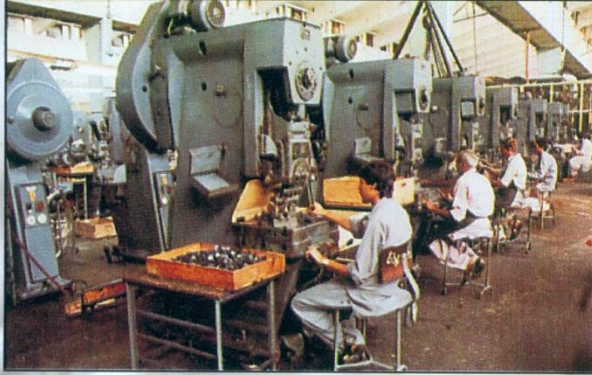


DIE CASTING



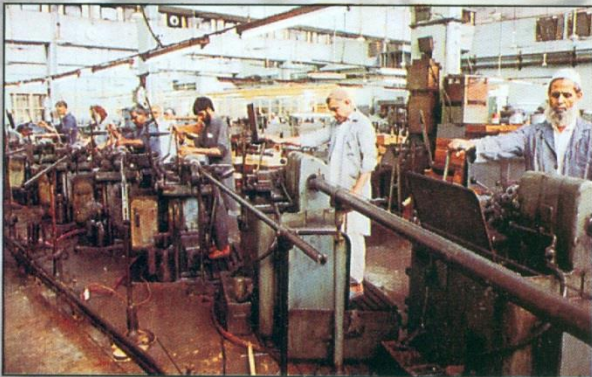
CNC NIBBLING

The superlative precision of sheet work is certified through the use of computer controlled machines like Nibblers Punching.



STAMPING PRESS SHOP

All kinds of metallic parts are produced by using different types of presses like eccentric, inclineable, hydraulic & screw type ranging from 5 Tons to 100 Tons capacity.



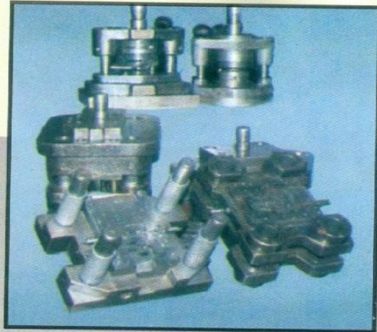
TURNING MACHINE SHOP

Turned parts are made by using different types of turret, capstan & automatic machines like TORNOS, INDEX used for mass production.



SURFACE TREATMENT SHOP

TIP is fully equipped to carry out different surface treatment i.e Copper, Nickel, Silver, Gold, Chromium, Zinc, Tin Plating, anodizing, Black burnishing, painting, screen printing etc.



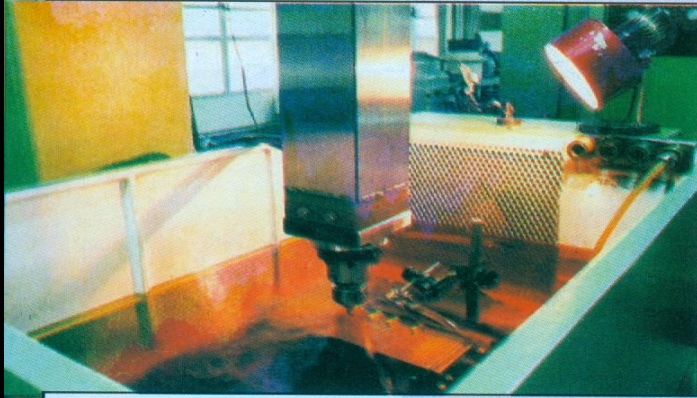
Different Tools



Wire Erosion



TOOL MAKING



SPARK EROSION

TOOL DESIGN ON CAD/CAM

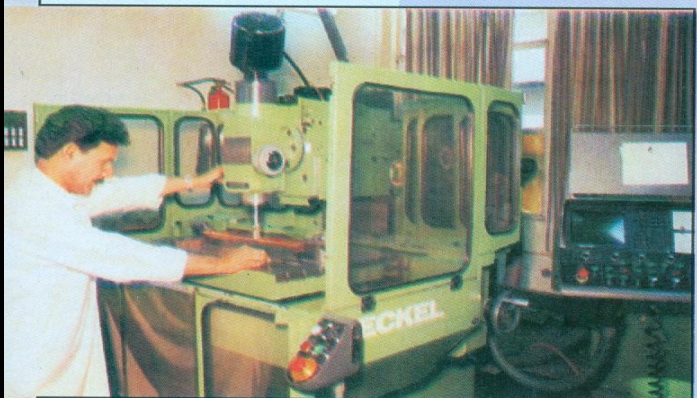
A big pride for TIP is the computerized tool designing carried out on the system of CAD/CAM. TIP owns one of the biggest press Tool, Die Making and High precision Devices and Gauges manufacturing facility in the country.



