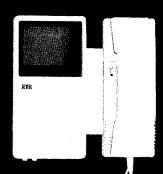


Quality video and intercom systems

APT. VIDEO + INTERCOM SYSTEM

- Installation and wiring instructions -



42 CENTRAL DRIVE
FARMINGDALE, NY 11735-1202
(631) 777-5500
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Due to continuous product improvement, all information and specifications shown herein are subject to change without notice!

Form STR D 003 (11.88)

Specifications

Apartment station: VMH 24 A

Power source: DC 16V

Current consumption: 0.6 A during operation

Designed for apartment buildings with door release capability. Includes one dry contact.

Video entrance station: TTV

Camera tube: 1/2" b/w saticon (CCD type camera optional)

Illumination: 10 Lux
Scanning line: 625 lines
Output impedance: Vss 70 Ohm
Temperature: — 10 °C + 40 °C
Input voltage: 16 VAC

Automatic controls: Auto gain, auto beam

Lens: Wide angle, auto iris, auto focus

Number of buttons: Available from 1 to 5 button (expandable to any size)

Video control unit: VCU

Input: 16 VAC, 40 VA

Output to monitor: 16 VDC

Output to handset: 9 VDC (talking lines)

Output to door release: 16 VAC

Output to TTV: 16 VAC (calling button)

Video Distributor unit: VDU

Input from TTV: 1 input
Output to monitor lines: 4 outputs
Output to further VDU's 1 output
Output impedance: 75 Ohms
Input impedance: 75 Ohms
Gain: 0 dB

Wiring distances

Between video control unit and the farthest VMH 24 A

90 m / 300 feet

Notes concerning wire gauges (thickness)

All wire gauges shown in AWG are AMERICAN WIRE GAUGES. Use 1,2 mm² or double wire 0,8 mm² as an equivalent for #18 AWG and 0,8 mm² as an equivalent for #22 AWG.

Coaxial cable connection:



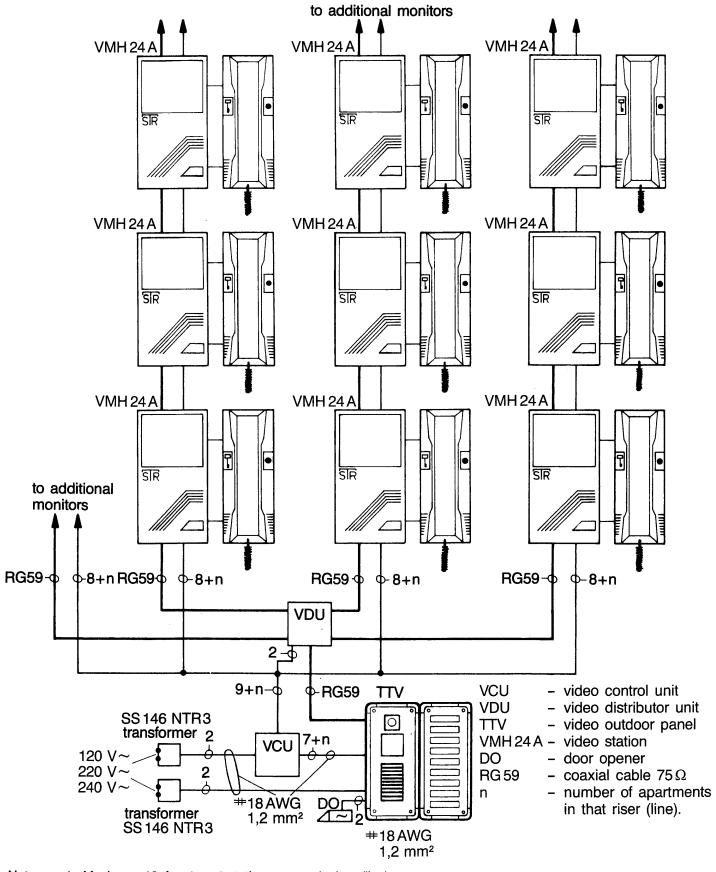
Type RG 59 / U

Coaxial cable requirements:

Use RG-59/U which must meet the following specifications.