CNC MILLING

SPARK EROSION/WIRE EROSION

Used for sinking profiles and formations of curvatures and cutting Complex shapes in the making of Moulds, Tools, Foundry Patterns Model Patterns and High precision Gauges, Jigs, Fixtures and Devices.



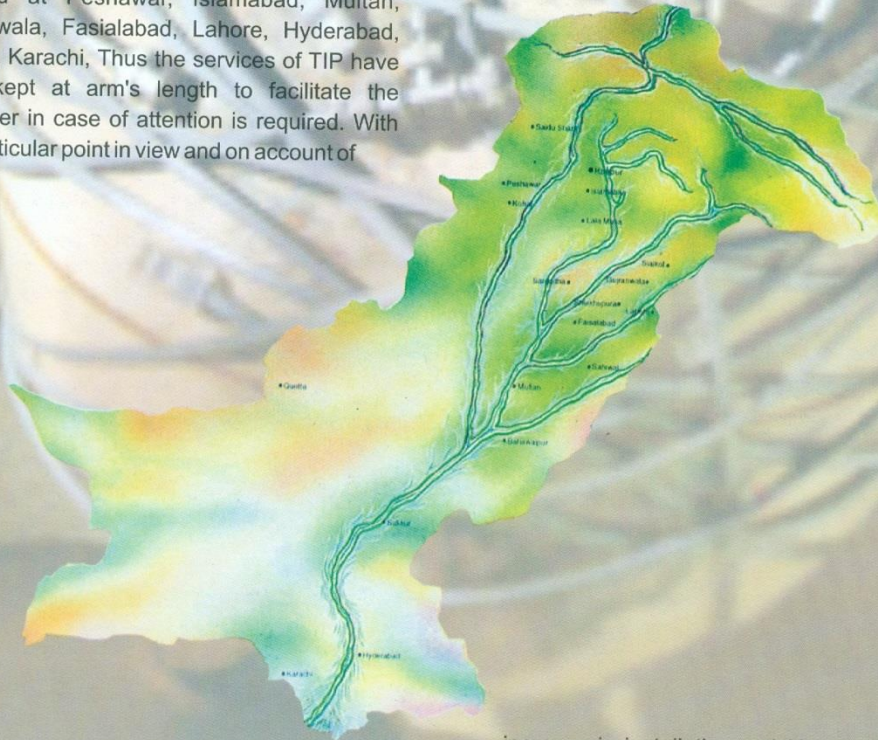
CNC OPERATED MILLING MACHINE

For the highly accurate milling of surfaces, slots, cavities and channels in five axes.

EXCHANGE PLANNING INSTALLATION & COMMISSIONING

TIP has been carrying out the Planning and installation of all the Telephone Exchanges that it produces and delivers to its customer since 1959, About 2.9 Million line unit have been installed by TIP up to the end of 1999-2000 financial year. This includes 1.8 Million Electronic Digital Exchange Lines. TIP also does the Air-conditioning of the exchanges.

The Installation and Regional Headquarters are situated at Peshawar, Islamabad, Multan, Gujranwala, Faisalabad, Lahore, Hyderabad, Quetta, Karachi, Thus the services of TIP have been kept at arm's length to facilitate the customer in case of attention is required. With this particular point in view and on account of



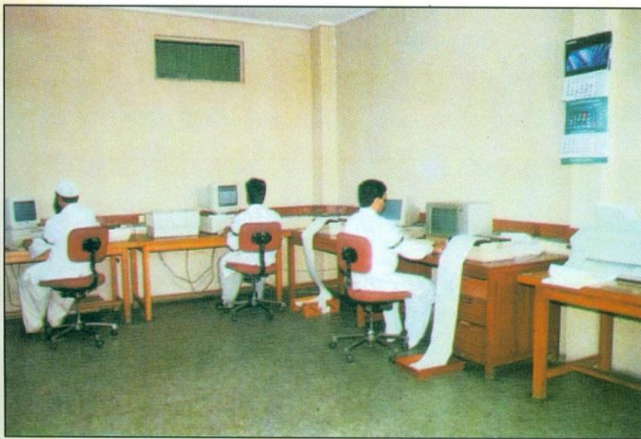
increase in installation activities in the northern region small offices with workshops have been opened. A modern planning office called the EWSD Support Center has been set up, with the close collaboration of Pakistan Telecommunication Company Ltd, which is carrying out the entire planning work of Digital Exchanges installed by TIP throughout the county.

TRAINING



ELECTRONIC CLASS

TIP trains its own technicians in a Training Department that holds specific and specialized courses ranging from 2.1/2 to 3.1/2 years. It also holds Refresher Courses to verse the exiting staff keep pace with modern technology.



COMPUTER CLASS

The Computer Section contributes heavily to modernization of systems in saving time and money. TIP runs a regular Computer Training and Operation Centre for its introduction into the organization.

ALMEEZAN



SINGLE PHASE ENERGY METER

TELEPHONE INDUSTRIES OF PAKISTAN

Haripur-Hazara

ALMEEZAN

1. APPLICATION

Type Al-Meezan M140J is single phase Kilowatt - hour meter used for measuring electrical energy in a wide range.

2. BRIEF DESCRIPTION

Type M140J single phase Kwh meter is an induction type meter and is designed for 400% over load. It has rigid Aluminium die-cast frame and chassis with ultra violet stabilized double collar transparent cover, Intrusion and rain protected. It is mainly composed of high quality electro-magnets, Aluminium rotating disc, damping magnet, register and triple jewel bearing. The plastic encapsulated Potential coil ensures excellent performance and protect it from moisture. Tripple jewel bearing and low meter constant ensures the life of meter more than 30 years. An enlarged figure Drum of register enables to take reading from a distance to a decimal place. The special design of current coil extends the over load capacity of the meter without any considerable rise in temperature. The terminal block made from high grade thermo-setting material and pure copper pressure plates has reduced the contact resistance. Heavy terminal enables to accommodate the main wiring having conductor of 7.5 mm in diameter. The whole unit is sealed in unbreakable security box. (F.R.P.)

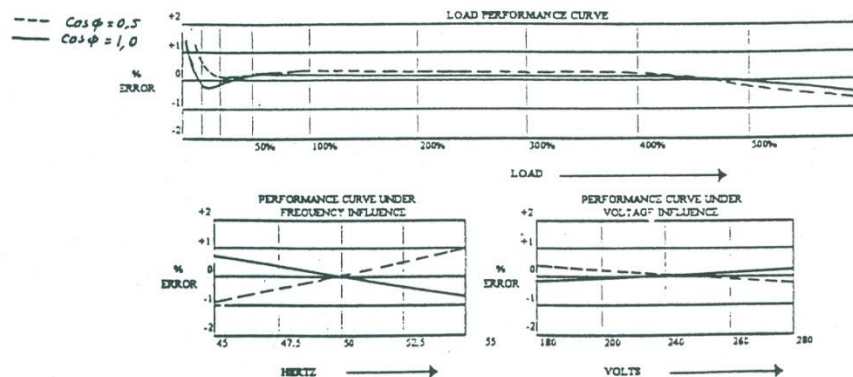
3. MAIN FEATURES.

- Increased Load Capacity.
- Low Power loss (Better than IEC Geneva Standards).
- Transparent ultra violet stabilized double collar cover.
- Low temperature co-efficient.
- Anti reversing Provision.
- Low Weight rigid design.
- Register readable to decimal place.

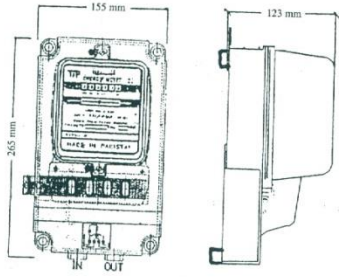
4. MAIN TECHNICAL DATA.

- 4.1 Rated Voltage = 240 Volt AC
- 4.2 Nominal Current = 10/40A
- 4.3 Frequency = 50Hz.
- 4.4 Accuracy (grade) = 2.0
- 4.5 Starting current = 50 milli ampere.
- 4.6 Creeping, No creeping at no load condition (Disc does not complete one rotation at any voltage from 80% to 110% of nominal voltage).
- 4.7 Torque at nominal current and unity power factor ($\cos \phi = 1$) = $4\text{Nm} \times 10^{-4}$
- 4.8 Rotating speed = 12 RPM (Under Max. Load and unity power factor)
- 4.9 Meter constant = 300rev/Kwh.
- 4.10 Power loss 0.8 W (Better than IEC Geneva Standards)
- 4.11 VA burden for current Magnet 0.169 VA at nominal Current.
- 4.12 Very high insulation resistance 500 M-ohms.
- 4.13 Weight = 2 Kg
- 4.14 Overall dimensions (mm) = 265x155x123
- 4.15 Individual Packing in Thermopore box.