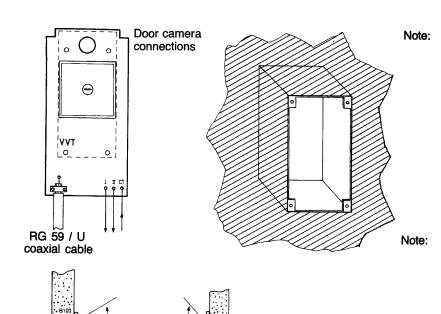
- Both core and braided conductors must be of copper (not of copper weld).
- Impedance: 75 ohm.
- Permitted closed loop DC resistance: 14 ohm.
- Permitted attenuation: 6 dB at 4 MHz.
- Cable sheath size should not exceed 7.4 mm (5/16").

Block diagram for apartment system with video distributor



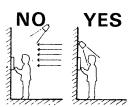
Note:

- 1. Maximum 10 Apartment stations on each riser (line).
- 2. Three of the 8 common wires shall be min. 18 AWG / 1.2 mm²
- 3. All wiring is #22 AWG / 0.8 mm² unless shown otherwise.



Panel backbox must be installed flush with finished wall surface.

Install camera/panel with auxiliary lighting as shown below.



Recommended camera/panel mounting height (from finished floor)

3 mm (1/8")

Type RG 59 / U

8.5 mm (3/8")

Floor

Top of panel back box should be 1600 mm (63") from finished floor.

Camera angle (top view)

The TTV video entrance station should not be exposed to;

- direct sunlight

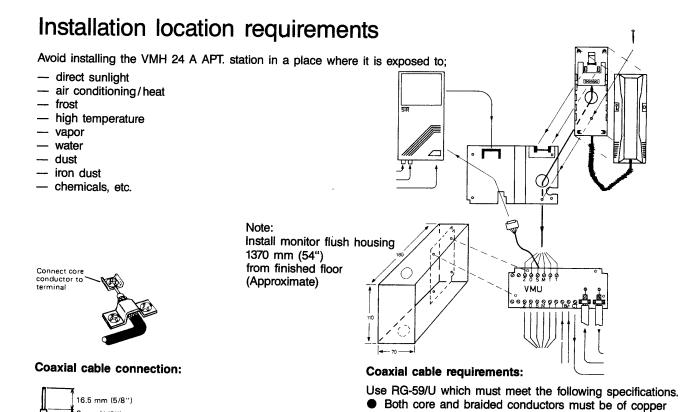
(not of copper weld).

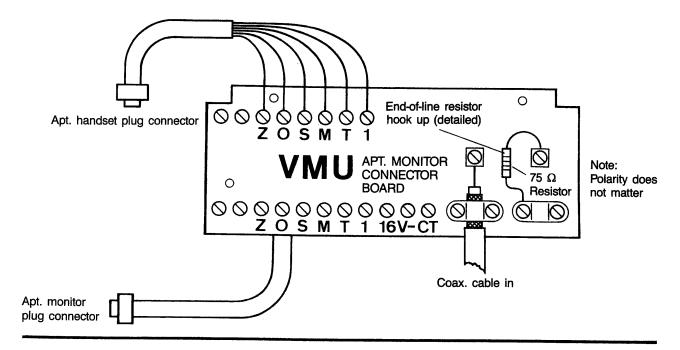
Impedance: 75 ohm.

Permitted closed loop DC resistance: 14 ohm. Permitted attenuation: 6 dB at 4 MHz.

Cable sheath size should not exceed 7.4 mm (5/16").

- a strong light source such as mercury street lamps, porch or gate lights,
- direct rain or snow.





Monitor threshold control Voice volume control

Adjusting the VCU power supply

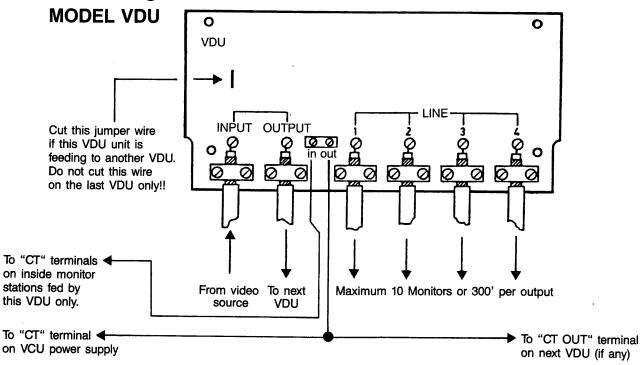
The model VCU system power supply is designed so that when a monitor is called, any and all other monitors that may be 'ON' will be turned off automatically. This is accomplished by a threshold adjustment circuit built into the VCU.

This adjustment is pre-set at the factory to allow only (1) monitor to turn on. Depending upon job conditions, it may become necessary to allow (2) or (3) monitors to be activated simultaneously (For duplex apts.-etc.).

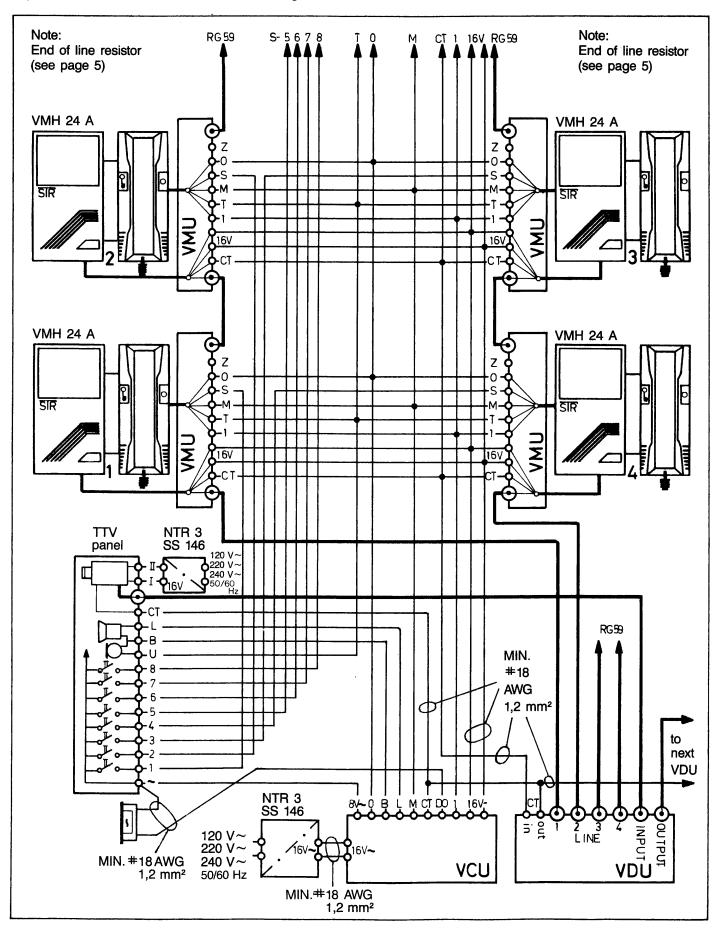
There is a potentiometer with the markings 1-2-3-4 on the VCU board. Slowly turn this potentiometer upwards until the power supply allows the (2) or (3) monitors to turn 'ON'. If only (1) monitor has to turn 'ON' at a time, adjust the potentiometer so that it allows (1) monitor to turn 'ON' and if another button is pressed at an entrance panel, all other monitors are turned 'OFF'.

There is also a potentiometer on the VCU board to control system voice volume. Adjust as required.