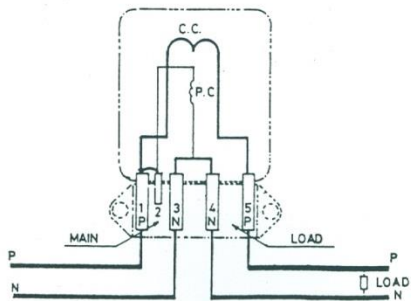
5. TYPICAL PERFORMANCE



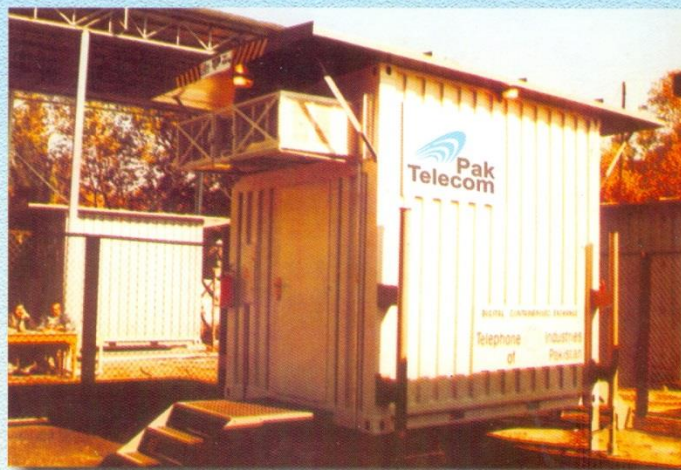
MECHANICAL DIMENSIONS



WIRING DIAGRAM



TIP



CONTAINER EXCHANGE

**10 ft, 11 ft & 20 ft Containers
(With modular fence)**

**TELEPHONE INDUSTRIES OF PAKISTAN
HARIPUR - HAZARA**

Telephone: Management (0995) 610489 Sales Department (0995) 610464 Sales Department Islamabad: 4435469
Fax: 611606 HRP, 4432118 ISL. Telex: 5716 TIP HP PK

W



DIGITAL CONTAINER EXCHANGE

EWSD Switching Systems are installed in containers for mobile and stationary operations. The containers are designed to conform to international freight terms and international standards regarding external dimensions of the containers, ISO corner fittings and loading/strength capacity.

CONTAINER SIZES

	10 ft		11ft		20ft	
	Ext.	Int.	Ext.	Int.	Ext.	Int.
Length (mm)	3029	2837	3382	4140	6058	5866
Width (mm)	2438	2225	2438	2225	2438	2225
Height (mm)	3000	2730	3000	2730	3000	2730
Weight Approx. (Kgs)	2590		2850		5180	

SALIENT FEATURES

- The container exchange is fully tropicalised
- Protected against storm and dust.
- Protected against water splashes (rain and melting snow).
- Container is provided an additional detachable projected roof to protect from extreme weather conditions.
- Shielding and Fire Protection with aluminium sheets and connecting aluminium strips through out the whole container from inside.
- Walls cutouts for air conditioner are sealed with covers in the form of Aluminium Channel Grills.
- Partition in the container to install switching equipment and MDF in separate compartments with separate outside doors to prevent unauthorized access to the switching room. (optional)
- Separate compartment with access from outside through insulated door and with adequate ventilation for unsealed batteries.
- Sealed batteries are accommodated in the switching compartment.
- Cable guides made of steel are provided in the floor for the subscriber cables, which conform to the shielding requirements.
- Separate power socket is installed in one of the front walls on switching side.
- Separate inlet for the transmission cable as per requirement of customer.
- Two window type air conditioning units each of two tons capacity (24000 BTU) or split type A.C. Units according to customer request.

TEMPERATURE OUT SIDE THE CONTAINER

- Minimum = -10°C Maximum = $+50^{\circ}\text{C}$. Humidity $\text{rh} \leq 100\%$

TEMPERATURE INSIDE THE CONTAINER

- Nominal = $+25^{\circ}\text{C}$ Range of Control = $\pm 2^{\circ}\text{C}$

A.C. UNITS OPERATION

The A.C. Units operate day and night unattended, without monitoring staff.

A cycle switch provides 12 hours running between the two units.

Automatic switch over to stand by unit on brake down of the functioning unit.

Maximum noise level inside the container 46 dB at 1 Meter.

Maximum noise level outside the container 52 dB at 25 Meter.

FIRE DETECTION

In case of fire, the system provides the following functions:

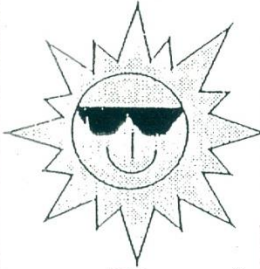
- Fire alarm transmission.
- Total stopping of the air-conditioners and fresh air.
- Mains supply cut off.
- DC supply cut off.

TELEPHONE INDUSTRIES OF PAKISTAN (PVT.) LTD. Haripur Hazara

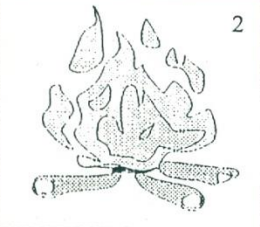
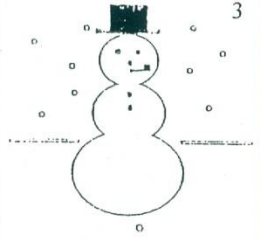
Telephone: Management (0995) 610489 Fax: (0995) 611606, 611395

Sales Department (0995) 610464

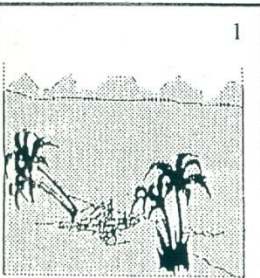
Sales Department, Islamabad (051) 4430969, 4435469 Fax: (051) 4432118



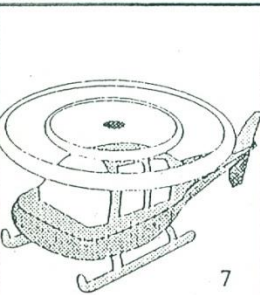
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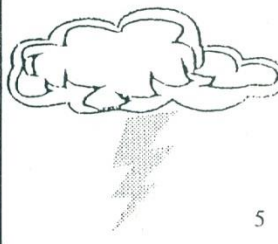
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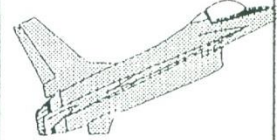
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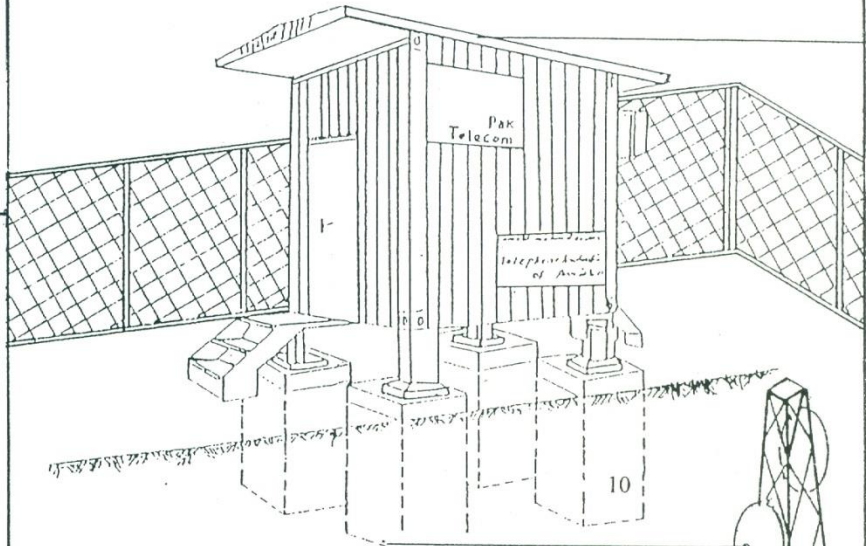
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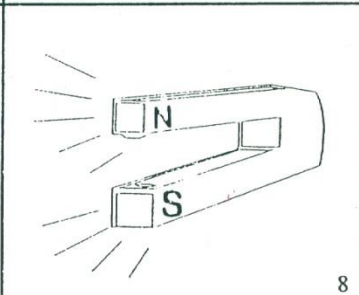
Protected Against

- | | |
|--------------------------|---------------------------|
| 1. Flood Water | 6. High Frequency Waves |
| 2. Fire | 7. Sound Waves |
| 3. Out Side Temperature | 8. Electro-Magnetic Waves |
| 4. Dust & Rain Splashes | 9. Burglary |
| 5. Lightening (Optional) | 10. Earth Quake |



ALARMS

9



8