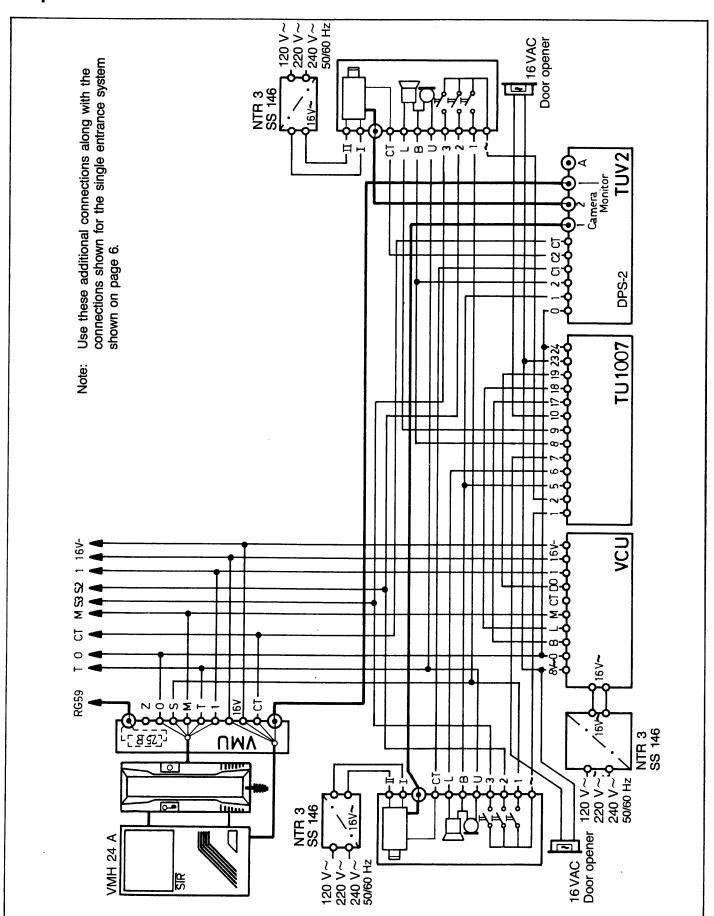
Detailed wiring connections for S.T.R. video distributor unit



Typical wiring diagram for single entrance apt. video + intercom system



Typical wiring diagram showing additional connections required for dual entrance video + intercom



General system information and notes

- 1. Make sure to observe all local electrical codes.
- 2. Make sure all connections are clean and tight and the coaxial cables are not shorted.
- Terminals CT and 16 V— must be minimum 18 AWG/1.2 mm². All wiring to transformers, door openers, panel button light assemblies and all wires carrying 16 VAC power must be minimum 18 AWG/1.2 mm².
- Make sure all wiring is tested for shorts and or grounds with an ohmmeter before connecting any system power. Use only U. L. listed transformers with an output of 16 VAC with a minimum of 40 VA (watts.)
- 5. Make sure all 75 ohm end-of-line resistors are installed at the end of each video riser/line.
- 6. If any video riser/line exceeds 300 feet (100 m) in length, you may have to install a model VVR video amplifier. Please consult your local S.T.R. distributor for more details.
- 7. Up to four (4) video entrance panels may be used. Please consult your local S.T.R. distributor for more details.
- 8. If there is sunlight or other strong light source behind the person standing at the camera/panel and there is not a sufficient light source on the person's face, the face will appear dark on the apt. video monitor. A seperate illumination light may be necessary.
- 9. The front of the entrance panel flush back box should be flush with the wall surface. The apt. monitor flush back box (model VBB) can be mounted up to 1/2" deep from the finished wall surface. Install the VBB back box with the VMU connector board on the right hand side of the back box.
- 10. When un-plugging the apt. monitor unit, use extreme care so as not to break any of the tiny wire connections. It is best to use a small screwdriver to pry the connector loose from the apt. monitor.
- 11. To install names on entrance camera/panel(s) simply pry the clear cover off with a small screwdriver. Install the name and snap the clear button cover back onto the button assembly.
- 12. The apt. buzzer may be replaced with a model R2000 alphatone signal (chime) adapator unit. Please consult your local S.T.R. distributor for more details.
- 13. Additional monitors and/or handsets only may be added in parallel in each apt. Please consult your local S.T.R. distributor for more details.
- 14. Apt. monitor units may be surface mounted using model SA 24 adaptor.
- 15. On the apt. version of the S.T.R. video + intercom system the large button on the front of the apt. monitor is inoperative.
- 16. For any additional technical information please consult your local S.T.R. distributor or the factory.

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